THE MIND OF A NATION: A PHILOSOPHICAL AND HISTORICAL CRITIQUE OF PSYCHOLOGY IN NEW ZEALAND

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Dedicated to all those, past and present, who have made psychology what it is today in New Zealand

Abstract

In this thesis the development of the discipline of academic psychology in New Zealand is explored both as a history and as an intellectual framework. The key tasks of this thesis are outlined, and the problems associated with writing a history are discussed. The methodology is explained as consisting of archival research, surveying and face-to-face interviewing. There follows an examination of the intellectual development of psychology, from the time of the Ancient Greeks to the present day, where the analytical focus is the fundamental dichotomy of mind-body and, as a subset, human consciousness. This focus is important to this thesis because the researcher regards consciousness as the major variable in the evolution of psychology. Chapter three deals more specifically with the mind-body issue and consciousness, and provides an intellectual framework within which the historical developments of psychology on these shores can be considered. Chapter four deals with academic psychology in New Zealand, from its earliest times when Otago University was founded, where it was taught as a subset of philosophy, to the point at which psychology gained autonomy as an independent discipline. This exposition includes the creation and development of the University of New Zealand. In this chapter, it is shown that while psychology was first taught at Otago in 1875, it gained its freedom last of all at that university. Other factors highlighted in this chapter include the involvement of the Presbyterian Church in the development of philosophy (hence psychology) at Otago, and the turbulence of those early years there, where no less than eight professors of philosophy came and went, by comparison with only the one at Victoria College. Chapter five begins at the point at which psychology gained its independence from philosophy, which varied in time across the then four university colleges. The first department to break free was at Victoria College (1950) and the last, Otago (1964). The roles of key personalities are explored, where these are supplemented by extracts from personal interviews. The way in which courses and programmes within each department of psychology developed is also examined. In particular, the output of graduate theses (Doctoral and Masterate) are analysed, across the decades of existence of each department, in terms of subdisciplines and gender. Of interest is the finding of a marked *gender reversal effect*, which occurred around the late 1970s to the early 1980s, in which theses produced by female graduates outstripped those produced by males. This chapter also reports the findings of a survey of New Zealand psychology academics conducted by the researcher, using a mailed-out questionnaire. The findings include a participant profile and views on a variety of variables such as philosophical stance and theoretical orientation. The final chapter includes comparisons across the six

university departments of psychology with attempts at explaining some of the key findings, a brief look at the non-university providers of psychology at the degree level, a consideration of some new directions for academic psychology in this country and, finally, a revisiting of the topic of consciousness which ran as a thread through the thesis.

Preface

My interest in the history, systems and theory of psychology is a long-standing one. At the root of this interest has been an even longer-standing interest and concern with the philosophical underpinnings of psychology, the mind-body issue in particular. From the beginnings of my own study of psychology, it has been my belief that an understanding of the origins of psychology, and an awareness of the way in which it has developed, are pre-requisites to an understanding of the discipline, its theories and its practices. Having researched and written this thesis, I am now completely convinced of this.

When one looks back through the earlier New Zealand course structures in psychology prior, say, to the 1960s, one is struck by the importance placed by those early academics on the philosophy and history of psychology, where this was actively taught to their students. Although, as this thesis will show, the teaching of psychology within departments of philosophy had its negative features, a positive feature was a proper grounding in the theoretical and philosophical bases of the discipline. The situation today is very different, with few departments of psychology in New Zealand offering courses on the philosophy, history or systems of psychology. Even within specific graduate course topics, for example, social psychology or learning theory, one does not find much evidence of a critical exposition of origins, underpinning philosophy and historical developments.

While not offered as empirical support, my own experiences at Massey University as undergraduate then graduate student of psychology showed me that very few, if any, of my several student cohorts had any significant knowledge of the history of psychology, not even of its developments in this country. True, they could all trot out that Wilhelm Wundt was the *Father of Psychology* or, perhaps, supply some dates and theorists from their own

special area of interest. But few had any real grasp of, or even interest in, the formative centuries of psychology in Europe. None that I had discussions with had given any thought to the fact that psychology emerged from philosophy, and what this implied for psychology. While some undoubtedly had a better grasp than I of, say, behaviourist principles, none of these students knew or really cared about where this brand of thinking came from. Of those fellow graduate students who showed admirable levels of dedication to learning theory (and there were quite a few!), and knew all about Skinner, few had ever heard of Thorndike and his *Law of Effect,* and even fewer of the British Empiricists! The same was true of the major psychological paradigms, and their philosophical origins and allegiances. I would speculate that I would have found the same situation had I studied in any one of the other departments of psychology in this country.

I do not mean the above to be a criticism of my fellow students, nor of my university teachers. If, unlike me, these students did not possess this spirit of enquiry into the past before starting their studies, then little that they met with was going to encourage such a spirit. In the case of my teachers, there were indeed those who had an interest in and a deep knowledge of the origins and developments of psychology. However, they found too few students who wanted to learn of these things. The indictment is of this modern era in general, and of the academic system in particular, which has allowed itself to become conditioned by New Right thinking in terms of giving education a user-pays dynamic, and eschews anything that it is able to brand as being of no immediate value and not contributing significantly to the quota of students. Thus, unlike in the past, we have large numbers of psychology graduates going out into employment who have little understanding of their discipline. They have accepted a set of truths as givens, have had little opportunity to delve into the origins of these so-called truths, and have had virtually no exposure to the underlying philosophical assumptions of science *per se*.

One of the key functions played by the university system, aside from imparting specific knowledge sets, is to teach students critical thinking. This, when coupled with the other major role of the university as the critic (even conscience) of society, should leave a student in a powerful position to make deeply informed choices in all domains of their lives. My fear is that this is not the case with students of psychology. It is my hope that, what ever other contribution this thesis makes, it may reawaken an interest in the origins and

developments of psychology in general, and in New Zealand in particular, and lead to a rectification of the absence of courses, at least at the graduate level, on history, systems and theories in psychology.

Acknowledgments

I wish acknowledge the debt I owe to several people who were, in some way, involved in the production of this thesis. However, while they can all take credit for the support, help, guidance and encouragement they gave me, the responsibility for any errors or misguided views rest with me alone.

Firstly, I wish to thank Dr Ross St. George (ex Massey academic psychologist) for his initial enthusiasm for this project. Aside from being a fine teacher of psychology, Ross is a valued historian of the discipline. Special thanks go to Dr John Podd, my Chief Supervisor, whose critiques of my ever evolving drafts have been comprehensive and very timely. It has been a special thrill to work with John on this project. Thanks also to Dr Gus Habermann of Massey University, as my second supervisor, for the fascinating emails on consciousness, and the opportunities to publish.

Thanks also to the staff of Victoria University of Wellington Library for their help and patience. Many is the time they have had to come down to the basement and turn me out at closing time. Special thanks also to the Staff of the Archives Section of the Hocken Library of the University of Otago.

My thanks go to The Open Polytechnic of New Zealand, my employer, for all the support and encouragement is has given me. Special thanks go to Paul Sutcliffe, HoS of the School of Management at the Open Polytechnic who, as my manager, has been an enthusiastic supporter of my attempts to obtain a doctorate. I wish also to thank my psychologist colleagues at the Polytechnic Glenn, Kevin, Darren and Ian for acting as guinea pigs in the trialing of my survey instrument, and Glenn in acting as rater in the category check used in my analyses of psychology theses.

Thanks must also go to those past and present senior academics who agreed to be interviewed my me. I look back on those interviews with a sense of privilege and pleasure. Thanks also to the psychology departments heads of Auckland, Canterbury, Massey, Otago, Victoria and Waikato for their permission to survey their staff.

My love and thanks to Miles, my teenage son, for his patience when there were other more important things to do and his dad was locked away in his study. Last, but most of all, my love and thanks to Kathy, my partner, for her encouragement and enthusiasm for this project, and for her valued suggestions and critiques. She kept me going through some dark hours and has read every single word of this rather lengthy thesis.

ERRATA

Page 24: line 23: The reference to Augustine should read (Augustine, 400/1912, 385-427/1948)

Page 74, paragraph 7: A footnote is required in relation to James, as follows:

1. Some argue that James used the term "dualism" in a purely intra-subjective sense – that of the dualism between the subjective "knower" and the subjective "known". However, in this sense we are all dualists, so little is added by this distinction. I argue that James was using the term in its Cartesian sense, of a dualism between the subjective knower (consciousness or mind) and the objective known (the world of his perceptions).

Page 131, Commentary on James' *Principles*: A footnote is required as follows:

1. Even though James has an entire chapter on the mind-body problem in "Principles", he argues that this problem is not the province of psychology, but that of metaphysics.

Page 142, line 18: for 1984/84 read 1984/85.

Page 173: There is a missing line after "Adcock was a pacifist.., as follows

....which made difficulties for him being twice in a war zone. He had stood with....

Page 201, lines 3-4: *starting catch up* should read, *starting to catch up.*

Page 233, line 5: the word *three* should read *two* (professors).

Page 254, line 18: in this line, *shown* should read *shows.*

Page 261, entry 11: The date should read (385-427/1948)

Page 261, entry 12: The date should read (400/1912)

Page 267, entry 8: A*ustralsian* should read *Australasian*

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CHAPTER 1: WRITING A HISTORICAL CRITIQUE: THE FACTORS INVOLVED

INTRODUCTION

One might ask, "Why bother with a historical consideration of psychology?" I cite Benjamin (1988), who argues that our most recent (still continuing) period of psychology has been dominated by a reaction against an earlier perspective considered too sweeping, too ambitious in scope, too weak in data and method. But he argues that a proper study of psychology's history will help change the situation in two ways. In one respect, there will be a departure in a much more thoroughgoing and rigorous way from earlier work, since the departure will be not simply a contraction but a fresh start. This will arise out of a proper understanding of what went before. In another respect there will be a tendency to revisit and renew earlier periods by renewing attention to problems posed in them. The behavioural sciences of the present have very little awareness that their predecessors were asking questions and offering answers about problems which have by no means been closed (Benjamin, 1988).

Taking Benjamin's points to heart, and having a desire myself to understand better the origins and developmental processes of psychology in general, and New Zealand psychology in particular, I chose to research this topic thoroughly. The outcome is this thesis which deals with the development of psychology in New Zealand, looking at the causes and correlates of the trends in psychology in this country since the late 1800s. It also examines the relationship between psychology and its parent discipline philosophy. In addition, it deals with the issue of consciousness as the linking theme of the development of psychology both globally and here in New Zealand.

The development of psychology in New Zealand is intricately bound up with the founding and growth of the university system in New Zealand. This is because, until more recent times, psychology has been the province of academics on these shores. Thus, any analysis of the development of psychology in New Zealand must entail an analysis of the growth of the university system along with the intellectual and socio-economic forces prevailing at each stage of this growth. However, this is only one aspect -- the more obvious one – of the development of psychology in New Zealand. To properly understand this development one must consider several other key

factors. One of these is the philosophical underpinnings of psychology. Another is the enormous influence that Britain had on developments in New Zealand in general and, for this thesis, on psychology in particular. One has only to read a few of the letters exchanged between Hunter and Titchener (Brown & Fuchs, 1971) to see just how powerful this influence (even control) was.

The major tasks for this thesis can be stated as:

- A general exposition of the philosophical underpinnings of psychology, with a particular emphasis on the mind-body problem as it has influenced philosophical and psychological thinking from the days of the ancient Greeks.

- A review of the literature, especially that having a New Zealand historical slant, identifying texts and articles of relevance to the research topic.

- An analysis of the historical development of academic psychology within the New Zealand university scene since the founding of the University of Otago and the University of New Zealand, to the present day[1]. This entails a mixture of archival search, surveying and interviewing of present day key figures.

- A consideration of the manner in which the topic of consciousness has been treated within academic psychology in this country from its early beginnings at Otago to the present day.

SOME TERMINOLOGY

Because a significant focus of this thesis is the mind-body problem and its concomitant, consciousness, it is appropriate to define certain key terms and their inter-relationship. Firstly, and perhaps unusually, I feel the need to define psychology. This is for two reasons: I take issue with the narrow and trite definition one comes across in undergraduate texts; and the term is

[1] Note that this analysis, hence thesis, focuses purely on academic psychology. It does not consider the development of the practice of psychology, nor the development of professional bodies such as the New Zealand Psychological Society. Also, although it is accepted that important work has been done during the development of educational psychology in New Zealand, it has been left out of consideration in this thesis in that it occurred within departments of education and not psychology.

fundamental to this thesis and the manner in which psychology may further develop is partly dependent on how we define it.

Psychology: In many undergraduate texts, psychology is defined as the *science of behaviour* (human and non-human). I find this a most unsatisfactory definition because the focus is on external behaviours alone and meets only the requirements of the Behaviourist paradigm. I offer a broader definition which allows for internal as well as external factors, genetic as well as environmental influences, maturational as well as learning processes and the entire range of states from neural activity, through the affects and cognitions to the transcendental. Thus, in this thesis, *psychology* is defined as:

That systematised body of knowledge, theories and practices that deal with those aspects of human and non-human nature that cover the innate and learned bases of sensation, affects, unconscious forces, perception, memory, cognition, normal and altered states of consciousness and transcendental states, as they influence behaviour in the individual, between individuals and groups of individuals.

Mind: In my Master of Arts thesis (Jackson, 1992) I argued that Mind is a universal characteristic of an implicate order, and is hierarchically superior to whatever else might reside within that realm. I further argued that there are other (lesser) aspects of the implicate order, such as consciousness. Mind explicates itself as consciousness *per se* where this explicate is the highest level of explication of the implicate order (non-spatio-temporal and hidden).

Consciousness: In the same thesis (Jackson, 1992) I argued that consciousness is a derivative of Mind, such that consciousness is the highest manifestation of Mind in the explicate order (the sense-based spatio-temporal realm). When I refer to consciousness I use it as a generic term, of which human consciousness is only one manifestation. I define consciousness as:

That overarching aspect within any organism that provides the active link between its implicate essence and the explicate environment, facilitating action by the organism on its environment, and action by the environment on the organism. Consciousness is a matter of degree, which is some function of the level of evolution attained by any given organism, wherein consciousness

has the properties of sentient awareness, information storage and retrieval and the processing of external stimuli to the organism's advantage.

This definition has been deliberately left broad so as to be able to encompass a wide variety of organisms, including humans. From my definition it is clear that my view of consciousness is far wider than that given in most standard psychological texts which tend to define it as waking awareness, and confine it mainly to primates and certain other higher order mammals.

Paradigm: Using Kuhn's (1962) discussion as a basis, we can say that a paradigm is a set of basic assumptions that delineate a specific subset or branch within the general field of scientific enquiry. It specifies the concepts that are regarded as legitimate and the methods needed to collect and interpret data. Decisions about what constitutes a datum or scientific observation are made within the paradigm. A given paradigm constrains the thinking of those who choose to operate within it such that they are committed to the same rules and standards of scientific practice. The paradigm specifies the type of problems investigated and the methods used in going about their investigation. Thus, the paradigm is supported by a consensus, and tends to be self-reinforcing and, in this sense, is somewhat like a mind-set which excludes other ways of looking at and thinking about the world. Thus, a given psychological paradigm has profound implications for those working under its auspices.

In this most general view of the term paradigm, one might regard psychology in its entirety as a paradigm, it being one branch of science. But I need to obtain a sharper focus than this, and so need to consider the subsets of psychology itself. Note that, in keeping with the above definition of a paradigm, we would not label given areas of psychology as paradigms. For example, it would not be proper to call social psychology or developmental psychology a paradigm, because many different mind-sets are brought to these fields of enquiry. However, later in this thesis (Chapter 5) it will seen that it is necessary to label these subdisciplines.

I propose that there are seven major psychological paradigms, where these cover all that I have defined as psychology, its theories and practices. I see these seven as: *learning-behaviourist* (as characterised by the work of Watson and Skinner, but encompassing views which allow for cognitions);

physiological (characterised by a biological-neurological approach); *sequential* (characterised by the notion of stages of development, and an implied irreversible order); *computational* (characterised by the use of theoretical models based on the digital computer, and especially adopted by cognitive science); *psychoanalytic* (characterised by Freudian thought, but as subsequently modified and expanded by neo-Freudians); *humanistic* (informed by the view that humans have the potential for growth and self-actualisation); *transpersonal* (informed by its consideration of a transcendent dimension of human nature).

Whilst the issue of psychological paradigms is not an overt focus in this thesis, the concept and my definitions of the paradigms have acted to organise the ways in which I have gathered my data, categorised them and analysed the developmental trends explored in this thesis.

HISTORIOGRAPHICAL CONSIDERATIONS

Hilgard, Leary, & McGuire (1991) argue that, in the last three decades, the discipline of psychology has undergone intense self-scrutiny which has, among other things, manifested in an upsurge of histories of the discipline. They point also to the foundation of bodies such as the APA's History of Psychology Division and the Archives of the History of American Psychology, and to the launching in 1965 of the *Journal of the History of the Behavioural Sciences*.

The historiographical issues occupying historians of psychology in recent times have been:

Continuity v discontinuity: This dichotomy relates to Kuhn's (1962) thesis regarding change within science. Have there in fact been scientific revolutions, truly radical ruptures, in the history of psychology, or has psychology evolved over time in a more or less consecutive fashion? Along with Kuhn, Foucault (1967) has made historians of science aware of the possibility of discontinuities. Some have gone so far as to argue that psychology does not have a subject (Smith, 1988) and that the history of psychology should be abandoned, because it does not seem possible to

conceptualise a continuous and unitary subject for that history. There is also the questioning of terms used by psychology (eg, sensation and motivation) where the meaning of these have altered across the duration of the discipline. For example, the term motivation had a different connotation for theorists such as McDougall compared with, say, Maslow. This relativism of terminology also undermines attempts to describe the history of the discipline.

Presentism v historicism: There is a need for more richly and accurately modulated historical analyses of the history of psychology, written from the vantage point of the actors involved and with minimal reliance upon the knowledge we have as members of a later era. However, this should not exclude addressing present day issues. What is needed is a balance between these two quite different orientations.

Internalism v externalism: Traditional histories (internalist) of science have focused primarily on the so-called internal development of scientific thought and procedures. That is, how one idea and method led to other ideas and methods in a more or less progressive fashion. This approach paid little heed to non-scientific factors, which are permitted in an externalist approach. The historian needs to attend to these non-procedural and non-ideational factors which pertain to the social, cultural, economic and political foundations and dimensions of science. There seems little doubt that scientific theories and methods draw on and influence other social and cultural realms (Ash & Woodward, 1987).

Great men v Zeitgeist: Great men are no longer regarded as standing alone in the history of science, either as *great* or as *men*. Eminence is a concept that needs to be ascribed and understood with care. Also, more recently attacked has been the notion of the existence of rigidly coherent and unified cultures that can in some way override individual variation and efficacy . That is, are there Zeitgeists? Again, there is a need for balance between these two dimensions of influence. There have, no doubt, been highly influential individuals who have had (still have) a powerful effect on the development of psychology (eg, a James or a Watson). But so too have there been periods where many socio-cultural factors have conspired to influence even leaders in their field (eg, the Nazi era).

Ceremonial legitimation v critical history: It is interesting to note that the dichotomies listed above line up such that their poles cluster as a part of an approach. That is, one cluster has the focus of continuity-presentism-internalism-great men, where the other cluster has the focus of discontinuity-historicism-externalism-Zeitgeist. The first cluster has often been subtly used to underscore and legitimise aspects of contemporary psychology. One way of making historical figures and events related to current interests is to create an *origin myth,* a story that purports to clarify how these persons and events served as founders and precedents of some current theory or practice. Such events can be characterised as *ceremonial* (Samelson, 1985) and can be contrasted with accounts that are more *critical* in nature. Ceremonial histories have also been termed *monumental* (Nietzsche, 1949) or *justificationist* (Weimer, 1974), serving as apologetics for current theories and practices. Most historians have become wary of such approaches, tracing contemporary developments back to predecessors, anticipations or foreshadowings. They reduce history to a kind of point-to-point line drawing that ignores more significant and interesting details that surround and contextualise these points. On the other hand, critical history is more analytic and less apologetic in orientation. It seeks to cut through illusions and myths, attempting to reveal the practical factors involved in psychology's history. This approach is in line with social constructionism.

Benjamin (1988) argues that, in the history of ideas, it is important to distinguish between *anticipations* and *foundations*. Anticipations are defined as those antecedent ideas that have likeness to but not developmental ties with later modes of thought. They are historically isolated instances of foreshadowings. Foundations, on the other hand, are the actual beginnings of later concepts or theories in the sense that the growth of thought is relatively continuous and the lines of influence are traceable. A failure to understand this distinction can lead to mistaking old ideas for new ones, and to not grasping the significance of the latter.

Benjamin (1988) cites Stocking who, in 1965, argued that history itself is in many respects the most undisciplined of disciplines. There have been many attempts to codify historical method and to define the philosophical presuppositions of its mode of enquiry. Stocking then sets up a series of dichotomies which may be subsumed under two alternative orientations toward historiography:

- context v analogue
- process v sequence
- emergence v agency
- thinking v thought
- reasonableness v rationality
- understanding v judgement
- affective v utilitarian
- historicism v presentism

Benjamin (1988) points out that a body of knowledge consists not merely of propositions, statements and judgements, but is these together with the questions they are meant to answer. An idea, then, is both a denial of alternatives and an answer to a question. Likewise, intellectual history is the history of people *thinking* rather than the history of thought (Robinson, 1986). In terms of reasonableness and rationality, the historian should ask not whether something is true or good, but why and where and to what end it came to be enacted or expressed.

Benjamin (1988) argues that it is necessary to see historical change as a complex process of emergence rather than a simple linear sequence. That is, there is a need to understand the science of a given period in its own terms. It is because (as Kuhn, 1962, argues) psychology is pre-paradigmatic that its historiography is more open to the vices of presentism. There is no single framework uniting all the workers in the field. Rather, there are competing points of view or schools. The best that most historians of the pre-paradigmatic sciences have done is to produce sterile tracings of theoretical lineages as seen in the many *history of theory* texts (Benjamin, 1988).

In regard to the historical antecedents of psychology, we can talk about *foundations* and *anticipations*, where the former are the actual beginnings of later concepts and theories in the sense that the growth of thought is relatively continuous and the lines of influence are readily traceable; and where the latter are those antecedent ideas that have likeness to but not developmental ties with later modes of thought. While it is easy to distinguish intellectually between these two, it is not always so easy to see which is which in practice. Benjamin (1988) cites Festinger's theory of Cognitive Dissonance and the earlier (late 1800s) ideas of Bain and Peirce, both of

whom put forward a concept that contrary opinions jar the mind. Is this a case of anticipations or foundations? If the latter, then Festinger never acknowledged his debt to either of the earlier theorists. In this example, it can be shown that the ideas of Pierce and Bain are forms of anticipations and not truly foundations. Benjamin argues that all anticipations within a broad intellectual tradition (eg, psychology) are potential cases of foundations or historical roots. But not all anticipations terminate as foundations. To ignore this fact invites a situation wherein allegations of intellectual derivations tend to increase with the marked gains in popularity of an idea or theory. There would be a tendency to view every modern achievement of science as simply the giving of technical names to ancient ideas. We need to be aware of becoming over-sensitised to noticing modern rings in early ideas.

As a researcher into the history of psychology in New Zealand, it is important that I be aware of and take into account the historiographical problems discussed above. In particular, I need to guard against coming down on the side of *continuity-presentism-internalism-great men*, a very easy trap to fall into when the duration of the history of psychology on these shores is relatively short and there is an abundance of fairly charismatic individuals who have helped to shape its development. Conversely, there is a danger in overcompensating in the direction of *discontinuity-historicism-externalism-Zeitgeist*, such that one ignores, for example, the powerful influence that someone like Sir Thomas Hunter had on psychology's development in this country. A balance is needed between these two clusters. Otherwise, one might end up with a history replete with potent figures but devoid of context, or with a history so highly contextualised as to be dehumanised.

METHODOLOGY

Historians have access to many different methods: archival, quantitative, biographical, textual-analytical, psycho-historical and so on. In this, it is important that the historian's subject should come first, dictating which methods are most appropriate at a given time, and not vice versa. That is, method should not dictate the topics of research. Historians do not simply read texts and write history. Decisions about topical or thematic focus, the nature of relevant data, the means of gathering this information, the appropriate mode of analysis and interpretation, and the construction of

narrative or other genres of presentation are all at issue, each and every time an historical project is undertaken.

The questions that have guided the present research are:

- What is the relationship between psychology and its parent philosophy in terms of the origins and current status of psychology?

- What was the relationship between the intellectual, socio-economic and cultural factors of New Zealand of the late 19th and early 20th Centuries and the formative years in the teaching of and research in psychology?

- Who were the key figures in the development of psychology in New Zealand?

- What philosophical systems were subscribed to by the influential academics, scholars, researchers and practitioners?

- How has the issue of consciousness and its study been dealt with during the development of psychology in New Zealand?

- Where might New Zealand psychology be heading during the remainder of this century and into the 21st century?

The greater part of the research reported here was reconstructive in that the data gathered were used to construct a story about the development of psychology on these shores. This entailed analysing the data to look for the structures, functions and processes that would reveal the developmental pattern. Although many of these data were quantitative in the sense that dates and other numerical values were involved (eg, the date of an event or the number of students enrolled in some given course), these data were not amenable to the more usual quantitative analysis as found in empirically based research.

In this context, it is worth bearing in mind the factors discussed by Sullivan (Sullivan,1973; cited in Henle, Jaynes, & Sullivan, 1973), where he talks about histories of the various sciences. He identifies four elements found in such histories as:

- A theory, model or set of proposals which act to organise the historical material.
- A sequence of events ordered in a temporal direction (the historical narrative).
- The author's mind-set, intellectual style, problems that are seen as in need of solving and a direction in which solutions might be sought.
- The author's social or reference group, where this might be professional or cultural.

I as the author of this piece of research am as subject to these factors as any author of a science history text. I do have a model or set of proposals and these have definitely organised this piece of research. This model and its proposals will be made explicit in the next two chapters, but in essence focus on the issue of consciousness, and its place in the scheme of things. There is clearly a sequence of events which act as the *facts of the case*, where these are ordered temporally (see shortly a discussion on criteria used in selecting data sources). I do have a particular mind-set which has strongly influenced this research. I have an idealistic streak, am optimistic about the human condition, subscribe to a metaphysic in which Mind is real and all important and despise naive reductionism. Finally, I am a white, middle class male of European origins.

There are two broad dimensions to the research conducted in this thesis:

- Philosophical speculation.
- Gathering and analysis of what is essentially historical data.

Philosophical speculation: This activity entailed a literature search and the analysis of certain influential ideas and relationships between philosophy and psychology. Of importance were fundamental philosophical dichotomies and the manner in which these have influenced the development of psychology down through the ages. For example, a key dichotomy within psychology is mind-body, where this has its origins in metaphysical speculation. The *data* in this context are qualitative. Thus, analysis means the manipulation of concepts using qualitative criteria such as validity of argument, logicality, explanatory power and so on.

Historical data: This activity entailed gathering large amounts of data from a variety of sources. In the type of research conducted here, the issue of data raises epistemological questions regarding how the knowledge data were obtained, and the degree of certainty that can be placed on them. The data gathered were archival in form, with most coming from textual sources (eg, university calendars, the Union List of Theses and departmental minutes) and a lesser amount obtained by direct interview. Thus, this research is essentially archival and suffers thereby from a very low level of control over confounding variables. That is, it cannot be readily established, for some given set of data, how viable are the competing explanations.

However, there is a degree of accuracy or factuality that can be ascribed to the gathered data. This does not amount to control in the experimental sense, but it does permit a classification of the data by establishing a spectrum of factuality. At one end of this spectrum we have data that are verifiable and accurate facts (eg, the date of the founding of the University of New Zealand), and at the other end opinions and speculations (eg, a given respondent's view about the interpersonal dynamics that influenced policy in some given psychology department). Thus, we might divide this spectrum into three zones:

- Established and verifiable fact.
- Generally accepted but not readily verifiable fact.
- Unsupported speculation or opinion.

Important also to this issue of the factuality of data are the criteria used for selecting information sources. The criteria used for selecting information sources were as follows:

- Were objective and factual (bearing in mind the above discussion).
- Provided information that related specifically to psychology within New Zealand.
- Gave an insight into formative factors.
- Clarified and resolved any disputes regarding factual events.
- Identified policies and decision-making processes.
- Possessed a unique knowledge of a given situation.

The unique values of archival research include:

- Unsuspected facets of a history.
- The uncovering of the genesis of ideas.
- Locating unsuspected personal influences.
- Identifying the role of academic and professional politics in shaping a personal career.
- Rounding out the picture of a given personage.

The label *oral history* refers to the reminiscences delivered verbally and recorded on tape, then transcribed to paper record. The oral historian is the person who elicits the account. This means of gathering information is easier for the interviewee than that of actually writing an account. However, it is prone to errors: errors of memory (omission or commission) on the part of the interviewee, errors in transcription, excess structuring on the part of the oral historian during the interview, biases introduced by the oral historian during transcription and so on. During the process of interviewing, I have encountered many of these sources of distortion. For example, misrecollection of dates by the interviewee was a common distortion. This type of distortion is readily checked (eg, against an existing record such as a university calendar). Much more difficult to deal with are the reminiscences which are prone to reconstruction and elaboration in the interviewee's memory retrieval processes. In conjunction with such natural memorial distortions, especially in those of more advanced years, one can never be sure whether facts are being reported or whether one is hearing how the interviewee would like to be remembered. In those sections where interview data are used, I have tried to make clear when I am reporting and when the interviewee is reporting.

The sources of information selected can be classified as follows:

Public domain documents

- Journal articles, especially those of an historical nature.
- Texts dealing with the general history of psychology.
- Texts dealing with the history of New Zealand psychology in particular and Australasian psychology in general.
- Copies of historical materials such as those held in the Beaglehole Room of Victoria University of Wellington Library.
- Newspaper articles.

University documentation

- University Calendars.
- Course prescriptions.
- Past examination papers.
- Required reading lists for undergraduates.
- The Union List of New Zealand Theses.
- Journal and text book holdings in university libraries.
- Graduate research.
- Minutes of departmental meetings.
- New Zealand University Alumni Association newsletters.

Personal communications

- Present Chairs and staff of university psychology departments.
- Living but retired past figures in the development of psychology in New Zealand.

The procedures used for accessing journal articles and texts were those used in any research (ie, library searches of indices using direct or online techniques). Notes taken from texts have been retained on computer disc. All journal articles and newspaper articles used as references were photocopied and retained by the author as original source data or information.

The procedure for accessing New Zealand university materials such as calendars, course prescriptions, graduate research, past examination papers and so forth consisted of visiting the universities concerned and researching the material within the university library. Where necessary, photocopies were made and retained as original source data or information.

To obtain access to departmental records such as departmental minutes of meetings, and interviews with departmental personnel, a letter of introduction from my Chief Supervisor was used to identify me as a *bone fide* researcher and act as a guarantee that I would respect confidentialities.

Access to non-university persons for interview was arranged by telephone contact followed by correspondence using my letter of introduction. Copies of all correspondence have been retained by me as raw data.

Interviews were conducted using a prestructured format in which key questions were asked. These questions were communicated to the respondents in advance, then asked during the interview[2]. The interviews were tape recorded using a standard audio cassette recorder. The tapes were later transcribed by myself. All tapes and original transcription documents have been kept. This material has been used within the research in several forms:

- Verbatim quotations (positively identified using quotation marks).
- Paraphrasing of what was said.
- General integration into the body of the thesis.

Ethical issues have been safeguarded by meeting the requirements of Massey University's Human Ethics Committee. All personal communications were collected in accordance with the Privacy Act and Official Information Act. Some *raw data* are classified as confidential to the respondent, and could be accessed only with the written permission of the original respondent.

In the next two chapters I will explore the philosophical developments that led to present day academic psychology, including a treatment of the mind-body problem and its concomitant, consciousness. These two chapters will form a framework within which the developments of academic psychology in New Zealand can be considered. As the roots of psychology are in philosophy, and because psychology was originally taught within departments of philosophy in New Zealand, philosophical considerations are important to an understanding of the development of academic psychology in this country. The fundamental dichotomy of noumena-phenomena, as dealt with in Chapter 2, is basic to much of the developments in philosophy and, more recently, in psychology. In more recent eras this dualism emerged in the form of the rationalist-empiricist split, which has had a major impact on the development of psychological thought. This is especially true of the mind-body problem, as

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[2] The general structure of questions asked during the interview was as follows:

- What drew you into a career in psychology?
- What was your PhD topic?
- Do you feel that your PhD topic has had any lasting influence on your subsequent career as an academic?
- Would you care tell me something of your career here at this university?
- Where do you feel academic psychology has got to in New Zealand and where do you see it heading in the next few decades?

dealt with in Chapter 3. These considerations also bear on the topic of consciousness, which I have declared to be a key issue for this thesis. The ways in which consciousness has been dealt with by the proto-psychologists from the time of the ancient Greeks will be explored in Chapter 2. In a similar way, consciousness as a topic within modern psychology will be dealt with in Chapter 3. Reference back to these discussions will be made within the historical treatments in the remaining chapters.

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CHAPTER 2: THE PHILOSOPHICAL INFLUENCES IN THE DEVELOPMENT OF PSYCHOLOGY

THE BASIC DICHOTOMY

Philosophical analyses of the human condition cannot ignore fundamental questions such as: What are we? What is our relationship to the universe at large? What can we know of reality? How do we know what we do know? The answers to these and similar profound questions entail two basic entities and the relationship between them: *mind* and *reality*. This pair amount to the most primordial dichotomy looked at in philosophy, that of *matter* and its *opposite*, where the opposite has been given a range of names by various systems of thought down through the ages. The Greek terms *noumenon* and *phenomenon* seem to capture this primordial dichotomy, where the former is that which lies behind all appearances, and is itself unknowable (Flew, 1979; Rand, 1912), and the latter is sensible appearance. In the Western theological tradition the two terms that are roughly synonymous are *Spirit* and *Matter*, and in the Indian tradition, *Purusha* (noumenon) and *Prakriti* (phenomenon) (Muller, 1875-1900).

From this primordial pair (however named) have arisen two distinct world views which, in ancient Greece, were best captured within the Pythagorean-Socratic schools on the one hand (Noumenistic) and the Democritic-Aristotelian schools on the other (Phenomenalistic). Of interest is the fact that the former schools of thought did not deny the phenomenal realm, but claimed that a noumenal realm lay behind it. Conversely, the latter schools did deny the existence of a noumenal realm, claiming that there is only the phenomenal realm. This philosophical argument has carried forward down the ages appearing in many guises, including theological, and lies behind the split between the Rationalists and the Empiricists (Perry & Bratman, 1993).

Subscription to a noumenal-based philosophy gives rise to a basic dualism because it is very difficult (though not entirely impossible -- *vide* Bishop Berkeley --Matthews, 1943, whose views will be explained in the following section) to deny the existence of the realm of phenomena. Subscription to a phenomenalistic philosophy does not lead to a basic dualism because it is

relatively easy to ignore the possibility of a noumenal realm. In fact, it seems to make life much easier to so ignore the noumenal realm. In this way one has only to deal with one universal stuff – matter in all its forms. This is the basic stance of philosophical materialism, which can lead in its extreme form to a physicalist-reductionist view in which humans (and all other life forms) become nothing more than biological machines.

The noumenistic-phenomenalistic dichotomy was central to Jackson's thesis (1992) which dealt with the essential mind-body problem in general, and with the evolution of consciousness in particular. For me to make sense of this fundamental dichotomy, I invoked David Bohm's concept of the *implicate* and *explicate* orders (Bohm, 1957, 1973, 1980), along with certain additions and modifications of my own to his theory. In this way I was able to equate the *Noumenon* with Bohm's implicate order and the *Phenomenon* with his explicate order. But more than this, I was able to do away with the essential dualism in the ancient dichotomy because the explicate order is a derivative of the implicate order. Hence, there is no essential dualism in Bohm's theory. This also enabled me to resolve the paradox that Descartes (Descartes, 1985, 1986) created with his mind-body problem and to demonstrate the fundamental flaw in the physicalist-reductionist stance in regard to mind-body. However, the aim of this present chapter is to pursue the philosophical issues further, and to see, in general, how these relate to the development of psychology, and in particular to the topic of consciousness.

In this chapter I explore the influences of Western philosophy on the development of psychology from the time of the ancient Greeks[1]. This approach leaves out the possible influence of non-western philosophical systems such as those of ancient China and ancient India (eg, Akhilanada, 1947). This is a reasonable enough approach when considering the influences from the earliest beginnings of Western psychology, because Asiatic and Oriental philosophical systems have only recently come to be known in the West with the translations made by scholars (eg, Muller, 1893) in the late 1800s and early 1900s. However, this approach becomes invalid when we consider the influences on more recent developments in psychology, such as the Humanistic and Transpersonal paradigms.

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[1] In this chapter, and elsewhere, there will appear references to the works of various authors for the purpose of indicating the progression of their thinking, rather than as support for my claims or arguments. In these cases the style used will clearly distinguish these from primary source citations. For example, Romanes' *Animal Intelligence*, 1882, rather than Romanes (1882).

THE HISTORICAL RELATIONSHIP BETWEEN PHILOSOPHY AND PSYCHOLOGY

This section examines the relationship between developments in philosophy from the time of the ancient Greeks and the emergence of psychology as a discipline in its own right. In the course of this exposition, I will keep in mind the primordial dichotomy first referred to at the beginning of this chapter – that of *Noumenon-Phenomenon*. In particular, the relationship between this pair and the development of the concept of consciousness will be explored.

Early Greek origins

The origins of modern psychology lay in the pre-Socratic philosophy of the Ionians. For example, Thales, Pythagoras and Anaximander (Barnes, 1979). Of the pre-Socratics, Pythagoras of Samos (circa 7th-6th Century BC) was probably the greatest. He was philosopher, mystic and the guru of an ashram. He held that the universe was essentially mathematical and placed a special value on numbers. Pythagoras taught that all life was of a unity, and thus that humans shared a kinship with all that lives. He also taught that the soul was eternal and transmigrated in a cyclic fashion taking on a new body in each incarnation. The goal in each life was to escape from the transmigratory cycle and reunite with the mystical origin of all things. These ideas strongly parallel those of the Buddhist doctrines of Rebirth and Karma. Pythagoras never dealt with consciousness as such, but he was concerned with the soul or *psyche* which might be regarded as that entity which incorporated the properties we now ascribe to consciousness.

Three other key pre-Socratics were Empedocles, Democritus and Protagoras. Empedocles (490 - 430 BC) viewed the soul as constructed out of the elements, and yet regarded each element as a soul. Democritus (460 - 370 BC) expounded an essentially atomist doctrine. Of him, Aristotle said he regarded the soul as a sort of fire or heat, and as being the source of all motion and life. Protagoras (480 - 411 BC) was a Sophist and held that perception was identical with knowledge. He held that "Man is the measure of all things", and by this implied that norms are relativistic. There is also the deeper implication that humans structure the world in their perceptions.

Socrates' (469 -399 BC) influence was (still is) enormous (Sauvage, 1960). His place in philosophy was so great that he has become a marker in Greek thought, where all before his time is literally called pre-Socratic. He left no writings, and it is in the writings of his great disciple, Plato, that we find his ideas expressed. Socrates was primarily concerned with the problem of knowledge and knowing. He asked "What can we know and how do we know it?" If we are truly ignorant then how do we progress to knowledge. That is, there appears to be no starting point from initial ignorance. If we are not ignorant then we do not need to enquire anyway. From this, Socrates made the assumption that we already know. It is a question of getting at this pre-knowledge. His approach (the Socratic dialectic) entailed drawing out of or leading toward that which is already within a person to be known .

Socrates set truth beyond the senses, but it was for Plato to give it a home. Plato (427 - 347 BC) was the most brilliant of Socrates' pupils, and was associated with Socrates right up to Socrates' execution. Sometime later, Plato, with the mathematician Theaetetus, founded the Academy in Athens. Plato wrote extensively (some 24 plus dialogues), which writing fell into three distinct periods (early, middle and late) (Hamilton & Cairns, 1961). In his writings, Plato uses Socrates as a vehicle for his thoughts, and explores the dialectical method. The earliest dialogues are concerned with the excellence of character (eg, soundness of mind and courage) where this is related back to knowledge. In the middle period, Plato tries to deal with the charge that the Socratic dialectic merely undermines the views of others without actually contributing anything positive with which to replace a demolished idea (Hamilton & Cairns, 1961). But he does more than this. Socrates is made to expound doctrines (Rhys, 1937), showing a preoccupation with the need to shun the world and withdraw in order to acquire knowledge. There is the seeking of the reality that knowledge rests on (Hamilton & Cairns, 1961). Out of this arose Plato's theory of Forms. The third period is marked by a concern with philosophical logic.

It was the middle period in which Plato expounded what has become known as Platonism or Platonic Philosophy, wherein he reaches his metaphysical heights. This occurs especially in the *Republic* and *Phaedo*. The central doctrine is that *Forms* (ideas), which are transcendent realities, can be viewed as universals, ideal standards or blueprints of sensory reality. In

developing his theory of ideas and the world of ideal forms, he laid the foundations of all of the subsequent Rationalist schools (Hamilton & Cairns, 1961).

The realm of forms was no less than the Noumenon and was changeless, being the reality behind the sensory world of appearances. This outer appearance can only ever approach that form of which it is an appearance. It can be modified, is always imperfect, is corruptible and eventually decays and disappears. For Plato, soul and body (we might today say consciousness and brain) were quite separate identities. The soul was the dominant aspect, was eternal and used the body as a vehicle through which to learn and grow. With Plato, psychology had not separated out as an independent discipline because his focus was on the world of forms and not that of the phenomenal world of feelings and cognitions. However, one can see in his notion of a soul (*psyche*) the beginnings of a consideration of consciousness as a topic for investigation.

The issues raised and considered by Plato are still central to psychological scholarship and the underlying theories of psychology. The central mind-body dualism developed by Plato shows in the tensions between what became the Empiricist and Rationalist views of the world. For example, lying at the root of some modern cognitive theories (eg, Chomsky's views on deep structure – Chomsky, 1975; and the ideas lying behind genetic psychology) are Rationalist assumptions. Similarly, lying at the root of the denial by the Behaviourists of mentalistic processes is a commitment to empiricism.

Aristotle (384 - 322 BC) studied under Plato at the Academy of Athens, and later became a teacher there until Plato's death 20 years later. Although a student of Plato, modern research has shown (Robinson, 1986) that Aristotle was never totally convinced of Plato's arguments even from his earliest days at the Academy, and certainly became hostile to them after Plato's death. He particularly criticised the theory of Forms, regarding it as lacking explanatory power. More than this, he argued that individual (physical) things are primary realities, thus turning Plato's view on its head. That is, Aristotle was the first Empiricist, whereas Plato was the first Rationalist.

Aristotle also argued against there being a common underlying set of principles for all the sciences, and so against Plato's hope of a dialectic that

would unify the sciences and by use of which all lesser principles could be derived. He regarded a human as a composite of *form*, *psyche* (soul) and *matter* (the physical body). But in *De Anima* (Rand, 1912) he argues that all things have a soul. It is this that makes a thing alive and consists in the various capacities for action, wherein the human animal has the highest capacities.

As far as psychology is concerned, the key work of Aristotle is his *Psychology: A Treatise on the Principles of Life* (Rand, 1912) in which he covers such topics as the faculties of the soul, sensation, imagination and thought. He did not regard the soul as separable from the body, and saw it as its cause and principle. Sensation, perception, imagination and thought were regarded as powers of the soul. Desire and reason were seen as the two motivating powers of the soul. Aristotle believed that the soul died with the body. However, he did talk of an obscure power of the soul involved in abstract thought which did not seem dependent on any physical organ, which might survive death.

Thus, Aristotle was initially a Platonist and, for a while, even taught Plato's philosophy at the Academy of Athens. However, when Aristotle started teaching he took a more psychological line of enquiry than did Socrates and Plato, looking deeply into sensory apparatus, sensations and feelings. In this sense, we could say that Aristotle was the first psychologist (at least of the Greco-European tradition). This is not to say that Aristotle revolutionised Platonism. Rather, his views evolved from it. In addition to his focus on the sensory world, Aristotle could not subscribe to the extreme Platonic dismissal of all but pure abstractions. Aristotle, in bringing the focus of knowledge back to the senses, was the founder of what became the Empiricist tradition. He dismissed the notion of Platonic forms as the only reality because the world Aristotle was investigating was not regarded by him as an illusion, as held by the Platonists. While the thrust of Aristotle's psychology was physiological, he conceded to the concept of a psyche or soul, the essence lying behind all of life. However, he put a different interpretation on the term *psyche* from that used by Plato. For him, psyche was not some extraphysical thing. It was a biological essence. This is close to the view held by many psychological theorists today who give credence to consciousness, and who argue against reductionist-physicalist notions, yet who do not see consciousness as

anything immaterial. Thus, we might say that Aristotle was the first to expound an Empiricist doctrine, yet hold a belief in mental life.

The great contribution of Aristotle to psychology was to locate the intellectual and motivational features of mind in the natural sciences. In this sense he was the original psychobiologist. He was Empiricist enough to establish the importance of the sensory world but did not totally abandon that which lay behind the world of appearances.

The Romans

There are two great protopsychologists of the Roman era, Lucretius and Plotinus (Watson, 1979). Lucretius (95 - 51 BC) was a Latin Epicurean philosopher. He regarded the mind and soul as of a single nature, where mind is the directing principle, in which mind-soul was viewed as corporeal. The mind was regarded as comprised of atoms which could move much faster than any visible entities. Plotinus (205 - 270 AD) was Egyptian by birth, but taught in Rome as a follower of Plato's system (Blumenthal, 1971). His writings were edited after his death by his disciple Porphyry into six groups of nine *Enneads*. His teachings have become known as *Neoplatonism* because they follow the teachings of Plato in regard to the hypostases: *The One* (an ineffable first principle), *Mind* (nous) and *Soul* (psyche).

Plotinus (Blumenthal, 1971) argued that the *soul* corresponds with discursive thought, *Mind* with intuitive thought and the *One* to the highest mystical awareness. Reality is an increasingly fragmented series of reflections originating in the One, which eventually lose their essence as they move outward from their source and fade into blank matter. Mind can contemplate the One, whereas the soul can only know its objects. The human goal is to transcend its physical limitations and, by contemplation, return to the One (note the Pythagorean influence here). In this way Plotinus felt that he had truly explained what Plato was teaching, and correlated metaphysical entities with various states or levels of consciousness. In this exposition, Plotinus takes the notion of consciousness another stage forward in that soul-psyche is that entity or property which deals with sense data and performs cognitive operations upon these.

Plotinus came to have an enormous influence on subsequent Roman Catholic theology, especially through Augustine who was born 150 years after Plotinus. While Augustine shared many of the fundamental doctrines of Plotinus, he (and all subsequent Christian theologians) differed in respect to the nature of God and creation. Plotinus saw the *Good* as a part of the whole, whereas Augustine argued that *God* was above his creation, and that existence was in time and not eternal as Plotinus had it.

Of the Patristic and Medieval periods, the three great figures (from the view point of psychology) were Tertullian, Saint Augustine and Saint Thomas Acquinas (Curtis, 1950).

Tertullian (160 - 220 AD – known also as Tertullianus) regarded the soul as emanating from the *Breath of God*, and regarded it as having a beginning. This in sharp contrast to Plato who held that the soul was unborn or unmade. The mind he regarded as a property of the soul, which is quite different to the view held by many of the ancient Greeks. In fact, Tertullian more or less reverses the hierarchical order (Curtis, 1950). What emerges here is the replacement of philosophy, logic and reasoning with the *Faith* of the Roman church. There is an appeal to Authority rather than to the strength of argument, wherein notions such as sin and heresy have crept in (Robinson, 1986).

Saint Augustine (354 - 430) was brought up a Christian, departed from the Faith for a while, but was reconverted in his mid-30s. His philosophy was always auxiliary to his theological preoccupations (Augustine, 1912, 1948). He held that only through Christian Faith could one achieve wisdom, and not through unaided intellect alone (Curtis, 1950). However, he was strongly influenced by Plotinus in that he accepted that some truths were attainable by reason alone, but qualified this by saying that one needed divine grace to make real headway.

It is only when we reach this era of Augustine that we come across significant references to the brain as a vital organ, and especially to its being the organ of thought and reason. Augustine's approach paved the way for the consideration of consciousness as an entity operating within the brain. Also, although not using such terminology, Augustine was the first to consider the neurophysiological correlates of consciousness. Prior to the Patristic period,

there is little or no reference to the brain and, in any case, the seat of reason was mostly held to be in the chest or breast (a very ancient notion). This lack of reference to the brain seems remarkable to us moderns, who take for granted its role as the central coordinating and controlling mechanism.

The scholarship of Saint Thomas Acquinas (1225 - 1275) made available again the works of Aristotle, showing how the latter's ideas could be combined with Christian theology (Curtis, 1950; Muller, 1893). For Acquinas the two principal powers of the human soul are *intellect* and *will.* He saw some greater power lying behind all things as the *Prime Mover Unmoved* (God). The soul is united to the body by virtue of it potential and actual powers, and the will is superior to reason.

The contributions of Patristic thought have been a mixed bag for psychological enquiry (Curtis, 1950). These contributions may be summarised as follows:

- In making humans unique the Patrists effectively blocked any ethological and evolutionary perspective. They also discouraged the application of scientific principles to the study of humans. Both were negative contributions in that they inhibited open enquiry.

- The Patrists produced a humanistic focus which was absent in Plato and Aristotle. Especially, the Patristic philosophers made human love a focus. This was a positive contribution.

- The Patrists forced a psycho-physical dualism, putting the human soul-mind beyond the reach of enquiry. This dualism was one of the antecedents to the current mind-body problem. Whilst it may have saved the world from materialism it certainly retarded scientific enquiry.

- By carrying religiosity into every sphere of human concern, the Patrists reduced daily experience to triviality. It led eventually to a virulent anti-intellectualism, a position that the authority of Rome made official. This was very negative in its effect, and evidence of it can still be seen today (eg, among certain religious fundamentalists).

• In combining rationalism with mysticism the Patrists conferred the human mind with the power to achieve transcendental awareness in this life (ie, by interior sense, grace, light of faith and intuition).

The Scholastics

In the centuries from 1100 to 1300, the Church controlled the universities and thinking in general (Curtis, 1950). This was the Scholastic age (the School men who argued over metaphysical issues). Psychologically, this age more than any before singles humans out as unique, giving them alone free-will and original sin. But these scholars were more interested in speculation than in experimentation.

The psychological enquiry of this era came closer to issues that define modern psychology than any other until late into the eighteenth century (Watson, 1976). Of especial focus were the dichotomies of nativism versus environmentalism, conceptualism versus sensationism, and mind-body dualism. Recognised was the need for a linguistic analysis as the first step to philosophical enquiry. Also sought was the establishment of the respective functions served by observation, logic and hypothesis.

The Renaissance

The period known as the Renaissance (1350 - 1600) was not one of scientific accomplishment. Rather it was one of general and literary preparation and of a breaking free from the chains of the Patristic era (Rand, 1912). Thus, it yielded no new philosophical psychology, but it did encourage the rebirth of secular thought, and gave rise to universities separate from the authority of the Church (eg, the University of Padua). Close to the end of the Renaissance were born two great thinkers, Hobbes and Descartes. The latter was the greatest thinker of that age, perhaps of any age (Anscombe & Geach, 1954).

Thomas Hobbes (1588 - 1679) is best known for his contributions to political thought (Perry & Bratman, 1993). That is, he saw psychology as the means of understanding state and government (*vide* his notion that at the root of all

human behaviour was self-interest and fear). He is also regarded as the founder of modern metaphysical materialism. He held that everything that is, is matter in motion, and espoused materialistic monism, utterly rejecting Descartes' dualism (Hobbes, 1962). Light and sound were held as not in the objects themselves but in the perceiving person. This observation represented a remarkable breakthrough. He regarded memory or imagination as a sixth (internal) sense in that the external senses can deal only with things that are present whereas memory and imagination can deal with other than the present. He distinguished two kinds of knowledge. That which came directly from the senses (*sense*) and that which came from within (*science*). But, despite this, we cannot say that Hobbes was directly concerned with the topic of consciousness.

Rene Descartes (1596 - 1650) was, according to Anscombe & Geach (1954), truly the first great psychologist since the ancients. While he was well aware of the trend toward experimental science his views were grounded in metaphysical enquiry. Thus, his psychology was subservient to his philosophy. But, though he was a Rationalist in the philosophical sense, he did not play down the importance of empirically based experiment. There is not the space here to do justice to Descartes' range and power of thought. His two major works, *Meditationes de Prima Philosophia,* 1641 and *Principia Philosophiae,* 1644, had a profound effect on the thinking of his time, and the issues he raised in them still have their influence today.

Descartes did not wish merely to make a great contribution to knowledge but to reconstruct the whole of philosophy anew, with mathematical reasoning as the key (Anscombe & Geach, 1954). He started afresh, wanting to rid philosophy of the rubbish and build a new system from scratch. For this he used his method of *doubt* in which he challenged all existing beliefs. This process ended with Descartes in a state of universal doubt, as a result of which he came up with the one proposition that he could not doubt and about which no demon could trick him -- the fact of his own existence. This gave rise to his famous pronouncement *"je pense, donc je suis"* or *"cogito ergo sum"* (I think, therefore I am). From this profound and difficult-to-challenge proposition, Descartes arrived at the mind-body split that has plagued philosophy and psychology ever since. His further thinking led him to conclude that the world is made up of two incompatible types of existence *res cogitans* (mind or consciousness) and *res extensa* (matter). Thus, humans

consist of an incorporeal mind lodged (somehow) in a mechanical body. The real conundrum that Descartes left us with is how these two seemingly incompatible substances can ever interact never mind communicate, as they clearly do. Descartes never unravelled this problem and nor has any other philosopher-psychologist since that time (Warner & Szubka, 1994).

The Modern era

The work of the contemporaries of Descartes in the 17th Century (eg, Spinoza, Locke and Berkeley), and in those coming after in the early 18th Century (eg, Leibniz, Hume and Kant) gave rise to the "modern" period of philosophy (Perry & Bratman, 1993).

Baruch de Spinoza (1632 - 1677) who, like Descartes, took a deductive line of reasoning arguing that, from a few basic truths, we can know all that there is to know. He stated that the philosopher's task was to identify these basic axioms, and denied the independence of things, regarding things as extensions. In this way he was able to link seemingly unlinkables such as mind and matter, where Descartes had failed to do so (Bidney, 1940). However, he accepted that mind and matter are distinct, even though intimately related. He adopted a form of pantheism arguing that all things are in God. In saying that everything was determined by the necessity of divine nature, Spinoza was required to deny the existence of free will. Even God is not free to make decisions other than those he does, because his decisions are determined by His nature. However, despite his determinism, Spinoza held that humans were free in the sense that actions are self-determined.

George Berkeley (1685 - 1753) argued that we do not directly apprehend reality, but that this generates appearances in the mind. He held that the proper objects of vision constitute a universal language of the *Author of Nature*, whereby we are instructed how to regulate our actions (Luce & Jessop, 1948-57). More directly related to psychology is his new theory of vision. He held that things cannot exist unperceived, that is, without a Mind or consciousness to perceive them. Tables and the like are not outward objects hidden away behind a veil of ideas, but are ideas, the very things we perceive. From this he further reasoned that all things reside in the mind of God. He took his ideas to a form of solipsism (the notion that I alone exist

wherein all else is part of my imagination) in which God alone existed. Berkeley's ideas still have relevance in the field of consciousness studies as, for example, in the notion that reality is structured in consciousness (Warner & Szubka, 1994).

John Locke (1632 - 1704) founded the classical British Empiricist tradition. He denied the existence of an innate source of knowledge, arguing that all knowledge came via the senses (Locke, 1961). Experience is of two sorts: that of *sensations* which derive from the outer senses, and that of *reflection* which derives from introspection. Simple ideas derive from sensation and have no other ideas contained within them and correspond to actualities in the sensory world and, in this respect, the mind is a passive organ. Conversely, complex ideas are compounds of simple ideas and do not have to correspond to reality and where the mind (consciousness) is an active agent. Locke distinguishes between the primary and secondary qualities of objects. *Primary* qualities are found in all bodies (eg, solidity and extension, which produce ideas that resemble their cause) and *secondary* qualities are those that produce in us ideas that do not resemble their cause (eg, tastes and smells). He saw the fundamental unit of knowledge as intuition.

Gottfried Leibniz (1646 - 1716) believed in an infinity of substances, maintained in existence by God, where each substance is simple and without parts, called a *monad*. The monad is also immaterial and may be called a soul. Matter is independent and is not conscious (Broad, 1975; Elwes, 1883). Yet, though he argued that human will is free, he too seems to have created a deterministic philosophy in which all depends on the will of God. He argued that God's will is an instrument in the *a priori* construction of the universe, wherein God acts in accord with the principle of *best* or *sufficient reason*. Importantly for the mind-body problem is Leibniz' identity law, which states that if the descriptions of two substances (or entities) A and B are identical then the substances must be identical. It was by applying this law that the physicalists argued that mind is identical to body.

David Hume (1711 - 1766) argued that we could be aware only of appearances in our minds and not of the reality out there. He accepted Descartes' notions of the veil of appearances and the great divide between consciousness and matter (Hume, 1888). He spoke of perceptions of the mind, dividing them into *impressions* (*primary* and similar to Locke's simple

ideas) and *ideas* (*secondary*, and similar to Locke's complex ideas). He attempted to do in the realm of mind what Newton had done in the realm of matter -- to produce a *mental mechanics*, but gave up the attempt (Pears, 1968).

Immanuel Kant (1724 - 1804) is regarded as one of the greatest of German philosophers, and his *Critique of Pure Reason*, 1781, is regarded as one of the great philosophical masterpieces, even though it is also very difficult to understand (Korner, 1955). Kant's aim was to restore the queen of philosophy, *metaphysics*, to her rightful place by asking what can be known by pure reason alone without reference to or derivation from sense data (Korner, 1955). Kant identified twelve *a priori* categories that represent the absolute minimum conceptual apparatus for making sense of the world. In *Critique* Kant is examining *a priori* grounds for judgements about experience. He argues that it is fundamentally wrong to take knowledge of tiny pieces of experience (eg, sense data) as primary data. He tried to escape from the conflict between empiricism and rationalism by arguing that neither sense alone nor reason alone could provide understanding of the world. Both were needed. Thought without content was empty and sense data without *a priori* concepts *were blind.* That is, matter was implicated in what was known about mind, and mind was implicated in what was known about matter (Kemp Smith, 1918). There is an organising principle which Kant regarded as a unitary consciousness which performs *a priori* synthetic activity on all sense data. Kant had (still has) an enormous influence on all subsequent philosophy, and in particular influenced Hegel's thinking (see the next section) who, in turn, had his own great influence on Germanic philosophy and psychology.

The work of these thinkers led to the formalisation of three great systems of philosophical thought: **empiricism**, **rationalism** and **materialism** (Russell, 1949). There are, in addition, idealism and nativism, but these are really subsets of one or other of the major three (eg, idealism is implicit in rationalism, and nativism in materialism). These three major philosophical paradigms cover most if not all of the issues that impinge on modern psychology, and therefore deserve more detailed attention.

Empiricism: The evidence of the senses constitutes the primary data of all knowledge. Knowledge cannot exist unless the evidence of the senses had first been gathered. All subsequent intellectual processes must use this

evidence and *only* this evidence in framing valid propositions about the real world.

The key Empiricist thinkers and their ideas were:

- **Francis Bacon** (*Advancement of Learning, 1605* and *Novum Organum, 1620*) who laid the ground for modern theoretical and experimental science in general and experimental psychology in particular.

- **John Locke** (*Essays Concerning Human Understanding, 1690*) who rejected the Rationalist views of Descartes and founded the British Empiricist tradition.

- **George Berkeley** (*New Theory of Vision,* 1709, and *A Treatise Concerning the Principles of Human Knowledge,* 1710). It is difficult to place Berkeley accurately. Historically he belongs with the British Empiricist tradition (Flew, 1979). But this is because of his work with sense perception and his commitment to an account of experience that rejects Rationalist arguments. And yet he came up with the notion that all sense objects are in the mind, and ultimately in the Mind of God. For this reason one could locate him in the Idealist camp (hence Rationalist paradigm).

- **David Hume** (*A Treatise of Human Nature, 1739.*) His main aims were psychological description rather than philosophical analysis, and he worked to put humans back at the centre of the stage, having been dislodged by Copernicus (Watson, 1978).

Rationalism: This is the epistemological system that asserts that all knowledge is the result of a rational analysis of the evidence of the senses, and that this very evidence cannot be gathered except by a rationally directing principle which uses an innate disposition called the *laws of thought*.

Principle figures and their contributions were:

- **Rene Descartes** (*Discourse on Method,* 1641, *Meditations*, *Principles of Philosophy,* 1644, and *The Passions of the Mind,* 1649). It was Descartes who bequeathed us the mind-body problem which is central to the Empiricist-Rationalist split.

• **Benedict de Spinoza** (*Ethics,* 1677, and *On the Improvement of the Understanding,* 1677), who saw that everything emerged out of divine existence and necessity.

• **Gottfried Wilhelm von Leibniz** (*New Essays Concerning Human Understanding,* 1705, and *Theodicy,* 1710), whose concept of the monad and its relation to God puts him in the Rationalist camp.

• **Immanuel Kant** (*Critique of Pure Reason,* 1781, *Critique of Practical Reason*, 1788, and *Critique of Judgement,* 1790). While it is legitimate to locate Kant among the Rationalists, his transcendental or critical idealism was the product of both the rationalism of Descartes and Leibniz, and the empiricism of Locke and Hume.

Materialism: This system asserts that there is only matter, and all that appears not to be so is nonetheless reducible to matter. It also espouses the notion of biological systems as machines (including humans). The earliest forms of materialism (excluding ancient Indian and Chinese thought) originated with Democritus and Epicurus. In the modern era the key thinker of this school of thought was Hobbes (*Leviathon,* 1651), who received support in the following century from Julien la Mettrie (1709-75) who saw humans as machines.

The influence of empiricism (and especially English philosophy) and materialism were very strong in the late 1600s and early 1700s, and certainly influenced Darwin, who made his contribution to psychological thought in his *The Expression of Emotions in Man and Animals,* 1889, in which he explored the notion of evolution leading (via natural selection) to serviceable habits (eg, facial expressions of anger). While Darwin was neither philosopher nor psychologist, his influence has been strongly felt in both fields. He subscribed to an essentially mechanistic view, seeing evolution as a ruthless process in a biological machine, in which humans were clearly located along a continuum of biological organisation. For someone who espoused evolution, he certainly set off a veritable revolution in thought, in which notions of enlightened machines, positivism and Social Darwinism are just a few (Hearnshaw, 1987). He has come to influence many modern psychological theorists as diverse as Freud and Skinner, and more recently his influence

can be seen in the rise of psychobiology. His theory is all but canonical in university biology departments around the world, despite the growing philosophical criticisms levelled at his notions of randomness, natural selection and survival of the fittest (eg, Denton, 1985).

THE EARLY PSYCHOLOGISTS

We now come to those thinkers who can be regarded as psychologists as much as philosophers. There are many figures of this modern era who have made a contribution to philosophical psychology, but among them Brown, Herbart, Bain and Spencer are worthy of separate mention here. The historical data for this section are based largely on Postman (1966), Rand (1912) and Watson (1976, 1978).

Thomas Brown (1778 - 1820) dealt with a variety of issues including sensation, space perception and intellectual states of the mind. He defined sensation as that affection of the mind which is immediately subsequent to the affection of the sense organs as induced by some external agency. He held that, in addition to the usual five senses, we have a time sense which is connected with memory.

Johann Herbart (1776 - 1841) wrote what must be one of the earliest textbooks in psychology, called *Lehrbuch zur Psychologie* (Rand, 1912), in which he analysed (among other things) the conditions of concepts and the connection between mind and body. He took the view that every human concept consists of infinitely small elementary apprehensions very unlike one another. His approach was mathematical and he seemed to see mental events as having something like a mechanical force which they exerted on the body. The soul, or consciousness, is an intermediary between the will and the body.

Alexander Bain's (1818 - 1903) main interest was the philosophy of the mind. He viewed the intellect as the thinking function of the mind, and as having various faculties such as memory, judgement, reason and imagination. In this, Bain was getting close to the modern conception of consciousness as entailing these faculties. Bain founded the essentially psychological journal called *Mind* (probably the first ever psychological journal) and now one of the most prestigious journals of philosophy. Bain also wrote the two most

influential psychology texts to appear before the twentieth century (*The Senses and the Intellect,* 1855, and *The Emotions and the Will,* 1859). In his *Senses and the Intellect*, Bain began with a chapter on the nervous system, a pattern followed for nearly a century by writers of introductory psychology texts (Andreski, 1972).

Herbert Spencer (1820 - 1903), before Darwin, developed his own ideas on evolution in his book *Principles of Psychology,* 1855/1896. For philosophy, he claimed a generality that went beyond the sciences, where its characteristic theories are true of everything. However, only in evolutionary theory is this claim empirically defensible. He saw evolution as a progressing integration, wherein there is a movement from disorder to increasing order and complexity, and from homogeneity to heterogeneity. Likewise he saw this progression in the Mind, as a movement from a confused sentiency to that of the advanced mind. In this, he was beginning to grapple with the concept of consciousness and its evolutuon. Around the same time as Bain, Gustav Fechner wrote his *Elemente der Psychophysik,* 1860, in which he mathematically attempted to relate mental and physical events, developing his law.

Between them, Bain and Spencer virtually founded experimental psychology, but fell short of its practice in that they never actually set up the facilities for research or conducted research themselves. That was left to Wilhelm Wundt (1832 - 1920) in Leipzig (*Principles of Physiological Psychology,* 1902).

The Germanic influence

At around the same time as Herbart, there arose a strong Germanic influence in philosophy and psychology. Attempts were made at an idealist alternative to the strong physiological flavour, with Kant's ideas being the most influential. In addition to Kant, a key trio of thinkers was Fichte (1762-1814), Schelling (1775 - 1854) and Hegel (1770- 1831), who together forged a unique form of idealistic psychology, and which still affects the way that Continental European psychology proceeds (Watson, 1976). Of this trio, Hegel had the greatest impact not only on psychology but on Germanic thought in general. He was declared by some to be the new Aristotle (Rand, 1912). He completely rejected Kant's caveat about the subjective nature of

reason, declaring that the truths of reason are necessary, non arbitrary and final. He argued that a philosophy that would genuinely explain the world must take as its first principle not a cause but reason.

Hegel's theory of psychology is most clearly presented in his *Phanomenologie das Geistes,* 1807, and in *Encylopaedia,* 1817. Hegel's ideas strongly influenced Freud's thinking, because Hegel's work is full of stages of development, ego conflicts and intimations of a death wish. Modern terms such as *self-awareness*, *self-actualisation* and *consciousness raising* are directly attributable to Hegel. His triad: *thesis-antithesis-synthesis* has influenced much thinking in academic circles. The theories of Piaget were also strongly influenced by Hegelian thought (Hearnshaw, 1987).

Despite his impact on socio-political thought (and action), Karl Marx (1818-1883) had little impact on the psychological thinkers of his age, nor on the psychology of this present age (Rand, 1912). This is partly because most of the developments in psychology at that time were experimental, whereas Marx's approach was historiographical. Marx took a sociological line when, at that time, psychology was taking an essentially biological line. Marx was a materialist and regarded humans as formed entirely by their environment. Crime and other maladaptive behaviour were caused by social evils, and consciousness itself was the creation of society. This view of consciousness was and still is far removed from that held in psychology, despite the second cognitive revolution which takes into account inter-person discourse and socially derived meaning.

Marxist thinking combined virtually all of the isms of the 19th century: positivism, materialism, utilitarianism, Hegelianism, pragmatism and experimentalism (Rand, 1912). He united these otherwise unmixable systems of thought with the almost naive belief in finding some flawless method (Berlin, 1978). He certainly did not find this method, but no one can deny the immense impact he has had throughout the world, especially within what was the Eastern Bloc (the USSR and East Germany), China and certain parts of South America. While pure Marxism seems to be going out of favour, it is far from dead, and has been resurrected in those more modern political activities that attempt to liberate peoples from oppressive power cliques. For example, the Liberation Theology of South America has Marxist notions at root despite the ideas having been fostered by Roman priests.

Regardless of the fundamental differences between, say, the thoughts of Aristotle and Plato, or between the Rationalists and Empiricists in general, what characterises them is their systems approach. These earlier theorists were concerned to develop an all-embracing theory or model. From the tail-end of the 1800s, a shift took place in the development of psychology. The generalised approach of earlier thinkers was lost, and the focus became more specialised (Robinson, 1986). It was argued that one should not attempt to get the big picture right until one had sorted out the lower level detail. However, it is questionable that, for example, a fine detailed study of vision-perception was undertaken in order to later develop, say, a full blown theory of aesthetics.

This shift from a top-down approach to a bottom-up approach was due essentially to the belief that psychology was (or at least should be) a science. This is why today's psychology is dominated by a relatively small number of highly specialised fields where, in the main, these developed independently and remain indifferent to each other (Hearnshaw, 1987). Some examples of these relatively watertight fields of enquiry are, personality, learning-memory, human psychophysics, psychotherapy, social psychology and genetic psychology. Just this small sample list shows that, while one can see that they appear to be discrete fields of study they are none the less linked, and that separating them out is an artificial device. This becomes especially true once one considers human consciousness which, more and more, is coming to be seen as the property or entity that brings these disparate fields of enquiry together (Warner & Szubka, 1994).

The beginnings of modern psychology

With George Romanes' (1848 - 1894) *Animal Intelligence,* 1882, there arose the origins of Behaviourism. Romanes argued that we could never know the mental life of another; we could only *infer* a mental life. We know only our own mental life, and infer that others are having similar mental processes because they are behaving in ways that we would behave were we having those same mental processes. In this there is the transition from introspection to Behaviourism. However, he did argue that consciousness is the ultimate stage of mental evolution. So, in this sense, he was a mentalist. His

Behaviourism lay in his view that only observable behaviour could be accepted as evidence of psychological functions. However, he was guilty of anthropomorphism in that he used his own introspective data as the basis of inferring psychological processes in non-human animals (Watson, 1976).

Romanes' anthropomorphism was countered by Lloyd Morgan's *Introduction to Comparative Psychology,* 1894, which stated that we may not interpret an action as the outcome of the exercise of a higher psychic faculty if it can be interpreted as the outcome of the exercise of one which stands lower in the psychological scale. But Morgan, along with many of his time, assumed that it was with states of consciousness that psychology had primarily to deal.

As early as 1800 materialism had made some inroads into the view of mind, in that the brain was seen as the organ of mind, and that if this organ was not functioning correctly then mind's operations were impaired. This again raised issues of free-will and its ultimate source. There arose two opposing views. One we can call *introspectionism*, using it in the original sense wherein it was confined to an examination of one's own ideas and other thought processes on the assumption that all healthy persons had such. The other view can be called *reductive materialism*, which proposes that all mental states, events and processes originate in the states, events and processes of the body, the brain especially. This approach was made *official* by Henry Maudsley in his book *Physiology and Pathology of the Mind,* 1867.

At the root of the issue raised by Maudsley was the issue of *evolutionary naturalism* (which beset the Victorian age) in which species were important and the individual was lost sight of, versus the *libertine ethic* that defended the dignity and freedom of every individual. This dichotomy of the collective versus the individual is still with us under other guises. For example, it occurs in the political sphere as with the New Right policies that have been implemented in New Zealand, in opposition to socialistic policies, over the past decade. Or in the psychological sphere with the tension between Maslow's notion of the self-actualised person (and the whole *human potentials* movement that arose out of his ideas), and Skinner's ideas as expressed in *Walden Two,* 1948, and in *Beyond Freedom and Dignity,* 1972.

Back in the 19th century there were attempts to reconcile these two opposing views. For instance, Wundt subscribed to the individual mind, viewing it as a

manifold of consciousness. Even where thinkers such as Wundt espoused the experimental method and viewed psychology as a science, they started with the fact of consciousness and always argued against the reducibility of consciousness (or mental life) to physical and biological processes (Hearnshaw, 1987). William James (1842 - 1910), in his *Principles of Psychology,* 1890, starts out by giving allegiance to the biological perspective, but (with some embarrassment) alters his stance once he gets to considering consciousness where he tries to see what can be meant by a correspondence between mental states and brain states.

There had been for some time two competing and conflicting views of mind (hence consciousness): *naturalistic* and *spiritualistic*. The former holds that mind is a natural phenomenon in the sense that it is purely the product of biological structures and functions. The latter holds that mind is incorporeal in its essence even though it needs a physical organ (the brain) to express itself through. There is a spectrum here, where we can place some theorists at one or other extreme, and others somewhere in between. For example, Skinner could be used to anchor the extreme naturalistic end of the spectrum and Plato the spiritualistic end. What is interesting about this polarity is that what extremists (say, naturalist) of one pole accused the other of (say, spiritualist), the accuser could equally be proved culpable of. For example, some extremist naturalists argued that the spiritualistic view of mind was simply unscientific and full of superstition. Yet extreme spiritualists have argued that naturalistic theories were nothing more than the natural magic of the Renaissance (Robinson, 1986).

Sigmund Freud (1856-1939) was the product of the then contradictory climate of German thought which defined science in positivist-deterministic-physicalist language and yet espoused an Hegelian philosophy (Robinson, 1986). Also at that time, Darwinism held sway, and Freud himself completed his doctorate in neurology. Freud was strongly influenced by Hegel's view that mind evolved from a primitive non-reflecting irrational substrate. Freud was also influenced by Breuer (Watson, 1976) and between them they gave rise to the outlines of psychoanalytic theory. They jointly published *Studien uber Hysterie* in 1895. Because, under hypnosis, the hysterical symptoms could be relieved, and the patient had no conscious knowledge of the causes, they adopted the term *unconscious* to locate the problem. Such symptoms as they treated or analysed were not feigned. Nor were they limited to women, a

widely held view at that time, and even by some today. The idea is ancient in that the word *hysteria* derives from the Greek for uterus! But though Freud and Breuer remained friends in the social sense, they fell apart in their philosophical and medical views. In 1900 Freud published *Interpretation of Dreams* and in 1901 *The Psychopathology of Everyday Life*. Early in 1902 he had a following. By 1920 he had a movement, and by 1930 he became the preeminent psychological theoretician (Watson, 1976). From the view-point of this thesis, Freud's major contribution was his emphasis upon subconscious operations. In this, he showed that waking consciousness was merely a part of the whole -- something akin to the tip of an iceberg. This thinking has had a strong influence on present day consciousness studies (Clark & Wright, 1988).

Freud knew of hypnosis, but he rejected it as a tool partly because of his Helmholtzian bias and partly because he had little success in getting patients *under* (Robinson, 1986). Thus, he turned to dreams, paraphraxes (slips-of-the-tongue) and free-association. Consonant with Darwinism, Freud's theories rested on the notion of instinctual biological drives, where the governing principle is pleasure. Since unrestrained *Id* could not be tolerated, Society had to socialise its young and thus develop in them a conscience (superego) which directs the individual away from gratification toward socially acceptable outlets of libidinous energy.

The basic point of Freudian psychotherapy was to return the patient back to the societal norm. That is, the analyst sought to reset the cybernetic setpoint (using the notion of a biological feedback mechanism) such that the outputs were again of an acceptable form. This aim is clearly in line with Darwinist-mechanistic thinking in that it works with the prime directive of biological evolution which seeks to diversify the gene pool of a given species. Deviation of any kind from this overall biological goal cannot be tolerated.

Freud was fretful to make the observed facts fit his theories, and this led to some rather unscientific behaviour on his part (Robinson, 1986). The cool reception he received was not due (as some have said) to his revealing sexual secrets or mentioning the unconscious. The former had been explicated by anthropologists years before Freud's time, and the term unconscious had been used by the ancient Greeks, and had been refined by Charcot and Janet in Paris (Whyte, 1960) well before Freud seized on it. The

main problem was the low fact-to-assumptions ratio in Freud's postulations (Robinson, 1986).

Carl Jung (1875 - 1961) extended Freud's thinking to include the collective unconscious, being influenced as he was by a strange mix of the concept of Platonic forms and Darwin's thinking about race and species (Jacobi & Hull, 1970). This led to Jung's concept of the Archetype, the *anima* (the male's archetypal image of the female) and *animus* (the female's archetypal image of the male). Thus, Jung argued, it was not possible (as Freud claimed) to understand the unconscious purely through a biographical study of an individual. Nor can neurosis be reduced purely to sexual undercurrents. Adler (1870-1937), too, departed from Freud's basic tenets and focused instead upon the will-to-power and the interaction between the evolving self and society (Watson, 1976). The notions of both Jung and Adler helped to move thinking away from the mechanistic determinism in Freud's scheme, and eventually led to the humanistic movement in psychology.

Some have confused the Freudianism of that time with the emergence of clinical psychology. But, the latter is medical psychology where France took the lead. A major worker was Pierre Janet (1859 - 1947) in Paris (*The Mental State of Hystericals* -- 1903) who studied under Charcot. It is interesting to note that Jung had studied with Janet for a while. Janet's main interest was that of hysteria, and it was he that showed that men could suffer this as well as women. Janet opposed Wundt's school of scientific psychology. He was against applying overtly generalised theories to each unique individual case. This seems in line with a characteristic of French thinkers who tend to celebrate the uniqueness of the individual. We see this same trend in Binet.

Alfred Binet (1857-1911) was an exponent of the French school of that time, and founded the prestigious journal *L'Annee Psychologique,* and later came into the field of mental testing (Binet, 1903). But this narrow focus ignores the much wider contribution of Binet. He was especially interested in the dynamics of the mind, its development and disorders. His most widely read text was *On Double Consciousness,* 1906. He celebrated the individual and rejected the attempts to show that the mental operations of all persons are similar. Just as with Janet, this is a general criticism of Wundt's physiological psychology and its introspective method.

Although there was some decline of interest in the topic of consciousness by the turn of the 19th century, this was due not to any proof that consciousness is a false conception, but to the fact that there is an inability of the modern accepted method of psychological enquiry to address these topics (Robinson, 1986). That is, the adopted method is *empirical* where this term equates not with the original meaning (see the earlier section) but with practicality, impersonality, ethical neutrality and antimetaphysicality. In this a philosophical stance is adopted which defines the nature of psychology as no more than an experimental method within science, rather than a philosophical endeavour in its own right. Out of this stance thinkers such as Titchener (1867-1927) hoped to advance Structuralism as that branch of psychology having an equivalence with anatomy in the biological sciences. But there was no covering law or theory or independent set of measures against which to validate these psychological methods. The data that researchers like Titchener gathered did not behave in the way that respectable scientific data should behave. Even the most willing, impartial, comfortable and fresh subjects had trouble introspecting identically on each occasion. There is a sense in which the new psychology emerging then (and in place now) was a method in search of a subject (Robinson, 1986).

Kurt Koffka (1886-1941) in his *Principles of Gestalt Psychology,* 1935, observed that Americans possessed a very high regard for science (the accurate and earthbound variety) which produced in them an aversion bordering on contempt for metaphysics. They regarded metaphysics as an attempt to try and escape from the welter of mere facts into a loftier realm of ideas and ideals. Koffka referred to a psychology that was turning away from the problem of consciousness toward the objective measurement of behaviour. In particular he was attacking John B Watson (1878 -1958) who insisted that a scientific psychology must concern itself only with behaviour and abandon all interest in consciousness, mental states, introspection, unconscious processes and other ghosts (in the machine). Watson was readily able to dismiss the Structuralists (eg, Titchener) but had more difficulty with Functionalism which argued for the stream of consciousness and for an understanding based on knowing the function of consciousness. One cannot understand a stream by taking quantitative samples from it (De Armey & Skousgaard, 1986).

One of recent psychology's great thinkers was Edward Thorndike (1874 - 1949). Thorndike was a student of James and his *Animal Intelligence,* 1898, was a landmark in the history of behavioural analysis. His *law of effect* states that behaviour is determined by its consequences. Watson was strongly influenced by Thorndike, but he did not approve of Thorndike's terminology, finding it too mentalistic. Rather, Watson saw the conditioned reflex as the unit of behaviour. However, he did approve of Thorndike's method.

By 1930, where Watson still had influence (his *Behaviorism* was republished as a 3rd edition in 1930, and this work influenced Skinner who published *The Behavior of Organisms* in 1938), psychology had divided into two distinct camps: those who worked as *behavioural scientists* and all the rest, where introspectionism was all but dead (Robinson, 1986). Although Freud's following was becoming international, Watson saw it as mentalistic and so no threat to real psychology. But Watson still had a few problems in areas that were not readily amenable to analysis into the reflex unit (eg, perception). In its Watsonian form, Behaviourism could not have survived (Hearnshaw, 1987).

It took B F Skinner (1904 - 1994) in his *The Behaviour of Organisms,* 1938, to revise Watson's ideas ensuring their survival. Skinner's book had as much influence on American experimental psychology as any work in the history of the discipline (Hearnshaw, 1987). Despite various revisions of Skinner's initial formulations, Behaviourism has retained the following features:

- Psychology is a natural science, restricted to the observable, whose aim is prediction and control of behaviour.

- It does not depend for its validity on the findings of neurology.

- Its law is Thorndike's law of effect but with the mentalisms removed.

- There is no need to consider issues such as consciousness, free will, intention and so on. These are verbal operants whose use society finds reinforcing.

The earliest intellectual groundwork for Skinnerism had been laid centuries before. For example, its only law is found in Epicurus, and its rejection of

rationalism was present in William of Ockham's (1285-1349) rejection of universals. Then, more recently, by Hume's ideas, Darwin's functional biology, Mill's utilitarianism and James' pragmatism. All of this amounts to a movement away from metaphysics (especially that of Kant) toward a practical philosophy-science.

Scientific psychology had its roots in 1830, in Germany, with Pukinje's physiological laboratory in the University of Breslau (then a part of Germany). There followed a succession of German researchers including greats such as Weber and Lotze at Leipzig. Between 1850 and 1880, in succession, there appeared Fechner, Helmholtz and Wundt. These three established scientific psychology. This movement did not initially take so well in Britain, where it was met with conservative opposition (Hearnshaw, 1987). In the United States of America, scientific psychology was welcomed by the likes of Stanley Hall, at John Hopkins University in 1881, where he became a pioneer of American psychology. Similar developments followed rapidly in Harvard, Yale, Columbia and Princeton universities. The development of scientific psychology was reinforced by World War I with its heightened nationalism and aggressive foreign policy. That war widened the rift between the philosophies of Continental Europe (especially Hegelian ideas) and those of the English speaking world (America especially – recall Koffka's comment).

At first sight, the Behaviourist thesis seems complete, pragmatically successful and without flaw. However, on careful reading this apparent invulnerability exists because the thesis does not really say anything useful about much of what concerns psychology. That is, according to Hearnshaw (1987), it fails to successfully explain domains such as reasoning, language acquisition and motivation. The underpinnings of Behaviourism are Darwinian in that it subscribes to a biological evolution that has endowed all animals including humans with their ability to respond to environmental stimuli. This creates problems for a system that pays scant regard to genetics. Invoking the generalisation of the law of effect is no help to the Behaviourist either, because this term is rich in mentalistic concepts. It would seem that Behaviourism can only retain its status as psychology by forfeiting its status as a science (Robinson, 1986).

The British Empiricist tradition has been strongly attracted to Behaviourism, but of critics there have been plenty (Hearnshaw, 1987). Humanists in

particular regard Behaviourism as amoral and dehumanising, and the Hegelians find it absurd (Robinson, 1986). Basically, apart from asserting its objectionable features, Robinson is saying that Behaviourism lacks a scientific explanation for the range of phenomena it purports to embrace. But the most persistent criticism is that Behaviourism fails to recognise the rational and intentional elements of human behaviour. That is, motivation is ignored. But the Behaviourists argue that the concept of motivation contributes little to the description of behaviour (Skinner, 1972). It is further argued that attempts to locate the real causes of behaviour (eg, motivations) are aimed at placing observers in a privileged position in regard to nature, seeming to put them in control. That is, *reasons* put humans in control whereas *causes* put nature in control. Modern people emit behaviours that seem to remove them from the direct control of others, because freedom and dignity are important. In this way people can regard themselves as rational, self-motivated, self-actualising beings who assert reason over causes.

Behaviourism and Materialism share in common their rejection of the *autonomous man*. The term is regarded as laden with mysticism, religiosity and superstition, being viewed as a code word used by those opposed to Behaviourism to demonstrate that humans somehow operate outside the laws of nature. Yet those using the term make no such claim and recognise that humans are subject to the laws of nature. What these claimants add is that we are only just beginning to get to know nature's laws and so have no right prematurely to circumscribe her operations such as to exclude facts which are difficult to deal with (eg, consciousness). There is no claim that we are autonomous in the sense of being able to ignore or go outside of the laws of nature. The Behaviourists confuse *freedom to* with *freedom from*. There is nothing to stop people flapping their arms about in an attempt to fly like a bird (freedom to) but most observers accept that they will not succeed (there is no freedom from -- the laws of physics in this case).

Continental Europe had its reply to the Behaviourist trend in the shape of Gestalt Psychology whose founders are regarded as Max Wertheimer (1880 - 1943), Kurt Koffka (1886 - 1941) and Wolfgang Kohler (1897 - 1967). All three worked at the *Instut die Psychologie* in Frankfurt. However, Wertheimer and Koffka arrived there in 1910, after Kohler had left for Frankfurt in 1909. Then, Koffka left for Giessen in 1911. Important to this movement was Wertheimer's work on perception and *apparent movement*, the *phi*

phenomenon, wherein the motion is created by the observer and depended on nothing in the apparatus or setting. While the Gestalt psychologists never gave allegiance to any given school of philosophy, their ideas can be connected with those of Kant, Hegel and the neo-Hegelians in the sense that it is through the notion of mental categories that sense data become organised percepts. The phi experiment is a study in mental phenomena and not sensory or behavioural states.

The Gestaltists never rejected the brain and central nervous system (CNS), nor things physical in general. They were not truly idealists. In fact they roundly criticised the Behaviourist for ignoring the most fundamental aspects of science (eg, as in physics where dynamics and motion are key notions). The Gestaltists argued that:

- Organisms have transactions with their environment.

- Environment is not only the physical objects proximate to the organism but is the interactions as well.

- The relationship between experience-action on one hand and brain physiology on the other hand is isomorphic, and that brain physiology is not of a reflex nature.

- Perception is governed by laws of organisation, wherein the organism imposes on the environment a *gestalt* (form or configuration).

- There is no simple relationship between the world of matter and that of experience.

Karl Lashley (1890 - 1958) was neither a mentalist nor idealist but he was quick to discern the deficiencies in the biological associationism of Pavlov. He was at heart a Gestalt psychologist and examined the CNS. His researches with animal subjects showed him that there was no one-to-one relationship between brain locations and specific processes such as learning and memory. He favoured an isomorphic relationship (as did Kohler). Where Pavlov's studies were careful, Lashley's were clever and even dramatic (Hearnshaw, 1987). He undermined the associationist theory and was never able to find the so-called *engram of memory* (Hearnshaw, 1987). His basic

message is still valid even though recent research has shown that there are subcortical locations associated with memory (Robinson, 1986). He was misled by his focus on the cerebral cortex.

We saw at the beginning of this chapter that the notion that mind can be explained in terms of matter goes back to the ancient Greeks (eg, Democritus) and has been explicit in the writings of the Stoics and Epicureans and beyond. The phrenology of Franz Gall (1758-1828) and the researches of Ivan Pavlov (1849-1936) lend it support, as do the modern Behaviourists. This overall view argues that there are not two stuffs but one – *matter*. Berkeley's absolute idealism (see the earlier section of this chapter) has never cut much ice in the scientific community since the early 19th century. Philosophers, however, keep the debate open. But modern science, psychology included, scarcely acknowledges its debt to the past 2000 years of philosophy and so scorns this current debate (Perry & Bratman, 1993).

Central to this debate is the topic of mind and consciousness. Because consciousness is the thread that runs through this thesis, and because I argue that one cannot understand the development of psychology without reference to philosophy, I tackle the so-called *mind-body problem* in the next chapter.

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CHAPTER 3: MIND AND CONSCIOUSNESS

THE MIND-BODY PROBLEM

The strength of the science consensus within psychological circles in part seems to rest on the longstanding popularity of the seemingly corroborative findings of modern neuropsychology. But this does not provide the whole answer because a materialistic monism is not a necessary condition. Soft dualism is valid in that it asserts that there are mental events without insisting that they belong to some non-material realm. To show that such events are caused by material events far from establishing the validity of material monism virtually guarantees the validity of the dualist position (Warner, 1986). The assertion that *I have a mind that is entirely different from material entities* cannot be falsified by any demonstration of the material causes of the proposed mental entity.

Another explanation offered by the materialistic consensus rests on parsimony being raised to a universal principle, wherein we should not look for complex answers when simpler ones will do. But this stance in itself cannot rebut the dualist position. It is the phenomenon of Mind itself that is the vexing challenge to the *unity of science* thesis (Block, 1981). Thus, the *unity of science* thesis cannot be used as an argument against dualism.

A third generic materialistic answer lies in seeing dualism not as a metaphysical proposition but as a set of logical and semantic deficiencies. That is, any talk about mind and brains is talk about the same thing, and that there are only physical events, even though we use mentalistic terms to describe some of them. Gilbert Ryle (1900-1976) has been the main exponent of this approach, with the Churchlands being the most recent (Churchland, P.S., 1986; Churchland, P.M., 1988). This is an essentially Behaviourist stance in that all events are seen in terms of behaviour regardless of whether we class them as mental or not. Thus, for Ryle, the Mind-Body problem is a pseudo problem (Ryle, 1949). He does not even attempt to show that although we use mental and physical languages we are talking about one and the same thing. However, there is still a dualism implicit in Ryle's assertion that behaviour is somehow managed (McGuinn, 1989). Thus, we can ask *What then is the manager*? The

big question is what is this same thing that the materialist claims for mind and matter alike?

Smart (1963) has attempted to show that there are no philosophical arguments that compel us to be dualists, and that everything should be explicable in terms of physics. He found it odd that all the cosmos should obey the laws of nature except those of a puny creature called human. He attempts to place psychology firmly on the bedrock of physical laws. He invokes the notion of *contingency identity* where the seemingly different mental events we refer to are contingently identical with brain states. The problem with this is that contingency implies that these mental states could be, but just so happen not to be, different from brain states.

Another problem is that the statements we make about our sensations and feelings are ultimately incorrigible, whereas statements about external events can be corrigible (recall Descartes' method and conclusion). The brain is such an external. Thus, there could be a mismatch, where sensation statements can never be incorrigible, and yet brain statements can be. Monists such as Smart live in hope that one day a mature neuroscience will show once and for all time that mentalistic language is redundant. This same hope is expressed by the Churchlands (eg, Churchland, 1988).

One could ask why psychology has invested so much in the relationship between brain physiology and behaviour. If the identity thesis is true (see the discussion in Chapter 2 on Leibniz), then what is the difference between psychology and neurophysiology? However, there are many psychologists who would not agree that psychology can be assimilated into biology, and say that no amount of experimentation will succeed in converting mind into brain (Warner, 1986). Warner argues that these theorists have, however, to select from one of three options:

- Conclude that mind is not in brain; then study mind in a non-physiological way. This preserves the discipline of psychology and prevents its assimilation.

- Conclude that mind is brain, where this raises a variety of problems (eg, ethical problems of animal research because humans lose their privileged status). This

choice amounts to no more than acknowledging the indebtedness of modern psychology to 19th century science.

• Conclude with Leibniz that mind and brain are different and parallel entities each conforming to its special essence and pacing off its harmonious journey in a way perfectly correlated with the other. This embraces metaphysics but is generally unpalatable to modern psychologists with their allegiance to science.

This preamble leads us to the Mind-Body problem proper. Of all the topics that are currently occupying the attention of philosophers, the Mind-Body problem is centre stage (Warner & Szubka, 1994). This is so because it is with the mind that we seek to know, to describe and to explain the world we live in. Without a successful philosophical resolution of the Mind-Body problem, the very epistemological assumptions of science (even of reality) are in doubt.

There are many differing approaches to, and proffered solutions for, the Mind-Body problem (Warner & Szubka, 1994), ranging from the blatantly physicalist-materialist to the equally blatant idealistic. However, one can classify these into three fundamental approaches as follows:

Identity Theory: In this approach it is argued that there is nothing that can be said about minds that is not already exhausted in claims about the CNS. That is, there is only the one thing, *physical matter*, which we refer to accurately with physical terms and which we refer to misleadingly with mentalistic terms. Thus, the essential claim here is that there is no other thing but physical matter, which mental terms refer to. The attractiveness of this approach is that it avoids the difficulties inherent in having a dualistic scheme where there are mental things and physical things. That is, it makes life very simple if everything in the world, including humans and their complex behaviours, can be reduced to one ultimate class of things, matter of some form. Philosophically, this stand rests on the validity of *Leibniz' Law*, which is stated as: *if one thing is identical to another then anything that is true of the one must also be true of the other.* The great value of Leibniz' Law is that it makes it very clear that if we wish to equate two separate things with an equals sign, then the property lists of each of the two things must be identical. It was the application of this line of reasoning that led Descartes to his dualistic view of the Mind-Body problem. He said that the properties of minds

are quite obviously different from those of the CNS (eg, the sensation of pain is quite different to the firing of certain clusters of neurons). Descartes said that mental states are conscious, private, non-spatial and indivisible, whereas physical states are non-conscious, public, spatial and divisible (Descartes, 1985, 1986). When viewed in this way, there can be no Leibnizian identity because the property lists are clearly different.

Three major objections to classical identity theory have been highlighted. The first of these had been raised by Descartes, who said that the property list of mental things was not identical to that of physical things. The second objection is that humans have a strong sense of the privacy of their minds, and that their minds are their own. This is known as the *first person* objection, where Classical Identity Theory leaves this something out. The third objection is that Identity Theory is species-chauvinistic in that it insists that only creatures with brains can have mental states, because it insists that mental states and brains are identical. Taken far enough, this final objection to Identity Theory not only insists that other forms of life (eg, non carbon-based) could have mental states, but that we cannot even restrict mental states to structures *per se*. The way out is to identify a given mental state with a functional state, which state could be realised in any number of structures or non-structures. This final objection to classical Identity Theory led on to Functionalism.

Functionalism: There are three key ideas underlying the Functionalist view. Firstly, there is a distinct difference between a functional description and a structural description. In computer science, this difference is captured by the difference between, say, a hardware circuit diagram of the central processor and a listing of the program code. The latter says nothing about the structures it might use to get things done, and the former says nothing about the processes that might occur within the described structures. Secondly, the functional descriptions can be hierarchically arranged, with lower-order functions nested within higher-order ones. For example, the organisational chart of a company is hierarchical in that it shows the Chief Executive Officer at the top, various senior executives at the next level down, who head certain functions such as corporate services and human resources, then levels of middle management, and finally those who report directly to these managers. The third idea is that, if the lowest

level of such a hierarchy consists of elements so simple that they are purely mechanistic, then physicalism is vindicated.

Combining these ideas enables us to correlate mental stuff with the functioning of the whole. In this scheme, identity statements are still relevant, but become more subtle. That is, where we are equating a functional device (say a text manipulation device) with a structural device (say, a personal computer), the function (text manipulation) can be carried out by a number of different structures, such as knife and woodblocks, ball-point, paper and scissors, and a personal computer using wordprocessing software. That is, we are saying in our *identity* statement that in this case that specific function is carried out by this specific structure, thus: *a personal computer is a symbol cruncher*.

When we get to human examples, the problem gets even more complex because, in the Cartesian tradition, the structures that have the function of, say, concept-maker or idea-abstracter, are argued to be mental structures existing in a *mental* space. But, the Functionalist disagrees and argues that, in the end, there is an identity between mental states (functions) and physical structures (eg, a human brain). That is, the specific function of abstracting concepts, say, is carried out by the specific structure of a neocortex, thus: *thinking is the firing of neurons in the neocortex*.

While classical Functionalism was a great advance on classical Identity Theory, it still had problems (Malcolm, 1971). Malcolm argues that, in particular, any mental state or process has a subjective feel to it (see the first person objection), and it is hard to see where a subjective element comes into the structuralist story. For example, pain is not a good piece of structure, nor is it any better as a function. Such things as pain just happen and are phenomenal. That is, events may not figure in the function-structure model.

Another problem is that of beliefs and propositional attitudes (eg, worries, fears, hopes, regrets etc.). Here are three such propositional attitudes:

(a) While I am typing this, I worry that the right keys will be missed being hit by my fingers.

(b) While I am typing this, I worry that my fingers will miss hitting the right keys.

(c) While I am typing this, I worry that the keys will miss being hit by the right fingers.

The problem is that we know that semantically (a) and (b) are the same, and that (c) is a different propositional attitude. That is, (a) and (b) tell the reader that my worry concerns getting my fingers to the keys I really want to get them to, whereas in (c) my worry is about the keys and their sense of loss. We know this ahead of any application of a rule of structural and or functional identity, and especially ahead of any neurophysiological research. We know they are different propositional attitudes (ie, different functional states) purely on the basis of the *grammar of English*. But this is not how identity or non-identity of physical states or functions is supposed to be determined on any basically physicalist-reductionist stance. We are supposed to look at *physical things*, not at grammar, for such decisions.

This is a problem for physicalism in general. For Identity Theory, the problem is that we can determine too many identities of structural states non-empirically (ie, non-physically). For Functionalism, we can determine too many identities of functional states non-empirically (ie, non-physically). And, as we shall see, for the next view, Eliminativism, the problem is how could questions of syntax and semantics even get a grip, if all there is are purely physical neurological events and processes.

Eliminativism: Beyond Functionalist physicalism, there arose an Eliminativist version, usually called Eliminativist Materialism. This approach is based on the notion that science moves forward by ditching the old as it takes on the new (a dubious and simplistic view, as Kuhn, 1962**,** has shown). Thus, if there are only brains, and thereby no minds, then our ways of psychologically speaking (called *Folk Psychology;* Churchland, 1988) are meaningless and should be dropped.

Basically, what the Eliminativist is saying is that any attempt to retain the theoretical terms of the Cartesian theory of mind, or attempts to retain our everyday psychological ways of describing human behaviour, have no value. Rather than retain the earlier notions and then try to squeeze them into a

workable identity equation (in which the Folk Psychological terms go on one side of the equation, and neurological terms go on the other side), the Eliminativist argues that we do not need an identity equation in the first place, because it causes so much confusion.

This is more than simply changing the kinds of explanations that are offered in a new theory. It means changing the very phenomena and the ways of identifying these phenomena which the new theory explains. The Eliminativist argues that with any new theory, we do not try to hang on to the previous ontological entities and processes. Instead, we give a new explanation of their properties and relationships. That is, we completely redescribe the very phenomena which we take the new theory to be explaining. The Eliminativist believes that once neuroscience reaches full maturity, we will no longer think of the phenomena which are genuinely there and which have a real explanation in any of the terms which we now use, as inherited from our outmoded theories (Churchland, 1986).

To summarise, from the above discussion, we can see that Eliminativism is a way around trying to keep mentalistic expressions and yet ditch minds. You get rid of the lot because any attempt to hang on to the Cartesian mode (or the Folk Psychological mode) of expression has no meaning. In this approach, the notion of X = Y is dropped as irrelevant because we are dumping the old Cartesian referent and not identifying two existently real things as with an equals sign. That is, X has no real existence or properties that science can determine, so it is completely replaced by expressions of the new theory. Thus, there are no Xs, only Ys. This gets around the identity issue in the Leibniz and functional senses. However, to take this view to its logical conclusion means dropping the old vocabulary and replacing it with the new scientifically approved vocabulary. This is done because the old modes are regarded as containing no ontological truths, and that we retain them only through linguistic stubbornness. However, the chunk of the language we would have to drop is so large that the exercise might become absurd (Warner, 1986).

Eliminativism has struggled with the notion of the privacy of thought and how practically one could clean up the language to eliminate Folk Psychology. From these respective struggles, a spectrum emerges. At one end of this spectrum Eliminativism is valid and at the other Functionalism is valid. In the battle

between the two, much depends on the findings of neuroscience and cognitive psychology (Warner, 1986).

Contemporary developments: The contemporary physicalist scene has changed considerably from that of the 1950s. Physicalists have learned from the lessons of classical Identity Theory and Functionalism. Essentially, science does not work by either *reducing* individual Xs to Ys or *replacing* individual Xs by Ys. It works by reducing entire theories, where Xs dominate, to new theories, where Ys dominate (Kuhn, 1962). Similarly with replacement.

Moreover, the progression of reduction or replacement is a matter of degree and not an either-or choice. The notion that the old theory is just a subset of the new theory is incorrect, because it is never the old theory which is reduced-replaced but a corrected version of it (Kuhn, 1962). The extent of this correction lies on a spectrum ranging from minor revision at the classical identification-reduction end to extreme changes which leave the old theory far behind at the Eliminativist-replacement end. For example, the transition from Aristotle's physics to that of Newton's entailed replacement, whereas the change from Newton to Einstein entailed reduction.

The most fundamental question for Physicalism is the extent to which there is a fit between a *Mature Neuroscience* and Folk Psychology. The real issue is whether neuroscience organises the phenomena for which it offers explanations in a way that is radically different from the way Folk Psychology organises the phenomena which it explains (Warner, 1986). This could go either way. In one direction, it might be shown that there are strong parallels between the categories of Folk Psychology and the neurological activities uncovered by neuroscience. For example, the notion of the *just noticeable difference* between two very similar weights may correspond well with the firing of certain clusters of neurons in the cortex. In this case, the fit would be good and a fair degree of reduction could occur. Conversely, there may be no significant correspondence between the two modes of explanation, so reduction cannot occur, and the Physicalist will want to ditch the Folk Psychology. For example, the clinical descriptors used for the various types of depression may have no correspondence with neuronal activity. From the Physicalist view, Folk Psychology is not worth keeping for its explanatory power because it is too

dualistic in its ontological commitments, but bits of it may be found worthwhile for its conceptual organisation (Churchland, 1988).

But, despite these variations of approach, the issues come down to one central question:

"Can a scientific program of a fully mind-independent description and explanation of nature be extended without fundamental modification to the description and explanation of mind?"

If the answer is yes, then the mental is fully reducible to the natural sciences (eg, physics, chemistry, biology and so on). This would imply that all talk of mentation is simply a code of convenience that we use, but has no real validity. That is, we have only *Folk Psychological* explanations. Thus, there is no dualism because everything, including mental states, are reducible ultimately to matter.

If the answer is no, then we must assume that mental states and mind-consciousness are non-physical entities the description and explanation of which will always lie beyond science. That is, we seem to have a dualistic state of affairs where mind and body have very different identities.

It would appear that there is no really acceptable halfway answer to the above question because of the nature of the question. Either science will one day be in a position to describe and explain everything, including things mental, or never will be. It is clearly the hope of the Physicalist tradition that the answer will be yes -- if not right now, then when we have a fully mature psychophysical branch of science.

A key term in the question above is *mind-independent*. This is a major assumption of science where the idea behind it is conjured by terms such as objectivity and value-free. Clearly, scientific objectivity comes in degrees. In classical mechanics science can have a high degree of objectivity. In quantum mechanics absolute objectivity is impossible because of the way in which the observer interacts with (is part of) the system under observation (Bell, 1987). Likewise, at the relativistic-cosmic level, absolute objectivity is hampered by human dependence on spatio-temporal conditioning, which has been learned on

one little planet where the classical laws of physics hold sway. Thus, even within the natural sciences, absolute objectivity is an ideal that is rarely reached. Objectivity in this sense could lie along a spectrum of possibilities where, at one end, we have the highly personalised, individualistic, local view of the universe of things and at the other end a totally impersonal and abstracted view. We can see the attempt to shift from the former end of this spectrum to the latter end in the historical development of science. Briefly, and somewhat simplistically, this shift can be described as occurring in three major phases:

Aristotelian: In this phase, science projected onto nature what the observer wanted to see there. That is, to force on nature a meaningful order of final causes. This had a very low level of objectivity.

Pythagorean: In this phase nature is viewed as a mathematically ordered whole (eg, Kepler and Galileo). Objectivity was higher, but still hampered by the classical view of nature.

Contemporary: In this phase (present day) science sees nature as a complex of contingent correlations delineated by empirical observations. This is probably the limits of a mind-independent view, at least for humans as presently evolved and constituted.

Thus, if mind-independence is difficult to achieve in the natural sciences, then how much more difficult is the enterprise when the science is psychology as it attempts to deal with mind? To rephrase the question asked above in more psychophysical terms, we can ask: *"Am **I** an object fully describable and explainable by science?"* This rephrasing helps us to focus on the central issue, because it brings in the notion of ***self***, where this same self is to be described and explained and is to do the describing and explaining. As one can see from the discussion about objectivity, the mind-independence aim is undermined by the fact accepted by most philosophers engaged in the Mind-Body debate (eg, Warner & Szubka, 1994) that mind (mental states) is private, subjective and of privileged access. Warner & Szubka point out that the underlying error in the *naturalism* view (that which argues for full reducibility to natural science) is that simply because something is real (in this case mental events) it must be equally accessible to all competent observers. This, effectively, is the absolute realism

stance, which has low explanatory power in the view of many present day philosophers (Warner & Szubka, 1994).

But, the ontology of mental states must be, by definition, a *first-person* ontology. Thus, how can a *self* be eliminated from the analysis? To argue this way is not to bar science from the study of mental states. But it does force the view that the usual conceptual methods of science with its highly objective empirical data gathering is not up to providing an adequate description or explanation of mind (Warner, 1986). This is because subjective experiences are at present outside of a physically based science's explanatory power in that such experiences are not publicly observable nor are they amenable to interpersonal processes or analyses. This, of course, is the major philosophical issue for psychology in its attempts to become a science.

One could ask why the Mind-Body debate? Why bother? It is certainly a complex and difficult enough debate, where many feel that work on the Mind-Body problem has come to a dead end (Warner & Zubka, 1994). Each who has an interest in the debate must answer this question for themselves. For me, the solution to the Mind-Body conundrum carries with it deep philosophical and metaphysical implications that affect the whole human enterprise. If naturalism wins this debate, then we must accept that all (includes everything that it is to be human) is finally reducible to the laws of quantum mechanics.

You the reader might argue, so what, I am still alive, I bleed, I weep and laugh. Yes, but the *you* doing so is simply a machine. For me, this is unacceptable because I give credence to the transcendental possibilities of human nature. Thus, my goal in the Mind-Body debate is to see physicalist-reductionist thinking (in whatever guise it appears) defeated. I believe that this can be done without falling into the dualistic Cartesian trap. That is, it is possible to have a coherent non-dualistic account without conceding to the naturalism view. The reason for this is that we cannot assume that the ultimate nature of reality is physical. That is, the one substance that the physicalists subscribe to (and argue for as the basis for all that there is) may be Mind. This is an argument I have used (Jackson, 1992), where I invoked and modified Bohm's notion of implicate and explicate orders (Bohm, 1957, 1973, 1980).

CONSCIOUSNESS

While this present thesis deals primarily with the development of psychology in New Zealand, as I argued from the outset, for me the issue of consciousness is the thread which links this development. I argue thus because, in my view, consciousness is central to the discipline of psychology. You will see from my earlier definition of consciousness that I use the term to embrace more than waking awareness. At the human level, I argue that consciousness is that coordinatory and integrative factor that uses the various brain structures to further the ends of evolution. Thus, a psychology without consciousness at its roots remains a shallow affair. For this reason, a major concern of this thesis is the manner in which consciousness has been dealt with (or ignored) in the development of psychology on these shores. It is necessary, therefore, to expand on what has been said so far about consciousness so that the reader will clearly see where I am coming from.

Consciousness is something that we all experience, and yet is so difficult to understand and explain. Dennet (1991) noted that consciousness is at one and the same time the most obvious and most mysterious feature of our minds. Nagel (1974, page 166) more ironically remarks "Without consciousness the Mind-Body problem would be much less interesting. With consciousness it seems hopeless." Not a very good start to a topic that runs as a thread through this thesis. In fact, as Davies and Humphreys (1993) imply, perhaps consciousness falls completely outside of any rational enquiry, defying both philosophical and scientific explanation. This may, ultimately, prove to be the case. But at present, the case has not closed and the jury is still out. Thus, I intend to pursue the topic just as others have done (eg, William James -- De Armey & Skousgaard, 1986) and continue to do (eg, McGuinn, 1994).

Before I deal directly with the term ***consciousness*** I wish to address the confusion that is liable to arise in the use of related terms such as *mind, mental, cognition, awareness, perception* and so on. For example, in some texts the terms *mind* and *consciousness* are used as synonyms. In my view this leads to confusion, because, for me, these terms relate to two different things. I wish to

make certain key distinctions between terms such as mind, consciousness, awareness and cognition, because I shall use these terms in a special way that is different to their conventional usage in psychology. Additionally, I need also to discuss briefly the issue of the relationship between consciousness (and its subordinate terms) and the brain.

Mind and consciousness: Jackson (1992) argued that consciousness is a derivative of Mind (a high order implicate), and is thus junior to it in a hierarchical sense. Note that I use Mind with a capital M rather than mind, so as to distinguish Mind from its non-technical usage as in common discussion (eg, "I have just made up my mind"), and from its usage as in philosophical arguments (eg, those of the physicalist on the Mind-Body problem), and from its usage in most psychological paradigms (eg, as in cognitive science which discusses the mind's representations of reality). The sense in which I use the term Mind is close to what Greek philosophers such as Plato described as the One, or Buddhist philosophers as the Void. A primordial ground or noumenal state.

Consciousness and awareness: The term *awareness* is sometimes used as a synonym for consciousness. However, I feel that this, too, leads to confusion, because there is a need to distinguish between the awareness which all sentient creatures seem to have and the self-awareness that only humans seem to possess. For example, a cat stalking a bird is very aware of the bird and the desired outcome, but does not possess the self-awareness of its intervening owner, who remembers how she felt when she found the last dead and mangled bird lying at the back door. It is necessary to recognise that awareness is not the same as self-awareness, and that consciousness includes, but is not reducible to, experience. Thus, awareness is junior to consciousness, whereas self-awareness seems (at least in part) to characterise consciousness. In this, I am not saying that non-human animals do not possess consciousness (I support this view, as shown in my definition on page 3 of this thesis).

Consciousness and cognition: The term *cognition* is used by most psychology texts in a narrower sense than that of consciousness, and I regard it as hierarchically junior to consciousness. The Latin origin (*cognitio*) shows that its root meaning is *to become acquainted* with something, or to *learn* something, or to *acquire knowledge.* That it is used as a lesser term than consciousness is

evident in the way that many (if not most) cognitive scientists use it (eg, Gardner, 1985), where they exclude altered states and the affects, leaving cognition as embracing all those processes that are commonly regarded as employing the mind (and the mind's representations) to do the work (eg, memory and thinking). Thus, in the sense in which cognitive science employs it, cognition appears to be only ***one*** of the operations of consciousness.

Consciousness and the brain: It is difficult to consider the topic of consciousness without also considering its physical organ of expression -- the brain. It is the difficulty of considering consciousness apart from a physical organ which makes it so easy for many consciousness theorists to lean toward a physicalist-reductionist stance. Even where the view is not one of extreme materialism, consciousness is still regarded as dependent in some way or other upon the brain. The theoretical views on this issue range from seeing consciousness simply as a by-product of the neural activity in the brain, to seeing consciousness as having an existence quite independent of the brain even though it must express itself through a brain. I have argued elsewhere (Jackson, 1992) that consciousness is as much an explicate of the implicate order as is the brain. Thus, there is no dualism at the level of brain-consciousness as with some theorists. Rather, the dualism is at the Mind-consciousness level. However, even this dualism is illusory because consciousness (as an explicate) is a derivative of Mind (as a high order implicate). But this argument needs further clarification, where a brief digression is necessary in regard to dualism in general and Descartes' version in particular.

Descartes developed a blatantly dualistic system in making such a clear and sharp distinction between mind and body (Anscombe & Geach, 1954). His distinction was so sharp and rigid that there arose the problem as to how two such totally different categories of thing could ever interact. From this Cartesian problem (or trap), there arose the notion that all dualistic schemes have an interaction problem. The model I have developed (Jackson, 1992) depended on two quite distinct entities -- the implicate order and the explicate order. The fact that these two orders have very different property lists (see the discussion above regarding Identity Theory) and are not reducible one to another implies that my model is dualistic, implying interaction problems. However, I do not believe this to be the case because my dualism does not suffer from the Cartesian trap.

Firstly, in the case of my model, the dualism is apparent only, because the explicate order is a derivate of (not separate from) the implicate order. The implicate order and explicate order have different property lists only in the way that the vocal chords and a shout have different property lists. The latter is a derivative of the former. The latter could not come into being without the former. Conversely, in Descartes' scheme, mind and body had quite independent existences. Further, not only is interaction between the implicate and explicate orders possible, in the model I proposed this interaction is necessary to the process of evolution.

Over three hundred years ago John Locke (Locke, 1961) listed many constituents of consciousness, such as perception, thinking, doubting, believing, reasoning, knowing and willing. Any comprehensive definition of human consciousness must include criteria for the structure and function of each constituting agency. Borrowing somewhat from Locke's original and thoughtful analysis, human consciousness appears to be strongly related to: **affective life**; **experiencing reality**; **attention-reflection**; **personality** and to **volition** (will). Therefore, any attempt at defining human consciousness entails considering each of these factors in turn, and then considering the meta-nature of that which organises and relates them.

Consciousness and the affective life: Far from defining consciousness, the affective state presupposes consciousness to be the very condition of experience. That is, to be conscious is to have sensations, all of which affect the body or set off reactions within it. This is another way of saying that to be conscious is to experience sensations (internal and external) and, as a result, to feel.

Consciousness and the experience of reality: **Humans** perceive an apparent reality and, in adapting themselves to this reality, unfold a complex operational capacity. To be conscious is to know one's experience. That is, to be conscious is to be capable of grasping one's own knowledge in the categories of verbal communication. This must be true even for those sense modes (eg, olfactory) for which we lack a sophisticated vocabulary, by comparison with, say, that of vision. (The focus here is human consciousness. I am not denying consciousness to non-human animals).

The major implication here is that the human mode of consciousness is, to a large extent, defined in terms of the speech (internal or external) capacity. However, this ignores that which we call unconscious, in that what is said (internally or externally) seems to sit on some deep structure of language that is never present to consciousness (Chomsky, 1975). We are aware only of segments of a given train of thought, as occur in a conversation, or as I type these words, and are never aware of the entire train. It is only when we have got that train out (verbally or otherwise) can we see it as a complete entity, and then realise that prior to this, the greater bulk of it was unconscious.

Attention-Reflection: Attention expresses the notion of a tension toward some desired goal, where the degrees of attention are hierarchical, ranging from involuntary functions to free-creative acts. Attention is the result of a dynamic function and structure, which arrives at its optimal power of differentiation only by acquainting itself with the infrastructures from which it emerges. This is a key notion, and lies at the root of the evolution of consciousness, in that consciousness evolves to the extent that the enfolded infrastructure becomes a part of the awareness of a conscious being.

Reflection is the process by which thought returns in on itself and duplicates the acts in the external world which it directs. It is carried to its furthest power by attention. This might be understood to mean that reflection is some higher mode of consciousness and not synonymous with ordinary waking consciousness. Perhaps this is where consciousness gets closest to pure ideation which, in line with Kant's thinking (Korner, 1955), makes the assumption that there is a realm of pure ideas to operate in. What I am trying to convey is that consciousness is not a given state or particular experience, but is that meta-structure within which there are a variety of modes, which seem to be arranged hierarchically, with reflection being a higher state than, say, a cognitive process such as numerical reasoning.

Personality: The self is complex, where personality is a history, linking the self's modes into a series of events, with the self being the author of its own person (*persona* -- the mask that is looked through). If self-consciousness involves founding one's own person, and if conscious being is the very nature of the

person, then neither the totality nor the basic structure of the person can be reduced to this manner of being conscious or to this idea of consciousness. Personality and self represent the transcendental aspect of *being someone* with respect to that person *having consciousness of something.*

Volition (Will): Philosophically, the issue of volition, or will, has been linked with that of the moral or ethical sense. This leads into the view that consciousness becomes moral consciousness when it evaluates/reflects upon its values, where moral consciousness cannot be radically separated from psychological consciousness. Morality is far from being some absolute entity or state, because it is caught up in that sea of reflections called consciousness.

Having now considered the above factors, where they (ie, affects, experiencing, attention-reflection, personality and volition) can be regarded as the major factors of consciousness, it would be easy to fall into the trap of assuming that these factors in combination comprise consciousness. That is, to regard consciousness as simply the sum of a collection of parts. Conversely, it would be just as easy to assume that consciousness is some diffuse thing that permeates its various psychical structures, thus refusing to consciousness its own structural integrity. In the first view there is an indifference to the interconnections of the parts and to any meta aspect. The second view seems to oppose the rooting of consciousness in the body, such that consciousness is not regarded as a natural phenomenon because it is utterly transcendent. It is my view that neither of these approaches is correct, because I regard consciousness as existent in its own right, as having a hierarchical order and as being the meta structure that integrates the parts without being the sum of them, and as being expressible through a physical form.

PSYCHOLOGY AND CONSCIOUSNESS

I wish now to explore the way in which consciousness has been dealt with by psychology from the earliest beginnings to the present day. This will involve not only how consciousness has been overtly dealt with as a specific topic of study, but also how the concept has had to be dealt with during the consideration of another topic (eg, memory and motivation). The aim here is two-fold: to explicate the way in which psychology has confronted the issue of consciousness across the existence of the discipline, and to show how the issue of consciousness is so inextricably bound up with the discipline of psychology and its development[1].

I have already shown that the proto-psychologists from the Greeks onwards had been keenly concerned with the issue of consciousness, even where this term was not overtly used (see Chapter 2). This concern is reflected right through the Greco-Roman-Patrist eras, and into the 17th and 18th centuries (eg, Descartes, Hobbes, Berkeley and Kant). In fact, the topic of consciousness becomes more and more overt as a topic of study as we move into the 1600s (eg, Locke's essays deal directly with consciousness where he lists what he regards as its key components -- see the discussion above). The debate intensified through the 1700s and 1800s culminating with the ideas of thinkers such as Brentano, Wundt and James in the late 1800s.

In considering how these earlier thinkers dealt with this topic, I have been struck by their honesty and courage in openly and publicly entering the debate. One might say that it was easier for them to be so brave because there was so much ignorance about the topic and so little research into it that these earlier thinkers could get away with saying whatever they pleased without fear of being rigorously challenged. I dispute this, because they were challenged by each other. Consider the arguments raging between those who sided with Wundt (Structuralists) and those of the Functionalist persuasion (eg, Angell). The issue of the rigour of the challenge may be debatable, but such a debate smacks of presentism. To debate the degree of rigour from the standpoint of today, with its fascination with sophisticated quantitative measures, would be to fail to see that such measures did not exist at the time of Wundt or James. Thus, for that age,

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[1] The material in this section is based on sources used in Chapter 2.

the rigour of the challenge was as valid or as acceptable as it is today. In fact, it might be that the heavy dependence on quantitative rigour in this age has a stultifying impact and can even lead to meaningless practices, as is sometimes the case in null hypothesis testing (eg, Baril & Cannon, 1995).

The key theorists on the issue of consciousness in the later 19th Century were Wundt, James, Ebbinghaus, Titchener and Baldwin. Of these, Ebbinghaus had the narrowest focus, being primarily concerned with memory and the nature of and measurement of intelligence. Wundt, James, Titchener and Baldwin were more globally interested in the whole gamut of mentalistic phenomena.

Table 3.1: Key theorists on the topic of consciousness

Theoretical stance	**ancient**	**medieval**	**1600s - 1800s**
Idealism	Socrates Plato Plotinus Augustine	Aquinas Patrists	Berkeley Spinoza Leibniz
Dualism	Aristotle		Descartes Wundt James Titchener Baldwin
Materialism	Democritus Epicurus		Hobbes Locke

We can summarise the discussion to this point in terms of eras and key positions taken, as shown in Table 3.1.

Using a rather simple vertical dimension, we can classify theorists into one of three basic camps, in line with the discussion so far. This has limitations because there is always some overlap across categories for some theorists. For example, although Locke was oriented to a materialistic doctrine, and was one of the founders of the British Empiricist School, he did not exclude mentalistic notions. Clearly, this tabulation leaves out a number of theorists, but it includes the key thinkers who were in some way or another concerned with the topic of consciousness. Thus, it is interesting to note that, as we move from the ancient,

through the medieval to the relatively modern periods, we see an increase in the number of theorists who espouse the dualistic stance. In the ancient world, we have only Aristotle who publicly adopted this stance, but even then, only marginally so, in that he had reservations about the psyche, seeing that it had to have some transcendent aspects. There were other Greek and Roman thinkers in the materialistic camp (eg, the Stoics) but Democritus could (along *Great Man* lines) be regarded as the father of Materialism, and Epicurus certainly subscribed to that doctrine. It is not surprising that there were no key materialistic thinkers in the Medieval period. The grip of the Church was too powerful. Because Descartes was the first to give a public voice to the concept of dualism, it is only from his time that we begin to see thinkers siding with that view. The overall implication of this table is that there has been an increasing diversification of positions across the three periods, and with a tendency toward dualism. This latter is due partly to the powerful impact of Descartes' thinking, but also to the force of the Rationalists' arguments over those of the Empiricists.

The picture changes as we move into the 20th Century. We find that psychology was nurtured in the womb of philosophy, and was most often lumped in with mental and moral science. This meant that psychology tended to be treated with a strong philosophical flavour. Consciousness was still a very lively topic, where the work of theorists such as James, Wundt, Titchener and Baldwin carried over well into the beginning of the 1900s.

Up to the end of the 1800s, although the methodology of science had been evolving, and the natural sciences had made great strides forward in knowledge, the dominant paradigm was that of Newton, in which the universe was seen as very real and having the nature of a vast and complex mechanism, that was readily predictable in its behaviour. In philosophy, the Mind-Body problem was still in healthy debate, but there was a growing trend toward physicalism, due primarily to the Newtonian paradigm. In society, aristocracies and landed gentry held the reigns of political power, the very wealthy controlled industry and commerce and the Churches still controlled the minds and hearts of Western peoples as they had for centuries. All of these factors had their influence on departments of mental and moral science, tending to produce a conservative dualism in which the body was regarded as the domain of natural science and the mind as belonging to God.

However, the seeds for rebellious thought had been set as far back as the University of Padua (during the Renaissance), whose academics took on the authority of Rome, and tried to create a humanistic philosophy, with humankind at its centre rather than God. At the turn of this present century many forces were shaping in the wings, especially in the domains of physics and politics. In the former, the work of thinkers such as Albert Einstein and Max Plank were threatening the comfortable mechanistic view of the universe as set out by Newton. The predictions and subsequent findings of relativity theory and quantum mechanics set up ripples that went far beyond the field of physics. They impacted on philosophical thought. In terms of consciousness, quantum mechanics had an enormous impact in that quantum experiments showed that the consciousness of the experimenter (observer) determined the way in which the probabilistic wave equation collapsed to yield a measurable result. In the latter case (politics), the works of philosophers such as Hegel, Marx and Nietzsche were influencing political thought, and were to have far-reaching consequences for geo-political systems. These notions also had their influence on the development of psychology, and in particular upon the development of concepts of consciousness. All three thinkers raised profound questions about the relationship between the individual and the collective (state), hence about human consciousness, in particular free-will and freedom of choice.

Thus, at the turn of this century, there was a ferment of thought in many fields, in which old concepts were challenged, and often proven to be wrong (eg, certain aspects of Newton's celestial mechanics). There was, in fact, a massive paradigm shift going on in science in general, and in physics in particular, where all of this fed back into the thinking going on in departments of mental and moral science. The universe had changed from being a neat orderly machine with God in charge, to one comprised of evanescent energy states whose actual reality was dubious, where probabilistic laws were in charge. God did not seem to fit the picture any more (did not even seem to be needed -- the "God is Dead" cry), the basis of all life appeared to be very insubstantial, and the basis of moral personhood seemed intangible and elusive. A devastating First World War, the breakdown of aristocratic control throughout Europe, the Free-Thinkers movement, the rise of democracy, the notions of Sigmund Freud and Havelock Ellis, all conspired to shatter the sense of stability in people's lives. God no

longer seemed to be in his heaven and all was not well, and the Devil seemed to be alive and well in Freud's unconscious!

Alongside the changes in science and politics, there was a rash of new technology, where inventions such as the telegraph then telephone and steam locomotives made the world a much smaller place, permitting new kinds of discourse, and linking nations in a way that had never occurred before. This hastened the process of change on many fronts. Added to these positive technologies were those of mass destruction (eg, the high explosive bomb). This all amounted to a steady democratisation of knowledge and an awareness that not only was the world round, but that what happened in one part could influence what happened in another part.

At the same time as Freud's brand of thinking about consciousness was flourishing, the work of thinkers such as Pavlov, Thorndike and Lashley was beginning to have an impact on the view of consciousness. It is interesting how the developments of psychology have always lagged behind those in physics. While physics was breaking free of mechanical models, psychology was about to embrace them. Thus, the thinking of such as Pavlov was based on the view of neurological mechanisms, with the aim of complete predictability (and even control) of behaviour. For a while, this strand of thought went along in parallel with the more mentalistic strand (eg, James and Wundt), but gradually came to push mentalism aside. Yet, in the world of physics, metaphysics was again asserting itself.

However, Freud's thinking prevented a total abandonment of the notion of consciousness, at least the subterranean and darker side of it. But the power of the mechanistic paradigm was growing in psychology and, in particular, the work of Thorndike came to have a great influence, leading to the work of Watson (and subsequently Skinner). Although Thorndike (a student of William James) was a contemporary of Watson, his *Animal Intelligence* (Thorndike, 1898), a landmark in behavioural analysis, influenced Watson, his provisional laws of learning especially (Heidbredder, 1933). Watson's influence on the treatment of consciousness has been enormous, and in many ways destructive, handing down a logical-positivistic legacy that has been quite stultifying. Although not the founder of logical positivism, Watson's ideas influenced Bertrand Russell who

regarded Watson's book *Behaviorism* as "massively impressive" (Skinner, 1979, page 10). In turn, Russell's conceptual equipment provided the Vienna Circle with its basis for logical positivism. While the rise of Behaviourism had positive spin-offs for psychology as a whole, especially in the domain of treatment methodologies, as far as consciousness is concerned, it appeared at the time like a death-knoll. Certainly, Watson's attack on Wundtian ideas was fatal, but less so on the Functionalist school of thought.

Freudian concepts remained a consistent force throughout the rise of Behaviourism, partly because they were the province of psychiatry rather than psychology, but also because it was very hard even for apostles of Watson to deny the existence of unconscious states. The best they could do was to argue that it was unscientific to bother with these states because they were private and not amenable to direct observation (an argument used for centuries by the Empiricists). All of this turmoil came at a time when psychology was only just beginning to emerge from the womb of philosophy and was striving for an independent life of its own, and to be recognised as a branch of science. This last need has, in my opinion, led psychology astray at times. It has emulated an out-dated physics, and embraced quantitative rigour as if this alone could make it a science. This strong need allowed Behaviourism to rise so rapidly and gain such a position of acceptance, that it made the topic of consciousness almost *persona non grata*, intimidating those who wished to keep the topic alive.

However, Behaviourism did not totally dominate the scene in the 1930s and 1940s. Important work was being carried out at the experimental level by those having a physiological persuasion. For example, Lashley continued with work on a neural basis of thought, started around the turn of the century. Similarly with Hebb and Hull. This is not to say that Lashley, Hebb and Hull denied the tenets of philosophical behaviourism. But they did not subscribe to the Watsonian variety. It is to the discredit of the early Behaviourists that they totally ignored the brain and its determination of human behaviour. Not only did they marginalise consciousness, they also marginalised the brain. It might have been somewhat safer to marginalise the former because of the philosophical problems surrounding the topic. But it was very unwise to marginalise neural structures, the brain especially, because the work of such as Hebb and Lashley left the claims of the Behaviourists in a very vulnerable position. The work of the

experimentalists may not have done the cause of dualism very much good, but it paved the way for an increasingly elegant understanding of the brain, and certainly undermined the rather simplistic associationist view put forward by Watson, and taken up by Skinner.

In a quite different direction from that of physiological experimentation, the Gestalt School arose and offered further arguments and proof against the concepts advanced by the Behaviourists. The trio, Wertheimer, Koffka and Kohler viewed consciousness from an essentially Rationalist viewpoint, arguing for an innatism in the way we perceive. This view was in direct opposition to that of the Behaviourists, who argued from a basis of learned responses (the essential Empiricist stance). In particular, the Gestaltists cited what became known as the *Phi Phenomenon*, in which the eye-brain created a movement which was not actually there, thus demonstrating that the movement was in consciousness. This, along with other powerful demonstrations (in relation to perception -- eg, closure), convinced the Gestaltists that the Behaviourist model was deficient, in that we bring to every perceptual situation a set of innate tendencies. That is, the *tabula rasa* viewpoint espoused by the Behaviourists (and the British Empiricists before them) lacked explanatory power.

By the end of the Second World War, the position on consciousness within psychological ranks was very complex, if not confused. At one extreme were the Behaviourists who regarded consciousness either as irrelevant or as non-existent. At the other extreme were the psychodynamicists, who regarded consciousness (and subconscious states) as being all important. Somewhere in the middle were the experimentalists on the one hand, who did not deny the existence of consciousness, but who tended to think of it as a by-product of brain states (an essentially physicalist-reductionist viewpoint), and on the other hand the Gestaltists who viewed consciousness as being the whole that was greater than the sum of its parts, as a kind of meta-entity (combined dualistic and Rationalist stance).

The emergence of psychology as a fully independent discipline separated psychology from its philosophical roots, which had both positive and negative features. The key positive effect was that psychology became free to forge its own identity, and develop its own specialised methodology as a new branch of

science. In fact, it enabled it to aspire to be a science. (As a branch of philosophy it was always something apart from science.) The downside of this separation was that psychology (at least for a while) lost sight of, and interest in, philosophical issues, the Mind-Body issue in particular.

As it became a science, psychology became more and more concerned with methodology (especially the experimental method), and leaned heavily on quantitative analyses (eg, the factor analytic movement and the general dominance of statistical techniques). All this had a fairly dramatic effect on the topic of consciousness. On one hand, the Behaviourists maintained a devastating attack on the very notion of consciousness, and on the other hand, the increasing allegiance to the scientific method and logical positivism made consciousness a rather difficult topic to research. Thus, during the decades of the 50s, 60s and 70s, research and theorising on consciousness fell by the wayside. Even within philosophy, the Mind-Body problem faded for a while, giving place to analyses of issues such as ethical behaviour and meaning.

Following on from World War II, the digital computer emerged from a science fiction dream into a reality. During the decades from the 50s to the 70s, the digital computer went from an extremely crude and unreliable collection of thermionic valves to the Intel Corporation's silicon chip-based processor. The evolution of computer technology had a powerful effect on many domains of human society in those decades (for example, in the commercial and military spheres). It certainly had a powerful effect on thinking in psychology, where the digital computer's hardware architecture and its software became a potent analogy for the newly emerging branch of cognitive psychology. Psychological theorists, interested in topics such as memory, perception and cognitive processes, rapidly seized on this new technology, initially for its power as an analogy and later as a physical tool for research. Some of these theorists tended to lose sight of the fact that the binary based digital machine was simply that and no more, forgetting that the human brain operates in a somewhat different fashion. However, the digital computer model was very seductive, enabling cognitive processes to be modelled in a powerful way.

Alongside the rise of the digital computer for purely number-crunching purposes there arose an interest in artificial intelligence (AI). The notion had been around

for sometime, but its physical realisation became possible with increasingly faster and more powerful digital machines. The development of AI reignited the interest in the Mind-Body problem, raising intriguing questions about what it is to be human and the true nature of life and consciousness. While much of this work rested either with computer scientists or philosophers, psychology certainly saw the potential in it, both as a research (and even practitioners') tool and as a further model for cognitive psychology.

Across these same decades, physics had not stood still. Quantum theory had developed into the most powerfully predictive model of any science, and had plunged its theorists into metaphysics. Its concepts challenged the very notions of reality, and raised old questions about consciousness. In general, psychology did not notice because it was too busy with its own affairs. Even philosophy for the most part had not really taken on board the enormity of quantum theory's findings. In fact, more interest was shown by those who were studying Eastern metaphysical and mystical traditions such as Buddhism. Among the technologies that arose out of the advances in physics was the laser whose totally coherent light led to the realisation of the hologram (a photographic plate exposed using laser light). The key characteristic of the holographic image plate is that the entire image is stored in the smallest segment of the plate (although resolution is lost). This fact was adopted by some neuropsychological theorists as a metaphor for the way in which information is stored in the neo-cortex, and became a powerful analogue for those who were still interested in the topic of consciousness in relation to the brain (for example, Pribram, 1990). In addition, the way in which (in the physical system) the beam of coherent light is used to reveal the image stored in the plate was used as a metaphor for consciousness (see Jackson, 1992). Finally, an understanding of the Mind-Body problem was enhanced by the model offered by Bohm.

The combined impact of these various scientific and technological developments on the topic of consciousness was, in the main, to re-establish it as a legitimate area of interest for psychology. More specifically, the models and metaphors that arose from these developments reduced the rigid Mind-Body dualism to something more wieldy, and re-positioned the brain as an organ of vital interest. They also gave the study of consciousness a scientific basis -- something that

had been lacking up to this point. After all, what could be more validating for a psychological topic than to receive support from physics?

In the past two decades, things have improved greatly for the study of consciousness. We now have a wide range of theories of consciousness, ranging from the purely physicalist through varying shades of dualism to those that are best described as transpersonal.

At the physicalist end of this spectrum are theories that are essentially neurological at root in that consciousness is seen as a by-product of neural activity in the brain (eg, the theories of Gazziniga,1977, with his psychobiological stance). Such theorists are quite unlike the earlier pre-experimental theorists who held a similar physicalist persuasion. These modern theorist have access to some very sophisticated research tools such as brain scanning techniques (eg, positronic emission tomography -- PET), and thus have a much clearer picture of brain structures, functions and processes. They also have access to the vast existent body of general psychological research findings. For these reasons, such theorists have come up with some seductive theories of consciousness that arise out of a methodology that is very respectable. In one extreme view, not only is consciousness seen as a by-product of neural activity, the development of the neo-cortex is seen as a by-product of Nature's quest for gene pool diversification (eg, Melnechuck, 1980). These research-backed theories have caught the attention of some philosophers who are interested in the Mind-Body problem (eg, the Churchlands), and who adopt an Eliminativist position. Such philosophers see these advances in neuropsychology as taking us closer to the day when all statements about Minds and other mentalistic jargon will be seen as redundant *Folk Psychology*. In fact, the movement they see could well spell the death of psychology as an independent discipline.

Within present day dualists there is a range from the soft-dualism of those who go a long way with the physicalists, but who stop short of full blown reductionism, to those who take a hard-dualism stance (more or less Cartesian). All of these dualistic theorists argue that while there is clearly a biological mechanism that consciousness must operate through, consciousness itself is not fully reducible to neural activity. There are aspects of being conscious that

cannot be explained at the level of neurons firing, such as the first-person objection. Some of these theorists are of the arm-chair type, who take a philosophical line of enquiry (eg, Burns, 1990). But some are researchers, such as Eccles (1981), who is a neuroscientist, and who takes a hard dualism stance in which his theological commitments figure fairly strongly.

At the purely transpersonal end of the spectrum there are a few theorists who see consciousness as the manifestation of Spirit in much the way Plato saw it. That is, the *Real* is transcendent and the space-time realm of the senses is, in the final analysis, illusory (Hamilton & Cairns, 1961).

Table 3.2 below is an attempt to show the relationship between the three major approaches to consciousness I have delineated (physicalist-reductionist, soft dualism and hard dualism) and various key theorists across the decades in which psychology has been developing as a discipline. I define my terms as:

physicalist-reductionist: one who subscribes to philosophical materialism, and who tends to reduce consciousness to basic elements (biological or behavioural).

soft-dualist: one who accepts that, although consciousness operates through a brain, it is not reducible to neuroscience explanations.

hard-dualist: one who holds that consciouness is an entity quite separate from the brain.

Thus, for example, I locate James as a soft-dualist because, while he never took a hard-dualist position, he talked of the irreducible dualism of consciousness (James, 1890/1893).

Table 3.2 is comprehensive in that it deals with all of the key theorists who have influenced our notions of consciousness. Those theorists it does not list (eg, Burns) are relatively minor in this field and have generated theories that are really derivatives of the theories produced by those listed. In Table 3.2, the asterisks indicate the duration of each theorist's period of active influence.

Table 3.2: Consciousness: approaches and theorists across the decades

		decades										
approach	**theorists**	**1890**	**1900**	**1910**	**1920**	**1930**	**1940**	**1950**	**1960**	**1970**	**1980**	**1990**
physicalist-reductionist	Thorndike			***	***	***						
	Watson				***	***	***					
	Hull				***	***	***					
	Skinner						***	***	***	***		
	Hebb						***	***	***	***		
soft dualism	James	***	***	***	***							
	Baldwin	***	***									
	Wundt	***	***	***	***							
	Titchener		***	***	***							
	Angell		***	***	***	***						
	Pribram							***	***	***	***	***
hard dualism	Maslow					***	***	***	***			
	Eccles							***	***	***	***	
	Ornstein								***	***	***	***
	Tart								***	***	***	***

It is interesting to note that the dominant theories of the late 1880s and early 1900s were of the soft dualism variety. But by the 1930s these had lost their influence and the more physicalist-reductionist theories started to come in and dominate. The only key theory of a soft dualism type that has persisted is that of Pribram. However, by the late 1960s and early 1970s, the purely physicalist-reductionist theories of consciousness started to lose their influence and theories of a hard dualism came to the fore and have persisted through into this decade. This is not to say that there is now no evidence of the other three approaches. The table simply shows that period of maximal influence of a given theorist and allows for the fact that any given theorist will retain a following even when that theorist's work has fallen out of favour or has been disproved.

Overall, what Table 3.2 shows is the steady shift from soft-dualistic theories, through physicalist-reductionist theories to hard-dualistic theories across the decades. This trend is not so surprising when one considers the developments in philosophy and physics in the 1920s and 1930s, where naive mechanistic theories of reality and of human nature had been losing ground since the 1920s (for example, the advances in quantum physics). The current dominance of hard

dualistic theories of consciousness has been reinforced by the recent upsurge of interest in consciousness research, which is being tackled by a variety of theorists from such diverse fields as physics, neuroscience and philosophy. For example, the concept of microtubles at the quantum level as a substrate of consciousness, as put forward by Penrose (1987).

However, Chalmers (1996), a recent rising star in the philosophy of mind, somewhat damped the enthusiasm of those who see the solution to the Mind-Body problem as dependent on the maturation of science (eg, quantum physics or neuroscience). Chalmers argues that the Mind-Body divides into what he terms the *hard* and *easy* problem, in which he locates all of the attempts by science, much to the chagrin of those in this field, into the easy category. But more on this shortly. Basically, Chalmers argues that conscious experience is not all there is to the Mind. Chalmers supports this argument by pointing out that although cognitive science has had much to say about Mind in general, it has had almost nothing to say about consciousness. This, he argues, is because cognitive science deals largely with the explanation of behaviour, and where it concerns itself with Mind at all, it is with Mind as construed as the internal basis of behaviour, and with mental states construed as those states relevant to the causation and explanation of behaviour. Such states may or may not be conscious. This matters not to cognitive science because any internal state responsible for the causation of behaviour is equally mental whether it is conscious or not.

Chalmers (1996) further argues that, at the root of all this, lie two quite distinct concepts of mind, the first of which he terms *phenomenal* (mind as conscious experience), and the second of which he terms *psychological* (the causal or explanatory basis of behaviour). That is, the phenomenological mind has to do with the way mind *feels*, whereas the psychological mind has to do with what mind *does*. Chalmers insists that there is no competition between these two distinct *minds* because neither of them is *the* correct analysis of mind. They cover quite different properties, both of which are real. A specific mental concept is usually analysable as phenomenal, psychological or some combination of the two. For example, Chalmers says that sensation is best taken as phenomenal, whereas learning and memory are best taken as psychological. These examples show that phenomenal features are characterised by what it is like for that

person to have that feature, whereas psychological features are characterised by an associated role in the causation and/or explanation of behaviour.

Chalmer's distinction is an interesting one which throws light on the ways in which we might deal with the Mind-Body problem. For example, Descartes effectively identified mental events with what Chalmers has termed phenomenal. The psychological theorists following Descartes tended to be Cartesian in that they developed psychological theories on the basis of introspective evidence (eg, Wundt and Titchener). However, developments in psychology beyond these early thinkers tended to establish the psychological features of mind as an autonomous domain. Modern psychology has tended to harden up the boundaries between Chalmers' (1996) distinction by focusing more and more on Chalmers' *psychological* domain to the virtual exclusion of the *phenomenal*.

However, Chalmers (1996) argues that every mental property is either wholly psychological, or phenomenal or is some combination of the two. Therefore, his two categories exhaust what one can say about mental life. He further argues that some aspects of mental life that are central issues for psychology are combinations of both domains. For example, *pain*, a sensation, straddles the two domains in that pain describes an unpleasant phenomenal quality, and also a state that leads to aversion reaction. This division of mental properties in phenomenal and psychological properties has the effect of dividing the Mind-Body problem into an *easy* part and a *hard* part. Chalmers argues that, whilst the psychological properties of mind pose many technical difficulties for cognitive science and some interesting puzzles for philosophy, they pose no deep metaphysical enigmas. He gives, as examples, work in artificial intelligence on learning and memory, where he views the problem as technical and not metaphysical. Chalmers lumps these issues into the easy category. He regards the phenomenal property of mind as baffling as it always was, despite the enormous progress made in the physical and cognitive sciences. Thus, he locates the phenomenal aspect in the hard category. For Chalmers, the hard problem is encapsulated in the question "How could a physical system (eg, mechanical, chemical, electronic or neurological) give rise to conscious experience?" The easy problems, according to Chalmers, are those that relate essentially to the mechanisms or correlates of consciousness, whereas the hard

problems are those relating directly to the nature of consciousness, and not to how it manifests itself.

In listening to the likes of Chalmers (1996), one sees that we seem no further forward in tackling the hard problems of consciousness than was Descartes. That is, we still have a hard dualism. For a time, I imagine that this trend will continue, and that theories of consciousness will remain predominantly hard-dualistic. However, I believe that, in time, there will be a return to a soft-dualistic stance. I hold this view because I am convinced that further advances in quantum physics and neuroscience especially, and a growing rapprochement between the disciplines now involved in consciousness research, will lead to the concepts espoused by David Bohm (Bohm, 1957, 1973, 1980). His concepts, while denying a hard-dualism (recall, that the explicate order is a derivative of the implicate order) permits a soft dualism in that mind is not reducible to the explicate order, but stresses that ultimately, there is only the implicate order. Note, however, the difference between this brand of soft-dualism and that of the earlier era. The soft-dualistic theories of the earlier era were based on essentially physicalist assumptions about reality. Conversely, Bohm's theory is not physically based, at least not in the ordinary spatio-temporal sense. Naturally, a simplistic physicialist view cannot survive an adoption of Bohm's concepts because the implicate order (origin of all) is beyond a mechanistic analysis.

In the next two chapters, I move away from these philosophical considerations and look at the actual development of psychology in New Zealand. However, as stated in Chapter 1, I will return for reference to Chapters 2 and 3 from time to time as issues of mind-body and consciousness arise in the historical analysis. Chapter 4 deals with the period from the founding of Otago University to that time when psychology began to emerge as a separate discipline, and Chapter 5 deals with the period from that emergence to the present day.

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CHAPTER 4: THE HISTORY OF NEW ZEALAND PSYCHOLOGY -- PART I: THE EARLY DAYS

INTRODUCTION

This Chapter deals with the period from the establishment of the University of Otago and the University of New Zealand to the time when psychology began the process of breaking free from philosophy. This period started in 1868 and ended in 1965, virtually a century! It is worth noting in this context that this period began after only five decades of colonisation and a mere three decades after the signing of the Treaty of Waitangi. This Treaty was signed in 1840 in the small North Island Maori settlement of Waitangi (*Waters of Lamentation)* by many Maori chiefs, in which they ceded their sovereignty to the English Queen, Victoria. The Land Wars (in which English troops fought against Maori warriors on behalf of the English settlers) were still in progress and the creation of a Dominion was still three decades away (Sinclair, 1980). In Europe and the United States of America in the late 1800s, by comparison, there was a highly stable social platform and a well developed and independent discipline of psychology. In New Zealand, because the timing of this process of emergence of psychology as an autonomous discipline differed across the four original university colleges, this period covers almost two decades. There was not a clean break from philosophy, necessitating some overlap with Chapter 5, which covers the period from the beginning of psychology as an autonomous discipline until the present day.

More specifically, this Chapter covers the establishment of the University of New Zealand (in view of its instrumental role in those early days), the University of Otago, then the three other University Colleges of that time, namely, Canterbury, Auckland and Victoria in that order of establishment.[1]

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[1] The sources for the data in this Chapter are university records such as professorial board minutes, council/senate minutes, annual calendars, specific departmental documents and personal interviews with psychologists who were present at the time psychology emerged as a discipline in its own right. In the interests of simplicity, the citation and referencing protocols for these sources will be as follows: Minutes of Professorial Boards and University Councils/Senates, University Calendars, and other specific university documents will be cited using a footnote, where the footnote will supply the reference details.

Personal Interview sources will be cited using the name of the respondent and the date of the interview (eg, personal interview: Ritchie, 1995). The full details can be found in Appendix A at the end of this chapter.

Particular attention is paid to the origins of the departments of philosophy (variously named in the four colleges) because it is in these departments that psychology had its beginnings in this country. Of importance here is the manner and timing of the process of emergence of psychology from philosophy as an autonomous discipline. This process differed across the four colleges, where these differences had long-term effects on the later phases, covered in depth in Chapter 5. Finally, in this chapter some comparisons across the four colleges are made along with comment on philosophical, sociological and psychological factors prominent at the time.

THE UNIVERSITY OF NEW ZEALAND

It could be argued that the University of Otago came before the University of New Zealand (UNZ). From a conceptual point of view, this is true. The founding fathers of Otago Province brought this dream with them. However, although the University of Otago was founded in 1869, and the UNZ was founded a year later by an Act of the General Assembly on 13 September 1870, the UNZ actually beat Otago to it by a year in that in 1868 a New Zealand University Act was passed. The UNZ was chartered by British Royal Consent to confer degrees of "rank, precedence and consideration" as if conferred by any British University.[2]

At the point of the establishment of the UNZ, the intention had been for Otago University to surrender its independent status and become a college of the UNZ. Immediately following the setting up of the UNZ, a deal had been attempted with the University of Otago in which, upon agreement by Otago to be dissolved and its endowments to be transferred to the UNZ, the UNZ would be established in Dunedin. The threat was that, should this agreement not be struck, the UNZ would be located elsewhere, probably in the Capital. However, Otago continued to procrastinate, and a letter battle ensued, extending from April 1870 to February 1871 between the University of Otago Council and the Senate of the UNZ. In this, Otago argued for the retention of what it regarded as its right to confer university degrees. The detail of this

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[2]Most of this section has been derived from Hugh Parton's *The University of New Zealand*, but with additional material taken from J C Beaglehole's *The University of New Zealand: An Historical Study*, Sir David Hughes Parry's *Report of the Committee on New Zealand Universities* and Gould's *The University Grants Committee 1961 - 1986*.

episode will be covered shortly, but what we had was the University of Otago already having professors, students and the provincial power to grant degrees, and the UNZ with no professors, no students but with the national power to grant degrees and affiliate colleges. Not a very happy or very logical situation.

The establishment of the Canterbury Collegiate Union in 1872, and its subsequent affiliation with the UNZ, enabled the UNZ to increase the pressure on Otago. In 1874, the University of Otago Council agreed to "hold in abeyance" its power to confer degrees[3]. In this way, face was saved all round. Otago never ceased to be a fully fledged university, but the UNZ was able to become the overall examining body. However, Otago's agreement carried with it certain provisos, one of which was Otago's insistence that all examinations be conducted in Great Britain. This move, if adopted by the UNZ, gave examiners half a world away the unchallengeable right to pass judgement on New Zealand's university students. It was adopted by the UNZ, and thus we had the University of Otago conducting the teaching to examinations set by another body. We would find this a strange setup today. Or would we? I will take up this issue later in relation to present times, because it is an important one, especially in terms of academic freedom. Certainly, the decisions made in the late 1870s became a long-term burden against which subsequent reformers had to battle for decades.

The second University Act of 1874 established the UNZ as an exclusively examining body styled on a somewhat distorted idea of how the then London University operated (Parton, 1979). The UNZ was to be controlled by a Senate of 24 Fellows, initially appointed by government, but with future positions filled by the Senate, and by a Court of Convocation (to be set up once the number of graduates reached thirty -- achieved in 1883).

The policy of affiliated institutions enabled many secondary schools around the country to have the same rights as Otago and Canterbury to prepare candidates for university education. These schools were prepared to undergo inspection by the UNZ and present their candidates for examination. Thus, the UNZ had set up what we, today, would call quality control procedures

[3] Minutes of the Council of the University of Otago: The Archives of the Hocken Library of the University of Otago.

which were to ensure that examinations met certain standards and were administered fairly.

There had been some earlier concern regarding the standard of the examination for the BA degree conducted by Otago and Canterbury professors. For example, there were failures to apply prior agreed standards of marking to final examinations. However, the move in which the UNZ Senate decided that all examinations for degrees, senior scholarships and honours be conducted by examiners in Great Britain had overcome these concerns. But, this move had not eliminated the concerns in regard to the standard of preparation for university teaching within the large number of affiliated secondary schools, where all the safeguards and inspection mechanisms that had been put in place began to fail. Within a few years of the establishment of the UNZ, grave abuses of the system were detected. Many secondary schools had been attracted by the offer of a financial subsidy from the UNZ upon affiliation with it. However, few had thought through the implications of teaching to university standards, and many were woefully under-prepared for this role. One outcome of the first Royal Commission on the UNZ, set up by Robert Stout (MP for Dunedin and Attorney General) and held in 1878, was the abolition of the system of affiliation of secondary schools.

The Royal Commission of 1878 made other important recommendations, the most crucial being that university colleges should be set up in the North Island, and that each college would have representation on the UNZ Senate. This representation was intended to bring the university colleges into a closer and more efficient relationship with the UNZ. Of interest, it was also recommended that the UNZ be located in Dunedin. As Parton (1979) speculates, had all of the recommendations of this Royal Commission been adopted and implemented, New Zealand would have had a truly federal university with constituent colleges rather than affiliated ones, and with professors directly involved in both the teaching and examination processes. But this never came to pass. One outcome of this failure was the growth of rampant provincialism within the university colleges as, for example, in the strong and sometimes acrimonious competition over the establishment of medical and engineering schools. There were those within the UNZ and Government who regarded this provincialism as wasteful of finite national

resources, and yet others who hotly defended what they saw as academic freedom (Parton, 1979).

After nearly two decades of pressure to reform university education, the New Zealand University Amendment Act was passed in 1914. This left the UNZ senate unchanged, but a Board of Studies was established (five professors from each of the colleges' professorial boards). The years between 1914 and 1925 were described by J C Beaglehole (cited in Parton, 1979, page 36) as "a period of warfare", referring in particular to relations between the UNZ Senate and the Board of Studies. All of this finally led to a second Royal Commission in 1924 in which Hunter (Professor of Mental and Moral Science at Victoria University College) was deputed by the UNZ Senate as one of its professors to advise on questions of fact. Hunter's knowledge was regarded as "encyclopaedic" (Parton, 1979). Recommendations were: a federal teaching university with constituent colleges having a large degree of autonomy, each governed by a council and not senate. Unfortunately, this never came to pass in this form, and it took almost another four decades before the colleges gained their independence.

The last Chancellor of the UNZ, Justice Smith, was appointed in 1945. He turned out to be a reformer and introduced the concept that led to what became the University Grants Committee (UGC). He also had strong views about the nature of research, and regarded research as the academic's "capital" in much the way a company has capital. Smith also reintroduced the PhD degree which some, Robert Stout included, had opposed because they could not see why disciplines other than mental and moral philosophy should be saddled with a Doctor of *Philosophy.* Why not a doctor of chemistry, or physics or geology as examples? But the pressure was too great from overseas, North American universities in particular. During Smith's office, the concept of the four existing affiliated colleges becoming separate universities continued to ferment with ideas polarising against the notion of a federal university. The pressure for separation was very strong from the University of Otago, which argued it had always been a complete and independent university from its foundation. In addition, there arose the demand for two new colleges, one for the South Auckland area and one in Palmerston North. This led to the opening of the Hamilton Branch of Auckland University College and Palmerston North University College, both in 1960. These openings were among the final acts of the UNZ.

In 1959 a committee was set up to look into all aspect of university education in New Zealand, headed by Sir David Hughes Parry (Parry, 1959). This committee concluded that the universities must play a *much* greater role in the New Zealand community and be better supported financially than in the past. It also concluded that the *de facto* devolution of the powers of the UNZ had already gone so far that the *de jure* status of the UNZ was in question. It recommended that the four constituent university colleges be given full university status. But a need for a national authority was recognised and it was recommended that this be handled by the UGC, having both financial and academic jurisdiction. This was established by Act in 1960. The dissolution of the UNZ occurred in October 1961 along with the enactment of The Universities Act which set up the four new universities.

In this context of the UNZ, it is worth briefly considering the examination papers it produced in general, and especially in relation to psychology[4]. Originally, these papers were written and printed in Britain (London), but from 1910 were printed in Wellington by Whitcombe & Tombs. However, as far as can be gathered, British academics continued setting the papers well into the 1900s. There are some exceptions such as Thomas Hunter (see the later section on Victoria College) being one of the two examiners for the 1924 examination in psychology. Up until 1914, the questions on psychology were located within the *Mental Science* section of the examinations. After this time the psychology component was located under *Philosophy*. This same shift is reflected in the calendars, as will be seen in the following sections on the four colleges. The earliest of these UNZ papers in psychology reflect the fact that the examiners were philosophers rather than psychologists. For example, the 1883 paper asks questions about *sensations* from a philosophical stand point, and about our perception of extension from a Cartesian viewpoint (recall Descartes *res cogitans* and *res extensa*). Of historical interest, this same paper asks the student how later enquiry lends support to the doctrine of *Phrenology*, implying that this subject was still worthy of debate.

In the 1895 paper, we see a shift to what we would regard as questions more properly in the domain of psychology, in which terms such as *mental image, concept* and *consciousness* appear. On this latter topic, the student is asked

[4] A set of UNZ examination papers is held by Victoria of Wellington University Library, for the years 1883 to 1955.

to explain how a time-system is constructed in consciousness. Also, at the Masters level for this same year, the student is asked to examine the grounds of the view that the mind-body problem rests on the false premise that mind and body are distinct. I regard this as a profound question, and one that most Masters students of psychology today would shrink from in horror. Thus, although the change from philosophy to psychology proper was occurring in these first few decades, the psychology of that era was very concerned with the mind-body issue and its concomitant, consciousness.

After the turn of the century, we see more mention of data and method. For example, the 1915 paper in psychology asks the student to discuss data and method in psychology in relation to the natural sciences and to philosophy, implying that, at least, the examiner saw a difference and, perhaps, saw psychology as more aligned with philosophy than the natural sciences. In this same paper, the student is asked to explain apperception and the view that consciousness of self is involved in the consciousness of objects. Thus consciousness, as a topic, was certainly not avoided, and was clearly regarded as being important.

The 1924 paper in psychology, mentioned earlier, marks a distinct change in direction, and looks much more like the type of psychology paper we would expect to see today. Of interest, this paper was set jointly by Thomas Hunter and a Reverend Merrington (presumably a British-based academic). Thus, not only do we see a shift to psychology proper, we also see the introduction of New Zealand examiners. As Hunter had already made his name as the country's leading psychologist (see the later section on Victoria), it is hardly surprising that Hunter assumed his examiner role at this point. Although this 1924 paper was a joint effort, Hunter's dominance is clear, especially in section B which deals with experimentation. The very first question in this paper sets the scene for the remainder in that it asks about the distinction between mental processes and behaviour, and the relationship between the objective and subjective methods. The paper also refers explicitly to the set texts in use in New Zealand at that time (see the next section).

It is interesting that, from Hunter's paper onward, we see very little mention of general philosophical issues such as mind-body, and little or no reference to consciousness. What we do see is more and more reference to data, method, behaviours, quantitative measures, physiology and all those aspects of

human structure and function that we regard today as the province of psychology (eg, memory, sensation, perception, instinct and emotion). By the time we reach the mid 1900s, the UNZ examination papers in psychology look quite modern. We have statements such as "The scientific status of psychology depends on its methods, not on what it studies -- discuss." Also, we see the steadily increasing influence of Watson's Behaviourism creeping in. For example, "Which theories of psychology emphasise the importance of stimulus and response?" These changes will be taken up again in the next section, and in the following sections on the four colleges.

THE EARLY TEXTS

Of significance in the following presentation and analysis are the set texts used by the early departments of philosophy in regard to the teaching of psychology. These early texts are important because they give us an insight into the particular focus in a given department and the influences these texts might have had.

At this early stage of the development of psychology in New Zealand there was a limited range of psychology texts available to academics. We take for granted in this age a ready access to a large and growing number of psychology texts, especially at the introductory level, where academics can be inundated by publishers' information. It was a very different situation in the early days of psychology teaching in this country. Knowledge of more recent texts would have been limited to sources such as the pages at the rear of many early texts that mention existing or upcoming publications by that publisher. For example, at the rear of Hoffding's 1891 edition of *Outlines of Psychology* (1891), a very popular book at that time, the publisher lists books for students of psychology, such as William James' *The Principles of Psychology* (James, 1890/1893). There would also have been contact with fellow academics who knew of other texts. These early teachers had no access to modern means of communications (eg, telephone, facsimile or email); exchanges by letter between New Zealand and Britain or Europe entailed many months of delay. However, as limited as it was, there was a degree of choice as evidenced by comparing the psychology set text listing across the four original university colleges even in the earliest decades (see Table 4.2 shortly).

While an analysis of all the psychology texts used across the decades from the 1870s to the 1950s is beyond the scope of my discussion, an examination of the key texts aids an understanding of the important ways in which the four colleges' psychology offering differed. From the 1950s, where psychology in New Zealand began to emerge as an autonomous discipline, the range of available texts in psychology increased enormously.

In analysing each of the key texts, I looked for general content or topic coverage, plus points of particular interest about the text or author. The question of why a particular text was chosen for a given course is a difficult one to answer at this distance in time. However, having selected a given text for what ever basic reasons, the nature of that text would have had its influence on lecturers and students alike. Some of the more obvious factors determining choice would have been:

• *Availability*: The existing range of texts in print at that time which had similar coverage to that actually chosen. This is a choice issue. In the earliest decades this choice was very limited; the range of psychology texts available then was a tiny fraction of that available today. Another factor that determined availability was the ease with which a selected text could be obtained (almost always from overseas).

• *Cost*: Involved here are two components; the cost to the college and the cost to the student. The early university college departments had very limited budgets as did most of the students at that time.

• *Preference*: The preferences of the selector, assuming a range from which to select, entailed several subsets. These included philosophical orientation and the following of some given school of thought. In those early days, the teachers of psychology were (with rare exceptions) trained as philosophers (sometimes as theologians) and would have held strong views in regard to the existing schools of philosophical thought. At Otago, almost all of the early Chairs in philosophy graduated from British universities (Oxford, Cambridge and Edinburgh, as major examples), implying a strong adherence to British Empiricism.

Table 4.1: The key psychology texts used by New Zealand university college departments teaching psychology during the founding years of psychology.

DATE	AUTHOR	TITLE
1884	Sully, J	Outlines of Psychology
1891	Hoffding, H	Outlines of Psychology
1890/1893 1894	James, W	(a) The Principles of Psychology (b) Psychology: Briefer Course
1907	Wundt, W	Outlines of Psychology
1908	Seashore, CE	Elementary Experiments in Psychology
1910	Stout, GF	A Manual of Psychology
1912 1920 1923 1932	McDougall, W	(a) Psychology: The Study of Behaviour (b) Group Mind (c) An Outline of Psychology (d) The Energies of Men
1922 1931 1939	Woodworth, RS	(a) Psychology: A Study of Mental Life (b) Contemporary Schools of Psychology (c) Experimental Psychology
1930	Collins, M & Drever, J	Experimental Psychology
1933 1937	Murphy, G Murphy, G Murphy, LB & Newcomb, TM	(a) General Psychology (b) Experimental Social Psychology
1935	Hartmann, GW	Gestalt Psychology: A Survey of Facts and Principles
1937	Allport, GW	Personality: A Psychological Interpretation
1937	Rickman, J	A General Selection from the Works of Sigmund Freud
1937	Thouless, RH	General Social Psychology
1940	Klineberg, O	Social Psychology
1942	Guilford, JP	Fundamental Statistics in Psychology
1948	Boring, EG Langfeld, HS & Weld, RM	Foundations of Psychology
1949	Freud, S	Introductory Lectures on Psychoanalysis
1949	Hebb, DO	The Organisation of Behavior: A Neuropsychological Theory
1950	Vernon, PE	The Structure of Human Ability
1951	Maslow, AH & Mittleman, B	Principles of Abnormal Psychology
1951	Smith, FV	Explanation of Human Behaviour

The summary analysis of the key early texts is presented in Tables 4.1 and 4.2. Appendix B, at the end of this chapter, provides the full reference details of the key texts, an abbreviated title and a synoptic analysis of each key text in terms of content and a commentary.

Table 4.1 lists the key texts used in the decades currently under discussion, giving year of publication, author and title. The table is generally sorted by date, making it easier to locate the decade. The full reference details appear in both Appendix B and in the Bibliography.

Table 4.2: The relationship between given early psychology texts, the decade of their use and the four original university colleges.

DECADE	AUCKLAND	CANTERBURY	OTAGO	VUW
1875 to 1900			Hoffding Sully	
1900-09		Hoffding Sully	Hoffding Stout Sully	Hoffding Stout Sully Wundt
1910-19	James (a) Stout	Hoffding Stout Sully	Hoffding Stout Sully	Hoffding Seashore Wundt
1920-29	James (b) Stout	Hoffding Stout Sully	Hoffding Stout Sully	McDougall (a) McDougall (c) Seashore Stout
1930-39	James (a)/(b) Woodworth (a) Woodworth (c)	Hoffding McDougall (c) Stout Woodworth (a)	Collins & Drever McDougall (c) Thouless	McDougall (b) McDougall (c) Murphy (a) Seashore Thouless Woodworth (a)
1940-49	Allport James (a)/(b) McDougall (d) Woodworth (b)	Allport Murphy (a)/(b) Thouless Woodworth (b)	Boring et al. Collins & Drever Maslow & M McDougall (c) Thouless Woodworth (c)	Allport Collins & Drever Freud Woodworth (b)
1950-59	Guilford Hebb McDougall (d) Smith Vernon Woodworth (b)	Boring et al. Rickman Klineberg Maslow & M Thouless Woodworth (a) Woodworth (c)	Hartmann James (a) & (b) Woodworth (a)	Allport Collins & Drever Freud Woodworth (b)

Of the texts shown in Table 4.2, the following were set texts for the first year (sometimes called junior papers in the calendars): Hoffding (toward the end of the 1910s, this text was shifted into the advanced papers), Sully, Stout, Wundt, James (a/)(b), Seashore, Boring et al., Woodworth (a)/(b), Thouless, McDougall (d) and Rickman. The remaining listed texts were set for the more advanced papers.

The texts listed in Tables 4.1 and 4.2 are the major ones in use at that time. As we move into the decades of the 1930s and 1940s other minor texts were introduced, but these are not considered to have had the same degree of influence. What I describe as minor texts are those that were listed as *recommended readings*, as opposed to set texts. For example, in the 1930s, at Victoria, Hunter listed River's *Instinct and the Unconscious* as a recommended reading. Similarly, Edgell's *Mental Life* was introduced at Canterbury College, also in the 1930s.

In the cases where two or more different titles have been used for a given author, the titles have been given a lower-case letter [eg, (a) or (b)]. This letter also appears in Table 4.2. which shows the relationship between texts, decades and colleges[5].

Table 4.2 covers the decades from the 1880s to the 1950s, and shows which texts were in use by which university college for its psychology courses. This table is kept simple by using only the author's name. Table 4.1 gives the year and title, and Appendix B gives the full reference details.

The pattern that emerges in Table 4.2 is worth commenting on. Firstly, there are no entries in the first two decades other than for Otago, simply because the other colleges had not come into being at that point. The second factor is the small number of key texts in use in the earliest decades (1880s to 1900s). In fact, the teaching load was carried primarily on the backs of Hoffding, Stout, and Sully right through to the 1920s for all four colleges. The differences across the colleges in this same period show up primarily at Victoria College where, in the 1920s, some dramatic changes came about. Thirdly, Table 4.2 shows that the range of texts in use increases as we move through the decades. The end of the 1920s was a watershed in this respect, where the decade of the 1930s saw not only an increase in texts but some significant departures from the original set listings. For example, at Victoria College, Hoffding and Wundt were dropped in favour of McDougall and Allport, and Stout's *Manual* found favour again. Also of interest in Table 4.2 is the fact that some colleges stayed with an early text where others had long abandoned it. For example, Stout's *Groundwork* was still in use at Otago in

[5] To facilitate a smooth flow in subsequent discussion when referring to a given early text, the usual citation is given (eg, James, 1890/1893) followed by the abbreviated title used in Appendix B (eg, *Principles*).

the 1950s when it had been dropped by Canterbury and Victoria in the 1930s. A more detailed consideration of the data on texts will be given in those sections dealing with the developments at each college. Additionally, in regard to these early text authors, their views on the mind-body issue and consciousness (see Chapters 2 and 3) will be examined.

THE UNIVERSITY OF OTAGO

The development of the discipline of psychology in New Zealand parallels that of the development of the university system in New Zealand. This is because the discipline has, for the most part, developed within university departments with very little direct influence from elsewhere in the Nation, at least until the much later formation of professional bodies such as the New Zealand Psychological Society and the creation of the Psychologists' Board in more recent decades.

The story of psychology on these shores begins with the foundation of the University of Otago in 1869, the very first university in New Zealand (with some qualification as discussed above in relation to the UNZ), and the third oldest in Australasia after Sydney (founded in 1850) and Melbourne (founded in 1853). The predominantly Scottish settlers of Otago came with a conviction in the value of higher education. Additionally, the discovery of gold in the province in 1861 saw Otago become the leading province in terms of wealth and population growth. These factors conspired to produce the demand and wherewithal for the creation of a University of Otago (Sinclair, 1980).

It is important to understand that the Presbyterian Church of Otago and Southland had a powerful influence in the provision of education at all levels within the province, including the tertiary level[6]. In fact, the Church was directly involved, with the Provincial Government, in setting up the University of Otago. This influence was quite unique to the developments at Otago and, as I will explain, had a direct bearing on the early years of philosophy (hence psychology) at Otago. At no other university college in New Zealand was there anything to equate with this influencing factor. It produced a marked differential effect at Otago when compared with the unfolding of psychology at Canterbury, Auckland and Victoria.

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[6] Gunn, F. (1935) in an unpublished Honours thesis of the University of Otago entitled: *The Contribution to Education Made by the Presbyterian Church in Otago and Southland.*

In the June of 1869 the Provincial Council passed the Otago University Ordinance, creating the University of Otago as a corporate body with the power to grant degrees in arts, medicine, law and music. This move provoked a reaction at the national level and, as explained earlier, an attempt was made to establish a colonial university (later to become the UNZ -- see earlier discussion), siting it in Dunedin and amalgamating it with the University of Otago (Parton, 1979). There was little national agreement on this and, in particular, the people of Canterbury reacted strongly and had their own ideas on what and where a university should be. Beyond obvious motives of provincial jealousies, there were the more rational concerns about localising a *national* university in any given provincial location. Coupled with this were split views in regard to the nature of a university; some saw it as a teaching institution and others as purely an examining and degree granting institution. The first category entailed the second, but not the other way around. At the root of these views was the issue of quality control in which there arose a dichotomy between control exercised via strict examination procedures and control exercised by the quality of the teachers.

The very first meeting of the Council of the University of Otago was held on 10 November 1869. The Council consisted of nine members, three of whom were clergy in the Presbyterian Church, with Reverend Burns as the Vice Chancellor. This meeting was held in the then new Post Office building in Dunedin. It is interesting to note that all Council meetings were opened with a prayer (presumably of the Presbyterian creed), a practice which continued for several decades. At this first meeting it is minuted[7] that four Chairs would be established: Classics, Mathematics, Chemistry and Mental and Moral Philosophy. The salaries of these four Chairs were to be 600 pounds per annum. Minuted at this same first Council Meeting was the view that the original Chair of Mental and Moral Philosophy also include Political Economy, it being felt that this would anchor the teaching in the modern era.

The original Chairs of this early University of Otago's department of Mental and Moral Philosophy were, without exception, British philosophers, graduates of top British universities such as Oxford and Edinburgh. The early Chairs of Mental and Moral Philosophy would have viewed the nascent discipline of psychology as a subset of philosophy and probably could not

[7] Minutes of the Council of the Univesity of Otago dated 10/11/1869: Archives of the Hocken Library.

conceive of it as something separate. But, more than this, despite the word *science* in the departmental title, the philosophical focus of these Chairs was not scientific and certainly not oriented to experimentation. The philosophy of the nineteenth century was analytical through and through and not really interested in practical matters. At root, these attitudinal issues arose out of the then clear distinction made between science and philosophy. The more recent concepts such as *applied philosophy* (eg, Griffiths, 1985), in which the practical applications of philosophy are considered, had not emerged. Philosophers did not do things to nature or people; rather they cogitated on fundamental issues. They did not share the same goals as science.

The first two philosophers at Otago were Scots, having completed their university studies in Scotland (see Table 4.3 shortly). Being philosophers rather than modern psychologists, their key concerns would have been philosophical. They would have been exposed to the range of philosophical viewpoints current in their university days, especially to those of thinkers such as Francis Bradley (an idealist), James Mill (a disciple of Bentham), Jeremy Bentham himself and Thomas Reid (the originator of the Scottish "common sense" school). All of these thinkers were concerned with epistemology and ontology (Flew, 1979). That is, the concern was with meaning and the ultimate nature of things. Implicit in this concern was the Mind-Body problem that Descartes bequeathed philosophy, hence psychology. Thus, for these two original departmental heads, the prime issues in psychology were philosophical and centred around the nature of mind and mental phenomena, and how mind interacted with body. Everything else (eg, sensation, perception, memory and so on) would have been seen as subordinate. The actual physiological and neurological mechanisms were not of prime concern, even though they were taught. In addition to these more philosophical factors, there appears to have been a somewhat possessive spirit with a great reluctance to see psychology flourish as an autonomous entity. This shows especially in developments at Otago, where this possessive spirit delayed the autonomy of psychology beyond its rightful time.

Of interest, the minutes of the Otago Council dated 28 April 1870[8] record that the election to these first four Chairs would be made by the Council itself (it being the employing body). The actuality is that this occurred only in the case of Classics, Chemistry and Mathematics. The Chair of Mental and Moral

[8] Ibid footnote 7, but Minutes of 28/4/1870

Philosophy was endowed by the Church Property Board, and this Board claimed the right to select and appoint the professor. This claim seemingly went unopposed by the Council despite the minuted statement. To this end, the Church Synod authorised certain of its Principals (members of the Synod) to form a selection committee and charged them to "...select a gentleman for nomination to the professorship of Mental and Moral Philosophy in the University". In June 1871, the Council was notified by the Church that a Mr Duncan MacGregor had been selected. It appears that the idea was then for the Council to either approve or decline this selection in accord with its own edict (see above). However, the truth is that it was the Synod that elected MacGregor to his Chair, in which the Synod acted as though it were the employing authority. This turned out to be a crucial issue and I will return to it later when discussing the appointment of Dr Salmond who followed on from MacGregor.

It is interesting to note that the election of MacGregor in 1871 to the Chair *of Mental and Moral Philosophy,* which department had a psychology course, predates by eight years the "official" birth date of Psychology in Wundt's laboratory in Leipzig. But this cannot be interpreted as this little colony having led the world in this respect. It simply means that the topic of psychology existed in its own right well before Wundt made it an independent scientific discipline. In fact, the *Leipzig* event merely marked the first known occasion on which a scientific experiment was conducted in psychology in a university department. It is misleading (as some introductory texts love to do) to call Wundt the *Father of Psychology*. Chapter 2 of this thesis shows this claim to be a nonsense. But, as far as New Zealand was and is concerned, in the field of psychology our role has been that of importer and consumer rather than creator or innovator.

MacGregor[9] was a distinguished academic and had held the position of Scholar in Mental and Moral Philosophy at Edinburgh University. He held an MA from Aberdeen, and an MB plus MC from Edinburgh. In the very first meeting of the Professorial Board[10] held on 30 March 1875 (with Sale *Classics*, Shand *Mathematics* and Black *Chemistry*), MacGregor put in place the programme for the courses in his department as: *structure-function of the*

[9] Note that all University of Otago records sighted by this researcher show the spelling as McGregor. However, the correct spelling is MacGregor (eg, Tenant, 1989).

[10] Minutes of the first meeting of the Professorial Board of the University of Otago dated 30/3/1875: sighted in the Hocken Library.

nervous system, *psychology and ethics*, *logic* and *the history of philosophy*. This structure was to last essentially unchanged for over five decades! It was also minuted that MacGregor would be teaching from Bain's *Mind and Body: The Theories of Their Relation* published in 1874, and *Mental & Moral Science (vols I & II)* published in 1868, plus Spencer's *Psychology*, published in 1870. However, there is no further mention of these texts in subsequent Board minutes, nor indication as to why they never appeared in the calendars. So it is not clear whether he did teach from them. Bain and Spencer had been very influential in the development of psychology in the mid 1800s (see Chapter 2 of this thesis). However, the Sully and Hoffding texts (published in 1884 and 1891 respectively) probably appealed to McGreggor for their modernity, and so earned their place in the calendars.

The Otago calendars show that MacGregor introduced Sully's *Outlines* when it came out in 1884. Sully took a basically Cartesian stand in that he gave credence to Mind as something separate from matter. He also saw psychology as a speculative science, more aligned with philosophy than with the natural sciences. Furthermore, he viewed psychology as the ground of the more practical sciences (including politics). Sully's *Outlines* would have been a very influential book in that it was the only one in use for psychology at Otago from 1884 through to the mid 1890s when Salmond introduced Hoffding's *Outlines*. Hoffding was a Danish scholar, and held the Chair of Philosophy at the University of Copenhagen. Like Sully, he adopted an essentially Cartesian stand in that he had a dualistic view of the Mind-Body problem. Of importance is his basically Rationalist-Innatist stance, in which he held that conscious life began prior to birth, implying that consciousness began its development in the womb. The philosophical stand taken by Sully and Hoffding would have been very influential in these early years of psychology at Otago. Their two texts were the only texts in use until the early 1900s, when they were joined by Stout's *Manual* (brought in by Salmond).

The Council Minutes of December 1885 record that Professor MacGregor had resigned and was taking up the position of Inspector of Lunatic Asylums & Institutions. This title was how it was recorded in the Minutes. However, in 1880, the Inspector of Lunatic Asylums was also given the oversight of hospitals and charitable aid, a somewhat strange arrangement, in which the conceptual linkage appears to be that charity was the common factor. In 1885 the Hospitals and Charitable institutions Act was passed into law. Thus, when

MacGregor took up his new position in 1886, his title was actually Inspector General of Hospitals and Charitable Institutions (Tennant, 1989). The Council advised the Church Property Board of MacGregor's departure and the Board responded that it would seek a suitable replacement. In the Council minutes of 3 February 1886, a letter was received from the Church Property Board saying that it had appointed the Reverend Dr William Salmond to the Chair of Mental and Moral Philosophy. This appointment had already provoked a reaction before the letter from the Board had been received because, in the January of 1886, the Vice Chancellor of the UNZ had expressed concern over the way in which Salmond had been appointed, challenging the criteria used, and questioning Salmond's knowledge of physiology in particular (Thompson, 1919). At this same time Robert Stout (Attorney General and MP for Dunedin) in a letter of 25 January 1886 to the Otago Council accused the Synod of violating its own Act (The Presbyterian Church of Otago Land Act of 1886) in that the Church had acted as though it were the appointing-employing body of Dr Salmond. He accused the Council of yielding its powers to the Synod. It appears that the Synod had admitted to Stout that they had been influenced in their choice by the creed of the appointee, which Stout construed (rightly in my view) that the Church had administered a "religious test". Such testing was in clear contravention of Clause 12 of Otago University's own Ordinance, which stated that the University was restrained from imposing religious tests upon its staff or students (Thompson, 1919, page 21). Stout wondered in his letter whether the University of Otago was in danger of becoming a sectarian university. Stout also, like the UNZ, challenged the lack of other, more suitable, criteria in the selection of Salmond, whose degree was a Doctor of Divinity from Edinburgh. Reading between the lines of Stout's letter, I deduce that he could not see Salmond providing a liberal and objective programme in philosophy and, in fact, implied that the programme would be substantially "theistic". It seems that his concerns were well founded as demonstrated in Salmond's letter.

In a defensive letter from Salmond to the Council dated 29/1/1886, he argued that he had the legal right to retain his Chair even if the Council tried to remove him. He also used the fact that his removal would abolish the Chair until the Council could fund it (knowing that this was unlikely for some time to come). This amounted to naked blackmail on Salmond's part. He further argued that he saw no evil in teaching a "Theistic Philosophy", and invoked his Edinburgh Doctor of Divinity plus his teaching of youth as criteria for his

fitness for the Chair of Mental and Moral Philosophy. Additionally, he had been charged with being selfish and self-seeking by the Otago press in trying to hang on to the Chair. He denied these charges and said that he left the outcome up to the Almighty. The Council Minutes of 10 March 1886 record that until legislation was effected that allowed Council and/or Synod to remove a professor, the Council declined to assent to Salmond's appointment. However, pressure had been brought to bear on the Council because, in minutes of 15 April 1886, the Chancellor had to use his casting vote to ensure that Salmond got the Chair. There was no mention of any changed legislation as earlier required!

At this distance, it is not possible to know with certainty the quality of Salmond's teaching, nor how theistically biased it might have been. It is evident that, unlike his predecessor, Salmond knew very little about physiology, hence the central nervous system (Thompson, 1919). It is also likely that he knew very little about psychology *per se* in that, prior to his appointment at Otago he was a Doctor of Divinity and had been teaching theology for ten years at the Presbyterian College in Dunedin (Thompson, 1919). But he did introduce Stout's *Manual,* which was a very comprehensive text covering just about every topic then regarded as the province of psychology. Again, like Sully and Hoffding, Stout subscribed to a dualistic position in regard to the Mind-Body issue. But, more than this, he put forward a Platonic view of consciousness as having its source in an immaterial realm, thus bringing in an element of Idealism. But, he eschewed dogma (this working to offset some of Salmond's influence) and urged the student to approach psychology with an open mind. Salmond's retirement is recorded in the minutes of 21 October 1913. Despite the trauma of 1886, he ended up becoming well liked and respected. In fact, the minutes of the Professorial Board of 18 October 1913 record Salmond as being "a great and inspiring teacher". It is also recorded there that Salmond had been a member of the UNZ Senate from 1888 to 1912. He retired as Emeritus Professor.

It appears that, from the point of Salmond's retirement, the Council intended setting up an Advisory Board to interview and recommend applicants in Philosophy even though the Church continued to endow the Chair. The third Chair, Francis Dunlop, was selected by the Church Property Board. However, the Council's original intent was acted on with the appointment of Findlay (the

fourth professor of philosophy), who was the first to be selected and appointed under the new regime.

The Salmond episode demonstrates that the Presbyterian Church, on at least one occasion, exceeded (even abused) its powers in respect to the appointment of the Chair of Mental and Moral Philosophy. In fact, not only did it overstep its authority in attempting to act as the employer, it applied a "religious test" on its selectee, where it is clear that the major reason why Salmond got the Chair was his religious persuasion (not simply that of being a Christian, but being of the Presbyterian Church). To corroborate this indictment, Gunn, in his Honours thesis[11], records that the Church Synod had expressed fears about Professor MacGregor's Materialistic-Rationalistic orientation, which the Synod clearly viewed as subversive. More than this, Gunn reveals that the *Political Economy* component of MacGregor's original Chair was removed by the Synod (not the Council!) because it gave MacGregor too much freedom within which to express his "subversive" views. Gunn also records that a Parliamentary Bill was prepared in secret, the aim of which was to despoil the Synod of its right to the Education Fund, by transferring power to the University Council alone. However, the Bill was rejected in its passage through the House. Subsequently, a similar attempt was made in the Legislative Council, but this Bill met with a similar fate.

Of interest in relation to MacGregor's subversive views is the observation by Margaret Tennant in her book *Paupers and Providers* (Tennant, 1989) that MacGregor was a follower of the thinking of Herbert Spencer, thus a confirmed social Darwinist. That is, MacGregor regarded life as a struggle for existence, a process of weeding out the ignorant, the incapable and unfit. There seemed little room for compassion and caring in this view. Tennant points out that MacGregor blamed poverty on individual failings. He supported state intervention in the most negative sense, that is, to permanently restrict the liberty of hopeless drunkards, criminals and paupers. While his social Darwinistic leanings were not in themselves evidence of materialism, his tough-minded views about paupers would be in line with the New Right thought of today, but would not endear him to today's religious bodies, who see New Right policies as being particularly un-Christian.

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[11] Ibid footnote 6.

But, more than just MacGregor's espousal of social Darwinism caused the Church to be concerned about him. In his article entitled "The problem of Poverty in New Zealand", published in three parts in the *New Zealand Magazine* in 1876 (MacGregor, 1876a, 1876b, 1876c), his views about God and the Church are made quite clear. For example, in Part-II of this series (1876b), we read "Unequal distribution is the inevitable result of liberty, which brings out and intensifies the initial inequalities of human endowment. The competition thus arising we found to be the great principle of progress, though its Sphinx-like alternative makes our humanity shudder, and sounds like a libel of the Deity." (page 208). Then again, in the final article (MacGregor, 1876c, page 316) we read, "Public opinion is as yet in its infancy among us, and on it nearly all the care of others had practically devolved. Our only hope is the School-master. Not the Law, not the Churches, not the Press can save us. They are all equally helpless, equally untrustworthy, in the absence of a healthy public opinion; and a healthy public opinion is a structure whose foundations can be laid only in the school."

In some departments, a professor's religious affiliations would not be a very critical issue (for example, in geology or chemistry), and the Synod would not have the need to influence appointments, leaving this entirely to the University's governing body. In fact, the only Chairs endowed by the Church at Otago were Mental and Moral Philosophy and, later, Natural Science. In philosophy (more specifically, Mental and Moral Philosophy as most of these early departments were called), however, a professor's views and general philosophical alignment were highly likely to flow over into the class room, in the choice of set texts and in course notes, hence strongly influencing the minds of students. Philosophers and theologians had long had an uneasy relationship, and fundamental metaphysical issues were being argued hotly in these early years, where some of these arguments threatened Christian Theology. This being the case, the Presbyterian Synod was much more likely to want an input into the appointment of professors of philosophy at Otago.

There was a limit on just how far the Church could directly oppose possible threats to its theological and even political authority, at least overtly and publicly. For example, it was not possible for the Church, via the department of Mental and Moral Philosophy, to coerce students or staff into espousing specific religious views through the medium of assessable or examinable

learning materials. However, as we see, it exerted powerful though indirect influence in terms of the selection of the Chair of Philosophy.

The involvement of the Church in university matters raises interesting questions about the different types of power and control that stems out of private sector funding versus public sector funding. With a private funding source, there is always the likelihood (at the very least the possibility) of vested interest coming into play in the form of influence by the funder on the funded organisation. In the case of a purely commercial funder this influence may be no more than a requirement that the funder receive adequate public recognition of its contribution (eg, by means of favourable advertising). While one cannot say that where the State is the funding source there is no likelihood of such biased influence, in a democracy, where the ultimate source of most funds is taxation (hence public monies), then the degree of influence (interference) will be much less than in the private sector funding case. However, the extent and effect of this influence, in either situation, must also depend on the nature of the body being funded and, in the case of the private funder, the nature of that funder.

In the case discussed above we have a particularly potent example. This is because the funder is a body (a church) having strong ideological views, and the funded body is an institution committed to educational principles such as academic freedom for both staff and students. The possibility of conflicts of interest are considerable in such a case. In fact, I cannot think of a more potent example other than where the funder is a political party with extreme ideological views.

To continue with the story of professorial appointments at Otago, the Council minutes of 17 February 1914 record that the selection by the Church Property Board of Dr Francis Dunlop for the Chair of Mental and Moral Philosophy was acceptable to the Council, which then confirmed Dunlop's appointment. This signals an end to the rather autocratic behaviour of the Synod, as occurred in the previous two appointments. The Council fully exercised its role as the employing body for the next appointment. A healthy lesson had been learned, and the Council clearly intended to avoid further controversy and to take charge of the situation.

Dunlop was a distinguished graduate of the University of Otago (hence the UNZ) with an MA in philosophy. He obtained his PhD from Jena, in Germany, studying under Professor Eucken there. He started missing Professorial Board meetings from around 1930. In 1931, he resigned from the University Library Committee, and is last mentioned in the Board minutes of 13 August 1931, where he gives apologies for his absence. The Council minutes of 18 October 1932 record Dunlop's death, and mentions his recent battle with ill health and his distinguished contribution to his teaching and to the University at large (he had held the Chair in Philosophy for 19 years). These same minutes record that the Church Property Board had been notified of Dunlop's death and of the consequent vacancy. Dunlop stayed with the original collection of set texts (Sully, Hoffding and Stout).

The Council minutes of 13 February 1934 note that a Dr John Findlay was due to arrive later that month. Although not minuted, it seems that Findlay's appointment was the outcome of recruitment and selection by an Advisory Committee set up by the University Council. The intention to operate in this way had been signalled shortly after Salmond's appointment. Also of significance is the fact that the name of the Chair changed to *Philosophy,* reflecting the Council's intention to broaden and update the scope of this Chair.

Findlay was an MA from Oxford, but also had an MA from the University of South Africa, and a PhD from Graz. He was welcomed to the Professorial Board on 5 March 1934. He did not make any significant changes to the teaching programme, but introduced, in addition to the Sully, Hoffding and Stout texts, Collins & Drever's E*xperimental Psychology,* McDougall's *Outline,* and Thouless' *Social Psychology.* The introduction of these texts along with the phasing out of the original three texts, marked a major change in the direction of psychology at Otago; a move away from speculative-philosophical psychology into a more experimental mode. In part, this seems to reflect Findlay's own diverse academic experiences. However, some of the text changes (eg, the Collins & Drever text) would have been influenced by Henry Hall Ferguson (ex Cambridge, appointed the year before Findlay), who had an interest in experimental psychology.

The choice of McDougall's *Outline* brought in a text having a very wide topic coverage, and with McDougall's own fairly unique world view, in which he

derogated the Structuralist notions of Wundt and Titchener and seemed to espouse the Functionalist views of James. It was a more modern text than Stout's *Outline*, but somewhat dated by the mid 1930s having been published in 1923. The choice of McDougall complemented the introduction of Thouless' text in that both had a strong social psychology leaning. However, today, we would not see Thouless' book as being especially a text on social psychology, because it covered such a wide range of general topics in psychology. Of importance is Thouless' reaction to the extremes of Behaviourism which (absurdly in Thouless's view) ignored mental processes.

In 1941, the word "psychology" appears in the index to the Calendar for the first time, indicating a shift in its status, and the beginnings of its recognition as a separate discipline. However, at that time, psychology was still very definitely a part of the Department of Philosophy. During 1943 and 1944 Findlay began to miss Professorial Board meetings, and Ferguson acted in his place. The Board minutes of 12 October 1944 record both Findlay and Ferguson as present and note Findlay's resignation to take up a new position outside the University in Grahamstown, near Port Elizabeth, South Africa. Little is said in either the Board or Council minutes about Findlay's contribution. This left Ferguson as acting head until the end of 1945. Toward the end of Findlay's time at Otago, he introduced further texts, including Maslow & Mittleman's *Abnormal Psychology* and Woodworth's *Experimental.* The Woodworth text was an important complement to the then slightly dated Collins & Drever text, and the introduction of an abnormal psychology component into the teaching was another significant departure from the past.

The Council minutes of 29 January 1946 record that Dr David Raphael would be taking up the Chair of Philosophy in March that year. Raphael was an Oxford scholar of some distinction, and appears to have entered into active involvement at Board and Faculty level from the beginning of his appointment. He was originally on the Faculty of Theology, but soon shifted to the Faculty of Arts and Music (the home of Philosophy). Raphael made no changes to either the programme or texts, seemingly putting his energies elsewhere. However, he did introduce Boring et al.'s *Foundations*. This text was an important addition to the then available texts on psychology, with a coverage from physiology through cognition to social relations. These texts reflects the authors' essentially physicalist-reductionist stance, a significant departure from the more dualistic stance of previous texts.

In May of 1947 a Committee (included Raphael) was set up by the Professorial Board to report on the future of psychology at Otago. This Committee argued that the main business of the Department of Philosophy was to teach philosophy and included psychology only to the extent that it was essential for philosophy students. In fact, the committee seemed to feel that psychology should be separated out as a department in its own right, but a Dr Eccles opposed this and the idea was dropped. These decisions were clearly influenced by what was already happening at Canterbury, Auckland and Victoria. Another very influential factor at that time was the power of Otago's Medical School which may have felt threatened by an independent department of psychology. The influence of the Medical School continued long after the period discussed here, where territorial problems arose between psychiatry and psychology under Peter McKellar as Chair of Psychology (see later)[12].

The Committee set up to look into the future of psychology recommended on 30 September 1947 that, essentially, psychology was to be taught within philosophy in a B.Sc structure, and that the Faculty of Medicine include general and social psychology in its Medical Bachelor's programme.

Raphael did not stay for very long. He resigned in October 1948, and returned to Britain to pursue his academic career. The Professorial Board report of 6 October 1948 mentions Raphael's resignation, and records that he "... had a keen mind...fresh and invigorating outlook..." and that he left for an academic career in Britain. In the Council minutes of that time, Raphael was regarded as having a ..."forceful and stimulating personality"[13]. In addition, it appears that he was hostile to psychology and his efforts toward its autonomy as a department seem to have arisen from this basis[14]. This seems to be corroborated by Fergson's request for a leave of absence (granted) shortly after Raphael's appointment. In fact, In 1948, Ferguson returned to Britain, and never returned to New Zealand. This was a great loss, as he was regarded highly by his colleagues and was felt to have made an enormous contribution to psychology at Otago[15].

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[12] Personal correspondence from Peter McKellar, dated 16/3/1997.
[13] Otago Professorial Board Minutes of 13 October 1948.
[14] Ibid footnote 12.
[15] Ibid footnote 12.

Also, around the time of Raphael's departure, Betty Bernardelli joined from Cambridge (UK) with a background in physiological psychology and the then new testing movement, she having set up testing procedures with the Royal Navy as a Naval Officer (personal interview, Bernardelli, 1995). Bernardelli joined a department that was not well run by comparison with most other departments at Otago. She feels that the problem went back to Oxford University's philosophers' attitudes toward psychology. Psychology had been stifled for many years at Oxford (it had been allowed to flourish at Cambridge), and this trend had been perpetuated at Otago (Raphael was ex Oxford). Bernardelli's view is strongly supported by the fact that William McDougall left England for America in 1920 because British universities were unready to provide the scope and facilities he needed. McDougall had spent an uneasy ten years at Oxford University, surrounded by hostile critics, and prevented by the terms of his appointment from conducting experimental work (Brown & Fuchs, 1971). This trend at Otago was further reinforced by the Reverend Charles Thornton (also ex Oxford) who joined the department at around the same time as Bernardelli's arrival. Bernardelli felt that Thornton could not understand the concepts underlying experimental psychology and regarded sensation as an almost theological issue. Although people like Thornton taught psychology, his examinations were more in the realm of philosophy-theology.

Just before he left, Raphael recommended to the Board that a D R Grey (who joined the Department mid 1947) take over as acting head of Philosophy. Grey remained as acting head until February 1950, when Professor John Passmore, an MA of Sydney University, was appointed to the Chair of Philosophy. Under Passmore, psychology became more clearly split off from philosophy in the prescription, and he introduced further texts (see Tables 4.1 & 4.2). The Council minutes of 27 July 1954 record that an Advisory Committee had been set up to recruit and select a replacement for Passmore, and the Professorial Board minutes of 13 October 1954 record Passmore's departure, with a very short statement of regret but without a record of reasons for his leaving.

On 28 October 1954 Council minutes record the unanimous adoption of the Advisory Committee's recommendation of Professor John Mackie, and appointed him to the Chair of Philosophy. Mackie was an MA Oxford, and had come from the department of Mental and Moral Philosophy at the University

of Sydney. In his short time in the Chair, Mackie became well liked by his colleagues and staff, but appears not to have furthered the separation of psychology from philosophy as initiated by Raphael. The course structure remained relatively unchanged, but a few new texts were introduced (see Tables 4.1 & 4.2).

The Council minutes of 8 October 1958 note the acceptance of Mackie's resignation, and congratulated him on his appointment to the Challis Chair of Philosophy at the University of Sydney. These same minutes set up an Advisory Committee for Mackie's replacement. However, it would appear that an immediate replacement was not forthcoming, and the minutes of 28 April 1959 record the appointment of a Mr Durrant as acting Head of Philosophy. It took until the May of 1959 for the Committee to locate a replacement for Mackie, a Professor Daniel Taylor, a graduate of Otago, who was appointed in the April of 1960. Taylor was to be the last professor of a department of philosophy that also contained psychology.

The Council Minutes of 28 November 1961 record that a Chair of Psychology be established, to be operative before 1963, and in February of 1962, the Council set up a committee to recommend an appointment to this new Chair. Taylor was on this committee. The minutes of 27 November 1962 record that Peter Mckellar was offered the first ever Chair of Psychology at Otago, but McKellar did not take it. At that time, he had become divorced and was contemplating re-marrying. Thus, instead, he went on leave as Visiting Professor of Psychology at Highlands University in New Mexico, and during this visit he re-married in Santa Fe in the December of 1964[16]. Griew was appointed in 1964, and Taylor became Professor of Philosophy in 1964. In fact, this was a period of transition for psychology because it was clearly no longer regarded as a legitimate part of philosophy, yet did not have a department of its own. To underscore this, the calendar of 1963 says that psychology may be offered that year, but without any certainty.

Table 4.3 provides a summary of the appointments to philosophy at Otago, showing the years of office, qualifications and a brief commentary. This table shows that Otago had a total of eight professors of philosophy before psychology finally broke free as an autonomous department. In a later section of this Chapter, comparisons will be made across the four university colleges.

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[16] Ibid footnote 12.

But, at this point, it is worth noting that Otago had as many professors of philosophy prior to psychology emerging as an autonomous discipline, as the other three colleges put together using the same criterion. We get some insight into the causes of this instability in noting that, with the exception of Salmond, no professor spent very long in the position, where some held the Chair for five years or less (eg, Raphael, Passmore and Findlay). Only in two cases was natural retirement or ill health involved. For the rest, it was a question of moving on to new pastures. In some cases, especially that of Raphael, there appears to have been an element of dissatisfaction or even conflict as a cause for departing so soon. No other university college suffered a fraction of the degree of turbulence within philosophy as experienced by Otago. Whilst proof at this distance in time is not possible, it is reasonable to speculate that such a high degree of turbulence had its negative impact on the embryonic discipline of psychology, and delayed its birth at Otago.

Table 4.3: The Professors of Philosophy at the University of Otago.

Year	Professor	Qualifications	Comments
1871 - 1886	MacGregor	MA (Aberdeen) + MB & MC (Edin)	Appointed Chair of Mental Philosophy & Political Economy in 1871 by Presbyterian Church Synod Committee. Scholar in Mental and Moral Philosophy at Edinburgh. Political Economy was taken away in 1881. Left Otago in 1885.
1886 - 1913	Salmond	DD (Edinburgh)	Chair of Mental and Moral Philosophy. First to introduce a set text (Sully). Retired due to ill health in October 1913. Minuted as a "great and inspiring teacher". Retired as Emeritus Professor.
1914 - 1933	Dunlop	MA (Otago); PhD (Jena)	Appointed in 1914 to Chair of Mental and Moral Philosophy, but appears for first time in calendar of 1918. Dunlop's death was minuted in March 1933.
1934 - 1944	Findlay	MA (Oxon), MA (South Africa); PhD (Graz)	Department name changes to Philosophy. First to be appointed by the University Council as opposed to the Church. Leaves in 1944 to take up a teaching post in Grahamstown. H H Fergson is acting head from 1944 to 1946.
1946 - 1948	Raphael	MA (Oxon), D Phil (Oxon)	Chair of Philosophy. His resignation is minuted in April 1948. Hinted that he did not fit in too well. D R Grey ran the department from 1948 - 50. It appears that Raphael was originally on the Board of the University of Otago's Faculty of Theology.
1950 - 1954	Passmore	MA (Sydney)	Chair of Philosophy. Left for undisclosed reasons.
1955 - 1958	Mackie	BA (Sydney), MA (Oxon)	Appointed Chair of Philosophy. Ex lecturer in department of Moral and Political Philosophy at Sydney. Resigned in October 1958 to Accept Challis Chair of Philosophy at Sydney.
1960 - 1964	Taylor	MA (Otago), Dip Ed (W. Aust), MA (Melb)	Taylor was the last professor of philosophy at Otago whose department taught psychology.

The detailed analysis of professorial appointments will not be repeated for the remaining three university colleges. It was justified in the case of Otago because of the relatively high level of change in Chairs across the decades from 1871 to 1964. It was also justified because of the Presbyterian Church's active involvement in the appointment process of the first three professors of philosophy. The nature and degree of this interference shows up only at this level of analysis.

CANTERBURY UNIVERSITY COLLEGE

General information about Canterbury College was obtained from the history of the College written by Gardener, Beardsley and Carter (1973). More specific information about appointments was obtained from the College's calendars. In addition, some supporting information was obtained from the Bulletins of the New Zealand Psychological Society (NZPsS), sighted in the National Office of the NZPsS.

The Province of Canterbury was founded in New Zealand with the deliberate intention to transplant a complete segment of British life to the new land, but without the class-ridden structure that most settlers wished to escape from (Sinclair, 1980). From the outset, the Province had high cultural and educational aims. Even before the first ships left England in 1850, the *Canterbury Association* had elaborate plans for a university institution, to begin as the collegiate department of the grammar school which was to be established upon arrival. Although nothing came of this grand scheme, the intent lying behind it was still there and led to the formation in 1871 of a *Canterbury Collegiate Union*, which gave instruction in Classics, Mathematics, Modern Languages and certain branches of science (eg, chemistry). At that point, philosophy was not taught. The UNZ had come into being in the same year, and the Collegiate Union became affiliated to the UNZ. Canterbury College was founded by an Ordinance of the Province in 1873, and the affiliation of the Union to the UNZ was later transferred to the Canterbury University College when it came into being in 1874. Thus, Canterbury was the second college to be established after Otago.

With the ending of the Collegiate Union's classes in 1874, the College took over the teaching. The first Chairs were in *Chemistry, Classics and English*,

along with *Mathematics and Natural Philosophy*. In 1877 a fourth Chair in *Palaeontology and Geology* was established, followed shortly after by a Chair in *Biology*. Thus, unlike the pattern in Otago, which had from the outset a full Chair in Mental and Moral Philosophy, there was initially no equivalent at Canterbury College. In fact, the College had to wait until 1901 before this omission was rectified, and even then it was merely a *Lectureship in Mental Science* that was established, and not a full Chair. This position was held by a Charles Salmond (not to be confused with Reverend William Salmond at Otago) who had an MA from the UNZ. Salmond considered psychology to be based primarily on introspection and gave little consideration to Freud, mental testing, or experimental work in his courses (Greer, Sloane & Hornblow, 1986).

It was not until 1914 that Salmond's lectureship became a full Chair. This delay must have had a considerable impact on the development of Psychology at Canterbury in those early years. A lectureship was not a part of the Professorial Board and consequently had a greatly reduced influence over important issues such as courses offered, funding and staffing. The new influence of Professor Salmond shows in the fact that for the previous 17 years, the departmental name remained unchanged. Within three years of his appointment, the department's name changed from Mental Science, to Moral and Mental Philosophy in 1917, then again to Philosophy in 1918, which name it retained until 1949. This series of name changes takes the philosophical focus of the department from the fairly specific to the all-embracing generic. Behind these changes lay the shifting of discipline boundaries.

It can be seen by comparing the early Chairs of Otago and Canterbury that the latter had quite a different focus from the outset, with a slant toward the physical and natural sciences. This is an interesting initial distinction in view of the fact that Otago has become the leading medical school in New Zealand. In fact, in the early days of Canterbury College, there had been some attempts to teach medicine and dentistry, but these were abandoned in favour of the strong existing programmes at Otago. Another interesting development at Canterbury was the variety of specialist schools that were established from its inception as a university college (for example, Fine Arts and Engineering). Of these, the School of Agriculture was formed in 1880, operating in Lincoln. It was administered by Canterbury College until 1897

when, by an Act of Parliament, it became Canterbury Agricultural College, and is now Lincoln University.

In 1907 at Canterbury College, the Department of Mental Science (as it had become) was offering two courses as part of a Bachelors programme, where these covered (as at Otago) logic, ethics and psychology. The text books in use at that time were Sully's *Outline of Psychology,* and Hoffding's *Psychology.* Salmond had introduced Hoffding's and Sully's texts from the beginning of his appointment as lecturer in 1901. In 1914 Salmond holding the Chair of *Mental Science* continued teaching the same two courses as before, on his own. In 1917, when the department became *Moral and Mental Philosophy,* the courses remained as before, but Stout's *Manual* was added, no doubt influenced by Otago's set text listing. A futher name change occurred in 1918, when Salmond's department became *Philosophy,* a move reflecting the overseas trend in which philosophy was seen as the overriding discipline, of which the likes of morals, ethics and mental science were seen as subsets.

In 1922, Salmond's lone task was relieved when he was joined by Parr as a lecturer. However, the course offering had not changed since the establishment of Mental Science in 1901. In 1923, a faculty structure was established at Canterbury, with a Faculty of Mental and Moral Philosophy being established, headed by James Shelly as the Dean. (Shelly was actually Professor of Education at that time, appointed in 1920.) In that year (1923) a course in experimental psychology was introduced. Salmond's department was a part of this new faculty. In this same year (1923) Clarence Beeby (PhD in psychology from Manchester) joined the Department of Education, but in 1924, shifted into Philosophy. In 1930, Beeby joined Salmond, teaching both philosophy and education courses. At this same time, new courses appeared within the BA, B Hons and MA programmes. Sully's text disappears, and McDougall's *Outline* and Woodworth's *Psychology* appear. The text by Woodworth had been originally published in 1922, and was in its 8th edition in 1930. It was one of the most popular and comprehensive general psychology texts of its time.

It seems that these early teachers could sustain a large teaching load. At that point, there was only Salmond and Beeby running all these degree programmes. However, it is unlikely that their classes were large by today's

undergraduate standards, with classes in the hundreds in some papers. In 1934, Salmond retired and died. According to Gardener et al. (1973), Salmond's view of philosophy as the "queen of the sciences" acted negatively for psychology under his administration, for they report, " ... and the 'new' psychology had no academic recognition in the Department of Mental and Moral Philosophy..." (page 260). With Salmond's departure, Professor Shelly (also Dean), along with Beeby were given joint responsibility for philosophy and education, and were joined by Winterbourn (as lecturer in both departments) and Turner. In 1935, Beeby resigned to take up the position of Director of the newly formed New Zealand Council for Educational Research.

Shelly continued in his acting head capacity, presumably running his own department and being Dean of the Faculty at the same time. However, in 1935, he resigned to take up an appointment as New Zealand's first Director of Broadcasting. In 1936 Professor Ivan Sutherland (ex Victoria) was appointed to the Chair of philosophy. In that same year, Karl Popper arrived from Vienna (to escape Nazi persecution) and joined Sutherland's department. Popper joined as a senior lecturer and left New Zealand at the end of World War II in 1945. He went to Britain, and took up a position as a senior lecturer at the London School of Economics, where he taught logic and the scientific method. In 1949, he was given a Chair in Logic and the Scientific Method (Gardener et al., 1973). In 1949, Alan Crowther joined as a senior lecturer, and the department was then called *Philosophy and Psychology*, the name order presumably reflecting the higher status of philosophy at that point. (Below, we will see that this word order was reversed when Victoria College was undergoing this process of breaking free.) In the previous years, under Salmond and Sutherland, the course offerings had not significantly changed, but there had been changes to the set text listing, in which Hoffding, McDougall, Stout and Woodworth were dropped in favour of Allport's *Personality,* Murphy's *General Psychology and Experimental Psychology* , Thouless' *Social Psychology* and Woodworth's *Contemporary Schools*.

There were further alterations to the set texts under Crowther's leadership when, in 1953, a separate department of psychology was established. The academic and administrative separation of psychology from philosophy was accompanied by a traumatic physical separation when, on 13 February 1953,

fire swept through the East Block of the old Christchurch Boys' High School building where both departments had been housed (Greer et al. 1986).

As its first Professor, Crowther added several new courses and new set texts, especially at the MA level (eg, history of psychology, general theory, personality and comparative psychology). However, the story of Crowther must wait until Chapter 5 when I deal with departments of Psychology.

AUCKLAND UNIVERSITY COLLEGE

General information about Auckland College was obtained from the history of the College written by Sinclair (1983). More specific information about appointments was taken from the College's calendars.

As mentioned earlier, one of the recommendations of the Royal Commission set up to investigate the UNZ, was to establish colleges in the North Island, at Wellington and Auckland. In 1882 the Auckland University Act was passed into law, establishing the University College of Auckland in the September of that year, endowing the college with a grant of 4000 pounds per year. The governing body was styled *The Auckland University College Council.* The two original Chairs were in *Classics and English*, and in *Mathematics and Mathematical Physics.* A little later were added Chairs in *Chemistry and Experimental Physics* and *Natural Science.* In addition to their salaries, professors and lecturers received fees paid by their students (seemingly, a feature only at Auckland). By 1883, the student roll topped 80, but there was still a considerable imbalance between the numbers of courses offered by Auckland and at the two South Island colleges (Victoria College had yet to be established). The memoranda of that time also reflect disgruntlement on the part of the Auckland University Council (Parry, 1959; Parton, 1979). The grant was clearly inadequate as were the buildings. Also, at that point, just as at Canterbury but unlike at Otago, there was no Chair of Philosophy or variant on it.

The absence of a Philosophy dimension at Auckland was not rectified until 1910 when Joseph Grossman (an MA from UNZ) took up a lectureship in *Mental Science*, within which department *Ethics* and *Psychology* were offered together. In 1916 Grossman was appointed Professor of Mental Science. In

1921, Grossman took over the Chair of *History and Economy*, giving us some idea of the extent to which these early professors were polymath individuals. But it also indicates that some initial appointments were unsatisfactory because not even a polymath can cope with a growing and specialised discipline such as psychology. It seems that some of these early appointments (eg, Grossman's) acted in a custodial role until the department was seen to be flourishing, when a more appropriate appointee took over. That is, a professor who knew the specialisation. William Anderson, an MA from Glasgow and *Ferguson Scholar* in Philosophy, took over from Grossman in this manner as Professor of *Mental and Moral Philosophy* (note the name change).

In the decade 1910 to 1920, the two original psychology texts used at Auckland were James' *Principles* (both volumes) and Stout's *Manual*. Appendix B shows that James' text had a very wide scope and would, in fact, have been rather heavy going for an introductory course (this, by James' own admission). This view is further supported by the fact that, in the decade 1920 - 1930, *Principles* was replaced by James' *Briefer Course*, which was an abridged version of *Principles*. We can be sure that those students who valiantly waded through *Principles* would have gained a very thorough grounding in psychological theory as it existed at the turn of the 1900s. They would also have been influenced by James' very clear views about consciousness, wherein he took a Functionalist stand in opposition to the Structuralist stand taken by Wundt and Titchener.

One has to wonder about the use of a text published in the late 1800s, for courses being offered in the 1910s and 1920s. This is quite out of keeping with the modern practice, at least in introductory texts, where new texts are introduced by academics, on average, every couple of years. Certainly, the modern publishers do not stand still, where many new introductory psychology texts appear every year, and academics find themselves inundated with publishers' information. The rather static nature of the early set text lists seems to point to the issue raised earlier in this chapter, regarding the selection processes used by academics, where availability was a major factor. It is unlikely that these early academics were happy sticking with the same old texts year after year. It is more likely that they had very little choice.

From his appointment in 1921, Anderson rapidly expanded the psychology offering and introduced new texts, and this, despite having once claimed "...that no significant principle or theory had ever been discovered by psychology." (Sinclair, 1983, page 202). In 1929, Anderson, still alone, was joined by Paul Anschutz (MA:UNZ, PhD: Edinburgh) as a lecturer. Anderson and Anschutz remained alone until 1949 when they were joined by Pflaum, and the course range extended further including emotion, motivation, learning theory, cognition and personality. In 1954, the number of staff under Anderson increased from two to five, with Anschutz becoming Associate Professor. At this point, psychology was still taught within philosophy, along with ethics and logic. However, there occurred significant changes in set psychology texts which now included such as Guilford's *Fundamental Statistics in Psychology*, Hebb's *Organisation of Behaviour* and Vernon's *Structure of Human Abilities*. In 1955, Anderson retired and Anschutz took over as Professor. Anschutz was the last professor of philosophy at Auckland to have psychology as part of his department. Professor Barney Sampson was the first Professor of Psychology at Auckland, but his story must wait until the next chapter.

VICTORIA UNIVERSITY COLLEGE

General information about the Victoria College was obtained from the history of the College written by J C Beaglehole (1949). More specific information about appointments was taken from the College's calendars.

It had been the intention to establish the Auckland and Wellington colleges simultaneously, as recommended by the Royal Commission (Parton, 1979). However, procrastination on the part of the then Government, and lack of funds arising out of the impact of the *depression* of the 1880s, led to the deferment of the Victoria College Act. In 1894 an Act was passed called *The Middle District of New Zealand University College Act*, which said that there shall be established in the City of Wellington a College affiliated to the UNZ. Further procrastination followed and continued until 1897, when the arguments ended with Prime Minister Seddon introducing the *Victoria College Act*. (The choice of name was a clever political ploy, that year being the 60th anniversary of the reign of Queen Victoria.)

The new *Victoria College* had as its province the districts of Wellington, Manawatu, Taranaki, Hawkes Bay, Nelson, Marlborough and Westland, a very extensive coverage! The College was admitted into the UNZ in 1899, and four initial Chairs were created at that time: *Classics; English Language and Literature; Chemistry and Physics* and *Mathematics and Mathematical Physics.* In that same year *The Victoria College Students' Society* was founded, the first such in New Zealand. This body changed its name to *Students Association* in 1906, the name it still bears.

Like Canterbury and Auckland, Victoria College did not immediately acquire a philosophical dimension. This occurred when, in 1903, Professor Mackenzie (ex St Andrews College of Scotland) who was actually the Professor of *English Language and Literature*, started teaching Logic, Ethics and Psychology. It is hard to gauge what kind of philosophy and psychology was being taught by someone having no formal background in either. But it was a start. For the psychological component, Mackenzie used Hoffding's and Sully's *Outlines*, and Stout's *Manual*, no doubt strongly influenced by the choices at the other three colleges. One can only speculate as to why Victoria's Council decided to make available this rather limited offering in philosophy. Amongst other likely motivations, Victoria would not want to be left behind and would want to address the imbalance in higher education that had existed for far too long in the Capital city. Whatever the real reasons were, we will see that this limited start led on to great things in psychology for Victoria in particular and for New Zealand in general.

The breakthrough occurred when Thomas Hunter joined Mackenzie in 1904, as a lecturer in *Mental Science*. Hunter was born in London but spent his boyhood in Port Chalmers, Dunedin. His mother was a woman of force and character, and his father was a stern puritan. Hunter's elder brother, Irwin, had a strong influence on the young Hunter, and endowed him with his pugnacity and readiness to face any challenge (De La Mare; in Beaglehole & Beaglehole, 1946). Hunter must have been somewhat awed when he witnessed his brother, at the age of nine years, confront the devout father and tell him he did not believe in God. De La Mare, who knew the Hunter family, had no doubts as to where Thomas Hunter's sympathies lay in that formidable strife of wills. Later, in this section, we will see that Irwin had a strong formative influence on the Hunter who became the academic leader. Macgregor, too, had a strong infuence on the young Hunter, under whom he

studied Mental and Moral Philosophy at Otago, gaining an MA and MSc there. He was also Mental Science Scholar at Otago. After ten years of secondary school teaching at Waitaki he moved to Wellington City.

Teaching at Victoria, Hunter very soon introduced a fourth text alongside Mackenzie's original three: Wundt's *Outlines*. It is interesting to note that Victoria was the only college to use Wundt's text. But this is not surprising, because of Hunter's high regard for Wundt and for Wundt's disciple, Titchener (personal interview, Ritchie, 1995). In fact, the copy of Wundt's *Outlines* that I sighted in Victoria University of Wellington Library was Hunter's own personal copy, having his name handwritten on the front leaf. *Outlines* was first published in German in 1896, and was translated into English by an English student of Wundt's (a Judd, who did his PhD under Wundt at Leipzig). Wundt's Structuralist leanings and mental chemistry approach come through clearly throughout this text. This view was in direct opposition to that of James and subsequent Structuralists, and represented a view of consciousness that was not destined to have a very long life.

The arrangement whereby Hunter was made responsible for teaching philosophy was a fortuitous one, because Mackenzie, not being a philosopher himself, gave Hunter a high degree of autonomy, and Hunter was the kind of man to fully use this to his advantage. In fact, Hunter was quite a polymath because, in addition to mental science, he also taught *General History* and *Economy*. Ritchie (personal interview, 1995) regarded Hunter as a voracious beaver who was always on the look out for something new. Ritchie feels that Hunter is hard to place intellectually, but was very much in the British Radical tradition. Hunter reacted to everything that was going on around him. Ritchie cites Hunter's response to the Newman Society (based on the ideas of Cardinal Newman, a theologian) in forming a Socratic Club, whose aim was to tear to shreds the theological arguments of the other. Hunter was intensely nationalistic, wanting very much for things to be New Zealand grown.

In 1907, Hunter was appointed as lecturer in *Mental Science and Economics,* then Professor of *Mental Science and Economics* in 1908. This was a rapid rise in four short years. The set texts remained fairly static until 1920, when Hunter made some dramatic changes, which will be discussed later.

Under Hunter, the department grew more rapidly than those at the other three colleges. In 1909 his department was renamed *Mental Science*, Economics having become a separate department in its own right in that year. Hunter clearly had very specific goals from the outset, and from his appointment as Professor, he established a practical course in experimental psychology, the first of its kind in New Zealand. In fact, with some notable exceptions (eg, Edinburgh and Cambridge in Britain, and Leipzig in Germany) there were few examples of such practical courses in psychology anywhere in the world. In addition to the Hoffding, Stout and Sully texts, Hunter introduced Titchener's *Psychology.* (Tichener's text is not analysed above because it acted to supplement Wundt's text.) Under Hunter, the autonomy of psychology as a separate discipline was fostered from the start, and he clearly worked toward this end. The degree of freedom Hunter had been given by Makenzie greatly facilitated this movement, and he retained this freedom to pursue his ends by comparison with his colleagues in the other three university colleges.

In 1913, Hunter's Chair was renamed Mental and Moral Philosophy. An additional text at this time was Seashore's *Experiments*. The course in experimental psychology had become a dominant feature of Hunter's offering, and could be taken as a stand-alone course. Seashore's text had been strongly influenced by Titchener's *Experimental Psychology* (1901), and hence had a Structuralist bias. However, the text was not a theoretical exposition but a manual of experiments which could be performed by the student without any laboratory facilities. This was a novel feature then, and has only more recently been paralleled by the manuals used by distance education providers such as Massey University in its extramural psychology programme.

In 1914, Hunter was joined by an assistant, a Leila Levi (an MSc from UNZ), and by 1916 Hunter and Levi were teaching psychology courses at a junior, senior and advanced level. In this same year Hunter introduced a *Psychological Laboratory* course in which Hunter used Titchener's laboratory manual for his first classes (Titchener, 1901). Under Hunter, in the next few years this course extended rapidly to include the topics of sensation, perception, mental imagery, memory, attention, feeling and association. By 1921, the laboratory course was being offered at the preliminary, pass, advanced and Honours level within the degree programme of the department. Hunter had found little support from his colleagues in philosophy in the other

three university colleges in his plans to make experimental work a compulsory part of psychology courses. Salmond at Otago had been particularly opposed to experimental work in psychology, and seems to have influenced Dunlop after him. Hunter expressed his disappointment in this respect in a letter to the UNZ in 1924, but found little support even in that quarter (Brown & Fuchs, 1971). He comes across as someone far ahead of his time, somewhat as a voice crying in the wilderness.

Around the mid 1920s Wundt's text falls from grace, having disappeared from the listing. Wundt's ideas of a form of psychological chemistry had long been under attack (eg, James, 1893) and Hunter had tried, without any success, to study *imageless thought*. In a letter to Titchener in August 1924, Hunter comments that he was glad that Titchener believed that the most subtle sort of analysis was necessary for experiments of this kind, since his own introspective work had yielded little (Brown & Fuchs, 1971). In the last of the letters between Hunter and Titchener, the latter was still encouraging Hunter in his Wundtian-type studies. But one gets the impression that Hunter was giving up on it, partly because of his heavy teaching load, but also because he was losing faith in Wundt's approach.

In 1924, Ivan Sutherland (MA, UNZ) joined Hunter as an instructor (later to gain a PhD from Glasgow, and become Professor of Philosophy at Canterbury). Hunter continued to expand the topic base of the department, and brought in many more new texts. (Titchener's text finally succumbed in 1926.) In 1931, Hunter's department is renamed. Philosophy, and in that same year he became Dean of the Faculty of Arts, and Sutherland became a full lecturer. The psychological laboratory course was still going strong, and a course in abnormal psychology was introduced. In 1939, Hunter was joined by Ernest Beaglehole (PhD London) who had a background in economics and anthropology. In that same year, Leslie Hearnshaw (MA Oxford) arrived, doubling the number of lecturers in the department. Hearnshaw taught the philosophy and history of psychology. He also established the Applied Psychology Unit of the Department of Scientific and Industrial Research which, regretably, did not survive long after he returned to Britain in 1947, where he took up the first Chair in Psychology at the University of Liverpool (note that this Hearnshaw is the same Hearnshaw often cited by me in the earlier part of this thesis as a historian of international repute).

This year (1939) saw an expansion in courses (eg, *Industrial Psychology* and *Introduction to Social Anthropology*) and in set texts (eg, Murphy's *General Psychology*, McDougall's *Psychology* and *Group Mind,* along with Thouless' *Social Psychology* and Woodworth's *Psychology*). The McDougall, Thouless and Woodworth texts have been previously discussed. In his text, Murphy makes it clear that he regards psychology as the science of behaviour and avoided questions about Mind. However, he accepted that in some areas of psychological investigation, subjective experience must be taken into account.

In 1940 Hunter was awarded the KBE in recognition of his services to higher education and the community, becoming Sir Thomas Hunter, and in 1948 he retired and was replaced by Beaglehole as Professor. Also in that year, Hearnshaw returned to Britain and Cyril Adcock (PhD London) joined the department (more of Adcock's story in Chapter 5). In 1949, the name of the department changed from *Philosophy* to *Psychology and Philosophy*, in which the word order was clearly a significant political move toward separating out psychology as an independent discipline. Compare this word order with that of Canterbury College when it was engaged in this process. Also, under the prescription we see that psychology and philosophy constitute two separate subjects for the BA and MA programmes. Additionally, at this time, the experimental work was absorbed into the undergraduate courses at the first and second year levels, along with the fact that the BSc in psychology was dropped. In this one can see that Beaglehole, in his quiet manner, was already making his own distinctive mark on the department. However, further discussion of Beaglehole, and his work at Victoria, must be left to the next chapter, where psychology finally frees itself from philosophy.

COMPARISONS ACROSS THE COLLEGES

To give some overall idea of the key developments in these early years at the four colleges, Table 4.4 shows dates of the foundation of the colleges and professorial appointments.

In particular, this tabulation shows the point of emergence of psychology as a separate department having its own professor. This is shown by giving the professor's name in **bold**. For example, Professor Beaglehole was the first

Professor of Psychology at Victoria College. In fact, he was the first Professor of an independent department of psychology among the four colleges. This tabulation also shows fairly graphically the degrees of stability that some colleges enjoyed (eg, Victoria) and the relative unrest that others suffered (eg, Otago), during the critical decades (1920s to 1950s) when psychology was struggling to emerge as an autonomous discipline.

Table 4.4: Professors of Philosophy-Psychology – comparisons across the four colleges with the dates of foundation and the first professor highlighted.

YEAR	OTAGO	CANTERBURY	AUCKLAND	VICTORIA
1869	**founded**			
1871	MacGregor			
1873		**founded**		
1882			**founded**	
1886	Salmond: professor			
1897				**founded**
1901		Salmond: lecturer		
1903				Mackenzie: professor
1908				Hunter: professor
1910			Grossman: lecturer	
1914	Dunlop: professor	Salmond: professor		
1920				
1921			Anderson: professor	
1934	Findlay: professor			
1935		Shelly: professor		
1937		Sutherland: professor		
1946	Raphael: professor			
1948				**Beaglehole: professor**
1950	Passmore: professor			
1955	Mackie: professor		Anschutz: professor	
1956				
1958		**Crowther: professor**		
1960	Taylor: professor			
1962			**Sampson: professor**	
1964	**Griew: professor**			

It is also rather interesting to note that the order of emergence of these autonomous departments of psychology is almost a mirror image of the order of founding of the four colleges. That is, Otago was founded well ahead of the other university colleges, and yet psychology broke free of philosophy well

after the others. Conversely, Victoria was the last college to be founded and yet psychology emerged well ahead of that in the other colleges.

Of interest is whether or not this is a systematic phenomenon. It is possible that it is due entirely to chance factors and, hence, has little meaning, but this seems unlikely. The most likely systematic cause of these order reversals relates to the factor of stability within the departments. This can be seen in Table 4.4 (from left to right), where in the period from foundation to emergence Otago had no less than eight professors, Canterbury five, Auckland three and Victoria only two. The basis of this stability, or rather the lack of it, seems bound up with the internal politics of the university college in general and the departments of philosophy in particular. Yet another factor in the problems faced by psychology at Otago appears to have been the "anti-abstract" faction in the Medical School there, where this faction stood in the way of founding an autonomous department[17]. The issue of stability is also a function of the background and training of the Chairs of these early departments. Otago, from its beginnings, had a strong Scottish influence in which the Scottish Presbyterian Church had a leading role (at least until the mid 1930s). Conversely, Victoria's philosophy department, after a very brief leadership by Mackenzie (a Scot from Saint Andrews College), was led by Hunter (from 1908 to 1948) who, though born in London, grew up in Dunedin. From this, one might assume that Hunter was in the same mould as many of the early professors of philosophy at Otago. However, recall that Hunter's brother Irwin had been a powerful formative influence, where the brother espoused a disbelief in God and the Church. Recall, also, that MacGregor, under whom Hunter studied, had raised the fears of the Otago Synod due to his subversive Materialistic-Rationalistic inclination. Thus, in Hunter, we had someone very different from the likes of Salmond and Dunlop. Hunter was followed by Ernest Beaglehole, a man whose intellectual history emerged in London where he gained his PhD at the London School of Economics, a very different environment to that of many of those who led the Otago departments.

[17] Personal correspondence from Dr David Stenhouse (graduate student at Otago during this period) dated 4/3/1997.

COMMENTARY ON THESE EARLY YEARS

While it is clear that psychology has impacted on society, socio-economic, cultural and political trends have been major shaping factors in the development of psychology as an autonomous discipline (Danziger, 1990). This has been so because, apart from other considerations, the content, methods and practices of psychology have had (still do have) far-reaching social and ethical implications (Sarason, 1984,1986). Psychology has allowed itself to be so shaped and has even been quite conformist and reinforcing of the socio-political status quo at times (Anderson & Travis, 1983; Frosh, 1987; Jacoby, 1975). This reinforcement of the status quo has, according to some writers (eg, Kitzinger, 1991), bordered on oppression. As true as this may be, psychology has also been seen as emancipating, empowering and able to facilitate the freeing of the disadvantaged and marginalised by bringing about positive social change (Cohen, 1986; Nahem, 1981; Sampson, 1983(b); Sullivan, 1984). The scientific and social spheres are not rigid water-tight entities, but interact in a complex fashion in which ideas both affect and are affected by the social order (Buss, 1975; Haru, 1987).

I now wish to bring these thoughts to this land, and to the early years of the development of New Zealand as a separate nation. To fully understand the early developments of psychology in this country, one needs to see them against the backdrop of wider national and even global developments. For example, at the time of the establishment of Otago University in 1869, a gold rush was in progress in that region. This brought a massive influx of peoples from outside the region (from as far afield as California) and wealth. Also, the land wars were in progress, although causing lesser problems in the South Island (Sinclair, 1980).

While both of these significant events had some influence on the developments at Otago University, what is more likely to have influenced a teaching institution was the academic climate in Britain and Europe, which must be treated as two quite separate climates at that time. For example, in the decades of the 1860s to 1880s, we had the powerful presence of Charles Darwin, John Stewart Mill and Karl Marx in Britain, and Fredrick Nietzsche in Continental Europe, all of whom were having a significant effect on scientific, political and philosophical thought and action. It is highly unlikely that the original appointees to the first Chairs at Otago, Mental and Moral Philosophy

especially, were ignorant of or unaffected by these giant thinkers. As far as the developments of British thought is concerned, this is especially true since all of these early Chairs were British academics, Scottish in particular.

All the way through this early development of philosophy-psychology in the university colleges, significant events were occurring both at home and abroad. For example, at the local political level, the Dominion's *Compulsory Education Act* was passed into law at about the same time as Canterbury College was founded. Likewise, at the time Auckland College was founded, the Nation entered its first economic depression wherein many dreams were dashed and lives wrecked. At a more global level, in the fields of technology, the telephone was invented just as Canterbury came into being, followed by electric lighting attending the birth of Auckland College. Similarly, the radio was invented at the time when Victoria College was established (Sinclair, 1980).

These national and global developments had a considerable influence on these embryonic centres of learning. It is difficult for us today to picture what life was like before the telephone, radio, electrical power and aircraft. For example, a New Zealand academic would have to wait at least the duration of a very lengthy sea voyage to learn of the latest ideas or research in Britain or Continental Europe. Course notes would have been written either by pencil or by a nib pen, using oil lamps or candles when the natural light failed. Somewhat different to this modern scene when course materials are produced using word processing techniques, under highly efficient lighting systems, and where one academic can be in instantaneous telephone contact with another academic around the other side of the planet, exchange written information in less than twenty four hours by email or visit knowledge sites on the World Wide Web!

Just as today there are those who take full advantage of new developments and those who are very slow to take them up, this same would have been true in the decades of the 1880s and 1890s. The university college records indicate that at Otago (Otago, 1890), the advantages offered by these new technologies (for example, the telephone) were taken up more slowly (perhaps reluctantly) when compared with, say, Victoria College (Victoria College, 1910). For example, Council minutes were being written with an early-style nib pen at Otago, when Victoria had long before gone to

typewritten minutes. This may reflect the differences in background and cultural conditioning in the two provinces, or it may reflect the individual differences among management and staff at the two colleges. In this respect, it is interesting to note that Hunter (and Beaglehole after him) was born in London, where his parents were exposed to its cosmopolitan atmosphere. Despite the fact that Hunter's parents brought the young Hunter to New Zealand, and that he was educated in Dunedin, the parental influence was a strong factor in his outlook (De la Mare; in Beaglehole, 1946). Conversely, the first two of the early Otago philosophers were of Scottish origin, giving them a more provincial outlook. In raising these issues, I am not offering support for a *Great Man* notion of history, but I am pointing out that cultural differences among academics had a considerable influence on these early developments, and tended to create a long-term trend in some cases.

As we saw above, while Otago was the first New Zealand University, its early history in the fields of philosophy and psychology had hardly been stable. The department teaching philosophy and psychology went through a period of considerable turbulence, and psychology did not free itself as an autonomous discipline until 1964, long after the other colleges had made a similar move. Compare this with Victoria, which began life as late as 1897, and at which psychology became a discipline in its own right in 1948. As much as anything, these individual differences appear to be a function of the strength of vision of the person in charge. While this view is vulnerable to the charge of the *Great Man* thesis, one cannot escape the fact that Hunter had a strength of vision that carried much before it (personal interview, Ritchie, 1995). For example, Hunter was the first in the country to establish experimental work in psychology (a very early departure from the pureness of analytical philosophy). Note also, under his leadership, how rapidly the course offering expanded and how new texts appeared. Compare this with, say, Auckland, where the course offering and set text listing changed slowly in the early years (very little between 1910 and 1939). By 1939, at Victoria, Hunter had won himself a KBE for his academic and community work, and Beaglehole had arrived with his new anthropological vision (personal interview, Ritchie, 1995).

In this exposition thus far, we see that the history of psychology in New Zealand covers more or less the same duration as the development of psychology, as a separate discipline, in Continental Europe, Britain and North

America. In these nations, psychology rapidly established itself as an autonomous discipline in the early years of this century (Koch & Leary, 1992), breaking away from its parent philosophy early on. There are certain exceptions to this, as for example, in the way psychology was treated at Oxford University in Britain (vide my interview with Betty Bernardelli in 1995 -- see earlier section on Otago). This clean break did not occur on these shores as shown in the above analysis where, in some cases (for example, at Otago), psychology languished in the grip of philosophy for many decades. While other minor influences were undoubtedly present, several major cultural and philosophical differences alone delayed the fragmenting of psychology from philosophy in this country.

Firstly, psychology had more or less freed itself as an independent discipline in Britian and Continental Europe before the time Otago's philosophy programme was into its first decade. Thus, in Europe (I am including Britain), by the end of the nineteenth century, psychology was a fully fledged and independent discipline. In New Zealand, this process had not even begun. New Zealand, at that time, was a very new nation, and was in its pioneering phase as a colony. This is not to say that sophistications such as higher education were luxuries that had to wait. As we saw, the early settlers came out to the new land with the intention of laying the foundations of a Scottish or English education, and Otago University was founded mere decades after the signing of the Treaty of Waitangi. But, despite these intentions, the colonisers had to deal with many pressing issues. For example, breaking in new land, building communities, dealing with land unrest, and coping with an autocratic government that lay 13 000 miles away. Such issues were far in the past of the Europeans (Sinclair, 1980).

Secondly, there were the differences between European and British developments in both philosophy and psychology. At the time we are looking at (mid to late 1800s), in terms of philosophy and psychology the dominant nation in Europe was Germany. Conversely, New Zealand was dominated by British thought, and Otago in particular by Scottish thought. Thus, the philosophical themes and areas of interest differed greatly between Europe and New Zealand. The former had its intellectual basis in the ideas of thinkers such as Kant, Leibniz, Hegel and Schopenhauer (all of an essentially Rationalist persuasion), whereas the latter's intellectual basis was firmly

grounded in British Empiricism, leaning on thinkers such as Locke, Hume and Mill.

The Rationalist approach tended to facilitate the separation process of psychology from philosophy in that it recognised inner realities and emphasised the psyche as an independent entity. Conversely, Empiricism played down the inner-outer distinction, leaving less of a need to mark out psychological processes as being that much different from, say, biological or physiological processes. Also, the Empiricist approach to mind and mentation was very different from that of the Rationalist approach. In the Empiricist view, mind-mentation was a product of sensory input in which learning processes and sense-data acquisition were all important. Compare this with the Rationalist view which saw mind-mentation as innate, and which utilises sensory apparatus. Nowhere is this distinction more obvious in the development of psychology than in the fundamental distinction between the ideas arising out of Watson and Thorndike on the one hand and Freud and Wertheimer on the other.

At root, the differences being discussed here relate to the theme running as a thread through this thesis -- that of consciousness. This term *consciousness* can be viewed in several different ways in relation to these early developments of psychology in this country. Firstly, at the highest level, the topic of consciousness is a philosophical topic which is deeply bound up with the Mind-Body problem. This is a fundamental dichotomy for philosophy and psychology. At the next level down, the term consciousness can be analysed through a sociological lens wherein we are dealing with the fact of human consciousness at the societal level. Finally, we have consciousness as a topic for psychology as a discipline that claims to deal with human behaviour.

At the philosophical level, the general Empiricist bias in the New Zealand university colleges was bound to lead in directions different to those in the top Continental European universities of that time. The New Zealand colleges adopted a very pragmatic approach in the main, and tended to lean toward physiological psychology as it slowly emerged. This distinction was true even at Victoria College despite the close relationship and friendship that existed between Hunter and Titchener (a long-time disciple of Wundt) who, though English, tended to regard himself as German. However, Wundt's psychology was not really in sympathy with that of his nation's great philosophical

thinkers, so it was much easier for a Britain to align with Wundt's views than, for example, with Kant's or Hegel's. This Empiricist bias in New Zealand's universities will come up again and again, especially in the next chapter when we look at the longstanding love affair some New Zealand's psychologist academics have had with Behaviourism.

At the sociological level of analysis, the consciousness of a nation or peoples is a complex amalgam of individual consciousnesses acting in concert with slow-changing cultural norms. In some respects, social consciousness is unique to a given nation, but in other respect has commonalities with other nations. Everything in human society has a history. Nothing exists in a cultural vacuum. Thus, though New Zealand has been in the process of unconsciously and consciously forging its own national identity, its characteristics are still heavily influenced by its British origins, even with the recent renewal of Maori culture. Its dominant language (that which transmits and generates its culture) is English. Its customs are primarily British, as are its laws and system of government.

So, it is hardly surprising that (leaving aside philosophical allegiances and sympathies) the early New Zealand academic pioneers in psychology adopted a generally British approach. Also, these academics were operating within a social context that was British through and through.

At the psychological discipline level of analysis, initially consciousness was a hot topic. After all, Wundt's early experiments related directly to consciousness even though he might not have admitted this, and probably did not see at that point where the topic of reaction time might lead. But he was clearly interested in the topic of mental images and used introspective techniques to investigate this. That is, he was dealing directly with the topic of consciousness in terms of it being an entity worthy of investigation and in terms of it being the very means by which mental activity could be investigated.

Beyond this, writers such as William James did not shy from the topic of consciousness. Rather, they actively engaged it. The favour of consciousness as a topic began a decline (as did the Structuralist movement of Wundt) with the rise of learning theory (eg, Thorndike's work and subsequently Watson's Behaviourism). The Empiricist leaning among New

Zealand's academics enabled them to side rapidly with this new movement in psychology, at least in general. However, there were those who were not so seduced (eg, Hunter and Beaglehole) as later discussion will reveal.

With regard to the influence of the early texts (Tables 4.1, 4.2 and Appendix B), as stated earlier, there was a very small range of texts in use for at least the first four decades from the founding of Otago. Thus, whatever shaping influence these texts had was carried on the backs of a very small range of thinkers, primarily Sully, Hoffding, Stout and James. As Appendix B shows, all four authors subscribed to an essentially Cartesian view of consciousness. It is only in the 1930s that we see other influences coming in with the likes of Boring et al. and Thouless with their somewhat more physicalist views. As we move forward toward the decades in which psychology freed itself from philosophy, in the set texts, the Cartesian view loses its dominance and a more clearly physicalist-reductionist and behaviouristic orientation comes in. This trend will be dealt with as we move into Chapter 5 and the modern era.

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Appendix A: Prominent past academics interviewed in regard to the early development of psychology in New Zealand.

Mrs Betty Bernardelli: Former Lecturer in Psychology at the University of Otago between 1948 and 1962 under Professors of Philosophy Raphael, Passmore, Mackie and Taylor. Interviewed at her home in Auckland in November 1995.

Professor James Ritchie: Former Lecturer in Psychology at Victoria University College between 1953 and 1964 under Professor Beaglehole. Interviewed at his home at Raglan in July 1995.

Appendix B: An analysis of the key psychology texts used by New Zealand university college departments teaching psychology in the founding years of psychology.

Allport, G.W. (1937) **Personality: a psychological interpretation;** London: Constable & Compant Ltd. **Abbreviated title:** Personality
Content: Approaches to personality (individuality, defining personality, characterology); development of personality (foundations, growth, the self, maturation); structure of personality (elements and traits); analysis of personality (methods, testing, experimentation); understanding personality.
Commentary: This book met a demand for a guide to the then new view called "psychology of the personality" which attempted to account for the manifest individuality of the mind. Allport is opposed to attempts at producing a generalised model of the human mind, arguing that such is esoteric, devoid of locus, self-consciousness and organic unity. He chooses not to write exclusively in terms of any given school, thinking it better to account for the richness and dignity of human personality than to clip and compress. Although the trait theory had a strong statistical basis, and Allport was a trait theorist, he was not quantitatively oriented, preferring to express research results in words rather than arrays of statistics. He was not interested in factors that shape personality, but in personality *per se*, arguing that culture is relevant to the extent that it has been interiorised.

Boring, E.G., Langfeld, H.S., & Weld, H.P. (Eds.) (1948) **Foundations of psychology;** N.Y.: Wiley. **Abbreviated title:** Foundations
Content: Nature of psychology; response mechanisms; growth & development; feeling & emotion; motivation; learning; recollection-imagining-thinking; perception, sensation (vision, hearing etc...); individual differences; heredity-environment; efficiency; personality; vocational selection; attitudes-opinions; social relations.
Commentary: Boring et al. were editors as well as being contributors to this text. Thus, it is a multifaceted commentary that emerges. However, the choice of contributors and the arrangement of chapters clearly reflects the editors' stance. In the first edition of this text the chapter order was determined by a desire for synthesis with sensation occurring first and personality at the end. In the second edition, this order was reversed in the interests of analysis. In the third edition there is a compromise of these two opposing principles. The editors' commentary shows most clearly in their statement that "the most important thing about an organism is not that it is conscious, but that it reacts to stimulation." This can be reasonably interpreted as physicalist-reductionist.

Collins, M., & Drever, J. (1930) (3rd ed.) **Experimental psychology;** London: Methuen. **Abbreviated title:** Experimental
Content: Introduction to experimental psychology; the senses; perception; attention; work & fatigue; suggestibility; feeling & emotion; imagery & association; learning & memory; imagination & higher thought processes; language; mental testing.
Commentary: This text was first published in 1926. The additions in this third edition cover those experiments that had been conducted since the first publication. It is neither a philosophical nor theoretical treatment, but an introduction to experimental psychology and its methods.

Freud, S. (1949) (2nd ed.) **Introductory lectures on psycho-analysis;** London: George Allen & Unwin.

Abbreviated title: Introductory Lectures

Content: Part I (this is by way of an introduction which presupposes no knowledge of the subject); Part II *Dreams* (introduction, hypotheses, content & latency, children's' dreams, dream-censorship, symbolism, dream-work, dream analysis, archaic-infantile features, wish-fulfilment); Part III *General Theory of Neuroses* (Psycho-analysis & psychiatry, meaning of symptoms, the unconscious, resistance-repression, sexual life, libido, symptom formation, ordinary nervousness, anxiety, narcissism, transference, analytic therapy).

Commentary: This text was based on notes for a course of 28 lectures delivered in German at the University of Vienna between 1915 and 1917. These notes were subsequently published in English in 1922, translated by Joan Riviere, a student of Freud's. This translation was a response to an earlier poorly translated American version which completely misrepresented certain of Freud's fundamental ideas (eg, the curability of obsessions). Freud comes across as both charming and very humble. He often says that his aim is not to produce conviction, but to stimulate enquiry and destroy prejudice. But he also comes across as very knowledgeable on a vast range of topics outside of psycho-analysis (eg, his grasp of the ancient world's mythologies is scholarly). He makes interesting distinctions between psycho-analysis and psychiatry which seem to have been lost today. He argues that psycho-analysis stands to psychiatry as histology (the study of the construction of organs) stands to anatomy (the study of the relationship between organs). As his listeners were medical students, this was an important distinction.

Guilford, J.P. (1942) **Fundamental statistics in psychology;** N.Y.: McGraw-Hill.

Abbreviated title: Fundamental Statistics

Content: Introduction to measurement and statistics; psychological measurement; educational measurement; the value of measurement & statistical analysis; numbers and their meaning; mental test scales.

Commentary: Commentary is not really an issue in this text because it is a fairly standard treatment of statistics as used in the social sciences. It would barely be dated even in the 1990s. The coverage is wide and the introductory chapters are an honest account of the uses and limitations of statistical analysis. It is surprising, therefore, that only Auckland University College used this text. In fact, in the early era covered by this chapter, Auckland was the only college to bring in a formal requirement of statistics.

Hartmann, G.W. (1935) **Gestalt psychology: a survey of facts and principles;** N.Y.: Ronald Press.

Abbreviated title: Gestalt Psychology

Content: Historical; theoretical (physical & physiological basis, philosophical foundations, varieties of theory); empirical (visual perception, audition & skin senses, sensory unity, memory, learning, thinking, insight, action-emotion-will); practical (mental pathology, I/O, educational problems); critiques of Gestalt theory by other schools.

Commentary: Hartmann saw Gestalt theorising as an important quantum leap, but was concerned that it was ill understood within American psychological circles at that time, due to several factors: the literature being mainly in German, the highly technical nature of the material and the popularity of Behaviourism (Watsonian). In this text Hartmann attempts to offset these factors and present a clear, accurate and sympathetic picture of Gestalt Psychology's theory and practice. Important is the fact that Hartmann spent the academic year 1930-1931 at the *Psychologisches Institut* in Berlin which was, as he says, the very citadel of Gestalt Psychology. This lends great authority to his translations and presentations. It is probably one of the best books on Gestalt Psychology ever written in English, and was certainly the best during the decades of its usage here in New Zealand.

Hebb, D.O. (1949) **The organisation of behavior: a neuropsychological theory;** N.Y.: Wiley.

Abbreviated title: Organisation of Behavior

Content: The problem & line of attack; summation & learning in perception; field theory & equipotentiality; the first stage of perception; perception of a complex; development of learning capacity; higher & lower learning processes; motivation; emotional disturbances; growth & decline of intelligence.

Commentary: This text emerged out of Hebb's own researches at McGill University in Montreal, and was refined during the weekly colloquia at the Yerkes Laboratories of Primate Biology between 1942 and 1947. The manuscript received wide input from colleagues of Hebb, including Harry Harlow, Karl Lashley, Karl Pribram and Roger Sperry. Hebb's stand is unequivocal in that he regards mental concepts, such as consciousness or the Freudian trio, simply as aids to understanding behaviour but having no reality in themselves. To view them otherwise is to create dangerous anthropomorphic agents. However, Hebb was not a Behaviourist, and criticised the Behaviourists for their disregard of the physiological bases of human behaviour. In fact, his book comes across as an apology for a physiological approach in psychology.

Hoffding, H. (1891) **Outlines of psychology;** London: Macmillan & Co.

Abbreviated title: Outlines

Content: Subject & method of psychology; mind & body; conscious & unconscious; psychological elements; cognition (sensation, ideation, apprehension of space & time); feeling (feeling & sensation, feeling & ideation, egoistic & sympathetic feeling, biology & physiology of feeling, feeling & cognition); the psychology of will.

Commentary: This text was originally published in Danish, then translated into German, a translation of which the author approved. The edition referenced here was translated from the German edition by Mary Lowndes. At the time of publication, Hoffding was Professor of Philosophy at the University of Copenhagen. Hoffding makes it quite clear that psychology is the science of the mind. That is, of thinking, feeling and willing in contrast to physiology or medicine. Hoffding adopts an essentially Cartesian stand in that he views mental operations as having a quite different property list to those of the body. He is also Innatist in that he declares that conscious life begins prior to birth. His overall stand is hard to define. He is sympathetic to Spinoza's notion that mind and matter are two equally eternal and infinite attributes of an absolute substance, but states that, because we cannot know that substance, we cannot say whether matter or mind stand closest to it. As with many of these early texts in psychology, the approach is speculative-cum-philosophical and not empirically or experimentally based. In Hoffding's text, although he attempts to avoid metaphysics, he never really strays very far from it. A modern student of psychology would find this text very hard-going and seemingly unrelated to psychology as taught today. These early writers boldly grappled with ultimate issues and were comfortable with vague boundaries and ambiguity, so unlike modern writers whose caution often results in texts without real substance.

James, W. (1893) **The principles of psychology (in 2 volumes);** N.Y.: Henry Holt & Company.

Abbreviated title: Principles

Content: Volume I: Scope of psychology; brain functions; habit; automaton theory; mind stuff theory; methods & snares of psychology; relations of minds to other things; stream of thought; consciousness of self; attention; conception; discrimination & comparison; association; perception of time; memory.
Volume II: Sensation; imagination; perception of things; perception of space; perception of reality; reasoning; production of movement; instinct; emotion; will hypnotism; necessary truths and the effect of experience.

Commentary: These two volumes arose out of the author's classroom teaching materials. James viewed psychology as one of the natural sciences and this view colours his approach throughout. That is, he makes the assumptions of science and does not challenge these on philosophical grounds. To go further, James argues that the enterprise becomes metaphysical. In taking this view, he would not have regarded the Mind-Body problems as the province of psychology. He asserts that psychology is the science of finite minds, and takes a strictly positivist approach. Beyond what he describes as a mass of descriptive detail, James does raise questions which, he argues, only metaphysics can deal with. James confesses to having been inspired by JS Mill and Wundt.

James, W. (1894) **Psychology: briefer course;** London: Macmillan & Co.

Abbreviated title: Briefer Course

Content: This is an abridged version of "principles" suited to classroom use.

Commentary: As for "Principles"

Klineberg, O. (1940) **Social psychology;** N.Y.: Henry Holt & Company.

Abbreviated title: Social Psychology

Content: Introduction (background & history of social psychology, social behaviour of animals, language); social factors in human behaviour (human nature, motivation, emotion, perception-memory); differential psychology (individual & class differences, sex differences, ethnic differences); socio-cultural factors in personality (development, culture, social factors, delinquency & crime); social interaction (individuals in the group, attitudes-opinions, prejudice).

Commentary: Klineberg shows an interest in an integration between psychology and ethnology, and gives this as the incentive for this text. He admits to having to trespass into domains that some would regard as outside the province of social psychology (eg, personality and differential psychology), but finds this inevitable. Klineberg takes an interactionist stance, in which society influences the individual and vice versa. In fact, he sees as *social* even those situations when the individual is alone. He perceives a continuum at one end of which there is the minimum of social determination (eg, the simple reflex), and at the other maximum determination (eg, attitudes within entire communities). Klineberg was more interested in the varieties of human nature rather than their constants, and was greatly influenced by the works of Gardener Murphy and Gordon Allport.

Maslow, A.H., & Mittleman, B. (1951) (Rev. ed.) **Principles of abnormal psychology: the dynamics of psychic illness;** N.Y.: Harper & Brothers.

Abbreviated title: Abnormal Psychology

Content: Part I Introductory concepts; Part II psychodynamic processes; Part III the aetiology of psychopathology; Part IV therapy; Part V syndromes in infancy, childhood and adolescence; Part VI syndromes in adulthood; syndromes in old age.

Commentary: This text was originally published in 1941, where the main changes are in the addition of new sections on disturbances in infants-children-adolescents-elderly, reactions to war conditions, and school-occupational settings. The coverage of this text is very wide, and has nearly 700 pages. The two authors collaborated well together (Maslow the psychologist and Mittleman the doctor of medicine).

McDougall, W. (1912) **Psychology: the study of behaviour;** London: Oxford University Press.

Abbreviated title: Psychology

Content: The province of psychology, study of consciousness, the structure of mind, methods & departments of psychology, study of animal behaviour, child & individual psychology, abnormal psychology, social psychology.

Commentary: This aim of this small text was a general introduction to psychology as McDougall saw it then. However, even here, McDougall is radical, implying in his title that psychology is the study of human behaviour: a view quite heretical in 1912. However, this did not make him a Behaviourist in the Watsonian sense, because McDougall had much time for the views of theorists such as Morgan (evolutionary emergence) and James (stream of consciousness).

McDougall, W. (1920) **The group mind: a sketch of the principles of collective psychology with some attempt to apply them to the interpretation of the national life and character;** Cambridge: Cambridge University Press.

Abbreviated title: Group Mind

Content: General principles of collective psychology (introduction, mental life of crowds, highly organised groups, group spirit, group types,); national mind and character (nations, the mind of a nation, freedom of communication, leaders and national life, the will of a nation, nations of the higher type); the development of national mind-character (factors in national development, race-making, racial change, progress of nations in their youth and in their maturity).

Commentary: This text had its origins in lecture notes gathered by McDougall over many years, in which he applies the principles of the mental life of groups to an understanding of the life of nations. In his much earlier work (*Introduction to Social Psychology,* 1908) he attempted to provide a foundation for an understanding of the constitution of human nature. From this viewpoint, this present text is a sequel to that work. Because a world war occurred in the intervening years, being very British, McDougall is at pains to point out that (despite having been so accused) he has no sympathies with what he call German idealism. Although he regarded humans as in the process of developing a *Group Mind*, he was not talking about some Hegelian state within which the individual is utterly subordinate. From our modern perspective, one can see that McDougall overdid his attempts to dissociate himself from German idealism in that he seems to derogate all that is Germanic (from Kant to Wundt!), claiming to have found little help from German psychology. Thus, his Group Mind is not an idealistic collective, but is founded on individualism and internationalism, with leanings toward aristocratic principles, and even hints of social Darwinism (not surprising for the man who had such a fascination with instincts).

McDougall, W. (1923) **An outline of psychology;** London: Methuen & Co.

Abbreviated title: Outline

Content: Introduction, behaviour in lower animals, behaviour of insects, behaviour of vertebrates, instincts in mammals and man, habit & intelligence in animals, behaviour of the natural man, perceptual thinking, attention & interest, imagining-anticipating-recollecting, emotion, disposition & temperament, belief & doubt, growth of mental structures, reasoning & belief systems, sentiments & organisation of character.

Commentary: By this time, McDougall's thinking had shifted clearly from a more mechanistic science view of psychology to a science of mind in which purposive striving is a legitimate and fundamental category. His ideas are more clearly set against the atomistic-anatomical view of consciousness (eg, Wundt and Titchener) and even more clearly in line with James's later thinking than that in the earlier book (Psychology: 1912).

McDougall, W. (1933) **The energies of men: a study of the fundamentals of dynamic psychology (2nd ed.);** London: Methuen.

Abbreviated title: Energies of Men

Content: Schools of psychology, the simpler forms of mental life, innate bases of instinct, behaviour of higher animals, the comparative method, natural & social man, the mind in action, pleasure & pain, feeling & emotion, disposition & temperament, affective life, sentiments, subconscious, mental disorders, brain physiology, learning, personality.

Commentary: The aim of this text was to present in one volume the essentials of McDougall's *Outline of Psychology* and *Abnormal Psychology.* It is concerned with what McDougall sees as the two great psychological questions: *What is the nature of human kind?* and *How does that nature become the multifaceted human personality?* In particular, this text deals with the instinct-intelligence problem. It also outlines a theory of learning. Because of the trouble his earlier use of the word *instinct* got him into, McDougall now uses the word *propensity*. However, despite his strong views, he never comes across as dogmatic, and encourages the student to debate and challenge the views expressed. In fact, he makes it clear that he has little time for what he calls "middle-of-the-road psychology" which leaves its adherents as members of every school, and not having any views of their own.

Murphy, G. (1933) **General psychology;** N.Y.: Harper & Brothers Publishers.

Abbreviated title: General Psychology

Content: Psychology as science, behaviour (racial & individual origins), simpler motives, emotions, simpler senses, perception, feelings, attention-discrimination, aesthetics, learning, memory, thought, imagining, dreaming, inventing, intelligence tests, heredity, ability, conditions of work, development of personality, theory of personality, psychological schools.

Commentary: Murphy makes clear the distinction between philosophy and the sciences, and argues that psychology belongs to the latter, in which the hypotheses do not usually have the boldness or compass of those in philosophy. However, he agrees that, at times, boldness is needed to rekindle the flame of scientific endeavour. Murphy comes across as a dualist in that he argues for the validity of the belief that mind and body are quite separate things. But he also points up the difficulties attending this view and sympathises with the (for him) modern trend to make psychology a *science of behaviour*, and hence avoids questions about *Mind*. But he argues that the usefulness of the *Behaviourist* approach is some function of the specific topic under consideration, and in some areas of psychological investigation is not at all useful because subjective experience must be taken into account (eg, as in aesthetics). Thus, his commentary is dualistic, at least to the extent that he holds that both externally observable behaviours and subjective experiences exist and interact, in which the interrelation is all important.

Murphy, G., Murphy, L. B., & Newcomb, T. M. (1937) **Experimental social psychology: an interpretation of research upon the socialization of the individual;** N.Y.: Harper & Brothers.

Abbreviated title: Experimental Social Psychology

Content: The field & method of social psychology; the process of socialisation (nature-nuture, biology of motives, learning processes); genetic study of social behaviour (children & adults); quantitative studies of individual differences in adult social behaviour.

Commentary: This text was originally published in 1931 by the Murphys alone; Newcomb joined them for this edition. That first edition was more in the nature of a handbook of research findings, whereas this edition is a more systematic interpretation of the evidences. The emphasis is not group behaviour but the process by which individuals respond to those about them. They argue against the then common view that the *biological* has primacy over the *social* , stating that the fundamental of individual biochemistry reflect the properties of heredity and socialisation. They also argue against the rigid distinction between social psychology and individual (or general) psychology because it falsely assumes that some behaviours are stimulated solely by persons and the rest by things. They see a spectrum (much as Klineberg did) at one end of which social factors play a relatively small part and at the other end, a very large part.

Rickman, J. (Ed.) (1937) **A general selection from the works of Sigmund Freud;** London: Leonard & Virginia Woolf, Institute of Psycho-Analysis.

Abbreviated title: General Selection

Content: Origin & development of psychoanalysis; principles of mental functioning; the unconscious; negation; types of neurotic nosogenesis; instincts; repression; some character types; on narcissism; mourning & melancholia; beyond the pleasure principle; the ego & id; inhibitions-symptoms-anxiety.

Commentary: The editor of this collection or "Epitome" of Freud's work has confined himself to a treatment of the general theory of psycho-analysis, creating an exposition of psycho-analytic theories. He made no attempt to include evidence in support of Freud's theories, thus leaving out case histories. He also omitted the therapeutic techniques developed by Freud because he felt that there was not the scope in an epitome to deal with this safely in detail. Rickman brings out two aspects of Freud's psycho-analysis as: (a) a method for treating mental and nervous disorders and, (b) as the science of unconscious mental processes. The overall aim of this text is to show the development of Freud's thinking where, to this end, the chapters are dated from 1910 through 1926, clearly showing the evolution of Freud's thought.

Seashore, C.E. (1908) **Elementary experiments in psychology;** N.Y.: Henry Holt & Co.

Abbreviated title: Experiments

Content: Visual after images, visual contrast, the visual field, visual space, auditory space, tactual space, cutaneous sensation, Weber's law, mental images, association, memory, apperception, attention, normal illusions, affective tone, reaction-time.

Commentary: Commentary is not really an issue in this text except, perhaps, in terms of the selection of content, which was strongly influenced by Titchener's *Experimental Psychology*. This book is neither a text-book nor laboratory manual. Rather, it is a manual of experiments which can be performed by the student without any laboratory facilities. This was quite a novel feature at this time, and has only much more recently been paralleled with the manuals used by distance education universities (eg, Massey University's extramural psychology programmes) for the conducting of home-based experiments.

Smith, F.V. (1951) **Explanation of human behaviour**; London: Constable & Co.

Abbreviated title: Human Behaviour

Content: The activity of explaining; human behaviour (the systems of: McDougall, Allport, Lewin, the Gestalt & Freudian approaches); three Behaviourist systems (what is Behaviourism? Watson, Hull & Tolman).

Commentary: This text aims to indicate the key problems faced by psychological theorisers, and promote a sympathetic understanding of their difficulties. In this sense, the text is a fairly objective and factual account in which the author appears to have kept his own biases out of the picture.

Stout, G.F. (1910) **A manual of psychology;** London: University Tutorial Press.

Abbreviated title: Manual

Content: Introduction (scope of psychology, data & methods, body & mind); general analysis (ultimate modes of being conscious, primary laws of mental process, associationism); sensation (definition, sensation-reflex, light, sound, Weber-Fechner law); perception (the perceptual process, imitation, pleasure-pain, emotion, spatial perception by touch and sight); ideation-concepts (ideas-images, memory, language and conception, self and external world as constructions, belief-imagination, volition).

Commentary: This text is the second edition of the original text published in 1898. Stout subscribed to an essentially Cartesian viewpoint with elements of Platonism included, in that he saw consciousness as having its source in an immaterial realm and as being something separate from body. He leaned more toward Parallelism than to Interactionism. However, he eschewed dogma, stating that metaphysical speculation was still (then as now) rife and that the student should approach these profound issues with and open mind.

Sully, J. (1884) **Outlines of psychology;** London: Longmans, Green, and Co.

Abbreviated title: Outlines

Content: Part I (scope & method of psychology, the physical basis of mental life); Part II (constituents of mind, primitive psychical elements, mental elaboration); Part III (perception, imagination, thought processes); Part IV (feeling and emotion); Part V (voluntary movement, complex action, concrete mental development).

Commentary: This new edition is a larger scale work than the original 1884 edition. Also, Sully published his *The Teacher's Handbook of Psychology* in 1890 which enabled him to leave out the original *Outlines* sections on the teaching of psychology. This new edition is the text used from the outset at Otago, and subsequently at Canterbury, Auckland and Victoria colleges until the 1920s. In fact, it was one of only three texts (Hoffding and Stout being the other two) which was used at Canterbury and Otago until the 1920s. Thus, this would have been a very influential text. At the time of its publication, Sully was Grote Professor of Philosophy of Mind and Logic at the University College of London. Sully gave credence to Mind as an entity separate from the body, and saw psychology as a theoretic or speculative science rather than a practical one, with its methodology based on introspection. However, despite subscribing to these dichotic views he stresses the connection between them. He saw psychology as the ground of more practical sciences such as logic, aesthetics, ethics, education and even politics.

Thouless, R.H. (1937) (2nd ed.) **General and social psychology: a textbook for students of economics and the social sciences;** London: University Tutorial Press.

Abbreviated title: General and Social

Content: The science of psychology; the innate pattern reactions; acquired patterns of behaviour; emotions; sentiments-attitudes-character-personality; foundations of human behaviour; hunger-fear-sex; acquisitiveness & pugnacity; laughter-play-work; perceptions; thought & language; conflict & volition; social behaviour tendencies; social grouping, morality; economic value; statistical measures; mental testing; intelligence; aesthetics; psychology of scientific & religious development.

Commentary: The first edition of this text appeared under the title *Social Psychology* in 1925, where the 2nd edition contains such extensive revision as to be almost a new book of increased size. Wholly new to this text is the chapter on statistical methods in recognition of their growing importance in the social sciences, and the chapter on social grouping, which included a section on group consciousness. But a key change from the earlier work is Thouless' playing down of the concept of instinct in line with McDougall's abandonment of the term due to its contentious nature. Also, in this text, Thouless gives emphasis to both *behaviour* and *experience* as a reaction to what he saw as the extremes of Behaviourism, seeing as absurd the tendency to disregard mental processes.

Vernon, P.E. (1950) **The structure of human abilities;** London: Methuen.

Abbreviated title: Structures

Content: Mental faculties and factors; landmarks in the development of factor analysis; hierarchical group-factor theory; analyses of educational attainment; intellectual faculties (verbal & non-verbal, practice, difficulty, speed); sensation-perception, imagery-aesthetics; psychomotor ability; performance tests; occupational abilities.

Commentary: This is an exposition of factor analytic techniques, in which Vernon explores the strengths and limitations, including the abuses, of this approach in studying human abilities. Vernon is clearly an adherent of the factor-analytic approach but is able to give an honest appraisal.

Woodworth, R.S. (1930) (8th ed.) **Psychology: a study of mental life;** London: Methuen.

Abbreviated title: Psychology

Content: Aims & methods of psychology, individuals & their environment, individual differences, intelligence, personality, heredity & environment, the nervous system, learning, memory, motivation, feeling & emotion, observation, sight and the other senses, thinking, imagination.

Commentary: The original edition of this text was published in 1922. It was also republished as a 20th edition in 1949 where Donald Marquis joined Woodworth for a joint publication. But, as far as can be ascertained, it was the 1930 edition that was used from 1930 to 1949. It seems likely that the text used by Canterbury College in the 1950s was the 20th edition. The content analysis above is that of the 1930 edition. The 1949 edition had greatly improved illustrations and the following additional contents: the correlation of abilities, physiological factors in personality, interaction with environment, individual development, and choice-conflict-frustration.

Woodworth, R.S. (1931) **Contemporary schools of psychology;** London: Methuen.

Abbreviated title: Contemporary Schools

Content: Background of current disputes, introspective psychology & the existential school, Behaviourism, Gestalt psychology or configurationism, Psycho-analysis & related schools, purposivism or hormic psychology, the middle of the road.

Commentary: This book was not intended as an introductory text, because it assumes a reasonable grasp of the psychology of its time. It appears to be aimed at the graduate student or professional psychologist. It attempts to highlight and explore the unsettled questions on which keen debate was in progress at that time. In 1931, the school era was just beginning, and Woodworth found it a curious phenomenon and a sign of the movement from psychology's infancy to its adolescence. Woodworth deals openly and without seeming bias with these debates despite his known Functionalist views, and raises a series of challenging questions. For example, he asked whether Introspectionism and Behaviourism alike were hopelessly floundering in the barren associationism of the past, as asserted by the then very new Gestalt school. While the age of the *schools* has passed, some of the issues raised by Woodworth in 1931 are still relevant and unanswered, and one can only recommend a modern to read this text.

Woodworth, R.S. (1939) **Experimental psychology;** London: Henry Holt & Company.

Abbreviated title: Experimental

Content: Memory; retention; memory for form; the conditioned response; maze learning; practice & skill; transfer of training; feeling; emotion (expression & bodily changes); psychogalvanic reflex; association; aesthetics; psychophysical methods; skin senses; smell & taste; hearing; vision; perception of colour & form; visual space; attention; reading; problem solving behaviour; thinking.

Commentary: This book had its origins in 1910 when Woodworth developed a set of notes for a college course in experimental psychology. Woodworth makes the interesting observation that, from the late 1700s to his time (1930s), the growth of publications relating to research in psychology (as opposed to theorising) had expanded exponentially from one publication in 1799 to over 600 in 1930. This text is not a laboratory manual as it does not go into detail regarding apparatus and technique. Woodworth's choice of content was guided by the experimental focus at that time. For example, the fields of perception and judgement figure strongly. However, Woodworth's Functionalist allegiance shows through.

Wundt (1907) (3rd English edition) **Outlines of psychology;** London: Williams & Norgate.

Abbreviated title: Outlines

Content: Problem of psychology; general forms of psychology; methods of psychology; general survey; psychical elements; pure sensation (sound, smell-taste, light) simple feelings, psychical compounds; intensive ideas; spatial ideas(touch, sight); temporal ideas (touch, audition); composite feelings; emotions; volitional processes; consciousness & attention; associations; apperception; psychical developments (states, animals, the child, communities); principles & laws of psychical causality (concept of mind, physical phenomena, development).

Commentary: This text was first published in German in Leipzig in 1896. The first English edition was published in that same year, translated by a student of Wundt's, Judd, who received his PhD at Leipzig. This 3rd English edition was based on Wundt's 7th German edition published in Leipzig in 1905, and appears to be the text that was used by Hunter between 1900 and 1920, because the copy sighted by me had Hunter's signature on the inside cover. The main changes between the original German edition and this edition is the addition of illustrations in various chapters and references at the end of each chapter. There is no evidence that Wundt's revised his theoretical position. Wundt's Structuralist leanings and mental chemistry approach come through clearly in this text.

CHAPTER 5: THE HISTORY OF NEW ZEALAND PSYCHOLOGY -- PART II: THE DAYS OF INDEPENDENCE

The main sources for the historical data in this chapter are:

- University calendars.

- Final examination papers in psychology.

- The *Union List of Theses in New Zealand Universities* (compiled by the University of Otago Library).

- Personal interviews with senior New Zealand academics in psychology.

In the interests of ease of reading, the calendars, examination papers and the Union List of Theses will be referred to using footnotes. The personal interview respondents will be listed in Appendix A at the end of this chapter, and will be cited using a mix of footnotes and direct reference as seems appropriate. As in Chapter 4, I will not clutter the text with footnotes or detailed references in regard to these sources of information except where necessary for the sake of clarity. Textual or journal article citations are referenced in the usual manner, where full details can be found in the bibliography at the end of this thesis.

In addition to the above listed sources, I intended to support and supplement my commentary on these post-War years with references to the original "Bulletins" of the *New Zealand Branch of the British Psychological Society*, as the now *New Zealand Psychological Society* was called prior to 1968. These Bulletins contained a great deal of information about key personal in academic psychology. In those days, the New Zealand Branch of the BPS was a learned society, and existed for the purpose of disseminating scientific psychology.

Sadly, however, these early bulletins no longer exist. They are not held anywhere in this country to my knowledge. I have tried the New Zealand Psychological Society, the National Library of New Zealand, the Alexander Turnbull Library, the Parliamentry Library in Wellington and the New Zealand university libraries. Where these bulletins had been held (eg, in the

Parliamentary Library) they have since been discarded. I also approached individuals who were likely to have at least some copies (eg, Mr Harry Love and Dr Ngaire Adcock -- the latter did once have a complete set belonging to the late Professor John Adcock but, as no one had any interest in them, she disposed of them), but without success. It seems that we must go down as a nation that has little time for its history.

The National Office of the New Zealand Psychological Society (NZPsS) does hold a complete set of the NZPsS Bulletin, from the first issue in 1973 through to 1998. I was able to access these copies and use the information in them to support and supplement at least some of the material researched in this chapter. As with certain other sources in this Chapter, I will not clutter the text with footnotes or detailed references in regard to these bulletins except where necessary for the sake of clarity.

The order in which the six university centres have been dealt with in this chapter is the order in which each centre's autonomous department of psychology came into being. In the cases of Massey and Waikato Universities, their departments of psychology were autonomous from the beginning and never had to suffer the various fates of the other four departments. One other point to note is that, although the original four colleges did not gain full status as universities until the 1960s, I shall write about them as universities to avoid unnecessary complexities. In the cases of Massey and Waikato, of course, from the viewpoint of psychology, we need talk only of universities.

THE SEPARATION OF PSYCHOLOGY FROM PHILOSOPHY

Recall that, from the discussion toward the end of Chapter 4, psychology in the four original colleges broke free of philosophy at widely separate points in time. Table 5.1 below summarises the key dates, places and persons involved.

Table 5.1: The separation of psychology from philosophy in the four original university colleges.

Year	First Professor of psychology at Otago	First Professor of psychology at Canterbury	First Professor of psychology at Auckland	First Professor of psychology at Victoria
1948				Beaglehole
1955				
1958		Crowther		
1961			Sampson	
1964	Griew			

As already discussed in Chapter 4, not only did the process of separation vary considerably in time, it varied also in terms of its ease or difficulty. The smoothest transition occurred at Victoria. Hunter, who took over Philosophy from Mackenzie (the first Professor of Philosophy at Victoria) vigorously led the way for psychology's liberation. This final liberation occurred under Ernest Beaglehole. The most difficult transition occurred at Otago, where psychology suffered greatly at the hands of a succession of philosophers, some of whom had only thinly disguised theological biases, and virtually all of whom, with the possible exception of Professor Taylor, had a very proprietary attitude toward psychology, and actively clung to it. At Canterbury and Auckland, the problem was not so much biased and possessive Professors of philosophy, but delays in establishing a Chair in philosophy. Although Canterbury was established in 1874, philosophy was not taught until 1901 (27 years later), and then initially only by a lectureship. A similar story was repeated for Auckland, which became established in 1882, but had to wait until 1910 for a lectureship in philosophy, 28 years on.

At this point, it is worth noting when a full undergraduate major in psychology appeared at each university. This first occured in 1949, at Victoria College, followed in 1952 at Canterbury College, then in 1958 at Auckland College. In the case of Otago University, the full major offering had to wait until 1968 (see shortly). At Waikato , a psychology major was offered from its founding in 1964. At Massey, this had to wait until 1973, for reasons to be explained later in this chapter.

Linked with this complex process of psychology separating from its parent discipline was the equally complex processes involved in the four colleges gaining autonomy from the University of New Zealand (UNZ). As discussed in Chapter 4, in 1959 a committee was set up to look into all aspects of

university education in New Zealand (Parry, 1959). This committee concluded that the universities must play a much greater role in the New Zealand community and be much better supported financially than in the past. It also concluded that the *de facto* devolution of the powers of the UNZ had already gone so far that the *de jure* status of the UNZ was in question. It recommended that the four constituents university colleges be given full university status. But a need for a national authority was recognized and it was recommended that this be handled by the University Grants Committee (UGC), having both financial and academic jurisdiction. This Committee was established by Act in 1960. The dissolution of the UNZ occurred in October 1961 along with the enactment of The Universities Act which set up the four new universities.

UNIVERSITY OF OTAGO

Daniel Taylor was the last Professor of philosophy at Otago to have psychology as a part of his Chair. In fact, Taylor was instrumental in the process of separation of psychology from philosophy. In 1961, the Council of the University of Otago Minutes record that a Chair of Psychology be established, to be operative before 1963[1]. In February of 1962, the Council set up a committee to recommend an appointment to this new Chair, and Taylor was on this committee.

At this point it is worth clarifying terms such as Professor, Chair, Chairperson and Head of Department (HoD). In the usage that follows, Chair, Chairperson and HoD will be synonymous in that these positions have executive-management functions. Thus, where I refer to HoD, I refer also to the Chairperson, and vice versa. Where I refer to a given Professor it is as a person who holds a Chair in Psychology, but who is not necessarily a HoD.

As discussed in Chapter 4, the University of Otago Council Minutes of 27 November 1962 record that Peter Mckellar was offered the first ever Chair of Psychology at Otago, but McKellar did not take it. As reported there, he had become divorced and was contemplating re-marrying. Thus, instead, he went on leave as Visiting Professor of Psychology at Highlands University in New Mexico, and during this visit he re-married in Santa Fe in the December of

[1] University of Otago Council Minutes of 28 November 1961.

1964[2]. Professor Steven Griew (a graduate of London and Bristol universities) was appointed in 1964. At that same time, Professor Taylor remained as the Chair of Philosophy, a relatively small department with the loss of psychology. Between the relinquishing of psychology by Taylor, and the appointment of Griew, was a period of transition for psychology. It was clearly no longer regarded as a legitimate part of philosophy, yet did not have a department of its own. To underscore this period of uncertainty, the calendar of 1963 says that Psychology *may* be offered that year.

In 1964[3], Griew ran the department on his own, but was joined by Barry Kirkwood in 1965, then Huggan in 1966. By the time of Griew's departure, to take up the position of Vice Chancellor at Murdoch University in 1969, he had an academic staff of five. In 1968, Peter Mckellar returned to New Zealand with a PhD from London University, and took over as HoD at Otago in 1969. McKellar was head of the department from 1969 to 1985 (16 years). McKellar chaired the Otago Branch of the NZPsS in 1975/76. In 1983, McKellar was joined by Graeme Goddard as an additional Professor of psychology, who became HoD in 1986. Goddard was Chair of the Otago Branch of the NZPsS in 1984/84, and in 1987 drowned while crossing a swollen stream during a tramping trip. The present Chair, Geoff White was elected as a Fellow of the NZPsS in 1981, and in the following year became a member of the newly formed Psychologist Registration Board. He was President of the NZPsS in 1988. White took over as HoD and Chair in 1990, and was elected as a Fellow of the Royal Society of New Zealand in 1994. This relatively small number of departmental heads has provided psychology at Otago with a great deal of stability for 32 years. Compare this with the opposite situation that psychology had suffered while in the embrace of philosophy in the previous nine decades.

In 1965, under Griew, there was only the single course, an introduction to psychology. To this was added a Stage II in 1966, then a Stage III in 1968. In this same year, the beginnings of the MA structure began to emerge. In fact, the University MA regulations were changed in 1968 to include psychology. By 1973, the numbers of psychology courses offered had grown dramatically. Within the BA/BSc programmes there was the original introductory course at

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[2] Personal correspondence from Peter Mckellar dated 16 March 1997: now living inYorkshire, England.

[3] University of Otago calendars 1964 to 1995: sighted in the Hocken Library of the University of Otago.

Stage I, four papers at Stage II (including experimental psychology, animal behaviour and learning) and no less than fifteen papers at the Stage III and B Hons level. Also, by that same year (1973) students could complete an MA in psychology (comprising the B Hons papers plus a thesis). In 1976, clinical training was offered, leading to a diploma in clinical psychology. The PhD degree had been available at Otago when it was a college of the UNZ, but this was offered within the department of philosophy. PhDs specifically in psychology became available once a department of psychology was established at Otago.

It is of interest that the Stage III syllabus, from 1975, included states of consciousness, paranormal psychology and evolution, as shown by the calendars and examination papers. Additionally, these topics were shifted into Stage I in 1979, implying that they had come to be seen as foundational topics. But these papers did not last that long, failing to appear in the 1984 calendar. As I have no hard evidence to account for this development, I can only speculate on its possible causes and on its brief history. Firstly, in 1969, David Marks (PhD, Sheffield) joined McKellar as a lecturer. Marks had an interest in consciousness, and had published articles on the relationship between altered states of consciousness and imagery, and presenetd a paper at the 1980 NZPsS Conference on related topics. Marks chaired the Otago Branch of the NZPsS in 1982, and left Otago in 1986. In 1973, Richard Kammann (a North American) joined McKellar as an associate Professor and, in June of 1984, died on sabbatical leave in New York. Kamman, who had completed his PhD at Cincinnati University, had published on parapsychology, life satisfaction and states of well-being. As at least one of these publications had occured while Kamman was resident in the United States, it seems likely that he brought these specialised interests with him to Otago. Thus, between them, Marks and Kamman had influenced course materials. The non-mainstream nature of these courses meant that they survived as long as their guardians and protectors remained on the staff. With Kamman's death, then later Marks' departure, there was no champion and the papers disappeared.

Today, the department of psychology offers a very comprehensive set of programmes ranging from Bachelors in both arts and science, Honours and Masterates in arts and science, an MSc in cognitive science, a diploma in clinical psychology and a PhD.

An analysis of the examination papers from 1965 to the mid 1990s show some interesting trends[4]. The 1965 examination paper was fairly basic and had questions relating to instinct, genetic bases of behaviour, learning, memory, psychophysics and hearing-vision. By 1970, the BA examination topics had been expanded to include animal psychology, the theories of Freud and Jung, Gestalt psychology, personality, social psychology, systems theory and psychological disorders. The 1975 examination papers show further developments and, as discussed above, included questions on states of consciousness and paranormal psychology. Also, in the years 1975 to 1980, questions of cross-cultural psychology appeared. This is interesting, because Otago never offered a specific paper on cross-cultural psychology. Another change that began in 1975 was the use of multi-choice questions in Stage I (175 items!), using computer scoring cards. By 1985 Freud and Jung had fallen from grace, and there was more emphasis on disorders from a clinical psychology perspective, including brain damage and psychometric testing. Also, the social psychology components on the questions increased. Between 1985 and 1990, in addition to the regular stages I to III topics, there were included questions on research methodology, the history of psychology and philosophical issues in psychology. There was also an emerging strong emphasis on cognitive psychology, neuroscience and information processing models. This was accompanied by a shift toward more quantitative, positivistic and physiological approaches. However, at the Honours level, for example in 1993, philosophical issues such as ethics, realism and idealism were examined.

An analysis of the Union Lists of Theses show some interesting trends for Otago across the decades from 1930 to 1990[5]. In this analysis I examined several parameters across this period:

- The ratio of Masterates to Doctorates.

- The ratio of male to female graduate students.

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[4] University of Otago final examination papers in psychology from 1964 to 1995: sighted at level 5, Rankine Brown building of Victoria University of Wellington.

[5] The Union Lists of Theses have been compiled by University of Otago Library staff since 1910. The compiler has varied across the decades, as has the exact title. These lists were sighted in the Reference Hall in the Rankine Brown building of Victoria University of Wellington Library.

• The distribution of subdisciplines within psychology.

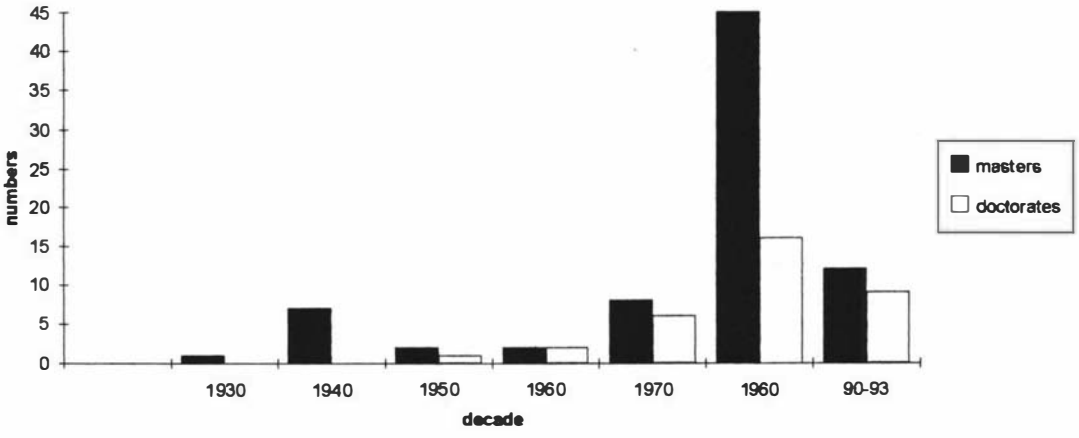

Figure 5.1: The numbers of Masters and Doctoral theses in psychology per decade for Otago.

Figure 5.1 shows the numbers of Masterate and Doctorate theses in psychology submitted at Otago across the decades 1930 to 1990. The bulge in the 1940s is of interest, where 7 Masterates were obtained compared with only one in the 1930s and 2 for each of the 1950s and 1960s. On looking at the thesis topics for the 1940s, one sees that most deal with issues related to the Second World War such as night vision (this was Peter Mckellar's own Otago Masters thesis), war neurosis and public opinion about warfare. During the 1970s, there was a small rise in Masterate and Doctoral theses, but in the 1980s, things took off, with 45 Masterate theses and 15 Doctoral theses submitted. As shown, the numbers for the 1990s are, of course, incomplete and, in fact, go only from 1990 to 1993. The next Union List was not due out until 1997, too late for my data gathering phase -- this same limitation applies to all other such figures for Otago and, subsequently, for the other psychology departments dealt with in this chapter. However, one can extrapolate from these limited data and see that the 1980s numbers are, at the least, likely to be repeated in the 1990s. In fact, in three years, the Doctoral output of ten theses signals a significant increase in Doctoral candidates for the 90s.

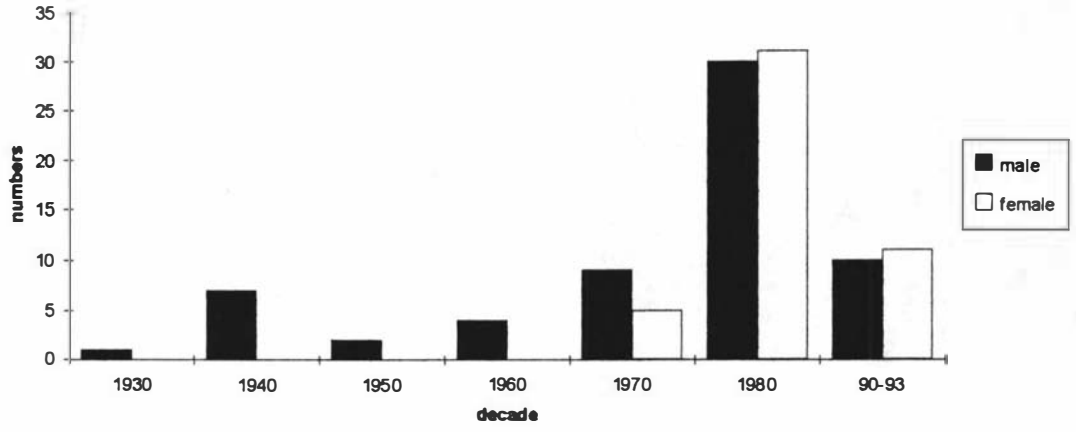

Figure 5.2: Combined Doctoral and Masterate theses in psychology by gender across the decades 1930 to 1990 for Otago.

Figure 5.2 shows the relationship between theses and student gender across the decades 1930 to 1990 for Doctoral and Masterate degrees combined. Across the decades 1930 to 1960, there were no female higher degree students in psychology at Otago. Females appear for the first time in the 70s, where males outnumber females approximately 2 to 1. This trend changes in the 1980s, where there are almost equal numbers of males and females submitting higher degree theses. The early trend for the 1990s suggests that females are beginning to take the lead. Later, in the sections on the other university centres, we will see that this gender reversal effect occurred somewhat slowly at Otago, by comparison with, for example, Waikato, where in the 1980s female higher degree students outnumbered males by a considerable margin.

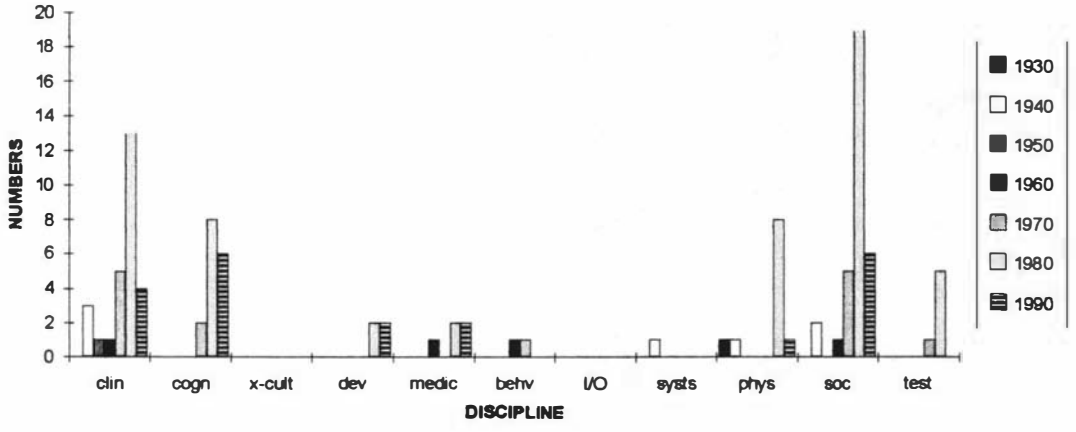

Figure 5.3: The distribution of theses within the subdisciplines within psychology at Otago across the decades 1930 to 1990. See Table 5.2 below for a full description of each subdiscipline.

Figure 5.3 shows the frequency distribution of numbers of Doctoral and Masterate theses combined (for both genders combined) across subdisciplines by decade. The eleven subdisciplines arose from an analysis of thesis topics, where the eleven categories were defined as follows in Table 5.2. Note that the histograms in each category are ordered by decade according to the key order. This is true for all future plots of this type.

An inter-rater reliability check on theses categories was conducted, to ensure that idiosyncratic selection on my part was not influencing the frequency distribution. The rater (a senior psychologist academic) was given a ten percent sample (184 random entries photocopied from the Union Lists of theses in psychology across all six New Zealand universities) of the total number of theses entries along with a list of categories. The rater's task was to place each entry in a category. The rater's selection was then compared with my original selection.

Table 5.2: Description of subdisciplines used in categorising theses.

category	description
clinical (clin)	any aspect of clinical psychology (eg, treatments, therapy modes, pathologies, forensic, retardates, etc.).
cognitive (cogn)	any aspect of cognitive psychology (eg, memory, cognition, linguistics, intelligence, motivation etc.).
cross-cultural (x-cult)	any aspect of cross cultural psychology.
developmental (dev)	any aspect of developmental psychology, including language acquisition, parenting etc... (child or adult).
medical (medic)	includes health psychology, medical psychology, sports psychology, but not clinical-pathological aspects
behavioural (behv)	covers all learning aspects, but especially operant or classical conditioning.
industrial and organisational (I/O)	any aspect of work behaviour in private or public sectors (eg, personnel and human factors).
systems (systs)	philosophical aspects, history, methodology, mathematical models, paradigms, the science of psychology.
physiological (phys)	all aspects of physiological psychology (eg, brain, CNS, narcotics, neuropsychology, perception, sensation etc..).
social (soc)	all aspects of social psychology (eg, attribution, relationships, social cognition, obedience and group dynamics etc..).
testing (test)	covers psychometrics, test design-construction-administration, test norms (includes clinical tests).

Figure 5.4 below shows the results of this consistency check.

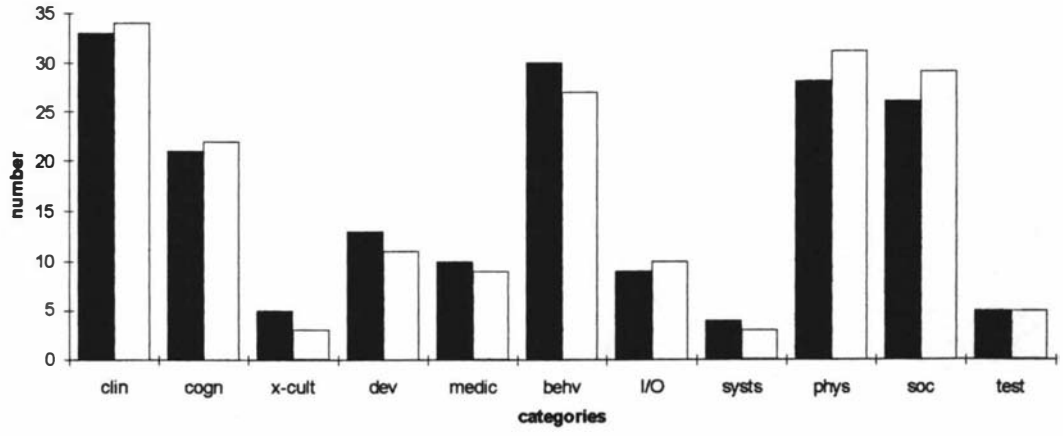

Figure 5.4: Results of thesis categories check using a rater.

In Figure 5.4, the vertical axis is number of thesis entries in the Union Lists and the horizontal axis the subdiscipline categories. The black columns are those of the rater and the white, mine. This figure shows the close agreement between the rater's placement of theses and my placements into the given categories. The greatest differences occurred in the categories of physiological psychology and social psychology where the differences were 1.63 % in both cases. None of these differences is considered large enough to invalidate the categories or thesis placements in them. Using a check based on Kendall's *coefficient of concordance* (Siegel & Castellan, 1988), in which reliability equals the number of agreements divided by the total number of observations, we obtain r = 160/184 or 0.87, a satisfactory concordance.

Note that this category placement check validates the similar data gathered and presented for the remaining university centres in the following sections, because the same categories were used (as defined in Table 5.2) for all six centres.

The data in Figure 5.3 show some interesting trends across the decades. Overall, these data show the areas of post-graduate focus, where clinical, cognitive and social psychologies in particular stand out. By comparison, other areas of focus such as cross-cultural, behavioural, industrial and organisational (I/O), and philosophical psychologies have received considerably less attention. Another interesting feature of these data is the

way in which focus has developed within a category. For example, the clinical focus went through a dip in the decades 1940 to 1950, but picked up strongly from the 1970s. The growth of interest in social psychology follows a similar pattern. Of interest is the relatively small number in the medical category, in view of Otago's strong overall medical focus. Testing saw a spurt of interest in the 1980s, but this seems have fallen away again. One can only speculate on the absence of interest in the categories of cross-cultural and I/O psychology.

Obviously, all of these thesis choices must reflect the interests of both the student and staff. Thus, these data say a great deal about staff focus as well as student interest. However, there must also be external influences such as sociological, economic and political factors. An example of these external factors was mentioned earlier in regard to the choices of thesis topic in the War years. Dunedin is not an industrial centre in the way that, for example, Auckland is. Nor is it the location of large numbers of head offices, as is the case with Wellington. Thus, perhaps, it is not too surprising that I/O psychology has received little interest. Likewise, population demographics probably influence an interest in cross-cultural issues (often bi-cultural at root), where the South Island in general, and Otago in particular, have few Maori people when compared with the North Island.

In relation to the mind-body problem and the issue of consciousness, Otago's treatment of these within its psychology offering has varied considerably during its long history. As discussed in Chapter 4, for many decades psychology was taught by philosophers within the discipline of philosophy, in which mind and consciousness were seen as valid topics. These early teachers of psychology accepted Cartesian dualism and showed an allegiance to Rationalism, rather than to Empiricism. From Griew's appointment, and especially under McKellar's leadership, this orientation changed, where the emphasis has shifted to the view of psychology as the science of behaviour, in which mind and consciousness have figured very little.

UNIVERSITY OF CANTERBURY

Psychology separated from philosophy in 1953 at Canterbury, but without a Head at that point. Alan Crowther was an ex Cambridge Don, having an MA and PhD from Cambridge. Now in charge of the department, Crowther had been in the Department of Philosophy since 1940 under Professor Ivan Sutherland. With him were Scott and Thompson, both UNZ men who had joined just after Crowther in 1949[6]. Crowther completed a Natural Science Tripos at Cambridge, and his mentors there did not see him as good enough to go on to physiology, so suggested he do psychology instead[7]. Pollard[8] related that when the department was one of joint philosophy and psychology, Professor Ivan Sutherland went on leave, putting Crowther in charge. Only a few weeks after his return Sutherland shot himself dead in his car not far from the university.

In 1957 Crowther was appointed Chair and Head of the Department, and was looking for academics interested in coming out to New Zealand to take on applied psychology. In response, George Shouksmith (at that time, MA Edinburgh, now Professor Emeritus of Psychology at Massey University), came out to New Zealand in 1957, and joined Crowther to start the Applied Psychology Unit there[9]. Ferguson (see Chapter 4) had done some I/O psychology at Otago but the politics there worked against him. Likewise, in 1942, Lesley Hearnshaw, while at Victoria, was appointed to head up the Industrial Psychology Research Unit of the DSIR (see the later section on Victoria). However, Hearnshaw went back to Britain in 1948. Thus, there was a gap of some 14 to 15 years, where Crowther was the only one teaching anything at all at the applied level (personal interview, Skouksmith, 1995).

Also, in the late 1950s, there was no clinical psychology being taught. The original Hunter initiative (see Chapter 4) had long since disappeared at Victoria.[10] Initially, under Shouksmith, the clinical component at Canterbury began as an extra paper in the Masters degree, followed by a part-taught, part-practical Certificate year. This became the foundation for the model (Masters, plus endorsement, plus Diploma) used by the other New Zealand

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[6] Canterbury University College calendars 1935 - 1958: sighted in the Stack Room in the Rankine Brown building of Victoria University of Wellington Library.
[7] Personal interview given by Jim Pollard in 1995.
[8] Ibid footnote 7.
[9] Personal interview with George Shouksmith in 1995.
[10] Ibid footnote 9.

psychology departments. The clinical programme proper arose out of discussions between Blake-Palmer (on his appointment as Director of Mental Health) and Shouksmith. Initially, Crowther was reluctant to move into the clinical field, but eventually relented. This opened the way for the first Department of Health-approved professional training in psychology in New Zealand. At first, only those holding positions in a clinical setting were admitted to the programme. But, soon after its launch, internships were offered to selected students within the Applied Psychology Unit. The work by staff and students within the clinical programme made a significant input into the Mental Health Foundation being established in Canterbury Province at that time (personal interview, Shouksmith, 1995).

In 1957, Barney Sampson came out to Canterbury from McGill University in Canada where he had completed a PhD under Donald Hebb. (See the section below on Auckland University for more detail about Sampson as HoD there.) In 1959 Crowther's team was joined by Jim Pollard, a graduate of Canterbury, who continues to teach psychology there to the present day. (See below for more on Pollard's story.)

In 1964, Shouksmith left New Zealand to take up a position at Queens University, Belfast. At that time, the possession of a PhD was becoming more essential to the teaching of psychology. It was not possible for Shouksmith to study for his PhD at Canterbury, because his workload was too great and Crowther was not all that supportive. At Queens, he found both the support and a time allowance.[11] Shouksmith remained in Northern Ireland until he returned to take up the position of Professor of Psychology at Massey University in 1971, but more of that later.

By 1969, Crowther had a fairly large staff, with Gregson holding a personal Chair, Thompson as a Reader, Pollard as a senior lecturer plus eight lecturers[12]. By 1975, the department had grown further and became the Department of Psychology and Sociology under Crowther, with two Professors additional to himself, four Readers, five senior lecturers and ten lecturers (a total of 22 staff). During 1978, Crowther began suffering from bouts of depression and, in 1979, retired from his position. Pollard remembers Alan Crowther with admiration and affection, saying of him that he

[11] Ibid footnote 9.

[12] University of Canterbury calendars 1958 - 1995: sighted in Stack Room of Rankine Brown building of Victoria University of Wellington Library.

excelled as both a teacher and an administrator. Although Crowther was an autocrat (all Professors probably were at that time and consulted only among themselves!), his department was one of the happiest in the university. Pollard recalled with sadness and a sense of guilt "When that awful depression finally overcame Alan, most of us felt a great guilt in our inability to help the man who had been such an influence in our lives. The guilt was all the greater for members of the discipline to which Alan had given so much, but which in the end seemed to have nothing to offer him." [13] This was written in 1986, long after Crowther's retirement and hospitalisation, in memoriam to Crowther's lonely death in hospital.

Pollard's MA thesis topic was based on work done at McGill University by Donald Hebb, using a maze and rats. The Hebbian approach was modified in that the animals were firstly thoroughly adapted to the maze, and only then introduced to complex problem-solving activities. Pollard admits that it took him a long while to escape from work with the Hebbian mazes. It was easy to do and to get published in, but he feels in looking back that the work was quite sterile. There was no consideration of what the evolutionary implications were and, at that time, instinct was a dirty word, the focus being on learning (Pollard was undertaking this research at the height of the Behaviourist thrust in New Zealand – personal interview, Pollard, 1995). Beginning as a demonstrator and part-time technician, Pollard was gradually absorbed into the department, and he took an assistant lectureship. He does not recall applying for the job -- he simply got it. This same approach applied to other appointments -- one simply got a letter from the Registrar to say that one had got a promotion. Somewhat different from today with its political correctness and complex equal employment opportunity practices.

Pollard recalls Alan Crowther as having a sense of his status and of not suffering fools readily. He also had an impish sense of humour. When Raymond Cattell visited and was openly boasting about his computer system back in the United States, Crowther told him that "we have a new computer", and showed him their new electric calculator. Crowther was very good at putting down people who were boastful or acting beyond their station. Pollard saw Crowther as a very private person who also adopted a Socratic teaching style. Thus, it was difficult to really get to know just what his views were. Also, it was hard to know when Crowther was acting out of duty or interest. Pollard

[13] Private paper by Jim Pollard entitled "Alan Crowther" dated 6 May 1986.

feels that Crowther's only true interest (other than the lives of key historical figures in psychology) was in Freud. The library at Canterbury still has an enormous collection of Freud's works due to Crowther's interest.

Pollard reported that Crowther was a benevolent dictator, yet one who gave his staff a lot of freedom. The only thing that Crowther would not permit was work in hypnosis, which Pollard puts down to some bad experience, probably at Cambridge. Crowther was not a research-oriented person, and Pollard speculates that he probably became HoD on the strength of his administrative abilities. One's research record was not a key factor in appointment or promotion in those days because, according to Pollard, Canterbury did not discover the value of published research until the early 1960s. Until then the emphasis had been on researching a subject to inform students. As explained earlier, Crowther had taken the Natural Science Tripos at Cambridge. Thus, in addition to his psychology, he had a strong biological background (personal interview, Pollard, 1995).

An example of the freedom that Crowther gave his staff was the purchasing of a group of monkeys for experimental purposes at Sampson's insistence. The monkey house was built on top of the East Block and a licence to house primates was obtained. Pollard reported[14] that no useful research was ever done, but that it was nice having the monkeys and taking care of them. A giant *Skinner box* was built, but the monkeys could not be encouraged to cooperate. Sampson and Pollard realised that highly evolved animals such as monkeys, with a complex brain and a huge repertoire of possible responses, behaved very differently to simpler animals such as rats and pigeons. A good lesson about the tenets of Behaviourism, thought Pollard. Sampson then had the idea of studying aesthetic preferences in monkeys, and he used welding rods which could be bent into a variety of shapes on which the animals could thread a small hoop. The shapes were presented in pairs and the monkey was left to make a choice between the shapes. None of this work was written up, and the monkeys were eventually sold.[15]

After his experiences with the Hebbian mazes, Pollard transferred his interests to the sociobiological movement (1975). At that time, he was teaching a Masters paper (among others) in comparative psychology. One of

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[14] Personal interview given by Jim Pollard in 1995.
[15] Ibid footnote 14.

his bright students told him about studies in altruism in honey bees, a concept that Pollard did not take kindly to, but it did lead him to start reading up on sociobiological ideas. Over the twenty years that Pollard has been teaching in this area, the bias in his classes has variously swung from strongly biologically deterministic to weakly so. He pointed out that social science still does not accept functionalism (that is, the functionality of organisms, and not to the school of Functionalism in psychology) in the way that biology does, so does not ask the right questions at times, staying within the individual's life time and learning experiences. Psychologists do not look at species questions, nor accept teleological explanations. Questions about individuals are acceptable, whereas those about species are not. Pollard feels that, for at least ten years post Second World War, biological determinism had a very bad name, which strengthened the learning thrust. He now sees that the pendulum is only just beginning to swing back toward considering the biological bases of behaviour (personal interview, Pollard 1995).

When Crowther was succumbing to his depression, Pollard reports[16] that Crowther was desperate for an organic basis to be found for it. If it was not organic then he was faced with the mental illness stigma. Crowther hated having to go to group therapy classes, some led by former students of the clinical programme at Canterbury. He had railed against psychotherapy all his life. Crowther had done nothing to prepare for retirement. He had no close friends, no hobbies, and his only joy in life was university politics -- which could not be taken into retirement (personal interview, Pollard, 1995).

Although, despite his depression, Crowther held out to the point of his official retirement, he was largely ineffective for at least three years before this. His illness was never a public embarrassment in the department because its onset was gradual and his secretary and staff protected him, and took on more and more of his duties. Some of his ex staff, including Pollard, visited Crowther when, after his retirement, he was admitted to Sunnyside psychiatric institution. Though he was always gracious with visitors, they rapidly realised that he wanted them to leave (personal interview, Pollard, 1995).

In discussing rare cases of departmental strife, Pollard reported that Robin Gregson was not popular, and Crowther intensely disliked him, but

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[16] Ibid footnore 14.

recognised his research output, so tolerated him. Gregson admitted to Pollard that he had difficulty getting on with people and found the easiest way to handle them was to be rude to them Although very knowledgeable, Gregson was not a good teacher because he used his classes to show off his knowledge, leaving little room for debate. When Gregson got his personal Chair (1979), the staff felt rather depressed. But, with much relief all round, in 1980, Gregson left for a Chair in psychology at the University of New England in Australia (personal interview, Pollard, 1995). To balance things up in regard to Gregson, the NZPsS Bulletins show that he made a considerable contribution to the NZPsS in his involvement in the local Canterbury branch, and was (with Laurie Brown of Victoria) the first editor of the *New Zealand Psychologist* in 1973.

In terms of the influence made by senior academics at Canterbury, Pollard reported[17] that Barney Sampson brought the department up to date methodologically, introducing analysis of variance and electronic calculators. Sampson was a tremendous person to be with, and great as a thesis supervisor (as long as one had a good stomach for alcohol -- all serious discussion with Barney had to be carried out at the pub!). Everybody liked Sampson, whereas no one liked Gregson. Pollard does not feel that Gregson had a lasting influence at Canterbury, whereas Sampson did. Pollard speculated on the ripple effect over such sad events as Harry Scott's death (see discussion shortly), saying that if Harry had not lost his footing and died on Mount Cook, Barney would probably have stayed on at Canterbury, and not become the Head at Auckland; and Pollard would not have got a promotion to lecturer.

Pollard reported[18] that Karl Popper (senior lecturer in Sutherland's Philosophy Department from 1937 to 1945), a refugee from Hitler's regime, had a profound influence on a small group of Professors at Canterbury, including Alan Crowther. He made them much more self conscious about what they were doing as academics. Popper would use phrases like "I and other great authorities". Such statements were not said with arrogance or braggadocio. They were simply statements of fact. Unlike some other refugee academics who fled Hitler's Germany, Popper did well at Canterbury. This contrasted sharply with the treatment received by ex-German academics at Canterbury

[17] Ibid footnore 14.
[18] Ibid footnote 14.

such as Walter Rosch, whose home in Christchurch was regularly ransacked by the security services during the last World War. Pollard also mentioned Sir John Eccles, the Australian neuroscientist. Eccles and Popper collaborated on a book, *The Self and Its Brain* (Popper & Eccles, 1977) which deals with the relationship between brain and consciousness. Pollard found this a fascinating joint effort in that Eccles was a devout Roman Catholic, whereas Popper was basically atheistic. Eccles earned tremendous respect as an experimentalist but, due to the intensity of his theology, was a flawed theoretician (personal interview, Pollard, 1995).

Pollard reported[19] that around the time Crowther retired, University policy changed, requiring that staff have a greater say in appointments. Until then the Chair was automatically the HoD. Today, any academic from senior lecture and above can be HoD. When professors at Canterbury discovered that they could resign as HoD and retain their professorial status and salary, there followed a spate of such resignations. Thus, when Crowther retired, an election was set up for the Head of Department. The contenders were Hugh Priest (the new democracy) and Bruce Jamieson (the old autocratic mould). This split the department and caused a lot a bitterness, the wounds of which took a long time to heal with some never healing. Pollard confessed to being on the losing side where he had voted for Jamieson. The department had also to elect a Professor, where Ken Strongman won the vote. Not long after that, Hugh Priest died of a heart attack while walking into work. Strongman was chosen to be Head of Department as well as occupying the sole Chair in psychology. Pollard disparaged the days of what he termed "raving democracy", which he found very time wasting. He preferred the efficiency of the benign dictatorship. He saw the same pattern emerging again in 1995, when the "young Turks", aided by a few disgruntled oldies, strove successfully to take the headship away from Strongman (personal interview, Pollard, 1995).

In 1979 Ken Strongman was appointed as Professor of Psychology at Canterbury and, when Robin Gregson left for Australia, Strongman was the sole Professor and Head of Department (the second only Chair in Psychology at Canterbury). In my interview with Ken Strongman[20], he reported that he came from a working class background in London, studied at grammar school

[19] Ibid footnote 14.

[20] Personal interview given by Ken Strongman in 1995.

and did well there. His mother died when he was seventeen, and there was no love lost between him and his father. Strongman was exposed to a lot of emotion in his household as a child and youth, much of it negative. Living conditions were cramped, and there were many occasions of anger being expressed in the house. He was the only one from his area of London that had ever gone to university. He was different and enjoyed being so. Psychology drew him partly because it was different and no one in the school knew anything about it. It also happened to be about people, which attracted him.

Strongman went to University College, London, in 1959. It had an experimentally oriented and laboratory-based department of psychology. His PhD was on induced anxiety in rats, and out of this came his interest in human emotion. He was not interested in animal research *per se* and, after completing his PhD, he did no more animal work, because he did not like it. The lasting influence from his PhD has been his long-standing interest in human emotion. This led back to him being fascinated by things that were ill-understood, and in which he could stand out as being different[21].

Taking the Chair of Psychology at Canterbury was a big challenge for Strongman: a new country and the department was in a mess. Strongman visited Crowther at Sunnyside (Crowther later moved to Cherry Farm in Otago), and saw him as a political animal, who had been appointed in a different era to do a very different job to the one Strongman faced. Crowther had only the one publication in his entire career, and yet was regarded as a good academic. At the time Strongman took over, there was a climate of change toward research (see also Pollard's comments above). Hugh Priest had been HoD for a short time; he did not do a very good job due to trying to be democratic, yet being actually autocratic (personal interview, Strongman, 1995).

Strongman came into a department which was in turmoil and where research was virtually naught. Gregson was in the department when Strongman arrived. A few years before that Gregson had been given his personal Chair, and stayed for only one year after Strongman's appointment. Gregson was not helping the department with his irascibility, and Strongman had had some intellectual skirmishes with Gregson, who perceived that, under Strongman,

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[21] Ibid footnote 20.

he would not become the HoD, though wanting to be. As earlier reported, Gregson went off to the University of New England[22]. Many of those who had been appointed by Crowther just a few years before he retired have since left. Conversely, those who had been in the department from the early days (eg, Pollard) are still there. This means that more than half the present staff have been appointed by Strongman. Strongman was the NZPsS *Members' Councillor* in 1980, was elected as a Fellow of the Society in 1981, and became the Inaugural Chair of the Psychologist Registration Board in 1982. In 1994, Strongman was honoured with election as a Fellow of the New Zealand Royal Society.

The course offerings in psychology got off to a strong start from the point at which Crowther took charge of the newly created department of psychology at Canterbury. Even in 1949, under Sutherland, Crowther was offering psychology at Stages I and II (see Chapter 4). In 1952, an MA in psychology was offered for the first time, in which the papers were in social psychology, the history of psychology, abnormal psychology and I/O psychology. Later, in 1956, personality was added to the list. In 1953, when Crowther assumed charge of the new department, he rapidly expanded the offering, introducing a Stage III which included advanced general psychology, personality and its development and applied psychology having a strong testing component. In that same year, Crowther was also offering B Honours and MA programmes[23].

Crowther was appointed as Professor of Psychology in 1958. In that year he greatly extended the graduate programmes, introducing papers covering such as the history of psychology, general theory, personality, social psychology, comparative psychology, occupational psychology and psychometrics. Also offered at that time was a BSc programme which had a biological bias covering physiological topics, with a special focus on animal behaviour. By the mid 1960s, a very full offering was available at the Bachelors and graduate levels.

By 1975, the topic coverage was very wide at all levels, with the three Stage I papers covering biological, general, differential, social and contemporary psychologies. The papers at Stages II and III of the Bachelors degree included such topics as experimental design, the history of psychology,

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[22] ibid footnote 20.
[23] The University of Canterbury calendars.

personality and abnormal psychology, psycholinguistics, mathematical psychology, perception and psychometrics. The Masterate level included such topics as comparative, developmental, physiological, clinical and organisational psychologies.

When Strongman became HoD in 1983, motivation and emotion were introduced at Stage III of the Bachelors degree along with a paper on emotion in the MA programme, these being Strongman's special areas of interest [24]. However, the strong physiological-behavioural bias, which had been present from the early days, remained. In 1990, cross cultural psychology was introduced at the MA level for the first time. Also, of importance, the original MA paper called cognitive psychology was renamed as cognitive science, reflecting the rise of this new science. Forensic and ergonomic psychologies were introduced at the Masters level in 1991 and 1993, respectively.

An analysis of the examination papers in psychology at Canterbury across the decades from the 1950s to the present day shows a wide coverage of topics at all levels, with little or no bias in the 50s through 70s[25]. However, in the 1980s, somewhat of a bias in favour of biological determinism arose, at least at the BA level. This bias appears to have disappeared in this present decade, with wide and equal coverage of topics at all levels, with a frank invitation to students at the BA 300-level to challenge the *status quo* in psychology.

The analysis of the Union Lists across the decades 1920 to 1990 for Canterbury show quite different results to those presented above for Otago[26]. Figure 5.5 shows the numbers of Masterate and Doctoral theses in psychology submitted at Canterbury across the decades 1920 to 1990. The production of Masterate theses from the 1920s has followed an almost exponential increase, where the numbers accelerated sharply from the 1960s when Crowther's leadership began to take effect.

[24] Ibid footnote 20.
[25] The University of Canterbury final examination papers in psychology: sighted on level 5, Rankine Brown building of Victoria University of Wellington Library.
[26] Union List of Theses as referenced earlier in this chapter.

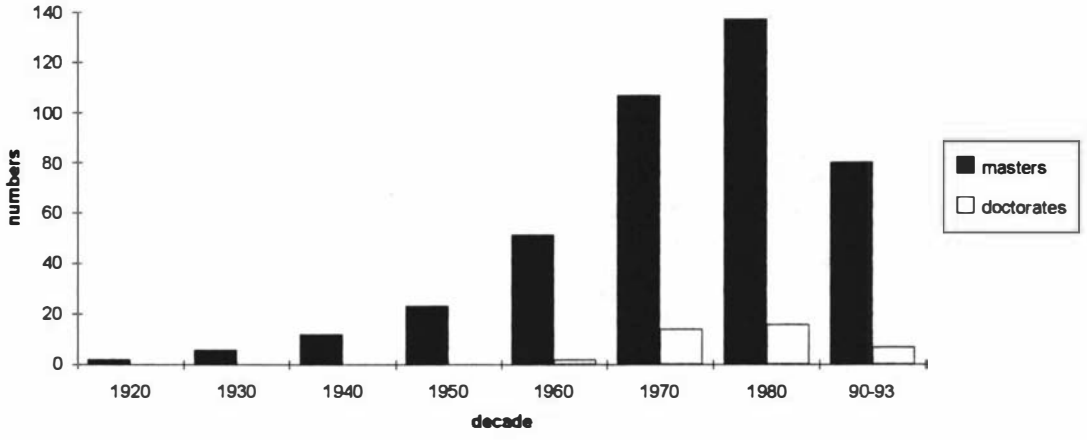

Figure 5.5: The numbers of Masters and Doctoral theses in psychology per decade for Canterbury.

Although the 1990s numbers are necessarily incomplete, it is clear that the output of Masterate theses in psychology is following the same trend and, if it continues, is aiming for something in the order of 200 by the turn of this century.

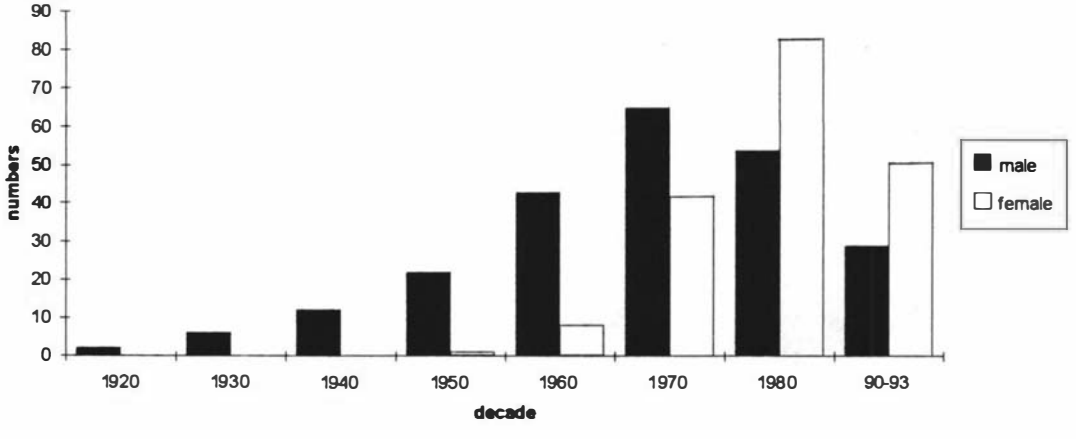

Figure 5.6: Combined Doctoral and Masterate theses in psychology by gender across the decades 1920 to 1990 for Canterbury.

The first Doctoral theses in psychology were submitted at Canterbury in the 1960s, one on human performance (I/O) and the other on patterns of ability in learning. In the 1970s and 1980s the numbers climbed somewhat but have remained well below the output of Masterates.

Figure 5.6 shows the numbers of combined Masters and Doctoral theses in psychology submitted at Canterbury, across the decades 1920 to 1990 by gender. What I have earlier termed the *gender reversal* effect can be seen more clearly in the case of Canterbury by comparison with Otago. In the 1960s, female graduate students were very much in a minority at Canterbury. In the 1970s this changed dramatically, and in the 1980s a complete reversal occurred with females well outnumbering males. This trend is clearly continuing in this decade, with female graduate students already almost twice the number of males.

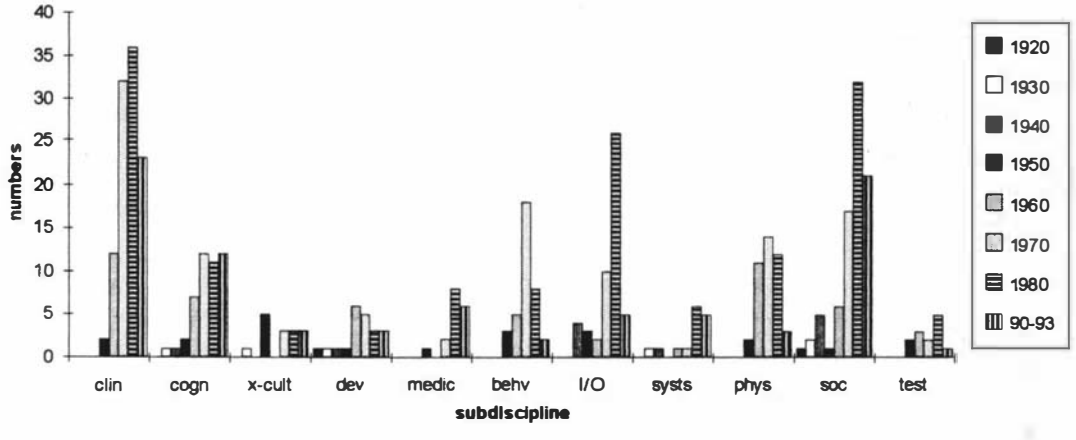

Figure 5.7: The distribution of theses within subdisciplines within psychology at Canterbury across the decades 1920 to 1990.

Figure 5.7 shows the way in which theses in the various subdisciplines of psychology are distributed across the decades 1920 to 1990 at Canterbury. Particularly outstanding are the clinical and social psychology theses. As seen in the above discussion, Canterbury was the first to set up a clinical programme, under the leadership of George Shouksmith. This early thrust is clearly still going strong, with 37 clinical theses produced in the 1980s and 23 already in this decade. There has been an interest in social psychology at Canterbury, as far back as the 1920s, with three MA theses produced in that

decade, one of which was Clarence Beeby's thesis on Laughter and Comics. Thereafter, output in this category was a bit patchy until we reach the 1970s, when it rises sharply, to compete with clinical theses. From the 1940s there has been a long-standing interest in I/O psychology at Canterbury, again due to Shouksmith's leadership. However, this category appears to have peaked in the 1980s.

Canterbury had a brief flirtation with behavioural theses, which started in the 1950s, peaked in the 1970s and then fell off dramatically. The data presented in Figure 5.7 in this category appears to follow the rise and decline of Behaviourism at the global level (personal interviews, Shouksmith and Taylor, 1995). Physiological psychology had its time of popularity in the decades from the 1960s to the 1980s, but seems to have dropped off in this present decade.

There has been a small but consistent level of interest shown in cognitive psychology at Canterbury, where this appears to have picked up in the 1990s, due, I suspect, to the introduction of cognitive science at the Masters level. Interest in the remaining categories has not reached a particularly high level, but is distributed across them fairly evenly. In fact, by comparison with the other university departments, Canterbury's psychology theses are the most widely distributed.

Although Canterbury has a shorter history than Otago, psychology gained its independence a whole decade earlier. Thus, the period in which psychology was taught within philosophy is considerably shorter than that of Otago's, and its influence was subsequently less. With the appointment of Crowther as Chair and HoD, psychology took on an applied bias. This trend had begun with Ferguson, and was pursued enthusiastically by Shouksmith. Similarly, Sampson brought with him an experience in and enthusiasm for neuropsychology.

The impact of these two thrusts rapidly weakened any philosophical orientation that Sutherland had maintained, shifting the bias from Rationalism to Empiricism. However, it seems that Crowther had a regard for unconscious processes judging by his fascination with Freud and the large collection of Freud's works he collected (personal interview, Pollard, 1995). Thus, Crowther's influence softened what might have become a very hard-nosed

orientation. Likewise, but later on, Strongman's interest in emotion along with his tendency to challenge the Aristotelian-Newtonian paradigm of science, has had a similar offsetting influence (personal interview, Strongman, 1995).

THE UNIVERSITY OF AUCKLAND

Psychology finally freed itself from philosophy at Auckland in 1958. In that year Anschutz, the Professor of philosophy from 1955, was reappointed and lost the psychology courses, retaining the philosophical courses only. Harry Scott (MA, UNZ; PhD, McGill University) arrived at Auckland from Canterbury in 1957, where he had been since 1953 when Crowther became the first Professor of psychology there[27]. Scott took charge of the new department of psychology, assisted by Campbell (MA, Oxon). Scott was not appointed as Chair of Psychology. Rather, he was listed in the calendar as Head of Department. Auckland had to await Barney Sampson's arrival from Canterbury (see discussion in previous section) in 1962 before it got its first Chair of Psychology. However, Scott certainly introduced changes from the outset. For example, he made significant changes to the required text lists at the Bachelors level. In 1960, Scott and Campbell were joined by Storm from Yale University. The psychology offering remained as in 1958 but there were some text changes. Sadly, Harry Scott died in a mountain climbing accident in the summer of 1960. The search team never did find his body[28].

Barney Sampson had always been interested in behaviour, and in particular with experimental psychology. He took a double degree in psychology and zoology, and got a First in both at the University of British Columbia in Vancouver (around 1951). He also taught for a year at the University of Alberta. He then completed a Doctorate at McGill University in Montreal. His biological background fitted in very well at McGill. He tended to regard himself as a neuropsychologist, where his overriding interest was how the brain worked. He abhorred the clinical approach even though, in his graduate training, he covered the various aspects of clinical psychology (though hating it). He feels that he had a neuropsychological bent all the way through, and

[27] Auckland University College calendars 1885 - 1957, and The University of Auckland calendars 1958 - 1995: sighted in Stack Room of Victoria University of Wellington Library.
[28] personal interview given by Barney Sampson in 1995.

was very influenced in this by Donald Hebb, under whom Sampson studied at McGill (personal interview, Sampson, 1995).

Sampson had met Scott at McGill, and learned a lot about New Zealand from him. When Sampson, at Scott's suggestion, came out to New Zealand in 1956, it was on a three year contract with Canterbury University College. He has lived in New Zealand ever since with his Canadian born wife Jean and his New Zealand born children (personal interview, Sampson, 1995).

The position of Chair of Psychology at Auckland came available, and in 1961 Sampson applied for the job and got it[29]. At that time, the psychology department was housed in old army huts and a police barracks. The department finally moved into a new multistorey block on Symonds Street in the late 1960s. At that time there was not a large student body nor many staff. The building took so long to build (from 1962 to 1978), due mainly to trade union activities, that some of the original requirements were no longer needed by the time the building was occupied in 1978. Sampson felt somewhat disillusioned having come to profess his discipline, but ending up involved in "building buildings". He was distracted by the administrative side of his job (personal interview, Sampson, 1995).

In the later 1970s, the student role began to increase dramatically in psychology. During this time there was very great pressure for industrial psychology, proper training in clinical psychology and social work. Sampson fought some of these pressures. He gave way on clinical psychology because, at least, that could be defined as being within the discipline[30]. In 1968, Graham Vaughan (PhD, Victoria) joined Sampson as a senior lecturer in behavioural science. In this position, Vaughan taught medical students within the Behavioural Science programme, and administered the programme. Vaughan became Associate Professor of Behavioural Science in 1972. Vaughan had considerable involvement in the affairs of the NZPsS where, in 1974, he chaired the *Social Issues Committee*, originally formed by Professor Tony Taylor at Victoria (see next section). In 1976, Vaughan was elected as Fellow of the Society, and 1978/79 was President of the Society and Convenor of its *Membership and Status Committee*. In that same period

[29] Ibid footnote 28.
[30] Ibid footnote 28.

(and again in 1985), Vaughan was (with Corballis – see shortly) editor of the Society's journal.

In 1976, Betty Bernardelli, a senior lecturer in psychology, took over administration of the Behavioural Science programme, while Vaughan concentrated on developing a programme in social psychology, hitherto neglected at Auckland. In 1984, Vaughan was appointed to an advertised chair in psychology. Sampson's aim, from the outset, was to introduce more New Zealanders at Auckland to offset what he saw as the obeisance to North American dominance (personal interview, Sampson, 1995).

In regard to the strong Behaviourist thrust at Auckland in the seventies, Sampson felt that this was due, in part, to the influence of Mike Davison who Sampson saw as more Skinnerian than Skinner, where Sampson regarded Davison as espousing the mathematical model view, meaning that Davison saw human behaviour as expressible in terms of algebraic formulae (personal interview, Sampson, 1995). Davison's work led to him being honoured by election as a Fellow of the New Zealand Royal Society in 1987. Sampson feels that the operant approach has run its course at the global level, where this lay behind the decline in the output of PhD and Masters theses in this area (see later graphical data) despite Davison's continuing influence. Sampson was concerned about the internal assessment of theses at Auckland, and used McGill University to externally examine PhD and Masters theses. In the end, McGill begged not to be sent any more because their assessment was taking up too much time[31]. During the late 1970s Sampson fell ill and spent time away from his duties. He retired in 1984[32].

In 1962, Betty Bernardelli, at that time at Otago (see previous chapter), was invited by Sampson to join the psychology department at Auckland[33]. She took up the position and found the department a very lively one. She taught the BSc courses there, running such disparate courses as individual differences and psychology for B Com. In addition, she taught the history of psychology to Honours students (Sampson felt strongly that advanced students should know of the history of psychology). She enjoyed working under Sampson, who gave his staff a free hand. He was also against narrow

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[31] Ibid footnote 28.
[32] Personal interview given by Mike Corballis in 1995.
[33] Personal interview given by Betty Bernardelli in 1995.

specialisations which he believed prevented people from communicating with each other (personal interview, Bernardelli, 1995).

In the late 1970s, Sampson asked Bernardelli to extend her responsibilities in Behavioural Science to include temporary administration of the Clinical Psychology programme. This followed the resignation of Professor Halmut Schaefer, the then director. She had no clinical training, but took on the job, and arranged for clinical examiners from Canterbury and Massey. Unfortunately, certain candidates, who had been failed, appealed. Auckland's Council set up a meeting in which Bernardelli was intensely questioned. The external examiners were asked by Auckland to reconsider their verdicts, which offended their respective universities, and they stuck with their original decisions. This whole episode caused considerable tensions between the three universities. It eventually settled down, and a new appointment was made to run the clinical programme (personal interview, Bernardelli, 1995).

John Irwin joined Sampson's department in 1962 as a lecturer and was appointed to an advertised chair in 1969. Irwin did not originally intend a career in psychology, but while studying at Auckland chanced on a book on factor analysis, and was taken with the idea that it might be possible to formulate a mathematical theory of mind. Only two departments (Victoria and Canterbury) were offering postgraduate study in psychology at that time (1950s), and Irwin decided on Canterbury for his MA because its offering was nearer to his tastes. His PhD at Tufts University was on auditory perception, and research into how human senses work has been his abiding interest. He has also retained his original fascination with the possibility of a mathematical description of mind, although not via the factor analytic route[34]. Irwin was elected as a Fellow of the NZPsS in 1976 and became *Members' Councillor* of the Society in 1983.

During the time that Sampson was sending his Masterate and Doctoral theses to McGill for external moderation, Mike Corballis, a New Zealander (MA Auckland; PhD McGill) then at McGill, used to receive these, and so was in regular contact with Sampson[35]. The Vice Chancellor of Auckland offered Corballis a position as Professor at Auckland (there being a rotating Chair arrangement in force by then) sharing with Sampson and Irwin. This was the

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[34] Personal correspondence from Professor John Irwin dated 14 April 1997.
[35] Ibid footnote 32.

late 1970s when the tension between the English and French speakers in Canada was heightening (especially following the election of the *Parti Quebecois* in Quebec Province), making life unpleasant for Corballis, who had his family there. In view of this, returning home to New Zealand seemed a wise choice. So he took up Auckland's offer, and started as Professor of Psychology at Auckland University in 1978. However, he had some nervousness about going back to Auckland as a full Professor since he had been only a student and junior lecturer there before (personal interview, Corballis, 1995). Corballis was elected a Fellow of the NZPsS in 1981, led its *Experimental Division* in 1983, and in 1994 was elected a Fellow of the New Zealand Royal Society.

Up until 1972, Sampson had been sole Professor. There was no joint Professorships nor rotation of the Headship. This earlier arrangement meant that the Professor's vision was the dominant influence on the department. Corballis remembers Sampson as a very charismatic person, perhaps even autocratic . However, he always gave those staff he trusted a fair degree of autonomy. The newer arrangement (from around 1973) meant that there was more compromise regarding vision and direction. Also, the scene had become much more complex by comparison with the mid 1960s, with the entry of so many new concepts in psychology, and a greatly expanded student body (personal interview, Corballis, 1995).

In 1958, the year in which psychology at Auckland gained autonomy from philosophy, there were relatively few papers being offered in psychology. It seems clear that Scott had plans to change this, and started making changes from 1959. However, his untimely death brought this to an end. The pace picked up rapidly once Sampson took up the Chair in 1962. By 1965 a wide range of papers was available at both the Bachelors and Masterate levels[36]. There was a strong experimental and physiological bias due to Sampson's own background and leanings. The course offering expanded further into the 1970s, with a major reorganisation of the BA structure occurring in 1974. The experimental and physiological biases were still there, but new papers such as cognitive process and theory/systems of personality had come in at the Bachelors level. The Masters offering had changed less since the mid 1960s, with a few additions across this decade, such as neurological psychology and advanced operant techniques in 1970, and issues in developmental

[36] The University of Auckland calendars as previously referenced.

psychology in 1971. In fact, the Masters offering had remained relatively unchanged (by comparison with the Bachelors) since the early 1960s.

This situation began to alter in the 1980s, with many new papers being introduced at the Masters level in 1980 to 1983, such as cognitive psychology and theories/systems of psychotherapy. By 1995 a wide range of papers were available at both Bachelors and Masters levels, where the original physiological bias had weakened, but leaving the experimental bias intact. From the viewpoint of the mind-body problem, Auckland has tended to face this in a neurological way, with courses in the 1990s in human neuroscience at the Bachelors level and mind and brain at the Masters level. This stance stems back to Sampson's original influence with his strong McGill/Hebb bias, and the continuation of this by academics such as Bernardelli and, later still, Corballis (PhD, McGill). Thus, the pole of biological determinism has been very strong at Auckland. An analysis of the examination papers in psychology at Auckland underscores this bias[37]. Of interest, this neurological focus has always been somewhat at odds with the Behaviourist paradigm because brain functions have been played down by that paradigm, and yet pure Behaviourism flourished for a while at Auckland under Davison. However, the examination paper analysis also shows how the pure Behaviourist focus, which was very dominant during the 1970s and 1980s, finally lost its influence in the early 1990s, and a reassertion of neuroscience occurred, with Corballis being its major champion.

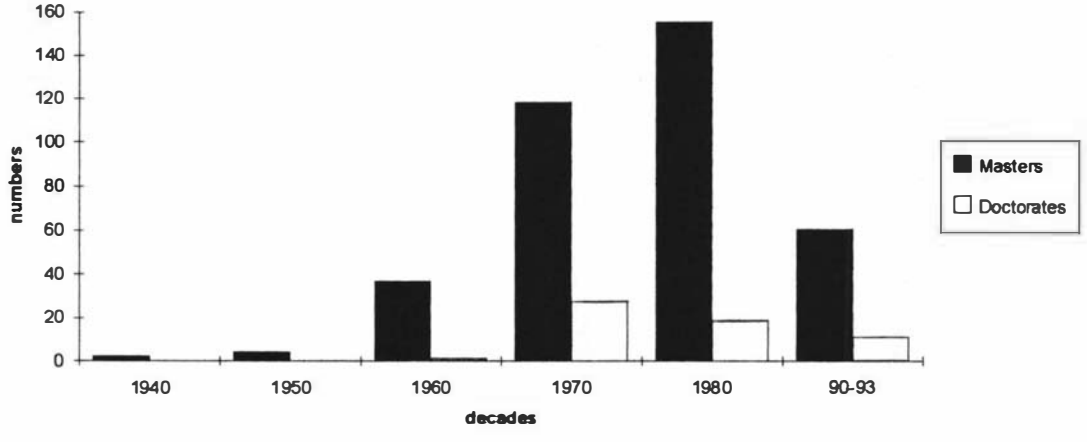

Figure 5.8: The numbers of Masters and Doctoral theses in psychology per decade for Auckland.

[37] The University of Auckland final examination papers in psychology: sighted on level 5, Rankine Brown building of Victoria University of Wellington Library.

Figure 5.8 shows the numbers of Masters and Doctoral theses in psychology submitted at Auckland University across the decades 1940 to 1990[38]. The numbers were quite low in the first two decades, but increased dramatically in the 1960s due to Sampson's appointment to the Chair. The numbers of Masterate theses produced in the 1970s and 1980s set a record for psychology theses in New Zealand universities. Auckland's department of psychology has been a very large department by comparison with the other university centres in this country (with the exception of Massey's), for any given decade. This is reflected in the much larger numbers of theses produced. The picture for Doctorates in these two decades is quite different, where Doctoral thesis output is much lower than that for Masterates (as might be expected) and appears to fall off. The numbers for the 1990s imply that the output will reach at least that of the 1980s in both Masterates and Doctorate theses. On this issue of quantity output, see the discussion shortly, when I consider the categories of subdisciplines in which Auckland's psychology theses have been produced.

Figure 5.9 shows the numbers of combined Masters and Doctoral theses produced by males and females across the decades 1940 to 1990. The same gender reversal effect noted for Canterbury occurs, but is not as dramatic.

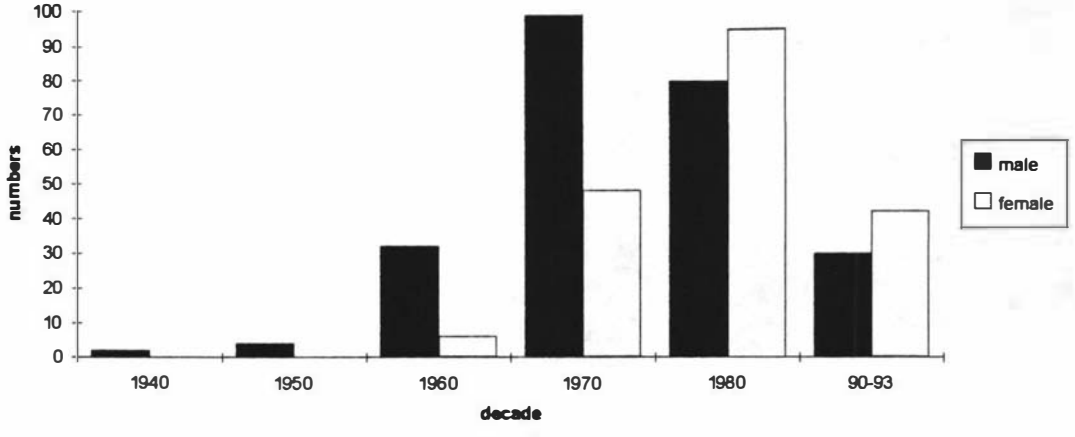

Figure 5.9: Combined Doctoral and Masterate theses in psychology by gender across the decades 1940 to 1990 for Auckland.

[38] Union Lists of Theses as previously referenced.

Figure 5.10 shows the distribution of psychology thesis categories at Auckland across the decades 1940 to 1990. Outstanding in these data is the thesis output in the behavioural category. Although, as Table 5.2 shows, this category covers a range of topics, in the case of Auckland significant numbers the theses produced in this category (Masterate and Doctorate) have dealt with operant conditioning reinforcement schedules using animal subjects (usually pigeons). However, this somewhat narrow focus by one staff member at Auckland is offset by the significant outputs in other categories, such as clinical, physiological and social psychologies.

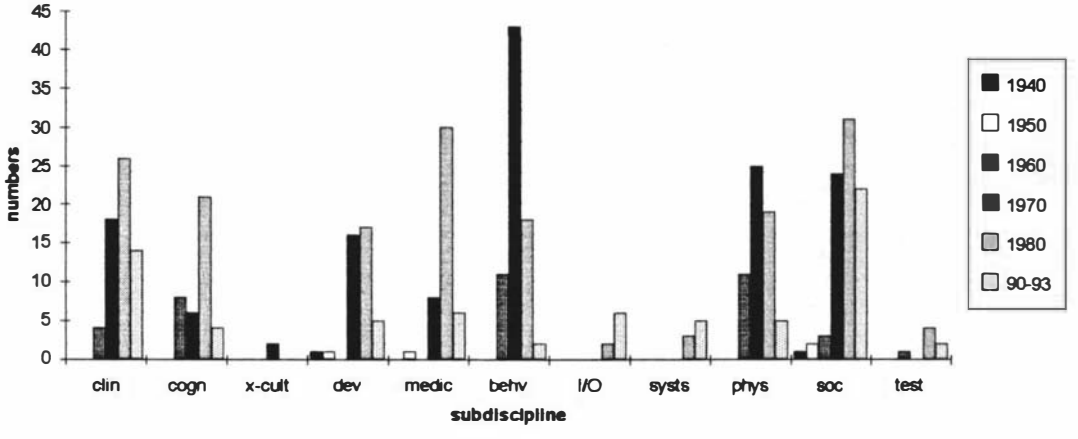

Figure 5.10: The distribution of theses within subdisciplines within psychology at Auckland across the decades 1940 to 1990.

Figure 5.10 also highlights the fairly low levels of interest shown in cross-cultural, I/O and testing psychologies. I find this surprising. In the case of cross-cultural psychology, Auckland is the largest Polynesian city in the world and is a very multicultural region, thus I would expect a higher level of interest than is the case. However, to offset this, it must be pointed out that a number of theses that I have categorised as *social psychology* cover cultural issues. This points up the difficulties of categorisation. I would also expect a much higher level of interest in I/O psychology and in testing, in view of the relatively high level of industrialisation in the Auckland region. Also, of some disappointment, is the very low output of theses in the systems category, bearing in mind that this category includes the philosophical aspects of psychology, methodology, history, mathematical models and paradigms. The clinical, physiological and social psychologies have attracted high levels of

interest across the decades at Auckland, with developmental psychology to a lesser extent.

Not very long after psychology became an autonomous discipline at Auckland, Sampson was appointed as Chair and HoD. Thus, although we see the same earlier philosophical leanings, in which mind and consciousness figured strongly as at Otago and Canterbury, the change to a non-dualistic empirical view was much more dramatic at Auckland. Sampson was not interested in mind and consciousness. He had a very Hebbian view of the human as a biological machine. He also facilitated the strong Behaviourist orientation at Auckland (personal interview, Sampson, 1995). Thus, in a decade from Sampson's appointment we had a department that was strongly Empiricist in its allegiance. However, in more recent times, especially under the guidance of Corballis, we see a return of interest in the topic of consciousness if only because international brain research demands the link.

VICTORIA UNIVERSITY OF WELLINGTON

Recall from Chapter 4 that, in 1948, Psychology became a fully autonomous Department under Ernest Beaglehole. Philosophy went off under Professor Hughes ending up a much smaller department. Much of what follows has its sources in the interviews I conducted with key figures who were in some way closely related to the scene at Victoria from the time of Beaglehole to the present day. Thus, there is inevitably some overlap between the different reports of my interviewees. But I make no apologies for this because in these overlaps, each have provided different facets of the same event from differing perspectives and interests.

Ernest Beaglehole did his PhD on *Property* at the London School of Economics (LSE). In this, he was ahead of his time, and James Ritchie can now see what a watershed issue it is in view of Ritchie's own recent work with the Tainui people (a major North Island Maori Tribe)[39]. The coverage of Beaglehole's PhD was enormous – from the behaviour of magpies to tribal conceptions of property. Ritchie reported that, when Ernest Beaglehole was studying for his PhD at the LSE, there was a notion of achieving the Fabian dream (an ideal socialist state), and this captured Beaglehole's imagination. Some people of this persuasion were attracted to Communism. However,

[39] Personal interview given by James Ritchie in 1995.

Beaglehole was never a communist, but he was a strong supporter of the Labour Party in New Zealand. These interests and leanings attracted Beaglehole to social and applied psychology (personal interview, Ritchie, 1995).

In the early 1930s Ernest Beaglehole was awarded a postgraduate scholarship at the LSE. He was then awarded a Commonwealth Fellowship for study in the United States of America. While studying at Yale, Beaglehole met George Murdoch who had established a teaching programme called the *laboratory of human relations* (in parallel with a similar approach at Harvard: eg, Talcott Parsons and Edward Bales). Thus, while Beaglehole was a psychologist, he had an interdisciplinary approach and was drawn to grand theories[40]. Beaglehole was given a Fellowship to Yale. After various other engagements, Beaglehole was offered a position at Yale. But Hunter, having sent him away for polishing up (Ritchie's expression), wanted him back. Finally, in 1937, Beaglehole returned, lured by Hunter's promise of a specific position in psychology within Mental and Moral Philosophy. On his return, in addition to teaching psychology, Beaglehole taught anthropology for one year, but could not keep this up due to his other teaching commitments (personal interview, Ritchie, 1995).

In 1949 Beaglehole brought in Mario Fleischl, a practicing lay psychoanalyst who had studied in Vienna under one of Freud's own graduates. Ritchie reported that Fleischl, who had a rich cultured European background, ran musical *soirees* in his drawing room, attended by musicians such as Turnovsky, Farquar and Lilburn. Fleischl also collected New Zealand art (eg, Colin McCahon). Ritchie believes that the psychology department at Victoria profited from Beaglehole's friendship with Fleischl, because it connected it with the intellectual and artistic life of the community. Beaglehole never saw the department existing just to teach psychology (personal interview, Ritchie, 1995). How different from this day and age with its emphasis on user pays and fiscal viability!

In the mid 1940s, Beaglehole had persuaded the Department of Scientific and Industrial Research (DSIR) to set up an industrial psychology division, modelled on the British Institute of Industrial Psychology, which grew out of ergonomic and personnel selection activities during the Second World War

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[40] Ibid footnote 40.

years. Beaglehole had brought out Leslie Hearnshaw, who had had some involvement with this British institute, and Beaglehole saw Hearnshaw as making a permanent connection between him and DSIR in order to establish industrial psychology as a profession[41]. Beaglehole also established the school of Social Work seeing this as a psychological profession (mid 1950s). By 1953, the staff of the Department of psychology had grown substantially, and in that year James Ritchie joined as a junior lecturer with Graham Vaughan following him in 1958. Ritchie reports that Beaglehole had a slightly scornful attitude toward sociology, not seeing it as dealing with reality and lacking depth, simply playing with survey results and words. He wanted anyone in the helping professions to get a solid grounding in a person-based psychology (personal interview, Ritchie, 1995).

Beaglehole brought Cyril Adcock (Cyril later became known as John) in as the department's statistical analyst because he saw the importance of community surveys. Adcock did his PhD on factor analysis at Birkbeck College in London during the last World War. Having studied under Burt, Spearman, Vernon, Cattell and Eysenck, he introduced this methodology to the Victoria psychology staff[42].

Ngaire Adcock, Cyril's widow, related that Adcock came to New Zealand in 1914 (age 11) from Manchester. His parents settled on some hill country at Te Rau-a-Moa, near the Kawhia Peninsula. As a result of impoverishment, the father took a job as a hairdresser in Te Awamutu, leaving his wife and son to break in the land. The intention was that Cyril Adcock become a farmer. But the principal encouraged Cyril to go further and he became a probationer teacher in Te Awamutu, then went on to continue his training in Auckland. He did not go to university till late in his career. (The University of Auckland, where he studied extramurally.) Returning to England for a time, he taught with the Workers Educational Association (WEA) there. When he returned to New Zealand as a junior lecturer at Victoria in 1947, he carried on his WEA interest here (personal interview, Adcock, 1996).

Ngaire Adcock reports that Cyril Adcock was a shy man. He had really to push himself to speak in faculty meetings, and had difficulty with groups of people. He was also a very lonely man. In addition, Adcock was a pacifist

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[41] Ibid footnote 40.

[42] Personal interview given by Ngaire Adcock in 1996.

Professor George Hughes on the steps of Parliament in Wellington during the anti-Vietnam war demonstrations.

Ernest Beaglehole died suddenly in 1966, at age 59, and Adcock took over as acting HoD until 1968. Earlier, Adcock had been promised by Beaglehole the second Chair at Victoria. This promise influenced his decision regarding the offer of a position as foundation Professor at a Canadian university. He held back because of Beaglehole's promise, but never did get the second Chair[43]. He did become associate Professor, and retired as an acting HoD. Unfortunately, the concept of a rotating HoD came into being circa the late 1970s to early 1980s, too late for Adcock. Earlier on, the Vice Chancellor told Adcock that he was too old to get the Chair. Adcock was deeply hurt by these actions. He retired in 1970, where he hated retirement, feeling that he had been amputated, missing the students and academic life (personal interview, Adcock, 1996).

Laurie Brown, who had been Professor of Psychology at Massey (see later section) came to Victoria in 1968 to take up the Chair. As reported earlier, Brown (with Gregson) was, in 1973, the first editor of *The New Psychologist,* the in-house journal of the NZPsS. In that same year, Brown became Convener of the *Ethics and Professional Standards Committee* of the NZPsS. Brown did not stay for very long at Victoria, leaving in 1973 to take up the Chair of Psychology at the University of New South Wales in Australia.

Harry Love[44] has a very vivid recollection of Beaglehole. When, in the 1950s, Love went to enrol at Victoria, he was interviewed by Athol Congalton and Beaglehole. Congalton opened the interview by saying, "You are not intending to do a full degree are you?", the implication being that Love with his somewhat raw background, was not up to it. Congalton's opening gambit made Love more nervous than he already was. In fact, without his earlier training in self-control he could not have gone up the hill to the University! Love replied to Congalton that, yes, he did intend completing a full degree, and explained his interest in philosophy. Congalton pointed out that you needed a very high intellect to get through such a programme, and asked Love if he was up to it. Love replied that he could not know, but wanted to try.

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[43] Ibid footnote 43.
[44] Personal interview given by Harry Love in 1995.

At that point, Beaglehole interrupted Congalton, saying "Of course, that is all he can do; he can see how it goes in the first year, and if successful why shouldn't he go on and do a degree?" Congalton backed down. This made a tremendous and lasting impression on the young Harry Love. Beaglehole came across to Love as a true Gentleman in the fullest sense of that term, who was willing to give someone a chance and facilitate the attempt. Love was very impressed, and nothing that he subsequently heard or saw changed that initial impression. Beaglehole lectured Love in social psychology giving his lectures in a manner which allowed for interruptions (personal interview, Love, 1995).

Beaglehole's door was always open, and Love felt he could always approach him when needed. He thought this about only two other people at Victoria at that time: Cyril Adcock and James Ritchie (Jim's friendliness, enthusiasm for psychology, and his encouragement enabled Love to get through his first degree). Love also mentioned Mario Fleischl, and thought him a fascinating person, though not easy to get along with. Love was somewhat in awe of Fleischl's extensive experience in dealing with people's behavioural disorders, coupled with his cultured background. Love found the other lecturers of that time distant, cold and even arrogant (personal interview, Love, 1995).

When Love studied at Victoria the whole University comprised the Hunter Building and the Science Block, and that was it. Even then, the Hunter building was old and not well designed. Staff were crammed into tiny offices (eg, Ritchie's room was more or less filled by his couch). Even Beaglehole's office was tiny by today's standards. Love was sure that professors today would not accept such a room. In Love's second year there was a compulsory statistics paper which knocked out up to half of the second year class! This strict approach was changed in the 1960s, where students were allowed to resit the statistics examination until they passed. In the third year, Love was relieved that he had Ritchie and Beaglehole (social and cognitive psychology), rather than the colder more remote lecturers such as Congalton. However, Love came to respect Congalton's intellect and knowledge of his discipline. Love compared his interactions with his teachers with those of today, with the huge lecture halls, and finds it hard to relate to the situation of a tiny figure of a lecturer at the bottom of a huge lecture hall filled with large

numbers of students[45]. Love has made a considerable contribution to the NZPsS having twice been its President, and with involvement on a variety of committees. He was elected as a Fellow of the NZPsS in 1983.

A very different experience of psychology under Beaglehole, compared with that of Love's, is that of Tony Taylor's[46]. Tony Taylor was born in London where he attended London University, after leaving the Royal Navy, and came out to New Zealand in 1951, completing an MA in psychology at Auckland University College in 1955. He came down to Wellington in 1956 and became a prison psychologist. He then joined the psychology staff at Victoria. Beaglehole asked Taylor to take on a teaching role while Adcock was on leave, and then to apply for a position lecturing in clinical psychology. He then undertook training in psychoanalysis, and proceeded to conduct PhD work at Arohata Borstal. In view of his background and training in clinical aspects of psychology, even in his early days at Victoria, Taylor tended to receive troubled students. This led to the first student counselling service of any kind in the country. He did this in a voluntary fashion from 1961 to 1963, but in 1964 he was officially appointed student counsellor at Victoria (personal interview, Taylor, 1995).

For the short time Brown was at Victoria, he remained HoD of Psychology, and Taylor was appointed Professor of Clinical Psychology (1968), a position he held until his retirement in 1990. Even as a Professor, it took Taylor seven years before he could get a course in clinical psychology established, because Brown was not very supportive. He gave tacit approval but no real support -- personal interview, Taylor, 1995. Alan Forbes (MA Aberdeen, PhD Otago), a senior lecturer from Otago, was appointed to the vacant Chair of Psychology in 1976 and, shared the management of the department with Taylor through the 1970s until 1984, when Ngaire Adcock became the Chairperson. Forbes left Victoria in 1990 into retirement. Taylor has been involved in the running of the NZPsS since its formation as it arose from the original New Zealand Branch of the British psychological Society in 1968. In 1974, he convened a *Social Issues Committee*, which looked a a wide range range of issues, including abortion, delinquency, drug abuse, homosexuality and Maori issues. He was elected a Fellow of the NZPsS in 1978.

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[45] Ibid footnote 45.
[46] Personal interview given by Tony Taylor in 1995.

As discussed in the above section, the first clinical programme in New Zealand was established in Canterbury. Taylor believes that a key factor in its establishment at Canterbury, rather than at Victoria, was due to the clash between the then Director General of the Mental Hygiene Department (Palmer) and Ernest Beaglehole, over the latter's book on Mental Health in New Zealand. Additionally, the Director General did not like Beaglehole's association with Mario Fleischl. In the early days this resulted in few clinical psychologists being trained outside of the Canterbury region (personal interview, Taylor, 1995).

An analysis of the course structure[47] and examination papers[48] at Victoria across the decades from the 1960s to the 1990s shows that the learning paradigm, so strong at Auckland, and to a lesser extent at Otago and Canterbury, never really got a foothold at Victoria. Certainly, operant conditioning was taught, but it took second place to a strong general experimental bias, at least until the mid 1980s.

The emphasis on drive-instinct models, prevalent in the 1960s, dropped off and operant theory started to come in. However, the general experimental thrust did not prevent a wide coverage which included cognitive, health, developmental, social and abnormal psychologies (where this included a psychoanalytic dimension), psychometrics and criminal justice psychology.

Figure 5.11 shows the numbers of theses submitted by Victoria University students across the decades from the 1940s to the 1990s[49]. The production of Masterate theses rises monotonically in the first three decades, seems to flatten in the 1970s, then fall in the 1980s.

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[47] Victoria University of Wellington calendars 1960 - 1995: sighted in the Stack Room of Victoria University of Wellington Library.
[48] Victoria University of Wellington final examination papers in psychology: sighted on level 5 of VUW Library.
[49] Union List of Theses as previously referenced.

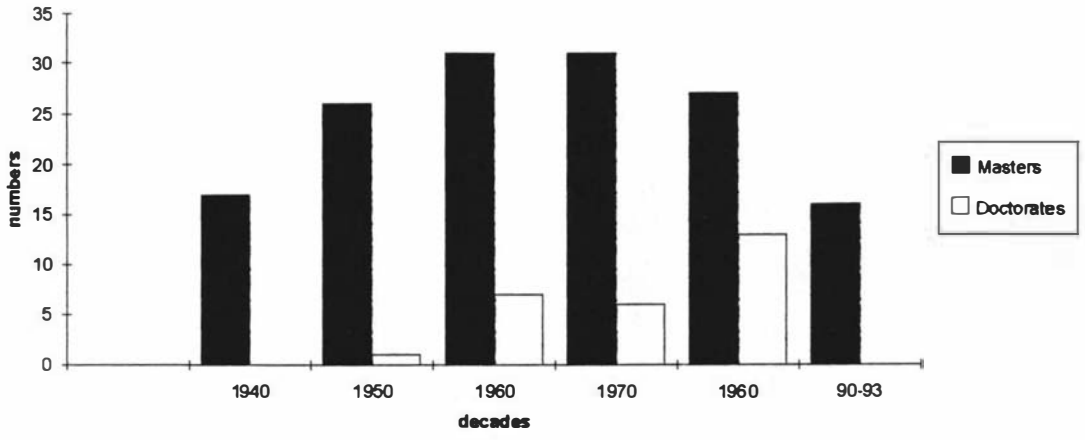

Figure 5.11: The numbers of Masters and Doctoral theses in psychology per decade for Victoria.

The early 1990s output indicates a resurgence. The output in Doctoral theses increases from one in the 1950s to six in the 1960s, but falls back to five in the 1970s. The output rises again in the 1980s, but remained at zero at least until the end of 1993. It would appear from these data that the level of Masterates will at least equal that in the 1980s, whereas the output of Doctorates seems likely to have declined somewhat by comparison with the 1980s. These various trends are not accounted for in terms of either quantity of staff or course offerings, because both rose in this same period.

Figure 5.12 shows the numbers of combined Doctoral and Masterate theses in psychology submitted by males and females across the decades 1940 to 1990 at Victoria. A gender imbalance in favour of males existed right through the first four decades and only in the 1980s did the gender reversal effect take place and, even then, on a much smaller scale when compared with, say, Auckland.

The trend in the 1990s, however, indicates that female graduate students are likely to far outnumber males. It is possible that the trends seen in Figure 5.12 during the middle period of the graph can be explained in terms of the lower numbers of female graduate students in this same period by comparison with other university centres.

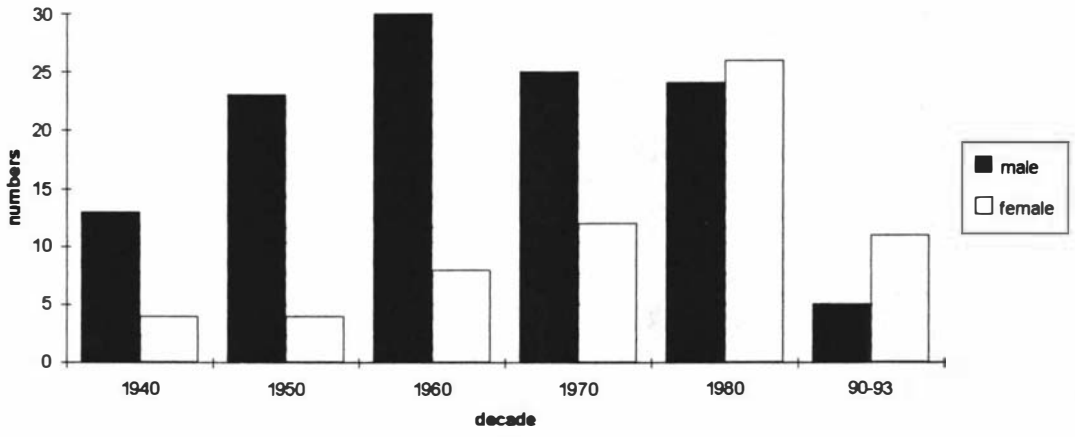

Figure 5.12: Combined Doctoral and Masterate theses in psychology by gender across the decades 1940 to 1990 for Victoria.

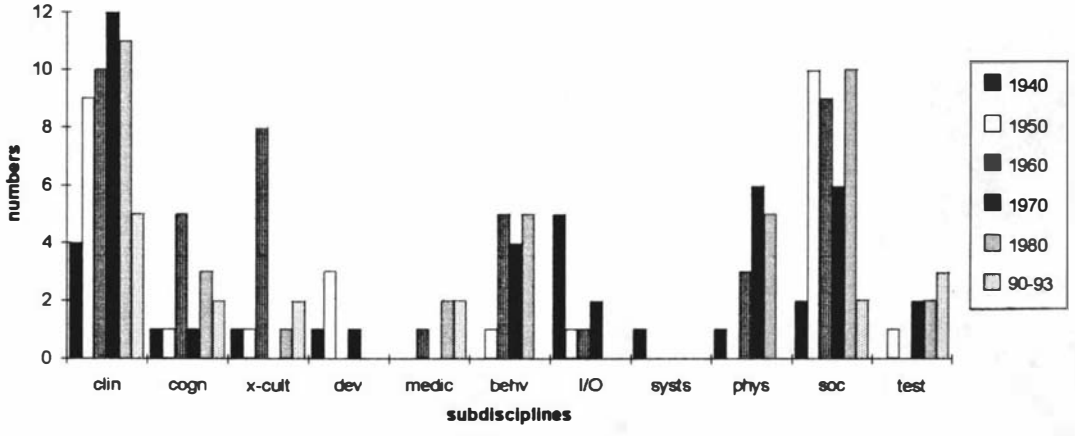

Figure 5.13: The distribution of theses within subdisciplines within psychology at Victoria across the decades 1940 to 1990.

Figure 5.13 shows the distribution of psychology thesis categories at Victoria across the decades 1940 to 1990. Outstanding among these data is the high level of output in the categories of clinical and social psychologies, with the former outstripping the latter. The clinical output is due to the energy shown by Tony Taylor and his colleague Frank Walkey. The output in the social psychology area, too, is no surprise in view of the long-standing thrust in this direction shown right from the earliest days at Victoria, beginning with Hunter, and carried on by Beaglehole and his protege James Ritchie. Of interest is the fact that the dip in the 1970s in social psychology theses coincides with Vaughan's departure for Auckland late in 1967. The other two areas of major focus at Victoria have been behavioural and physiological. The pattern in the behavioural category over this period is quite different to that at Auckland in the same period. At Victoria, many of the theses in this category were related to human learning, and those involving operant schedules related mainly to

human community situations such as psychiatric wards. Of interest is the burst of activity in the cross-cultural category in the 1960s. This had its beginnings with Beaglehole's interest in Maoridom, but was particularly due to the interests and energy of James Ritchie. It is significant that no theses were produced in this category during the 1970s. Ritchie took up his post as Professor of Psychology at Waikato in 1966. Activity in this category has picked up somewhat since, but remains at a low level when compared with its hey day. Cognitive and I/O psychologies have seen similar ups and downs. In the case of the latter, Hearnshaw was the driving force in the 1940s, as corroborated by the peak of activity in that decade. In all other categories, the output of theses has been at a relatively low level, but with a recent surge of interest in the psychometric area. A major implication of all this is that a given student's choice of thesis topic is strongly influenced by staff interests.

In terms of allegiances to Cartesian thought and the Empiricist-Rationalist dichotomy, Victoria has had a markedly different history when compared with the other three original colleges. Hunter, although at first an adherent of Wundt's Structuralism (essentially Rationalist) and hence that orientation to consciousness, soon embraced the empirical method when he confronted the difficulties of the introspective method, and introduced his laboratory course. The focus changed yet again with Beaglehole's appointment, who brought to Victoria a strong anthropological orientation. This offset the harder end of the empiricist thrust, and introduced a socio-cultural bias, some of which was informed by Rationalist thinking. Later, with the appointment of Taylor, the Rationalist element continued in the shape of a psychoanalytically informed clinical programme with an allegiance to the notion of an unconscious that influences conscious choice and action.

THE PRELUDE TO THE NEW UNIVERSITIES: MASSEY AND WAIKATO

In the January of 1962, there existed the four university colleges, as discussed extensively in Chapter 4. There also existed two *branches*, one in Hamilton, an offshoot of Auckland University College, and one in Palmerston North, an offshoot of Victoria University College. These two branches had been set up under pressure from the Department of Education, acting through the Senate of the UNZ. They existed primarily to meet teacher training needs. Most of the academic staff in their respective parent colleges were unfriendly

toward the branches, which were seen as low-status competitors for funds which were regarded by the parent colleges as earmarked for improving staffing and accommodation on the main campuses (Gould, 1988). In fact, the then Vice Chancellor of Auckland University College said of the Hamilton Branch, that it could only be a "mere simulacrum of a University" and benefited only the "few training college students who are genuinely fitted for university studies" (Gould, 1988, page 55).

In addition to the pressure exerted by the Department of Education, there came into being in 1956 a *University for South Auckland Society,* which had some influential support from people in local and national politics. A similar group, calling itself the *Council for the Development of University Education in the Manawatu*, was set up in 1961. Again, this body had influential support, including that from Les Gandar, who became Massey University's first Chancellor, then Minister of Education and finally the High Commissioner in London (Gould, 1988). These bodies were not without opposition from quarters other than the Auckland and Victoria Colleges. The Hughes Parry Committee (Parry, 1959) argued that other alternatives to the branches should have been considered, offering options such as incorporating teacher training within the existing university colleges or "end-on" university training either before or after professional studies. The Hughes Parry Committee was especially concerned about frittering away limited national resources in attempting to provide a university in every major centre that the Department of Education designated.

Although there were many similarities between the two branches (eg, both were in middling size cities a few hours drive from their respective main centres), there were also major differences. For example, the Palmerston North branch was very close to the existing Massey Agricultural College (of effective university college status) having a roll of some 500 students and an impressive research record. Also, there was some degree of complementarity in the programmes of Massey College and the Victoria Branch, where many thought that the two institutions should be merged into one unit (Gould, 1988). In addition, the Palmerston North Branch had, in 1961, some 700 extramural enrolments in addition to its 200 internals (the Hamilton Branch having less than 200 students in all at that point). Finally, it had already been suggested that a School of Veterinary Science be set up in Massey College. At that time New Zealanders had to go to Australia to study as veterinarians.

These factors conspired to the Palmerston North Branch being given priority over the Hamilton Branch for a resolution of the issues. It was clear that one possible solution, that the Branch and Massey College combine as a *Faculty* of Victoria College, was going to be fiercely opposed by Massey College which strongly guarded its autonomy as a teaching institution (Gould, 1988).

Eventually, after much wrangling between the various factions, at the end of 1962, a Bill was passed through the House that established the *Massey University College of Manawatu*, with its first Vice Chancellor as Stewart, the Principal of Massey College. The Principal of the Victoria Branch became the Dean of the Faculty of General Studies, and Professor of Geography. By the January of 1963 the new University College had five Professors and 55 academic staff.

The story with the Hamilton Branch went somewhat more smoothly than was the case at Palmerston North, mainly because the situation of the former lacked the complexities of the latter. However, unlike the Palmerston North Branch, where the parent college (Victoria) had taken a very active role, Auckland University College had not been actively interested (Gould, 1988). But, finally, Auckland University College Council was goaded into bringing resolutions before the University Grants Committee (UGC) in the December of 1963, in which Auckland half-heartedly insisted on its right to have an input in deciding the Branch's future. However, the UGC told Auckland that it was for the UGC to decide. There was a move by some for integration of the Branch and teacher's training college, but opponents to this pointed out that only 40 percent of training college entrants in Hamilton had University Entrance, and that many of even these were not suited to full-time university study. In addition, it was argued that some of the subjects taught in the training college would look out of place in a university calendar, and timetabling difficulties would arise. Eventually, the UGC was swayed away from integration and proposed, instead, association. The UGC proposed, initially, two schools for the new university: *Humanities* and *Social Sciences*, where the latter would include geography, mathematics and psychology, but not other sciences.

A draft Bill for the establishment of a university at Hamilton was approved by the UGC in June of 1963, which established a *University of Waikato* to be operational from 1 January of 1964, but not to take over the staff and

teaching of the Auckland Branch for another twelve months, when the branch would then be absorbed by the University of Waikato. The decision to set up a full-blown university in Hamilton had implications for the status of the University College in Palmerston North. It seemed unacceptable to have the much larger institution at Palmerston North (it was some twelve times the size of the Branch in Hamilton) as a mere college preparing its students for degrees at Victoria, when the Hamilton institution was to have full university status. Thus, at about the time that the University of Waikato Bill was being drafted, another was prepared to convert Massey College into an autonomous university, and on the same date (1 January 1964) as Waikato. A minor difficulty was what the new university should be called (Gould, 1988). Some felt that *Palmerston North*, should be in the title instead of *Manawatu*. Still others opposed the idea of any kind of regional element in the title. In the end, the title was decided upon as *Massey University of the Manawatu*. But this was not to last because, three years later, the title was to change one more time to its present form of Massey University.

MASSEY UNIVERSITY

Once Massey became an independent university in 1964, it never looked back. As Vice Chancellor, Stewart was very energetic and enterprising, and programme offerings increased rapidly, with an annual growth rate of internal student numbers nearly twice the national average for the other universities, and an extramural roll that took off on an exponential growth pattern (Gould, 1988). Also, unlike the other New Zealand universities, Massey enjoyed a relatively untroubled relationship with the UGC.

The foundation Professor of Psychology at Massey was Laurie Brown, an MA from the UNZ and a PhD, London[50]. He was alone in the department for the first three years of his appointment (1964 to 1967). At the end of 1967, Brown left Massey, taking up an appointment as Professor of Psychology at Victoria (see the earlier section on Victoria). In 1968 Yensen took up an appointment as a senior lecturer at Massey, and ran the department alone from 1968 to 1970.

[50] Massey University of the Manawatu calendar 1963/64: sighted in Massey University Library.

George Shoukmith was in the United Kingdom at the time the position of Professor of Psychology came available at Massey in 1970. Alan Crowther of Canterbury sent Shouksmith a letter advising him of the position. Shouksmith applied for the position, and returned to New Zealand for an interview[51]. During Shouksmith's interview for the Chair in Psychology, the then Vice Chancellor (Stewart) made it clear that he wanted Massey's Department of Psychology to emphasise applied psychology. This made Shouksmith highly suited with his I/O background obtained both in the UK and at Canterbury. This focus arose out of Massey's agricultural background, and the then Vice Chancellor made it clear to Shouksmith that he wanted a pragmatic department (personal interview, Shouksmith, 1995).

When Shouksmith took over the Chair at Massey, the facilities in the department were limited and there was only a permanent staff of two. There were only the two 100-level courses, and not enough students were passing these. The interregnum period between Brown's departure and Shouksmith taking over had been a poorly handled, the department having been left without a Chair from 1968 through 1970[52]. In addition, Shouksmith had to contend with what he called "frozen thinking" resulting in a very perceptual-behavioural orientation with no applied experience, and a rigid experimental-theoretical approach. Although Shouksmith had been exposed at Edinburgh to the Behaviourist concepts, he had never lost sight of the cognitive strand, and had never gone overboard with Skinner's ideas. For this reason he ensured that Massey never got swept into pure Behaviourism (personal interview, Shouksmith, 1995).

With his appointment at Massey, Shouksmith felt that he was now able to push his earlier attempts at Canterbury to fruition, and put applied psychology on the map. The Vice Chancellor knew of Shouksmith's involvement in nursing education in Northern Ireland, and he was asked to set up a unit at Massey, teaching psychology to trained nurses. Also, during his job interview, Shouksmith had mentioned a need for sociology at Massey. As a result, a department of Sociology was created, and the VC asked Shouksmith to manage it in addition to Chairing psychology[53]. At Stage two, a social psychology element was introduced, followed by a second unit in social psychology. Later, when the sociology and nursing studies started to come on

[51] Personal interview given by George Shouksmith in 1995.
[52] Ibid footnote 52.
[53] Ibid footnote 52.

stream, the department expanded rapidly. Sociology then became a separate department with its own Chair (mid 1970s), and later still so did Nursing (1977).

Shouksmith soon became involved with the extramural activity. He had had no prior experience of extramural teaching, and Massey was given it because no one else wanted it. In fact, Shouksmith reported that he had been told by his peers, especially those at Victoria whom he suspects did not like the competition, that one could not teach psychology at a distance[54]. Two years later (1973), at a UGC meeting, he forced the decision that the first two years of psychology courses taught in New Zealand would be transferable across universities and that no distinction was to be made between internal and extramural. In its first year, the extramural component was very small (personal interview, Shouksmith, 1995).

Shouksmith found it to be a good discipline writing for extramural courses, because one could not get away with the last minute preparation of a lecture session. A lot of innovative things were carried out within the extramural context as, for example, the home-based laboratory manual. Some of this work came out of the work Shouksmith did at Queens University as a lecturer. Massey's psychology department was the first to offer vacation courses off-campus (the first being down at Cromwell), where people enjoyed having Massey come to them[55]. At that time, there were no third year extramural courses, and students had to study internally at that level. However, in the space of a decade, the growth from Stage I up to Stage III was very rapid once the extramural offering got underway. At the time of interviewing Shouksmith, the Department of Psychology at Massey had not offered the Masterate level extramurally, the main reason being the higher costs resulting from the fees reduction when applying EFTS (Equivalent Full Time Student) formulae. However, this is likely to change with the Masters programme starting to be offered extramurally in 1998[56].

It took Shouksmith three years to get the complete Bachelors degree psychology major up and running. There had never been a Stage III prior to 1973. Beyond this, the first Masters papers started to come in (1974). In fact, the calendars show that, by 1975, Massey was offering a total of twelve

[54] Ibid footnote 52.
[55] Ibid footnote 52.
[56] Personal corespondence from Dr John Podd, Massey University, 1997.

papers at the Masters level. By this time more staff had arrived (eg, Dave Clarke and Kerry Chamberlain). These new people were looking at things in a new way, and under them psychology at Massey became dynamic and outgoing, lifting it out of what Shouksmith termed "the brass instrument approach" (personal interview, Shouksmith, 1995). The rapid expansion of psychology courses at Massey carried its own problems, one of which was external assessment, where some of the new courses were not being taught elsewhere in NZ. Thus, Shouksmith employed Mckellar, Professor of Psychology at Otago, as the external moderator for Massey's entire degree programme. There was no statutory requirement to set this up, but it seemed important to do it in order to maintain credibility.

Through the seventies the growth increased, and toward the end of that period things took off exponentially. Psychology became the biggest department in the social sciences area at Massey, and soon became one of the biggest departments in the university (by 1979, psychology had a staff of seventeen). Shouksmith then started to introduce specialist areas at the Masters level, with a particular emphasis being I/O psychology, which no other university was teaching (personal interview, Shouksmith, 1995).

Shouksmith had never intended to offer a clinical programme at Massey, but Jim Ritchie (then Chair in psychology at Waikato) persuaded him otherwise, pointing out that the North Island needed such a programme[57]. Recall from the previous section that, despite Tony Taylor's efforts, a clinical programme did not come into being at Victoria until the mid to late 1970s, and Auckland had also had its share of problems in this direction in the same period. Thus, Massey set up a clinical programme and, along with this, a joint appointment with Lake Alice, and later with Palmerston North Hospital.

The development of the I/O psychology programme was slower compared with the clinical programme because New Zealand lacked the big industrial base of nations such as the United Kingdom. However, since first establishing I/O psychology at Massey, over the decades of the 80s to early 90s the department of psychology at Massey has secured a number of Government contracts, for example, in conjunction with the DSIR, looking at stress among Prison Officers in the mid 1980s. In addition, the department also worked with the National Airways Corporation (NAC), with whom Shouksmith became a

[57] Ibid footnote 52.

permanent consultant[58]. In 1989 Shouksmith took up the position of Dean of Social Sciences at Massey and, in 1997, he retired as Professor Emeritus in Psychology. He is currently the acting Head of the Academic Aviation Studies Unit at Massey's School of Aviation, the school he helped to establish. Shouksmith has had a long and considerable involvement with the NZPsS. He was President of the Society in 1981/82, and elected as a Fellow in 1982. In 1983, he chaired the *Psychologist Registration Board*.

As mentioned earlier, under Brown, there were only the two 100-level courses in psychology. This changed rapidly with Shouksmith in the Chair, where he introduced 300-level and Honours papers in the year of his appointment (1971). Additionally, and not mentioned by Shouksmith in my interview with him, there was an MSc programme in psychology (there were only four papers available in the MSc) that ran from 1971 through to 1973, when it was replaced by the MA. This followed a four paper-plus-thesis format (still in use at Massey). Provision for PhD studies was offered for the first time in 1975. By 1979, a range of seven 300-level, and fourteen Masters papers were offered in psychology! In this, one sees how important is the size of a department in such expansions. The staff of the department increased from three in 1971 to seventeen in 1979. The growth rate in both staff and courses continued through the 1980s. In 1997 there were 32 academic psychology staff at Massey, making it the largest psychology department of the six New Zealand universities covered by this thesis[59].

An analysis of the examination papers in psychology at Massey over the decades from the 1960s reveals a very wide coverage at all levels, with an emphasis on applied psychology at the 300-level and higher[60]. There appears never to have been a single intense psychological focus at Massey as occurred in some other departments (eg, Behaviourist at Auckland and cross-cultural at Waikato). But the pragmatism as required by the Vice Chancellor at the time of Shouksmith's appointment is very evident. This is not to say that Massey has eschewed theory. This is clearly not true. But theory has been taught with a focus on its practical applications rather than as an entity in itself.

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[58] Ibid footnote 52.
[59] Massey University calendars as previously referenced.
[60] Massey University final examination papers in psychology: sighted in Massey University Library.

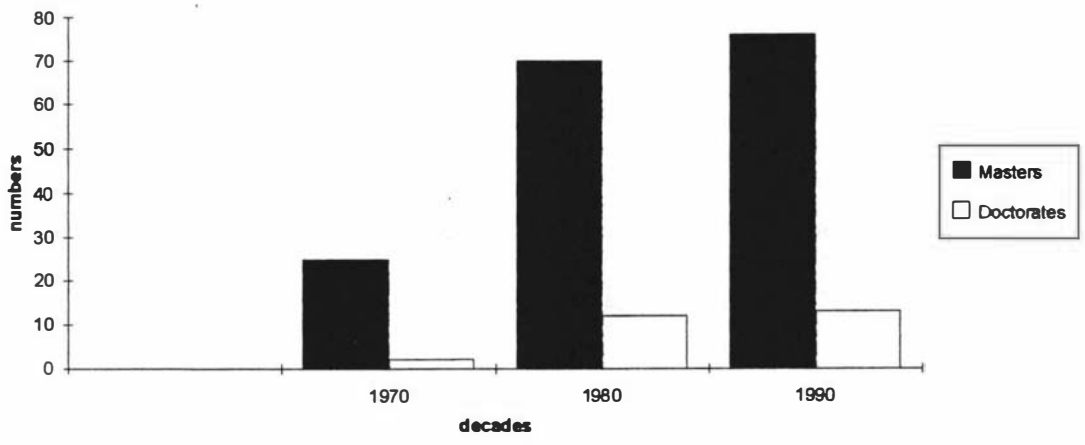

Figure 5.14: The numbers of Masters and Doctoral theses in psychology per decade for Massey.

Figure 5.14 shows the numbers of psychology theses produced at Massey at both the Doctoral and Masters level[61]. As discussed above, postgraduate programmes were not introduced until the early 1970s; thus, no theses appeared in the 1960s. Of note is the fact that both PhDs examined in the 1970s were in the social psychology category, and ten of the twenty five Masters theses in that decade were in the same social psychology category. The output continued to grow in the 1980s. The early 1990 data show a strong preference for social and I/O psychology (see Figure 5.16, below).

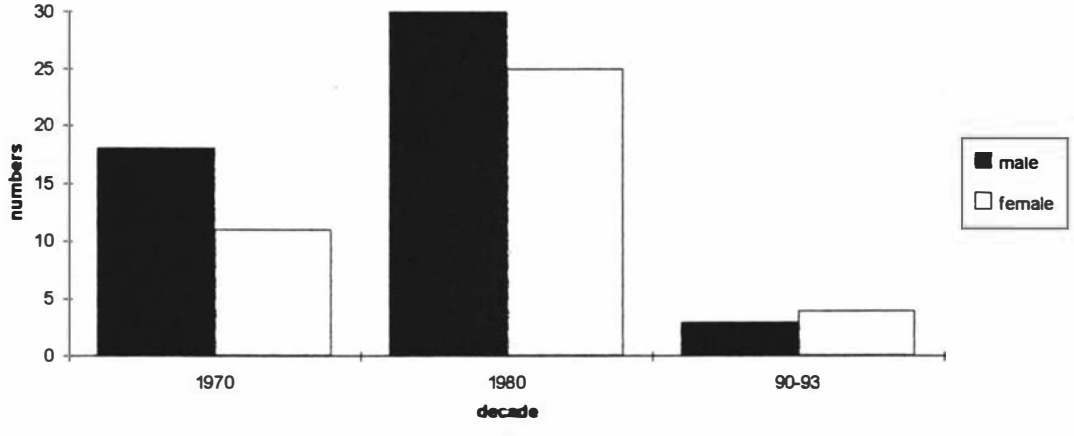

Figure 5.15: Combined Doctoral and Masterate theses by gender across the decades 1970 to 1990 for Massey.

Figure 5.15 shows the numbers of theses produced by male and female students (Doctoral and Masters combined) at Massey across the decades

[61] Union List of Theses as previously referenced.

1970 to 1990. These data show that there has been a reasonable gender balance at the graduate student level from the outset. However, noticeable by comparison with the other universities is the fact that the gender reversal did not occur at Massey until this decade. See Canterbury for comparison, where the gender reversal comes in dramatically in the 1980s. Of the factors of likely influence, a gender imbalance in staff would not have delayed the reversal trend, because the psychology department at Massey had seven female academics in the mid-1980s out of a total of twenty. Even today, by comparison, Canterbury's department of psychology has only four female academics. From these comparisons one can argue that staff gender is not a key variable in the gender reversal effect noted for all universities. This topic will be revisited at the end of this chapter, where the influential variables and other factors will be considered.

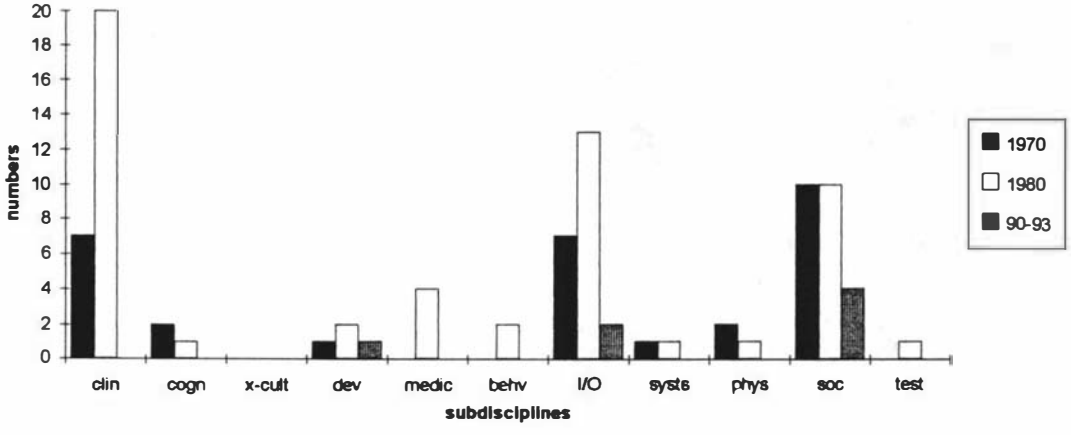

Figure 5.16: The distribution of theses within subdisciplines of psychology at Massey across the decades 1970 to 1990.

Figure 5.16 shows the distribution of combined Doctoral and Masters theses within categories across the decades 1970 to 1990 at Massey. These data certainly corroborate the claims Shouksmith made in my interview with him, in that the clinical, I/O and social psychology categories dominate. However, it is of interest that, to date in this decade, there have been no theses examined in the clinical category. Even bearing in mind the incompleteness of the 1990 data, this is noteworthy in that no less than twenty theses were submitted in this category in the 1980s[62]. By comparison, the output of theses in the other two dominant categories is clearly in growth mode. Of the remaining categories, output has been at a low level, and non-existent in the cross-cultural category. On the issue of cross-cultural psychology, Shouksmith

[62] There are, however, as many currently enrolled in the clinical programme as in the 1980s -- personal communication from Dr John Podd (1997).

made it clear (personal interview, Shouksmith, 1995) that he saw little point in competing with Waikato (a not too distant neighbour) which had had a strong cross-cultural focus from the outset. Some other interesting features of Figure 5.16 are the bursts of output in the 1980s in the medical, behavioural and testing categories. Nothing in my research data can directly account for these effects, but I suspect that it is a function of staff interests. However, with the exception of Auckland (see above), there was a steady decline of interest in the behavioural category from the late 1970s across all the universities, and it had never been a strong focus at Massey. I can only speculate that staff changes and workload were responsible for this effect in the other two categories. It is known to the writer that only one academic carried the psychometric-come-testing workload, and he has now left. Whatever else these data show, they show that a given university psychology department, with its finite resources (staff, time and money) has the choice of either spreading itself thinly across the subdisciplines or focusing on a few. The former seems to have occurred at Canterbury, whereas the latter has occurred at Massey. The choice factor itself seems to come down to the founding Professor's own interests and his/her choice of staff. While George Shouksmith was not the founding Professor of psychology at Massey, he might well have been in that it was he who put his stamp on the department rather than Brown.

THE UNIVERSITY OF WAIKATO

Unlike Massey, the relationship between Waikato and the UGC was somewhat troubled. Disagreements arose on several fronts, but especially on roll growth, funding and the spread of disciplines to be taught at Waikato. In particular, there had been demographic prediction problems (Gould, 1988). At the national level, demographic forecasting had been wildly out in certain respects. A key demographic was population growth and, in the mid 1960s, it was predicted that the population for Hamilton City would reach 292 000 by 1986 ! This was very optimistic indeed. In fact, even in 1996 the population of the urban Hamilton zone is only 129 000[63]. Naturally, Waikato University based its own predictions on these national predictions where, for example, the roll for 1980 had been predicted as 5000. In fact, it reached only 3329.

[63] The 1997 New Zealand Official Year Book.

Throughout the 1960s, doubts persisted as to the viability of Waikato. Although the roll grew from 133 in 1963 to 538 in 1969 (a relatively high growth rate), the absolute numbers were not high (cf. the roll of 2500 at Massey in the same period). One needs to remember that, at that time, the UGC operated on a basis of quinquennial grants, which meant that serious cash flow situations could arise because, across half a decade, significant changes could occur to the parameters that influenced fiscal viability (eg, the cost of living and the cost of capital equipment). The average level of grants in 1965-66 had been $150 000, whereas, in 1969-70 it rose dramatically to $290 000. This worked against Waikato because, at the time when the university came into being, it was not given any input into the negotiations for its own UGC grant. The UGC subsequently admitted to government that it had underestimated the needs of the university at least in the first few years of its operations (Gould, 1988). There was also conflict with the UGC over the university's proposed schools of science and commerce, the UGC ultimately refusing to approve these proposals. A change of UGC Chairperson in 1966 produced a favourable change, and support for science at Waikato. But this came too late, for Waikato had to wait until 1970 before its first science students could be enrolled.

Another important aspect of the turmoil at Waikato was the proposal (initiated by James Ritchie, the Foundation Professor of Psychology at Waikato) for the establishment of a Maori Studies Centre at the University. Outside of the UGC, there was extensive support for this project, including that from the Governor-General who pointed out the scandal of the Maori Scholar, Te Rangi Hiroa (Sir Peter Buck) having to go to Hawaii to pursue his Polynesian studies (Gould, 1988). A formal application was made by the Waikato University Council to the UGC in 1965. At a meeting held early in 1966, there was strong support for the scheme except from the UGC members present who wondered whether the Centre was really a function of a university, and why a *Centre* and not an ordinary teaching department (Gould, 1988). However, the UGC finally gave support to the scheme, but it was subsequently blocked at Cabinet level. This blockage appears to have arisen because Cabinet feared that the establishment of such a Centre (especially in view of its *action research* orientation as proposed by Ritchie) could embarrass Government, and "make the Maori problem worse rather than better" (Gould, 1988, page 74).

Finally, as a political ploy, Waikato included funding for the Centre in its 1970 - 74 bid to the UGC, which body did not make any allowance for this on the grounds that it would be improper to include it when the Centre was still under consideration. When they challenged Government on this issue, University of Waikato supporters were told that Government had approved in full the grant recommended by the UGC. Thus, it was up to the University to spend the grant in what ever direction it saw fit (Gould, 1988). Obviously, to then set up the unfunded Centre would draw funds from other scheduled areas. Between the UGC and Government, these two bodies put Waikato into a clever Catch-22 situation. The Centre was finally launched, without additional funding, in 1972, seven years after it had been proposed!

James Ritchie, Founding Professor of Psychology at Waikato University, was born in Wellington to Australian immigrants from a working class background[64]. He came into contact with Wellington Maoridom as a youth. He taught in Maori schools, and found this experience dramatically different and new for him. He did not start out wanting to be a psychologist, but had a strong need to explain himself to himself and, especially, what his experience with Maori was all about. He thought of himself as a teacher, and went to university to create an intellectual framework for his teaching (personal interview, Ritchie, 1995).

Ritchie knew of Ernest Beaglehole and sought him out in 1951. The Beagleholes' "Some Modern Maoris" (Beaglehole & Beaglehole, 1946) had a strong influence on Ritchie, who feels that it was not a popular book because it was viewed as coming from a "British Colonial detached arms-length viewpoint of the natives"[65]. The Beagleholes had developed a combination of anthropological, sociological and psychological techniques, with a Margaret Mead flavour, Mead being a friend and colleague of the Beagleholes. Sir Peter Buck, in his foreword to the book, expressed doubts about explanations derived from such techniques. But, despite these criticisms, Ritchie was strongly drawn to the Beagleholes' form of analysis, and saw in it a chance to understand and extend his own involvement with the Maori world, and thus joined Beaglehole at Victoria, where he studied for his BA (1952), MA (1954) and finally his PhD (1960) (personal interview, Ritchie, 1995).

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[64] Personal interview given by James Ritchie in 1995.
[65] Ibid footnote 65.

On finishing his PhD, Ritchie took up an award with the Rockefeller Foundation. He went (with Jane Ritchie, his wife and daughter of Ernest Beaglehole) to Harvard which he found an intellectually stimulating environment, having eminent thinkers such as Allport, Murray, Leary, Huxley, Erikson and Parsons teaching there. But Ritchie was particularly influenced by the ideas of Erik Erikson, which he later used as the basis of an undergraduate course at Waikato for about ten years[66]. Ritchie went from Harvard to Columbia University, in New York City (Otto Klineberg was there at that time) and took seminars with Margaret Mead and attended her evening continuing education course. From Columbia, the Ritchies went to the London School of Economics (personal interview, Ritchie, 1995).

Around the time the Chair in Psychology was to be established at Waikato, Ritchie applied for the Chair in Psychology at Massey, but Laurie Brown got the job (1964). Ritchie then applied for the Foundation Chair at Waikato and got it. At that same time, he had been offered a Chair in psychological anthropology at Queens University in New York, but chose Waikato because of the challenge it presented. He asked himself how often is one to get the opportunity in one's life to be in on the ground floor not only in setting up a new department in psychology but in setting up a new university. There was the opportunity to come to a university that its founding documents suggested was destined to be radical. The 1960s were the years of radicalism, as for example in the riots at Sorbone and the Berkeley Campus massacre (personal interview, Ritchie, 1995).

Ritchie reports[67] that he was moving between the two polarities of establishing a department and working at the change agent concept. Ritchie brought with him to Waikato a desire to make psychology an instrument for social change. He saw his appointment as an opportunity to build a department dedicated to that ideal. Ritchie saw both Hunter and Beaglehole as having this concept – the university and the community, where they could work in a partnership for change. Ritchie had clear ideas about his approach at Waikato. He wanted psychology involved in a practical dialogue with the community because, for example, there was at that time no dialogue between psychologists and economists (personal interview, Ritchie, 1995).

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[66] Ibid footnote 65.
[67] Ibid footnote 65.

Waikato's Department of Psychology was consciously constructed by Ritchie along the lines of the Harvard *social relations* model, and was not much influenced by the British approach in either anthropology or psychology. Ritchie was interested in Tolman's views, especially in relation to the Belief Value Matrix (BVM), an aspect of the general theory of action. The BVM was where the person and the cultural influences came together to form a fundamental set of beliefs[68].

Ritchie wanted to create something at Waikato that was different from the approaches at the existing universities. He felt that changing social conditions required a different type of social science education, where psychology was the key, and he was determined to provide this. He declared on his application for the Professor's job that he would be bringing a strong social psychology orientation. Ritchie also felt that applied psychology had languished in New Zealand, as, for example, the training programmes in clinical psychology at Victoria and Auckland. Thus, Ritchie wanted Waikato to be social, applied, radical, interdisciplinary and confront what psychology had to do with Maori people, especially their mental life (personal interview, Ritchie, 1995).

One of Ritchie's radical ideas was to do away with final examinations, and replace them with internal assessment appropriate to the work done. He was especially against the idea of a student simply turning up at an examination and, due to a brilliant memory, seeming to do well. There was a need for a more valid and reliable relationship between learning and testing. He was not, however, allowed to dispense with final examinations, and acknowledged there were problems with internal assessment. For example, assignments can build up toward the end of the year, and may be as fearsome and stressful as a final examination[69].

To Ritchie, 1970 seemed to be a watershed year, when the university looked at staff dissatisfaction (eg, over portability). Psychology was no longer constrained by the school structure, staff increased, and there was an increase in courses to a full psychology major[70].

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[68] Ibid footnote 65.
[69] Ibid footnote 65.
[70] Ibid footnote 65.

For some time, Ritchie and Barry Parsonson (ex Canterbury) managed the department between them. Parsonson brought with him a Behaviourist slant. This low staffing level was acceptable initially because student numbers were low for some time. The University initiated a big recruitment drive to convince the community to send their children to Waikato, but low numbers continued for some time (personal interview, Ritchie, 1995).

In developing his new department, Ritchie identified three phases:

1964 - 1971: a founding phase covering the first five years, in which a twenty-two paper degree was offered from the beginning.

1972 - 1983: a growth phase in which there were three separate streams -- personality, social and experimental-physiological. From 1972, the action-research oriented Centre for Maori Studies was increasingly occupying Ritchie's time and interest.

1984 and on: a third phase, where the staff turned against the phase two concept, because teaching became too onerous once student numbers increased, leaving no time for research. In addition, there was a departure from a belief in the area of personality, particularly because people like Walter Mischell were challenging it theoretically. Thus, the programme was revised.

Also, from 1984, Ritchie ceased to be HoD, and his involvement with the Maori Centre had increased as the work expanded and as a result of the Lange Government's revival of Treaty issues. The eventual outcome in psychology was the abandonment of the original three-stream structure, which was replaced by a heterogeneous amalgam of courses with no central curriculum concept, but with greater similarity with courses in other university departments (personal interview, Ritchie, 1995).

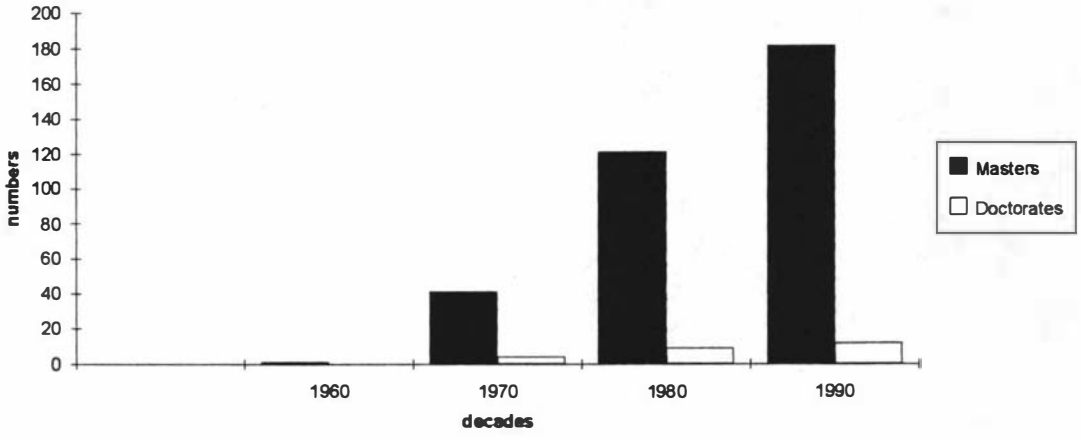

Figure 5.17: The numbers of Masters and Doctoral theses in psychology per decade for Waikato.

Figure 5.17 shows the numbers of theses in psychology produced by Waikato across the decades 1960 to 1990[71]. The growth in Masterates was rapid across these decades. For 1990, the trend is clear. By comparison, the production of Doctoral theses in psychology has been relatively low at Waikato. Only three were produced during the whole of the 1970s, and five in the 1980s.

As would be expected from the strong socio-cultural focus set by James Ritchie, all of these Doctoral theses with one exception (reinforcement schedules) were in line with this focus. This, in part, may account for the relatively low output in that there may be more deterrents to this kind of high level research by comparison with, for example, work on operant schedules with pigeons. It looks as though this low key trend in Doctoral theses is continuing into the 1990s.

[71] Union List of Theses as previously referenced.

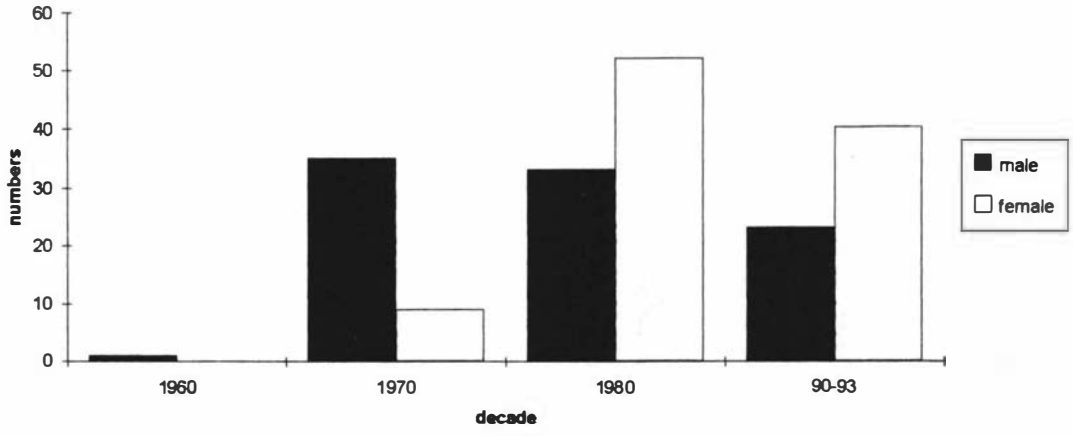

Figure 5.18: Combined Doctoral and Masterate theses in psychology by gender across the decades 1960 to 1990 for Waikato.

Figure 5.18 shows the numbers of theses produced by male and female students (Doctoral and Masters combined) at Waikato across the decades 1960 to 1990. These data strongly support the perception that I formed of Waikato's Department of Psychology (as for example in the interviews with Ritchie) that it has consciously fostered a climate of equality across cultures and genders. For this reason, the gender reversal effect of the 1980s has been as strong at Waikato as in any other department considered in this chapter, where theses produced by females exceeded those produced by males by a very large fraction. This trend is clearly continuing into the 1990s, especially at the Doctoral level where, in the 1980s, of the five Doctoral theses produced, four were from female candidates. However, the small size of the sample suggests caution.

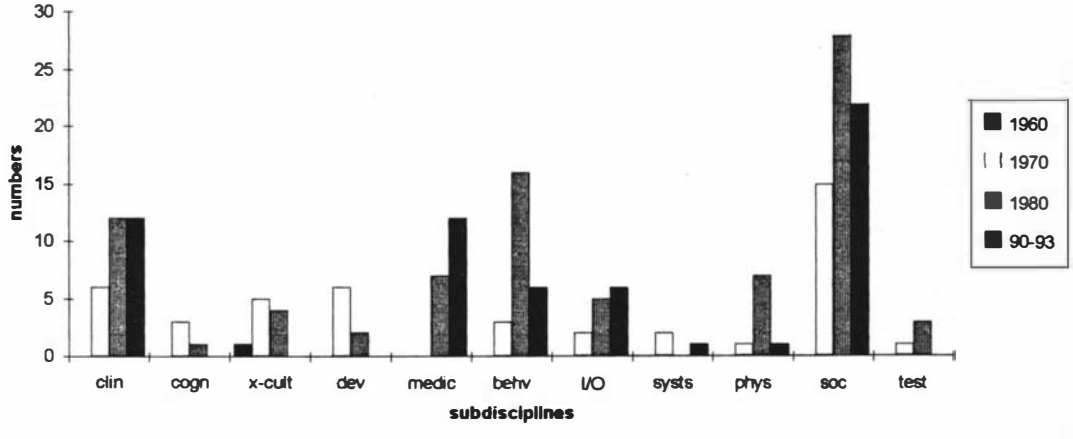

Figure 5.19: The distribution of theses within subdisciplines within psychology at Waikato across the decades 1960 to 1990.

Figure 5.19 shows the way in which theses have been distributed across the subdisciplines of psychology (Doctoral and Masterate combined) at Waikato across the decades 1960 to 1990. The most dominant category in these data is that of social psychology, where this trend is clearly continuing. This would hardly be surprising in view of the department's consistent focus across the decades. The clinical category, too, has been an area of focus and looks as though it is headed for an increased output during the 1990s. The same appears to be the case for the medical category. An analysis of the medical category theses shows that most are focusing on the relationship between medical factors (eg, a stroke) and factors in the community (eg, care factors in recovery). This emphasis is in line with the social and community psychology focus at Waikato. However, this particular group of theses would be wrongly categorised as social psychology because their prime focus is medical. This same issue arises when we consider the cross-cultural category. One might expect this to be more dominant than it is, but it appears to have peaked in the 1970s and fallen off in the 1990s. However, what seems to have happened, at least in part, is that the specifically cross-cultural issues have become part of a wider social psychology focus. Thus, some theses that are correctly categorised as social psychology have within them a cross-cultural (usually bicultural: Maori-Pakeha) content. As might be expected from Ritchie's declared views (personal interviews, Ritchie, 1995) and the overall focus of the department, the behavioural category has never dominated at Waikato. Among the remaining categories, interest has been less dominant and even sporadic, implying a dependency on certain specific staff members and their interests. However, I/O psychology seems to be emerging as a definite focus for the 1990s.

An analysis of the course offering at Waikato[72] shows that in the 1960s, the offering was quite small, where the MA/M Phil was offered for the first time in 1968. There were some dramatic changes in 1970 in terms of quantity of papers offered, the introduction of course codes and a change of name of the programmes from Bachelor of Arts (BA) to Bachelor of Social Science (B Soc Sci) at the undergraduate level, and the change from MA to M Soc Sci along with the introduction of a Doctor of Philosophy (D Phil) degree. This latter marks Waikato out from the other New Zealand departments of psychology

[72] The University of Waikato calendars 1964 - 1995: sighted on level 5 of Rankine Brown building of Victoria University of Wellington Library.

which use the PhD. A B Phil programme was offered from 1972, which appears to equate with the B Hons offered at the other centres. Of interest, a course in Humanistic Psychology was offered for the first time at Waikato in 1971, well ahead of its time for the New Zealand scene. In keeping with the thrust at Waikato, a course on the psychology of women was introduced in 1977, the first and only of its kind in New Zealand for a long time. In the early 1980s, courses in community psychology started to appear. Again, as in the case of humanistic psychology, Waikato led the field with its introduction in 1987 of a course in transpersonal psychology at the Masters level. Waikato is still the only centre to offer such a course in New Zealand.

Massey and Waikato, as the two most recent departments of psychology, have had none of the philosophical history of the four original departments. This has had a dual effect. It has facilitated a freedom to develop their own unique brand of psychology, but at the same time it has robbed them of that grounding in the philosophical underpinnings of psychology. With Shouksmith's long-standing applied orientation (I/O and clinical) it is not surprising that Massey developed a strong applied bias. However, Massey never embraced Behaviourism nor hard-core Empiricism. While an interest in mind and consciousness has never been a focus at Massey, it has encouraged the development of research and courses in discourse analysis and the second cognitive revolution, both of which demand attention to conscious processes and to Cartesian dualism. Waikato's socio-cultural focus came directly out of Ritchie's background at Victoria and his overseas travels and contacts. Philosophically, Waikato has leaned toward a Rationalist position far more so than any of the other five departments. This has shown up in a number of its courses, but especially in courses on humanistic and transpersonal psychology.

THE SUBDISCIPLINES AND THE GENDER REVERSAL EFFECT

Now I wish to return to the gender reversal effect discussed in relation to the production of psychology theses in various subdisciplines. It was noted that this effect varied across New Zealand universities, and also that it did not appear to be a function of the gender ratios in academic staff at any given university. It appears more likely that this effect is a function of academic

research interests, along with nationwide and local societal trends prevalent in any given decade.

The gender reversal effect discussed in this thesis occurs across the 1970s and 1980s, where the trend of female dominance in thesis production continues into the 1990s. While there are wide differences in this effect across the six New Zealand university departments of psychology across the decades, it can be seen in all of them. However, this effect is more pronounced in some departments than others.

Table 5.3: Numbers of theses produce by male and female Doctoral and Masters students in psychology across departments and across decades.

Department	1950s	1960s	1970s	1980s	1990- 1993
Auckland					
male	4	32	99	80	30
female	0	6	48	95	42
Canterbury					
male	22	43	65	54	29
female	1	8	42	83	51
Massey					
male	0	0	18	30	3
female	0	0	11	25	4
Otago					
male	2	4	9	30	10
female	0	0	5	31	11
Victoria					
male	23	30	25	24	5
female	4	8	12	26	11
Waikato					
male	0	1	35	33	23
female	0	0	9	52	40

Table 5.3 shows that the gender reversal effect is minimal in some departments, in the two decades under discussion (1970 - 1989). For example, at Otago, Massey and Victoria the effect is barely noticeable. In fact, at Otago and Massey, a reversal of the ratio of male to female theses has only just begun in this present decade. The effect is most dramatic at Canterbury and Waikato. As the effect is most pronounced at Canterbury, I shall use these data as a basis for analysis. The effect at Canterbury is seen best in a graphical plot as shown in Figure 5.20.

This figure shows the numbers of combined Masters and Doctoral theses in psychology submitted at Canterbury, by gender, across just over four decades (1950 to 1993). At Canterbury, in the 1960s, female graduate

students were very much in a minority. In the 1970s the ratio of male to female graduates underwent a progressive change as the numbers of females rapidly increased. By the end of the 1970s females were starting catch up. In the 1980s a complete reversal of this ratio occurred with females well outnumbering males.

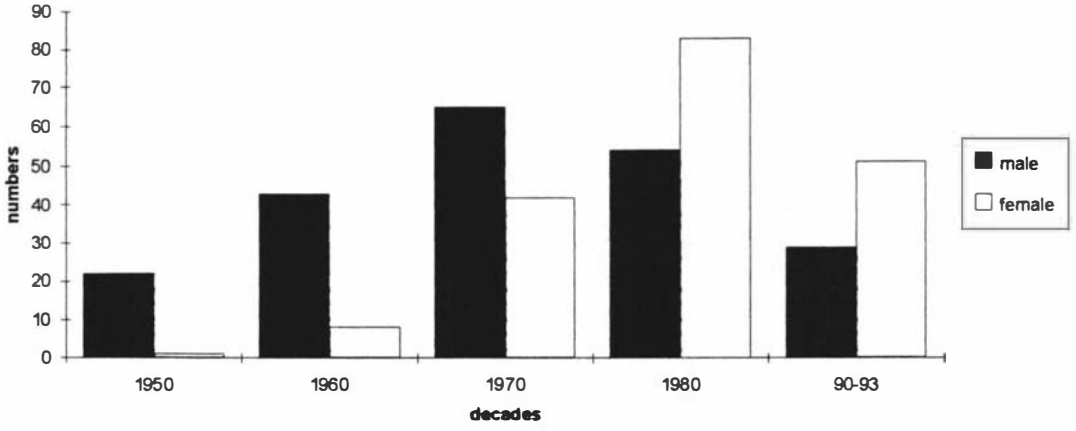

Figure 5.20: Combined Doctoral and Masterate theses in psychology by gender across the decades 1950 to 1990 for Canterbury.

The most current Union List of Theses was published in 1993, where the next issue is not due out until the end of 1997. Thus, the data in Figure 5.20 are very incomplete for this decade. Despite this, there can be little doubt that the noted trend for the 1980s is clearly continuing in this decade, with female graduate students approaching twice the number of males.

As interesting and dramatic as this effect is, the data in Table 5.3 and Figure 5.20 are coarse measures. These data collapse Doctoral and Masters theses and collapse the range of psychological subdisciplines in which theses were produced. In looking for candidate causes, it might be that the gender reversal trend observed in the production of psychology theses is simply a reflection of a global trend across many disciplines in New Zealand universities. However, an analysis of the ratios of male to female university students in New Zealand over the past few decades shows a wide disparity across disciplines[73]. For example, as recently as 1995, male graduates well outnumbered female graduates in disciplines as disparate as religion-theology, commercial-business, the natural sciences and engineering. In medicine and law, the numbers were roughly equal, and only in the humanities and in the social sciences do we see females significantly outnumbering males. The ratios in the 1970s and 1980s show that, indeed,

[73] The New Zealand Official Year Book: Section 9.3 on Tertiary and Continuing Education.

female students have increased across all disciplines, but that the increases have been insignificant in some disciplines (eg, engineering) and substantial in others (eg, psychology). Also, the figures do not show a dramatic gender reversal, but rather a steady change in ratios. In support of this, a survey conducted for the New Zealand Vice-Chancellors' Committee[74] showed that, for the first time, in 1994 women university graduates outnumbered men. The survey showed that this trend has continued where, in 1996 there were 905 more women graduates than men. However, a more global trend is not the cause of the gender reversal effect in psychology discussed here. It is more specific to the trend seen in the social sciences.

Accepting that the gender reversal effect for psychology graduates may be an intensified effect of the more global effect seen in the social sciences, we are still left with explaining why it is so intense in some psychology departments and why there is so much variation across departments. As regards to the across department variation, a possible candidate might be a variation in the ratio of male to female academic staff. That is, there may be some relationship between that ratio and the reversal seen here. An analysis of the ratio of male to female staff across the six departments does show such a variation[75]. For example, Waikato has had, from its early days, a reasonable balance between male and female staff members where, today (1997[76]), ten of the twenty eight staff are female. At the other end of this spectrum is Canterbury, where very few females have been employed in its psychology department . Today[77], at Canterbury, there are four female staff members out of a staff of 22. The situation varies between these two extremes in the other departments, with the ratio of female to male staff being: Otago, 7 to 21; Massey, 10 to 32; Victoria, 5 to 18 and Auckland 7 to 26[78]. (As an aside, while some of these ratios appear to recognise female academics, they hide the fact that very few women currently hold senior academic positions in psychology departments in this country. I will return to this issue in Chapter 6.)

If we consider a spectrum of ratios of female to male academic staff, then Canterbury anchors the extreme low end. Yet this same department has also

[74] A survey entitled "Graduate Employment in New Zealand", conducted in 1996 by the Standing Committee on Graduate Employment of the New Zealand Vice-Chancellors' Committee
[75] Calendars for New Zealand universities.
[76] University of Waikato Calendar for 1997.
[77] University of Canterbury Calendar for 1997.
[78] Relevant university calendars.

produced the most extreme display of the gender reversal effect. Thus, staff male-female ratios is not a likely candidate of the reversal effect discussed here. It appears more likely the case that this effect is some function of academic research interests, along with a differential attraction to subdisciplines between males and females.

The gender reversal effect highlighted here is a fact, and is worthy of investigation, as is the whole phenomenon of the shift in male-female university student ratios in New Zealand[79] and the impact of this on many disciplines, and not just psychology. However, as further exploration of the gender reversal effect is outside the scope of this present thesis, I must leave this interesting matter for future research.

SURVEY OF NEW ZEALAND PSYCHOLOGIST ACADEMICS

The main purpose of this survey was to capture the views of a large number of psychologist academics, currently teaching in a New Zealand university setting, on a wide range of issues, and to establish a profile of this sample of academics. The survey was not designed to yield results which could be analysed in a highly quantitative fashion. It yields a set of interesting data, which gives an overview of the qualifications, backgrounds, academic status, theoretical orientation and opinions on psychological issues. In this sense, it is in line with the general thrust of this thesis, and is valid historical information about this modern era of psychology in this nation.

The survey aimed to gather data in a variety of categories that were considered relevant to an understanding of the present state of academic psychology in New Zealand universities and, hopefully, give some indication of future directions. Although the New Zealand polytechnics are providers of degree level education in psychology, they are relatively new to this field and their individual departments of psychology are still very small by comparison with university departments. For example, at the time of conducting the survey (1996), the School of Psychology at The Open Polytechnic of New Zealand had only four full-time academic staff. By comparison, the smallest university department of psychology has 18 full time staff. For this reason of

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[79] Ibid footnote 75.

size and because this thesis deals primarily with the university system in New Zealand, the polytechnics were excluded from this survey.

The categories which were considered to be of importance to the aims of this survey included:

Personal profile: Basic demographic information on each academic such as gender, age, formative years, qualifications and current academic position.

Personal dynamics: Data which give an insight into each academic's motivations, philosophical orientation and views in relation to psychology.

Theoretical orientation: Data which show where each academic is positioned along certain theoretical axes. The questions in this category were influenced by a study conducted by Coan (1979).

Views on psychology: The views of each academic on the subject matter, fields of enquiry and contributions made by psychology.

Views on influencing factors: Data about the influence of earlier psychological perspectives on the subsequent development of psychology, along with the influence of certain factors (eg, societal, economic and political) in shaping modern psychology.

Views on the topic of consciousness: Data which indicate where academics stand on the issue of consciousness as a topic within psychology.

It had been the intention to make comparisons between universities, and the survey forms were structured to enable me to identify a given university department. However, one department head refused to allow the department to be identified in any analysis. While all other departments had given this permission, a series of comparisons between the named departments would have readily identified the "anonymous" department, so small and close knit is the psychological scene in New Zealand. Thus, my initial approach had to be modified. While I will identify certain university departments in certain aspects of their academic activities and characteristics, I will not make large scale comparisons. Additionally, the *raw* data (Appendix C) are those collapsed across all six departments.

The participants in this survey were all university academics holding positions within the psychology departments of New Zealand Universities. The participants were all those academics who responded to the mailed out survey. The mailing list was generated from the lists of full time staff supplied to the researcher by the head of each department, where every listed academic was sent a survey form to complete. All participants were volunteers and, by taking part in the survey, signalled their acceptance of the conditions of the research.

After pilot work, the questionnaire comprised twelve pages, the first being a cover page which included an explanation of the purpose of the research, a statement about the participant's rights, details of the researcher's supervisors and the details for the form's return. The remaining eleven pages were divided into sections A through G, where the questions within each section carried a number, and subset questions a lower case letter in brackets. Section A gathered information of a generic nature which enabled me to generate a profile of the respondent and the sample at large. Section B explored the respondent's motivating dynamics, philosophical orientation in regard to psychology, and views about psychology as a science. Section C considered the respondent's theoretical orientation. The questions in this section were based on those used by Coan (1979) in his *Psychologists: Personal and Theoretical Pathways*, and enabled the researcher to establish the general theoretical orientation of each respondent and the sample at large. Section D looked at views about the subject matter, fields of enquiry and the contributions made by psychology. Section E examined views on the influencing factors in the development of psychology, while section F sought views on the topic of consciousness. Section G invited respondents to provide comments about any aspect of the issues raised in the survey form. The piloting of this form showed that it took, on average, twenty minutes to complete. (Appendix B contains a copy of the questionnaire.)

An initial approach was made by letter to the HoDs of the psychology departments of *The University of Auckland, University of Canterbury, University of Otago, Massey University, Victoria University of Wellington* and *The University of Waikato*, who were asked to supply a list of all full time staff currently employed in their departments. This approach was taken rather than rely on calendar information which, in the period the survey was conducted

(October through December 1996), was almost certain to be out of date as far as staff listings were concerned.

A survey form and reply-paid envelope was sent to every listed academic with a response deadline. Upon the expiry of this deadline, a letter was sent to every listed academic giving thanks where a response had been made, and making a plea for a response where one had not been made, in an attempt to increase the response rate.

A spreadsheet was created using *Microsoft Excel (version 4.0)*, one for each university, on which survey data were captured and analysed. For each response category, the responses were summed and the averages were calculated. No other form of statistical analysis was undertaken. For those few categories which did not yield a numerical response, the analysis was textual. A composite spreadsheet was then created in which the data from separate departments were collapsed (see Appendix C).

The presentation below is intentionally informal in making no pretence to follow the format of a formal report of an investigation (eg, introduction, method, results and discussion). This approach is in line with the rest of this dissertation. All values given below are for the combined responses for all six university centres. The total number of academics surveyed was 148 (this excluded visiting lecturers or fellows and laboratory or clinical assistants), where the average department size was 24.7 academics, with a range from Victoria at 18 to Massey at 32. Across all six centres, the total number of respondents was 74, giving an overall response rate of 50.0%. The average response rate for individual university departments ranged from 27.0% for Auckland to 68.0% for Canterbury. These poor response rates means that the data presented below need to viewed with caution, because there is no way of knowing how representative the final sample is.

The categories below follow the order of questioning used in the survey in terms of section, question number and question part. In the case of data which are simply the sum of responses (eg, that for gender), they are described textually. Where the data take the form of a frequency distribution (eg, age ranges), a graphical presentation is used. Where the data are the result of the respondent making a selection on a scale (eg, in Section B

regarding reducibility to the laws of physics), the average composite response is given.

Of those who responded 53 were male and 21 female. Thus, male responses outnumbered female responses by over 2 to 1. Although the full comparisons cannot be made for the reasons explained above, there is a wide variation in this parameter across all six departments. For example, from Canterbury the responding sample was 14 males and 1 female, whereas from Waikato it was 9 males and 8 females.

Figure 5.21 shows the frequency distribution of age for this composite sample, where few occupy the lowest and highest age ranges, with many (46 or 62.0%) falling between 41 years and 55 years.

In terms of formative years, most respondents gave New Zealand as the land of their birth. Smaller numbers gave Europe or North America, and very few Australia or Asia, there being no other reported categories. In terms of ethnicity, 70 of the total number of respondents gave their ethnicity as European, with 3 giving Maori and 1 as Chinese.

Age:

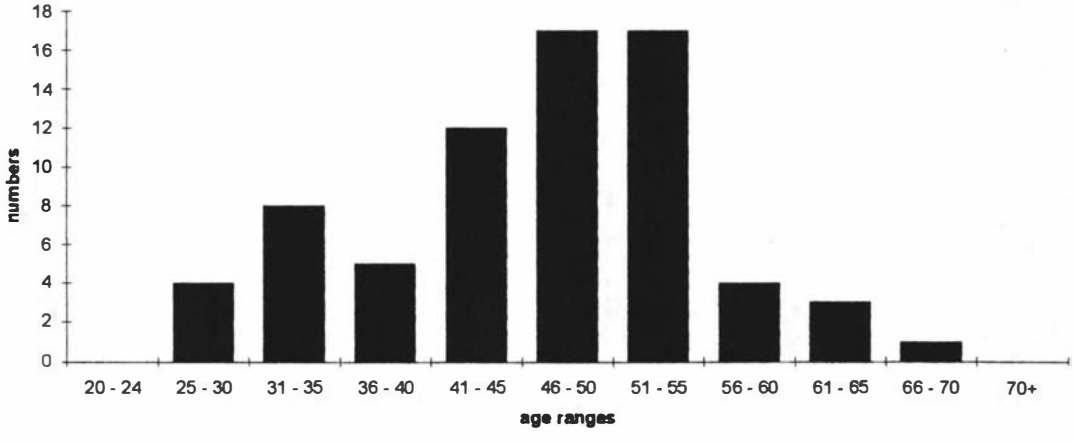

Figure 5.21: Age distribution among surveyed academics in psychology departments in New Zealand universities.

Just over two thirds (nearly 68.0%) of the sample held a Doctorate in psychology, the remainder holding a Masters degree (32.0% of the sample). Nine staff claimed to hold post Doctoral qualifications. This category was not defined in the survey form and only in two cases was it defined by the respondents (as a Doctor of Science). In response to questions about

position held within their department, 40.5% reported holding lecturer-assistant lecturer positions, 35.1% as senior lecturer, 9.5% as associate Professor (includes Readers) and 13.5% as Professor.

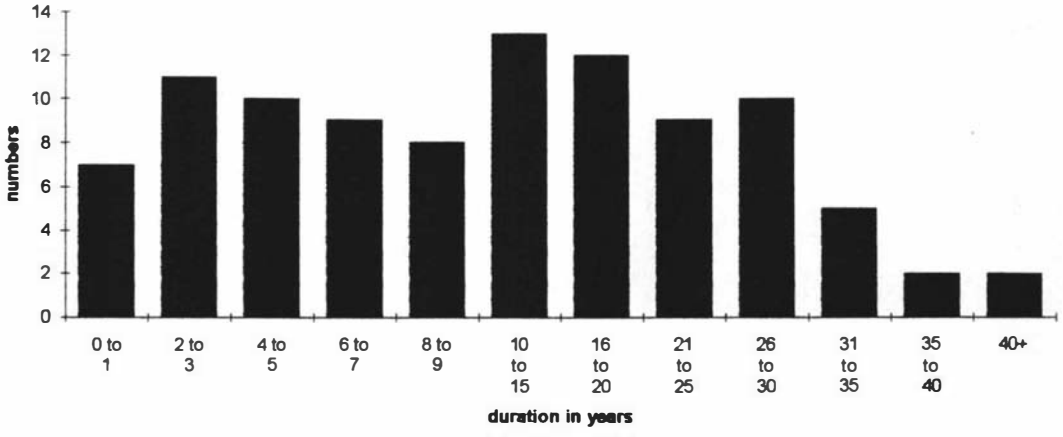

Figure 5.22: Distribution of time in years spent in an academic position at a New Zealand university.

Figure 5.22 shows a frequency distribution of duration of appointment of the surveyed academics. The distribution is relatively flat between 2 to 30 years, with a small peak in the 10 - 20 years category. The distribution falls off sharply beyond 30 years in appointment.

In response to questions about membership of New Zealand professional bodies, the data show that the largest category (20.0%) is ordinary membership of the New Zealand Psychological Society. Nine respondents are members of the New Zealand College of Clinical Psychologists, and one academic is a Registered Psychologist.

In relation to career choice, the greater number gave an interest in human nature (51.0%) and the scientific challenge of psychology (54.0%) as their reasons. A desire to help others also figured, as did being an agent for change. Very few (6.7%) gave status as their reason.

The profile of this sample shows a number of interesting factors. Males well outnumber females (2.5 to 1). Most of the sample's ages are between 41 and 55 years of age, most are New Zealanders by birth and of European descent, with nearly 68% holding a Doctorate, and where academic rank appears to follow the distribution typical of New Zealand university departments (as analysed in the 1996 calendars). Time in appointment varies widely, and professional membership does not appear to be of overriding importance in

view of the fact that only 20.0% of the sample are ordinary members of the New Zealand Psychological Society, and only one academic registered as a psychologist. The reasons given for choosing a career in psychology were dominated by its scientific challenge and an interest in human nature, with a desire to help others and seeing psychology as an agent for change taking a lower priority. Conferred status is a reason of low importance for this sample.

In regard to their philosophical orientations, the sample disagreed that human behaviour is reducible to the fundamental laws of physics. By far the greatest proportion (50.0%) of the sample claimed to have an Empiricist orientation, with lesser numbers choosing Materialist (31.0%) and rationalist (28.0%), and with very few regarding themselves as dualists (6.7%). In response to specific questions, the sample held a neutral view in regard to the mind-body problem, the nature-nuture controversy and the possibility of objectivity in psychological research.

The sample as a whole did not feel that human behaviour is reducible to the laws of physics. This is of interest in that the sample also chose Empiricism as the dominant philosophical orientation (50.0%), with 31.0% aligning themselves with philosophical Materialism. This implies that while many in the sample see a material substrate for human nature that is best researched with an empirical approach, they seem to reject the naive reductionism of those of a purist physicalist persuasion (eg, Churchland, 1988). This is corroborated by the sample's neutrality on the mind-body issue, seeing neither pole as having dominance. Again, this ambivalence occurs in response to the question about nature versus nuture (basically innatism versus environmentalism). However, the sample clearly sees psychology as a science, although not with any forcefulness. This lack of strength of conviction seems underscored by the ambivalence in regard to the possibility of objectivity in psychological research. Thus, although a science, the level of achievable objectivity in, say, the physical sciences, is not seen as possible in psychology by this group.

The data relating to Section C on theoretical orientation are detailed in Appendix B. The results for this section do not yield any startling orientations, where the scores for each factor are fairly close to the median value of the range. This cannot be explained simply as a *regression to the mean* effect, because the way the scores for individual questions combined would not

facilitate this (eg, the first factor was the sum of scores of questions 1, 8 and 13). Also, when analysing the within-university scores across the range of questions, and when analysing the across-university scores within a given question, there emerges a wide variation in score. The results presented here show the composite effect across all six centres, which happens to have yielded rather average results. However, there are considerable individual differences between university centres in terms of orientation. For example, the respective factor scores for Auckland and Waikato (along with the composite value for all six departments by way of comparison) are as shown in Table 5.4 below.

These scores show distinct differences between these two centres and between them and the composite score. For example, Auckland shows a stronger factual orientation than Waikato. Likewise, Auckland shows an elementaristic orientation whereas Waikato shows a more holistic orientation. Finally, Auckland shows a quantitative orientation, whereas Waikato shows a more qualitative orientation.

Table 5.4: A comparison on orientation factors between Auckland and Waikato Universities

Factor	Auckland	Waikato	Composite
factual v theoretical	9.4	8.1	7.6
impersonal causality v personal will	11.0	9.8	9.6
behavioural v experiential	3.0	2.4	2.5
elementarism v holism	7.7	5.1	6.2
biological v environmental	0.9	-1.0	2.4
empiricism v rationalism	9.0	8.4	8.3
quantitative v qualitative	9.7	6.8	8.3

In Coan's view (Coan, 1979) these differences form a coherent overall difference in that factual-elementaristic-quantitative go together, as do theoretical-holistic-qualitative. At root, these clusters align with the fundamental dichotomy that pervades psychology -- that of the Empiricist versus Rationalist split (see the discussions in Chapter 2 of this thesis). These differences and their directions are not really surprising in view of the overall thrust of the two universities, where Auckland has had a decidedly experimental orientation and Waikato a socio-cultural one for some time now.

An implication of these differences is that, despite differences in individual staff teaching and research interests within a given university department, there is a cohesive departmental orientation which seems to have been sustained across decades.

In response to questions about views on psychology, and in particular the favoured paradigm, many of the sample chose the cognitive paradigm (28.0%), with a somewhat lesser number choosing the learning-behaviourist paradigm (18.9%). Much smaller numbers selected from the remaining paradigms, with only one choosing psychoanalytic. The strong favouring of cognition by this sample is in line with the growth of cognitive science. On opinions about psychology, the sample agreed that psychology has confirmed more than common sense, has made a significant contribution to understanding individuals and society, and is an agent for change. The sample disagreed that psychology is the all-embracing social science.

In exploring the sample's views about the value and acceptability of Milgram's series of "obedience" experiments, just over 50.0% of the sample felt that they served a useful purpose. However, 25.0% felt that this series of experiments should not have been permitted. Only 15.0% felt that these experiments should be permitted today. Very few felt that the end purpose of these experiments justified the means to that end. An interesting gender difference emerged in the analysis of these data. For males and females respectively, 17.0% and 62.0% felt that the series should not have been permitted, 72.0% and 28.0% felt that a valuable purpose had been served, 6.0% and 5.0% felt that the end justified the mean, and finally 21.0% and 5.0% felt that such studies should be permitted today. Thus, for this sample, males seem much less bothered by the ethical implications of research such as Milgram's than do females.

The questions based on Milgram's obedience studies attempted to explore the sample's views about the relationship between the contributions that psychology as a science can make and the ethical considerations of such research. Milgram was driven by his personal horror at events that occurred in concentration camps during Hitler's regime, in which he wondered how seemingly decent people could come to commit such horrific acts of inhumanity (Milgram, 1963). Sadly, he discovered that they could as long as they perceived an authority figure that must be obeyed. Despite the

importance of Milgram's findings, such studies would not be permitted today in virtually any university department in the world. Overall, the sample believes that while such studies made a valuable contribution, many have reservations about whether they should have been permitted, with a much larger proportion of females holding this view. What is one to make of these results? Basically, that while a certain set of actions may have an end that could be regarded as valuable, the means to obtaining that end is repugnant, with a greater percentage of females adhering to this view compared to males.

In exploring the sample's views on the influencing factors in the development of psychology, where five key earlier perspectives were defined, the sample held neutral views in regard to Structuralism, Functionalism, the Gestalt and Psychoanalytic schools. However, they viewed Behaviourism as important. It is difficult to know whether this response was based on a real knowledge of the influence of these earlier perspectives, or was a regression to the mean in the absence of real knowledge. If the latter, then this effect did not emerge in the case of Behaviourism. In regard to the former, it is unlikely that of the younger members of the sample few would have extensive knowledge of schools of thought such as Functionalism. Overall, this set of questions was probably misguided in that it demanded a level of knowledge that is probably absent in many modern psychologists unless they happen to have a special interest in psychology's historical dimensions. But, assuming some general level of ignorance in this sample, the results indicate the power of the Behaviourist school over the *minds* of psychologists!

The sample's views on various influencing factors were sought with respect to the emergence and development of psychology. The sample held neutral views in regard to structuring a better social order, socio-economic factors, political factors and university departmental politics. I was not surprised by this ambivalence overall, but was surprised in regard to it in relation to departmental politics. If my researches for this thesis have shown me anything consistent, then it is that the influence of the political dynamics operating within a given psychology department has had a significant effect on the development of that department. Conversely, the sample regarded as important the philosophical position taken by key theorists, the emulation of the physical sciences, the search for truth-understanding and academic ambition-aspiration. The sample regarded religious beliefs as unimportant.

In the final section of the survey, views were sought in regard to the concept of consciousness, where respondents were asked to rate each topic along a scale ranging from no importance to great importance. Regarded as important by the sample were the topics of human consciousness and its evolution. The sample held a neutral view about altered states of consciousness, and regarded a transpersonal dimension of human nature as unimportant. These are encouraging findings because, as a topic, consciousness has had bad press for a number of decades now, especially with the attack made on the concept by the Behaviourists in the time of Skinner (1972). This has changed only very recently, where there is emerging a renewed interest in this topic, not just by psychologists, but in a multi-disciplinary fashion involving disciplines as far apart as quantum physics and anthropology, as seen so clearly in the conference *Towards a Science of Consciousness II* , held in Tucson, Arizona, April 1996[80]. It takes time to counter the devastating effects of a well orchestrated attack such as that made by Watson (1924), then Skinner (1972), on the topic of consciousness. But it does seem that, at last, consciousness is a concept given a second lease of life by psychologists.

Section G of the survey form gave respondents an opportunity to express views on any aspect of the issues raised in the survey form. Very few took this opportunity. Of the few that did use this section, some pointed out the flaws that they perceived in the survey instrument, and others made positive comments about the usefulness of the survey. No respondent used the section to make additional points about the issues raised in the survey. From the general lack of responses in this section, it appears that the survey form acted as an adequate instrument to capture views on a wide range of topics.

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[80] The Tucson Conference was first held in 1994, and became possible because of the shift in viewpoint among academics and researchers in regard to the topic of human consciousness. The writer attended the second Tucson conference.

Appendix A: Prominent academics interviewed in regard to the developments in departments of psychology in New Zealand in the modern era.

Dr Ngaire Adcock: Former Chair of the Department of Psychology at Victoria University of Wellington. Interviewed in her home in Wellington in February 1996.

Mrs Betty Bernardelli: Former Lecturer in Psychology at the University of Otago between 1948 and 1962 , and Lecturer in Psychology under Professor Barney Sampson at The University of Auckland. Interviewed at her home in Auckland in November 1995.

Professor Mike Corballis: Presently Professor of Psychology at The University of Auckland. Interviewed at his home in November 1995.

Mr Harry Love: Former Director of Psychological Services in the Department of Justice (now Corrections) in Wellington. Interviewed at his home in Wellington in October 1995.

Mr Jim Pollard: Presently Reader in the Department of Psychology at The University of Canterbury. Interviewed in his offices in November 1995

Professor Barney Sampson: Former Professor of Psychology at The University of Auckland. Interviewed at his home in Auckland in November 1995.

Professor George Shouksmith: Professor Emeritus at Massey University. Interviewed in his offices in October/November 1995.

Professor Ken Strongman: Presently Professor of Psychology at the University of Canterbury. Interviewed in his offices in November 1995.

Professor Tony Taylor: Former Professor of Clinical Psychology at Victoria University of Wellington. Interviewed in his home in Waikanae in October 1995.

Professor James Ritchie: Former Lecturer in Psychology at Victoria University College between 1953 and 1964 under Professor Beaglehole, and Foundation Professor of Psychology at The University of Waikato. Interviewed at his home in Raglan in July 1995.

Appendix B: The survey instrument used in this thesis to capture data on a wide range of issues from New Zealand psychologist academics

A SURVEY OF NEW ZEALAND ACADEMICS IN THE FIELD OF PSYCHOLOGY

This survey is being conducted as a part of Ph.D Research entitled: ***The Mind of a Nation: A Philosophical and Historical Critique of Psychology in New Zealand,*** where the researcher is Peter A Jackson, Ph.D candidate with the Department of Psychology, of Massey University, New Zealand.

The study explores the relationship between psychology and its parent, philosophy, within the New Zealand context, from the late 1800s to the present day. The issue of consciousness will run as a thread through this research.

You are encouraged to complete this survey because it is the belief of the researcher and his supervisors that the data gathered here will make a contribution to an understanding of the development of psychology in New Zealand, and may throw some light on its future direction. The survey questionnaire should take 20 minutes of your time to complete.

If you consent to take part in this research, you have the right to:

- refuse to answer any particular questions
- withdraw from the study
- ask any further questions about the study that occur to you during your participation
- provide information on the understanding that it is completely confidential to the researcher and his supervisors. All survey information is collected anonymously, and it will not be possible to identify you in any reports that are prepared from the research

The researcher's supervisors are:

Dr John Podd: phone (06) 350 4135
email J.V.Podd@massey.ac.nz

Dr Gus Habermann: phone (06) 350 4135
email G.M.Habermann@massey.ac.nz

both of the Department of Psychology, Massey University, Palmerston North, New Zealand

Please return your completed questionnaire by 31 October 1996, sending it to:
Peter Jackson
17A Riverside Drive
Lower Hutt
NEW ZEALAND **PLEASE USE REPLY PAID ENVELOPE**

Please answer the following questions as honestly and as accurately as you can. Most questions require only a tick in the appropriate box or the circling of a number (please use a black or blue inked pen)

SECTION A: *In this section of the survey, I am gathering information of a generic nature which will yield a profile of you as an individual and of the survey sample at large.*

1. GENDER: **Male** ☐ **Female** ☐

2. AGE (In years)

20 - 24 ☐	**41 - 45** ☐	**61 - 65** ☐
25 - 30 ☐	**46 - 50** ☐	**65 - 70** ☐
31 - 35 ☐	**51 - 55** ☐	**70+** ☐
36 - 40 ☐	**56 - 60** ☐	

3. IN REGARD TO THE LAND OF YOUR FORMATIVE YEARS (early childhood to adolescence), PLEASE SUPPLY THE INFORMATION REQUESTED BELOW:

(a) The land of my birth was: .....

(b) My ethnicity is: .....

(c) The predominant culture
in my childhood years was: .....

(d) Other information relevant to this question:

4. HIGHEST QUALIFICATION HELD

B.Hons	☐	**Masterate**	☐
Doctorate	☐	**Post Doctorate**	☐

5. FOR YOUR HIGHEST QUALIFICATION PLEASE STATE:
Year of award: .....
Awarding University:
.....
Thesis topic:
.....
.....

Name of chief supervisor:

.....

6. POSITION CURRENTLY HELD

Research assistant	☐	**Associate Professor**	☐
Lecturer	☐	**Professor**	☐
Senior lecturer	☐	**Faculty Dean**	☐
		Visiting fellow	☐

Other .....

7. TOTAL TIME SPENT IN ACADEMIC POSITIONS (In years)

0 -1	☐	**8 - 9**	☐	**26 - 30**	☐
2 - 3	☐	**10 - 15**	☐	**31 - 35**	☐
4 - 5	☐	**16 - 20**	☐	**35 - 40**	☐
6 - 7	☐	**21 - 25**	☐	**41+**	☐

8. IN RELATION TO PROFESSIONAL BODY MEMBERSHIP, PLEASE TICK THE APPROPRIATE BOXES:

A registered psychologist ☐

A Member of the New Zealand Psychological Society ☐

A Fellow of the New Zealand Psychological Society ☐

A Member of the New Zealand College of Clinical Psychologists ☐

A Fellow of the New Zealand College of Clinical Psychologists ☐

A Member of the New Zealand Royal Society ☐

A Fellow of the New Zealand Royal Society ☐

Other:.....

SECTION B: *In this section I am exploring issues such as motivating dynamics, orientation and views about psychology as a science.*

1. PLEASE INDICATE WHAT DREW YOU TO A CAREER IN PSYCHOLOGY (you may tick more than one box):

An interest in human nature ☐
A desire to help others ☐
The scientific challenge ☐
The status it confers ☐
Becoming an agent for change ☐
Other reasons:

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

2. ALL HUMAN BEHAVIOUR (PHYSICAL, AFFECTIVE AND MENTAL) IS REDUCIBLE TO THE FUNDAMENTAL LAWS OF PHYSICS (please circle the number which seems to you most appropriate):

not at all 1 2 3 4 5 in every respect

3. THE PHILOSOPHICAL ORIENTATION YOU MOST SUBSCRIBE TO IS (you may tick in more than one box):

Empiricist ☐ Rationalist ☐
Materialist ☐ Idealist ☐
Monist ☐ Dualist ☐
Other: .....

Note: the above orientations are defined as:

Empiricism	**all knowledge comes via sensory apparatus**
Rationalism	**knowledge is accessible by reason alone**
Idealism	**that mind lies behind external reality**
Materialism	**all that exists is matter or is dependent on matter**
Monism	**that there is one and only one substance**
Dualism	**that there are separate mental and material substances**

4. FOR YOU, THE MIND-BODY PROBLEM IS AN ISSUE OF (please circle the number which seems to you most appropriate):

no importance 1 2 3 4 5 great importance

5. IN REGARD TO THE NATURE-NURTURE CONTROVERSY YOUR BELIEF IS THAT HUMAN DEVELOPMENT IS DETERMINED (please circle the number which seems to you most appropriate):

wholly by nature 1 2 3 4 5 wholly by nurture

6. IN REGARD TO WHETHER OR NOT PSYCHOLOGY IS A SCIENCE, YOUR VIEW IS (please circle the number which seems to you most appropriate):

Not at all 1 2 3 4 5 in every respect

7. IN REGARD TO OBJECTIVITY IN PSYCHOLOGICAL RESEARCH, YOUR VIEW IS (please circle the number which seems to you most appropriate):

Not at all possible 1 2 3 4 5 possible at all times

SECTION C: *In this section I am exploring your theoretical orientation. For each of the statements listed below, circle the response which most expresses your opinion, where the symbol key is:*

SD = strongly disagree
D = disagree
? = cannot say
A = agree
SA = strongly agree

1. A science is likely to progress most rapidly if researchers devote themselves primarily to factual information gathering rather than engaging in speculation or theory building.

SD D ? A SA

2. Human behaviour is characterised in all aspects by lawful regularity and thus, in principle, it is completely predictable.

SD D ? A SA

3. All behaviour, except for a few simple reflexes, is learned.

SD D ? A SA

4. Individual human differences are governed to a high degree by heredity.

SD D ? A SA

5. All the concepts used in psychological theory should be explicitly definable in terms of measurable operations.

SD D ? A SA

6. Human behaviour is governed to a considerable extent by inborn predispositions.

SD D ? A SA

7. It is best to define *perception* in terms of stimulus-response relationships, rather than in terms of internal non-public events.

SD D ? A SA

8. Theories should consist mainly of inductive generalisations based on observation.

SD D ? A SA

9. Human actions are just as causally determined as other physical events.

SD D ? A SA

10. In the long run, researchers can achieve most if they devote each individual study to a specific, circumscribed problem.

SD D ? A SA

11. Psychological theory could benefit greatly from more extensive use of mathematical models.

SD D ? A SA

12. The primary goal of psychologists should be the explanation of observable behaviour, rather than the explanation of conscious events.

SD D ? A SA

13. Most of the important landmarks in the history of any science are empirical discoveries, not theories.

SD D ? A SA

14. Our most important information in psychology has been obtained by well-controlled causal experiments.

SD D ? A SA

15. Many of the most important relationships in psychology can be revealed only by complex kinds of statistical analyses.

SD D ? A SA

16. In scientific writings, psychologists should either avoid making statements about conscious phenomena, or attempt to express these in terms of physical conditions and events.

SD D ? A SA

17. Higher mental processes are largely products of learning.

SD D ? A SA

18. Many of the behavioural differences between men and women are a function of inherent biological differences.

SD D ? A SA

19. All personal choices are causally determined.

SD D ? A SA

20. A good indicator of the maturity of a science is the extent to which its explanatory principles can be stated in a precise, quantitative form.

SD D ? A SA

SECTION D: *In this section I am exploring your views about what you regard as the subject matter, fields of enquiry and contribution of psychology.*

1. THE PSYCHOLOGICAL PARADIGM OF MOST INTEREST TO ME IS (tick only one box):

Learning-Behaviourist ☐
Physiological ☐
Developmental ☐
Cognitive ☐
Psychoanalytic ☐
Humanistic ☐
Transpersonal ☐
Other (please state): .....

2. FOR EACH OF THE STATEMENTS LISTED BELOW, CIRCLE THE RESPONSE WHICH BEST EXPRESSES YOUR OPINION, WHERE THE SYMBOL KEY IS:

SD = strongly disagree
D = disagree
? = cannot say
A = agree
SA = strongly agree

(a) Psychology has done more than simply confirm common sense:

SD D ? A SA

(b) Psychology has made a significant contribution to the understanding of individuals and society:

SD D ? A SA

(c) Psychology is a force for societal change:

SD D ? A SA

(d) Psychology is the all-embracing social science of which all other social sciences are but a subset:

SD D ? A SA

3. Certain experiments have been conducted in the past that would no longer be permissible, despite extremely valuable knowledge having been obtained. For example, in social psychology, Stanley Milgram's well known series of experiments which explored ***obedience*** by using genuine volunteer subjects who took part in a *learning* experiment in which the subject taught the learner (a confederate actor) word pairs by means of electrical shock.

IN REGARD TO MILGRAM'S OBEDIENCE EXPERIMENT I BELIEVE (More than one box may be ticked):

It should never have been permitted ☐
It served a valuable purpose ☐
As a means the end justified it ☐
It should be permitted today ☐
Other comments you would care to make:

_____

_____

_____

_____

SECTION E: *In this section I am exploring your views on the influencing factors in the development of psychology.*

1. BELOW ARE FIVE BRIEFLY DEFINED KEY PERSPECTIVES OF EARLIER PSYCHOLOGICAL THOUGHT. IN TERMS OF THEIR OVERALL INFLUENCE ON THE DEVELOPMENT OF PSYCHOLOGY, GIVE EACH A RATING BY CIRCLING THE NUMBER THAT YOU THINK IS MOST APPROPRIATE:

***(a) Structuralism*: Proposed by Titchener as a natural science of the Mind and having the same role in psychology as anatomy has in the biological sciences.**

no importance 1 2 3 4 5 great importance

***(b) Functionalism*: Developed by James then Angell, the focus is on the processes and operations of the Mind (not content-structures) as captured by the *stream of consciousness* notion.**

no importance 1 2 3 4 5 great importance

***(c) Behaviourism*: Developed by Watson and further developed by Skinner, the focus is on externally observable behaviours and Mind is of little or no importance.**

no importance 1 2 3 4 5 great importance

***(d) Gestalt*: Developed by Wertheimer, Koffka and Kohler, its focus is on innate mental mechanisms where mental laws determine perception (eg, the *phi* phenomenon).**

no importance 1 2 3 4 5 great importance

***(e) Psychoanalytic*: Developed by Freud, the focus is on the unconscious aspect of Mind, with its processes and the psychic structures they operate through and are mediated by.**

no importance 1 2 3 4 5 great importance

2. IN RELATION TO THE EMERGENCE AND SUBSEQUENT DEVELOPMENT OF PSYCHOLOGY, RATE EACH OF THE FOLLOWING STATEMENTS BY CIRCLING THE NUMBER THAT YOU THINK IS MOST APPROPRIATE:

(a) The philosophical positions taken by key theorists, have been of

no importance 1 2 3 4 5 great importance

(b) Attempting to emulate the physical sciences was of

no importance 1 2 3 4 5 great importance

(c) The search for truth-understanding has been of

no importance 1 2 3 4 5 great importance

(d) The desire to structure a better social order has been of

no importance 1 2 3 4 5 great importance

(e) Socio-economic factors have been of

no importance 1 2 3 4 5 great importance

(f) Political factors have been of

no importance 1 2 3 4 5 great importance

(g) Religious beliefs have been of

no importance 1 2 3 4 5 great importance

(h) University departmental politics have been of

no importance 1 2 3 4 5 great importance

(i) Academic ambition and aspiration have been of

no importance 1 2 3 4 5 great importance

(j) Other (state, then rate): .....

no importance 1 2 3 4 5 great importance

SECTION F: *In this section I am seeking your views about the topic of consciousness and what I regard as related issues. Rate each item by circling the number that you think is most appropriate.*

AS TOPICS IN PSYCHOLOGY

1. Human consciousness is of:

no importance 1 2 3 4 5 great importance

2. Altered states of consciousness are of:

no importance 1 2 3 4 5 great importance

3. The evolution of human consciousness is of:

no importance 1 2 3 4 5 great importance

4. The possibility of a transpersonal dimension, that is beyond the physical, affective and cognitive aspects of human nature, is of:

no importance 1 2 3 4 5 great importance

SECTION G: In this section you are invited to give your comments about any aspect of the issues raised in this survey. If necessary, please continue your comments on a separate sheet.

Appendix C: Spreadsheet showing the composite data gathered in the survey of New Zealand academics

Section A

gender		age		land of birth		qualifications	
male	53	20-24	0	Africa	0	B Hons	0
female	21	25-30	4	America	11	Masterate	15
		31-35	8	Asia	3	Doctorate	50
		36-40	5	Australia	3	post Doctorate	9
		41-45	13	Europe	18		
		46-50	18	New Zealand	39	**position held**	
		51-55	17			res assist	0
		56-60	4	**ethnicity**		lecturer/asst lect	30
		61-65	4	Chinese	1	senr lecturer	26
		66-70	1	European	70	assoc prof	7
		70+	0	Maori	3	prof	10
						dean	1
						vis fellow	0
				time in position		**prof mem'ship**	
				0 - 1	4	registered	1
				2 - 3	8	MNZPsS	15
				4 - 5	7	FNZPsS	8
				6 - 7	7	MNZCCP	9
				8 - 9	7	FNZCCP	0
				10 - 15	10	MNZRS	6
				16 - 20	9	FNZRS	2
				21 - 25	8		
				26 - 30	7		
				31 - 35	4		
				36 - 40	2		
				40+	1		

Section B

career motivation		philosophical orientation	
human nature	38	empiricist	37
to help	18	materialist	23
science	40	monist	11
status	5	rationalist	21
change agent	13	idealist	6
		dualist	5

Note: for the following questions a Likert scale was used, where:
strongly disagree = 1
disagree = 2
neutral = 3
agree = 4
strongly agree = 5

Note: these values are medians.

human behaviour is reducible to the laws of physics	2
the mind-body problem is important	3
nature rather than nuture determines human development	3
psychology is a science	4
objectivity in psychological research is always possible	3

Section C

Note: a Likert scale was used as in Section B on all twenty questions in this section. The factor *biological v environmentalism* is a composite of two opposing factors as used by Coan and, thus, required the use of negative values.

factor	quest nos	median	max range	means	orientation
factual v theoretical	1 + 8 + 13	9	3 - 15	7.6	theoretical
impersonal causality v personal will	2 + 9 + 19	9	3 - 15	9.6	impersonal
behavioural v experiential emphasis	12	3	1 - 5	2.5	experiential
elementarism v holism	10 + 14	6	2 - 10	6.2	neutral
biological v environmentalism	4 + 6 + 18 - 3 - 17	1	-7 to +12	2.4	biological
empiricism v rationalism	5 + 7 + 16	9	3 - 15	8.3	rationalist
quantitative v qualitative	11 + 15 + 20	9	3 - 15	8.3	qualitative

Section D

Note: for the questions on **opinions** regarding psychology a Likert scale was used as in Section B, where the values given are medians. The other values are numbers of responses.

paradigms			opinions			Milgram	
learning-behavioural	14		common sense	4		not permitted	22
physiological	8		significant contrib	4		valuable	44
developmental	4		societal change	4		justified	4
cognitive	21		all-embracing science	2		permitted	12
psychoanalytic	1						
humanistic	4						
transpersonal	2						

Section E

Note: a five-point Likert scale was used with a range from "no importance = 1" to "great importance = 5" The values given are medians.

perspectives			**statements**	
structuralism	3		phil positions of key theorists	4
functionalism	3		search for truth	4
behaviourism	4		better social order	3
gestalt	3		socio-economic factors	3
psychoanalytic	3		national politics	3
			religion	2
			psych dept politics	3
			staff ambition	4
			emulating science	4

Section F

Note: a Likert scale was used as in Section E. These values given are medians.

topics in psychology	
human consciousness	**4**
altered states of consciousness	**3**
evolution of human consciousness	**4**
transpersonal dimension	**2**

CHAPTER 6: NEW ZEALAND PSYCHOLOGY: AN OVERVIEW AND THE FUTURE

In this final chapter I draw some conclusions in regard to the development of psychology in New Zealand. I will review the historical developments covered in Chapters 4 and 5, making some comparisons across departments of psychology, highlighting certain trends and offering tentative explanations. A following section briefly discusses where academic psychology is presently at in New Zealand, and speculates on where it might be heading as we move into the twenty first century. Staff gender and thesis production are singled out as topical issues. Then I look at the new providers of academic psychology, such as the polytechnics and private providers, who have more recently come onto the scene. Finally, I return to the issue of consciousness, where I attempt to see what role it has played in the development of academic psychology in New Zealand, and its importance as a topic for the future of psychology.

A RETROSPECT AND SOME CONCLUSIONS

The development of New Zealand academic psychology has been the outcome of a complex mixture of British then North American thinking and influence. There has been very little, if any, Continental European influence. In the early days of New Zealand psychology, when it was developing within the womb of philosophy, the formative influence was almost wholly British, where the Chairs of philosophy were British Dons. Somewhat later, nearer to the time when psychology was beginning to free itself from philosophy, there came in a North American influence. There is no fixed point at which this occurred. Rather, it varied across the four original university colleges. One might want to argue that the earliest evidence of this new influence occurred at Victoria due to the friendship between Hunter and Titchener. However, it is a mistake to regard this as a truly North American influence, because Titchener was an avowed disciple of Wundt. The then dominant North American theme in psychology was the Functionalism that stemmed out of the thinking of James, and so was an opponent of Wundt's thinking. However, Hunter did visit Cornell and was strongly impressed and influenced by the experimental approach in vogue there. This was quite different to the approach taken by Hunter's contemporaries in the other three university colleges. Considerably later still, a truly North American influence took hold

and consisted in part of the importing of Behaviourism (at that time that of Watson but, later, that of Skinner). There is little doubt that Behaviourism has held sway on these shores well beyond its rightful time. It appears to have hindered developments in neuroscience and physiological psychology. It likewise hindered thinking on consciousness. In fact, consciousness has been abysmally treated if not ignored until very recently. But Behaviourism was only a part of the North American influence. Also, in part, it consisted of the experimental work being done by such as Lashley, then later Hebb. This line of work and thinking was imported by Sampson, initially at Canterbury, but later at Auckland. It is rather interesting that it has been at Auckland that these two strong strands of Behaviourism and experimental neuropsychology have flourished side by side. Since the emergence of psychology as an autonomous discipline within New Zealand academia, the British influence steadily waned, but left a strong allegiance to British Empiricism, flavoured by Kiwi pragmatism. Nowadays, most undergraduate and postgraduate psychology texts are written by North American authors, and courses are shaped by North American theory and practice. Over all, New Zealand has been an importer of psychology, a follower rather than a leader, a consumer rather than a producer.

Also worthy of mention in this retrospective is the fact that there was a time when New Zealand undergraduate and graduate psychology students were exposed to something of the history of psychology, including its philosophical underpinnings. This trend was there from the start, even when psychology was being taught within departments of philosophy. Many of the texts used then emphasised the way in which psychology developed, and students were expected to have a good understanding of the discipline's origins and philosophical underpinnings. Such courses seem to have waned during the late 1970s through the early 1980s. With a few notable exceptions today, little emphasis is given to these aspects of psychology in undergraduate and postgraduate courses in New Zealand. Perhaps this simply reflects a global trend, where the *immediate* rules thinking and the past is regarded as unimportant. Perhaps it also says something about the New Zealand psyche with its here-and-now, pragmatic focus, coupled with the pressure that our present socio-economic dynamics place on tertiary education (deliverers and consumers alike) with its user-pays basis in which the dollar is all important, and understanding history is viewed as a luxury.

AN OVERVIEW OF THE DEVELOPMENTS OF ACADEMIC PSYCHOLOGY IN NEW ZEALAND

Chapters 4 and 5 have shown that the history of academic psychology in New Zealand spans the emergence of the discipline, as defined in Western European terms, up to this modern era. Thus, we are hardly newcomers to the discipline, being involved in its development from the outset. However, this is not to say that New Zealand has been an innovator in the discipline. In fact, quite the reverse where, in the main, New Zealand has largely been an importer and consumer of psychological theory and practice. This was suggested by St. George (1987) and can now be backed up more substantially.

At the time psychology got started at Otago (late 1800), it was taught under the auspices of philosophy. While this acted to protect the nascent discipline, it also served to hold back its eventual autonomy. A variety of factors came into play at Otago, where key ones were the overbearing influence of the Presbyterian Church, possessiveness and obstructiveness on the part of various Chairs of Philosophy and, later on, the power of the Medical School at Otago. Thus, although academic psychology was first seen at Otago, it gained its autonomy first of all at Victoria, and had to wait till 1964 for its freedom at Otago.

Although psychology first operated within the embrace of philosophy at Victoria, there was none of the turmoil or tensions as at Otago and, under Thomas Hunter, psychology soon found its champion thence its autonomy. In this regard, it is likely that Hunter's later position as Principal of Victoria College aided this process. At Canterbury and Auckland, although again there was an absence of the problems experienced at Otago, psychology was slower in its emergence. These two colleges were established well before Victoria, yet psychology gained its autonomy at them well after Victoria did. This fact seems to rest more on the dynamism of Hunter than on impediments at the other two colleges.

The following discussion centres mainly on the autonomous departments of psychology, with minimal reference back to parent departments of philosophy. In this way, fair comparisons can be made across all six departments. This

approach is required in any case because, at Massey and Waikato, psychology flourished autonomously from the outset, never having been embedded in a department of philosophy.

The way in which academic psychology developed at the six university centres has followed certain common trends but has also revealed considerable individual differences, especially in terms of courses and staff interests. In some cases, these differences of focus have emerged at the outset such as the strong and deliberate socio-cultural focus initiated by James Ritchie at Waikato. But, just as often, these differences have emerged e*n rout*e, usually with the appointment of a senior academic having a strong persuasion and personality. For example, the emergence of the clinical programme at Canterbury with the arrival of George Shouksmith or the strong Behaviourist bias at Auckland in the 1970s led by Mike Davison.

In addition to these specific foci, there have also been differences in the rate of growth of departments, in the ratios of male to female staff, in the rate of growth of course offerings and, especially, in the output of Masters and Doctoral theses (see later sections of this chapter). In these various regards, Victoria and Canterbury had a head start on the remaining four centres, having independent departments of psychology as early as 1948 and 1953 respectively. In the case of Auckland, the situation is less clearcut in that although psychology emerged as a programme separate from philosophy as early as 1958, Professor Sampson was not appointed as Chair until 1962. By the time the other three departments had come into being (1962 to 1964), Canterbury already had a staff of four and was offering five courses, two of which were at the second year. At Victoria, by 1964, there was a staff of seven and an even wider range of courses than at Canterbury. By the same year, at Auckland, there was a staff of eight and a wide course offering at both the Bachelors and Masters levels. By comparison, at Otago in 1964, where it had all begun, there was only Professor Griew and a single first year course!

Looking forward a decade to the mid 1970s, under Professor Peter McKellar's leadership, the situation at Otago had changed dramatically, with a staff of twelve and full Bachelors, Honours and Masters programmes being offered. This progress, from a virtual doldrums situation to one comparable with the other centres, again underscores the influence that the HoD can have on a

department. In that same period (1964 to 1975), the other departments had not stood still and waited for Otago to catch up. At Victoria, where the lead had been taken from the outset, there were two full professors and ten staff with full Bachelors, Masters and an MA Applied (Clinical) being offered. At Canterbury, where Alan Crowther was still in charge, there were three professors, four readers (equivalent to associate professor) and sixteen staff, offering full Bachelors and Masters programmes. At Auckland, the situation was equally impressive, with two professors, two associate professors and sixteen staff and a full Bachelors and Masters programme.

At the two new universities, where the departments of psychology began life in 1964, growth was impressive more or less from the outset. At Massey, things got off to a somewhat hesitant start under Professor Brown, who was alone from 1964 through to 1968, in which year Brown left for Victoria and was replaced by a senior lecturer. This situation continued until the end of 1970. In the period from 1964 to 1970, there were being offered only two first year courses. Professor Shouksmith was appointed in 1971. With the arrival of Shouksmith, by 1975 (in four years) the staff had increased to ten, and full Bachelors and Masters programmes were being offered. Growth at Waikato followed a slightly faster rate where, by 1975, Professor Ritchie had a staff of ten and was offering programmes at the Bachelors, Masters and Doctoral level, along with a Diploma in Clinical Psychology. It is also worth reiterating in these comparisons that Waikato departed from tradition in using the term *Social Science* in the titles of its Bachelors and Masters programes and titling its doctoral degree a D Phil.

SOME NEW DIRECTIONS IN NEW ZEALAND ACADEMIC PSYCHOLOGY

In attempting to see where New Zealand academic psychology might be heading, one must look at how it began and where it has been heading since that time. We saw that, in its earliest days, psychology was taught within departments of philosophy, by philosophers. At that time, psychology was simply a subset of wider philosophical considerations, especially of those concerned with metaphysical questions about the mind-body dichotomy. Also, at that time, the *science* of psychology was nascent, where the methodology and technology were quite primitive by today's standards. For example, in the late 1800s at Otago, there was little application of statistical methods to data

gathering and analysis. In fact, this kind of research simply did not occur there. Likewise, even the simplest of technology that, today, we take for granted (eg, a typewriter or pocket calculator) did not exist.

The state of theorising about matters psychological in those early days at Otago and, later, at Canterbury and Auckland, was very loose by today's standards. The field was wide open for unsupported speculation, hence for the creation of grand theories. One can see this approach in the early psychology texts used by the Otago philosophers. For example, Sully, in his *Outlines of Psychology* (Sully, 1884), created grand theories for psychology, and insisted that it was the philosophical basis of the more practical sciences such as logic, aesthetics, ethics, education and politics. The basis of this bold claim was Sully's belief that psychology was to do with mind, where he held that mind was the informing source of all behaviour. Few psychologist theorisers would be so bold today. While some modern theorists might be comfortable with Sully's metaphysical views about mind, their awareness of the fate of grand theories and acceptance of the importance of methodological rigour would make them reluctant to be as bold as Sully.

Those early days of grand speculation lasted well into the 1920s and 1930s. However, in those decades, the *science of psychology* was establishing itself with increasing rigour, especially in the field of experimentation (Collins & Drever, 1930). The more quantitative approaches, such as in analysis of variance, came in during the 1940s and proliferated after World War II. Research into more specialised areas of psychology was proceeding apace, such as Helmholtz's work on vision, the work of James, Lange and Cannon on emotion, or Lashley's work on the conditioned reflex. Psychology had entered a stage, where advances in measuring technology were being applied to psychological experimentation, such as the use of the optical spectrometer in investigations of colour perception (Collins & Drever, 1930). Also, at around this same time, statistical methods such as factor analysis were becoming more refined, and added to the quantitative rigour[1].

By the time that psychology began to free itself from departments of philosophy in this country (*circa* mid to late 1950s) it was well established as a branch of science with its own specialised methodology and technology. Also, at this time, the fervour of Behaviourism was sweeping the planet, and

[1] George Shouksmith in a personal interview in 1995.

departments of psychology in New Zealand were caught up in this. Behaviourism appealed to the tenets of British Empiricism and focused on externally observable behaviours. This approach reinforced the scientism trend in psychology and lent it a seeming objectivity equal to that of physics. Not all, however, were swayed by the proselytising of the Behaviourists. Beaglehole at Victoria and Crowther at Canterbury were, at the least, ambivalent toward this radical newcomer[2]. The Behaviourist thrust, though put across as being the essence of science, was not in the same class as the well established strands of experimental psychology as conducted by the likes of Donald Hebb (Hebb, 1949).

In its downplaying of the functions and structures of the central nervous system, Behaviourism lost the respect of many of psychology's eminent researchers and, as a result, suffered a steady decline in influence from the late 1950s onward (Robinson, 1986). One could not ignore the brain to the extent that Watson and Skinner did, and hope to get away with it. However, of interest for the history of psychology in New Zealand, the love affair with Behaviourism continued right into the 1970s, especially at Auckland[3]. It is not very clear why this should be so, even in the more extreme situation as at Auckland. Perhaps the somewhat dated clinging to Behaviourism says something about the New Zealand psyche. We are, after all, regarded as a very pragmatic people who can use very simple things (eg, number eight fencing wire) in remarkable and practical ways. Perhaps the Behaviourist notion of a conditionable reflex arc (Robinson, 1986, argues against calling it theory) is analogous to number eight fencing wire, a very simple thing that has certain practical uses, but if bent too far, or too often, breaks.

By the mid 1970s, academic psychology in New Zealand did not look any different to that elsewhere[4]. While psychological theory might have found different outlets or applications in this country by comparison with, say, Britain or North America, it was informed by overseas thinking and methodology. Today, at least as far academic psychology is concerned, a visiting European, British or American academic would feel quite at home in any department of psychology in this country. Where such a visitor might notice some differences would be in the operational structures and functions of our universities and the nature of government control.

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[2] See the discussions in Chapter 4.
[3] See the section on Auckland in Chapter 5.
[4] See the discussion in Chapter 5.

In New Zealand, government tends to exert control over research in quite subtle ways. For example, the focus in departments has shifted from research publication outputs to obtaining research grants, where this change has come about through the application of New Right policies which favour free market forces and economic pluralism[5]. That is, there is coming about a value shift where academics who can pull in research monies are increasingly valued above those who can do research. In this, and in other ways, a government can influence the research outputs of a department. It can also control the conducting of courses and programmes through funding mechanisms. Some departments in a university tend to be heavily subsidised by *cash cow* departments, where this mechanism has long been a feature of university life. However, under a New Right regime, all programmes and courses might be required to be fully self-funding. If this principle were enforced by legislation, one has to wonder at the fate of certain low student number programmes and courses. If rivalry for funding became the dominant dynamic within universities, it would most likely spell the death of certain offerings, such as in philosophy or the classics. Even in a financially buoyant discipline such as psychology, we would see some changes. Low-number courses would be an obvious casualty as, for example, special topics in psychology at the Masters level. This, in turn, would restrict student choice along with research opportunities for staff. However, as yet, for psychology this situation has not arisen. In fact, in the light of the popularity of areas such as clinical and I/O psychology the discipline has done quite well under the current user-pays dynamic[6].

As indicated above, although attention to the brain suffered somewhat as a result of intense Behaviourist propaganda, this attention has again been rekindled, as demonstrated by the work of Mike Corballis at Auckland[7]. His internationally recognised work has been facilitated by recent advances in technology as, for example, in the developments in positron emission tomography (PET) and magnetic resonance imaging (MRI). Technologies such as PET and MRI have enabled researchers to investigate the brain in ways that were impossible using the earlier electroencephalographic technology. In the same way, advances in computer technology (hardware and software) have facilitated psychological research on a number of fronts

[5] Personal interview with Professor Ken Strongman of the University of Canterbury in 1995.
[6] See discussions in the earlier part of this chapter and in Chapter 5.
[7] Personal interview with Professor Mike Corballis in 1995.

whether this be in the use of the computer as a computational device (eg, statistical analysis), or as a mathematical tool (eg, in developing models of cognitive processes), or as in artificial intelligence research.

We have been through a phase where the digital computer was raised almost to the level of a paradigm for cognitive processes, as though in some way the brain was modelled along the lines of the digital machine. Of interest is the recent reversal in direction of this trend, where neuroscience's findings are influencing computer science. For example, computer scientists are coming to see that the human brain is still the best system in existence for producing and understanding language[8]. Similarly, in the field of human perception in relation to the development of three-dimensional visual perception software as used in robotic object recognition tasks.

A good example of the use of computer technology is the way in which the World Wide Web (the Internet or Web) facilitates research and scholarship, and brings together thinkers from across the planet. This medium not only facilitates research and scholarship, it also acts to bring about a convergence of the major approaches to psychology across the planet. The existence of British, American and European academic psychologies is due in major part to their geographic isolation (geography has been a powerful creator and reinforcer of paradigms). This argument does not exclude the influence and power of language. However, not only does the Web demolish geographic boundaries and distances, it is forcing a convergence to a single world language. As galling as this must be for some nations whose native tongue is not English, it is very clear that English is the *lingua franca* of the Web.

A new and exciting example of the use of the Web has arisen here in New Zealand, at Massey University, where Professor Andy Lock runs his *virtual faculty*[9]. The virtual faculty began to form in late 1994 and came together in its networked form in late 1995. Since the 1st of January 1996 nearly 5000 Web users have visited Lock's Web site[10]. The common interest shared by the members of this virtual faculty is the *second cognitive revolution*, which recognises that psychological phenomena actually exist in discourses,

[8] Trueswell of the University of Pennsylvania's Institute for Research in Cognitive Science, as reported in the March 1997 edition of the APA's *Monitor*.

[9] Although I personally know Professor Lock, I never once had to inteview him by any medium. I accessed the following information directly off the Web using Netscape. The Web homepage address is http://www.massey.ac.nz/-ALock/virtual/welcome.htm

[10] I last accessed this site in May 1997.

significations, subjectivities and positionings. In particular, cognitive psychologists have seen the importance of the issue of *meaning* in the process whereby a reader of strings of symbols (eg, those you are reading right now) comes to understand them. There is the growing recognition that meaning is constructed in *conversations* rather than merely located in some mechanism inside someone's head. That is, cognition rather than being intrapersonal is interpersonal. As Lock points out, such things as attitudes should not be seen as semi-permanent entities. Rather, attitudes come into existence in displays expressive of decisions and judgements and in the performance of actions.

Lock also points out that in the attempt to establish itself as an objective science, psychology shied away from the subjective domain. This shyness now seems to be fading where, according to Lock, many branches of psychology have come to realise that a major component of human reality is what may be termed a *conversational reality*, in which two or more subjects (subjectivities) interact to negotiate, maintain and change meanings of the world within which they live, and also to construct, maintain and change their selves. However, at present, this line of reasoning is very new and untried. It remains to be seen whether or not this is the way forward for psychology, and whether it will have any lasting impact.

The current fifteen members of this faculty are spread across the planet (eg, Rom Harre in Oxford, England, Kenneth Gergen in the USA and Andy Lock in New Zealand). A central aim of the virtual faculty described here is to explore the possibilities of teaching, training and research that are opening up through the existence of the Web. The hope is that these possibilities can be harnessed to the traditional structures of academic work (ie, universities as they currently are structured having physical campuses). Thus, the members of this virtual faculty seek to locate themselves in the real world, with real students, in a real university. The intention is to use the Web's potential to re-invent the form of university education. As Lock points out, although his particular project is located within the social sciences, it is readily transferable to other disciplines. It seeks to supplement rather than replace current practice through a reversal of the traditional notion of distance education. That is, rather than the students being dispersed, in the case of the virtual faculty it is the academics who are dispersed. This facilitates the coming together of recognised world leaders in given fields, as an active virtual

faculty, allowing students access to an array of talent that no single traditional university could assemble. The next major step for this particular virtual faculty is to put core courses in place that lead to qualifications in particular specialisations. The essential features of this approach are that faculty members become visiting adjunct members of existing academic departments, where physical and new media are integrated (eg, face-to-face and email).

STAFF GENDER

Not only were there differences in the points of emergence of psychology departments and their respective rates of growth in terms of staff and course offerings, across the six universities there were (and still are) differences in the ratio of male to female staff. For example, Waikato has had, from its early days, a reasonable balance between male and female staff members where, today (1997[11]), ten of the twenty eight staff are female. At the other end of this spectrum is Canterbury, where very few females have been employed in its psychology department. (I am excluding the period when psychology nestled with philosophy, when there were several female staff members employed as psychologists, such as Betty Bernardelli.) Today[12], at Canterbury, there are four female staff members out of a staff of 22. The situation varies between these two extremes in the other departments, with the ratio of female to male staff being: Otago, 7 to 21; Massey, 10 to 32; Victoria, 5 to 18 and Auckland 7 to 26.

On this issue of staff gender, it is also worthy of note that few females have been promoted to senior levels within psychology departments in this country. Some notable exceptions have been Dr Ngaire Adcock (Chairperson at Victoria), Associate Professor Jane Ritchie at Waikato, Associate Professor Diane McCarthy at Auckland and Associate Professor Judy Brook at Massey. At the level of senior lecturer, where one might expect a little more balance, the situation is no better. Today, at the level of senior lecturer, at Massey, there are three females out of a total of fifteen; at Otago, two females out of seven; at Victoria there is the one female out of seven; likewise at Auckland; and at Canterbury there is the one female out of a total of ten.

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[11] University of Waikato Calendar for 1997.
[12] University if Canterbury Calendar for 1997.

At the level of lecturer/assistant lecturer, we have a very different picture. The ratios of females to males are as follows: Massey, 8 to 4; Waikato, 9 to 6; Auckland, 5 to 4; Otago 5 to 4; Victoria, 4 to 4 and Canterbury, 3 to 7. Leaving aside Canterbury for the moment, these ratios imply that, at this lowest rung of the academic ladder, the gender balance is reasonable, and even seems to favour females. However, there are other, perhaps less kind ways of viewing this situation. It might mean that females are being relegated to the lowest ranks to ensure sufficient slots for males at the higher levels. It might also signal that females are viewed as being adequate for employment at these lower levels, but not so regarded for the senior positions. Either way, or combining both implications together, the figures here lend support. The anomalous situation at Canterbury seems in keeping with its overall position on the gender ratio issue.

Overall, what is the explanation for this rather poor state of affairs in regard to the appointment of female academics? Is it an indictment of selection and promotion procedures in these departments? If this were the case, then what of the Equal Employment Opportunity policy these universities claim to operate? Is it being flouted or being worked around? Perhaps there are other explanations? It might be that few women of adequate calibre have been available for selection. But this explanation hardly seems tenable in view of the large numbers of female psychology postgraduates that these six universities have been producing. It might be that few women are drawn to academia. But this does not seem the case in that all six departments discussed have many women academics at the level of lecturer/assistant lecturer. Do these gender ratios simply reflect the situation across all disciplines in New Zealand universities? Not really, because the social sciences and the humanities appear to have very fair gender balances overall and, in some cases, females well exceed males, even at the senior levels[13]. By comparison in yet other areas (eg, engineering), the ratio of females to males is very low[14]. Thus, we are not seeing in the figures for psychology departments some reflection of a global pattern. What then is one to assume?

There are, no doubt, many potential causes for this situation. However, one reasonable speculation is that there has been a long-standing, and still

[13] Based on an analysis of various New Zealand university calendars for 1997.
[14] Ibid footnote 13.

current, dynamic that operates against women in these departments. While not exactly empirically valid evidence, there is some support for this view in the interviews I held with Ngaire Adcock and Betty Bernardelli. Much more empirically valid are the views put forward by a sociologist at Massey University, Dr Ann Brooks, in her upcoming book *Academic Women*[15]. Brooks says New Zealand universities remain masculinist institutions with limited and rigid career patterns for academic women. She points out that, although the numbers of academic women is increasing, they are still disproportionately located at the lower levels of the appointment scales. Brooks sees as influencing factors in this situation, in regard to academic men and women in our universities; the overall attitude of men towards women, a general lack of support shown by men for women, difficulties some men have in taking women seriously, the threat that some men experience when confronted by well-published and ambitious women, and a range of behaviour patterns including verbal, physical and sexual harassment which academic women experience from their male colleagues. See also Rivers (1997), who looks at this issue and who comes to similar conclusions.

However, despite these validly held views, it must be recognised that things have changed dramatically in the past twenty years. Twenty years ago, male domination was evident in many quarters, and not only in university departments. In fact, the scene has probably changed more rapidly in favour of females in academic settings by comparison with other settings (eg, senior appointments within commerce and industry). For psychologist academic appointments, as more females graduate with PhDs in psychology (having, too, a desire to go into academia), there will be pressure for a balancing up of the situation.

THESIS PRODUCTION

Another major dimension on which considerable differences are to be found across all six departments is that of thesis production (both Masterate and Doctoral). I regard this as an important variable as it is perhaps the major dimension on which one might want to assess a department. After all, research and its contribution to knowledge and understanding is a major

[15] Ann Brooks' book is being published by the Open University Press (extracts from her book were sighted in issue 2, April 1997, of Massey University's Alumni magazine).

function of a university, if not *the* major function, in addition to being a social critic. Thus, the production of higher degree theses must be seen as a key variable in the life of a university department.

In looking at this issue, I will not revisit the *gender reversal effect*, discussed in the previous chapter. Here, I focus only on quantity without regard to student gender. There are many ways in which one might present these data but, basically, we have the choice between absolute numbers and rate of thesis production. Because there is such a wide variation in the duration of existence across the six departments, it would be unfair to use absolute numbers of theses produced alone, even though these tell their own story. For this reason I have chosen as the key datum the number of theses produced per year across the life of each department to date as the rate of thesis production. But I have also included the absolute numbers of theses produced to date by each department.

Table 6.1 shows the average numbers of PhDs and Masterates produced by each of the six departments, per year. These data were obtained simply by dividing the absolute number by the number of years of existence (absolute numbers are shown in brackets), from the time when psychology was first taught to the year 1993. The departments are shown in order of their starting years (shown in brackets). It is accepted that some of the theses were produced within departments of philosophy (ie, early theses at Otago, Canterbury, Auckland and Victoria), but all are theses in psychology.

Table 6.1: Average numbers of PhD and Masterate theses produced by the six psychology departments in New Zealand universities per year. The numbers in brackets are the absolute total numbers produced.

	Otago (1871)	**Canterbury (1901)**	**Victoria (1903)**	**Auckland (1910)**	**Massey (1964)**	**Waikato (1964)**
PhD	0.30 (34)	0.42 (39)	0.30 (27)	0.71 (59)	0.45 (13)	0.41 (12)
Masterate	0.69 (77)	4.54 (418)	1.64 (148)	4.57 (379)	2.62 (76)	6.24 (181)
Totals	0.99 (111)	4.97 (457)	1.94 (175)	5.28 (438)	3.1 (89)	6.66 (193)

The rate of PhD thesis production is very similar across all six departments, with the exception of Auckland which shows nearly twice the rate of the others. These PhD thesis data show the fairness in using rates rather than absolute numbers (Compare Canterbury with Waikato who have almost

identical rates yet widely different absolute numbers.) We see a wider variation in the rate of production of Masterate theses, with Otago anchoring the low end of the spectrum (at 0.69 per annum) and Waikato anchoring the upper end at 6.24 per annum. Looking at overall rates of thesis production, of note is the very high rate for Waikato, whose rate is higher than both Canterbury and Auckland (both having high rates) and far in excess of Otago's and Victoria's rates. Also of note is the difference in the rate of theses production between Massey and Waikato, bearing in mind their identical lifespans, and similar rates of growth and departmental size.

As interesting as these data are (the differences between departments especially), they are purely quantitative. It would be unwise to make comparisons on a quantitative criterion alone, because it completely excludes the academic quality and overall contribution of a given thesis, and I do not have sufficient data to be able to assess these criteria. However, assuming that the academic quality control standards are comparable across all six departments, we can assume that in terms of academic quality, there is little between the theses at a given level (Doctoral or Masterate) across the departments.

This leaves mainly the issue of the usefulness or potential contribution of a given thesis as the criterion on which one might want to assess it. If there were a wide variation on this dimension across the six departments, and usefulness had been traded with (or sacrificed for) sheer quantity, then one might have cause for alarm at the differences shown in Table 6.1. Depending on how one assesses usefulness, there may be some minor evidence of a quantity-usefulness trade off in certain specific areas. For example, of the total number of theses produced by Auckland (438), 74 (nearly 17%) were based on some narrow variation of operant reinforcement schedules, where most of these were produced between the mid 1970s to early 1980s. However, this phenomenon occurred only at Auckland, and certainly did not interfere with that department's production in the other subdisciplines. A much more balanced and even spread of thesis production occurred at Canterbury in roughly the same period, where the total numbers produced were even greater than that at Auckland.

If we can eliminate staffing levels as a factor in this variation of rate of thesis production, and can assume that there are no significant differences in

academic quality, and can also assume that usefulness has not been sacrificed for sheer quantity in any major sense, then what other factors are left that might explain the differences in Table 6.1? One factor that I have not yet mentioned is the time it takes to produce a quality thesis, and the impact this might have on production. Clearly, one would expect, on average, the time spent in producing a Doctoral thesis to be well in excess of that in producing a Masters thesis. At all universities, an absolute minimum duration of two years must be spent on a Doctoral thesis[16], whereas most students complete their Masters thesis well within two years and usually within a year. Thus, those departments which have focussed on Doctoral theses (eg, Otago) are likely to produce less Masters theses within a given finite duration. But this, alone, cannot explain the differences in Table 6.1.

Perhaps the time to produce a thesis is some function of the research question or of the subdiscipline? It might be that a purely theoretical thesis takes much less time to produce than one having a large empirical component. While not offered as support for this argument, my own purely theoretical Masters thesis took nine months to write, whereas this present thesis has been nearly thirty months in the writing and is not finished yet. In my case, the major difference rests in the huge amount of data gathering entailed in this Doctoral thesis. This component did not exist in my Masters thesis. If my experience is a common one, and I suspect that it is, then the theoretical versus empirical ratio across departments may be a key factor in explaining the differences in Table 6.1. Evidence would need to be found that the greater bulk of the theses produced by the high output departments were more theoretical than empirical. But to investigate this would entail examining large numbers of theses, which is well outside the scope of this thesis.

More difficult of analysis is the notion that time and difficulty level to produce a thesis is some function of the subdiscipline. Is there such a relationship and, if there is, does this in itself tend to reduce overall attraction to and production within certain subdisciplines? In this respect, there has certainly been a variation in quantity of thesis production across the subdisciplines I have identified. For example, over 300 theses have been produced in each of the clinical and social psychology areas, by comparison with under 50 in each of the cross-cultural, systems and testing subdiciplines at the other extreme. The remaining subdisciplines

[16] PhD regulations as in the university calendars.

tend to average out at around 100, with the behavioural category being the highest at nearly 150. Of course, none of this in itself is indicative that, for example, theses in the clinical or social categories are easy and quick to produce, whereas those in, say, cross-cultural, systems and testing are difficult and take a long time to produce. Leaving aside the problems associated with defining ease and difficulty, there are too many other contending variables (eg, staff research interests, availability of supervisors and socio-economic factors) to make such generalisations safe, and it is outside the scope of this particular thesis to attempt to answer these questions.

However, it is reasonable to assume that, where a thesis topic is perceived as difficult or lengthy in production then, on average, students are more likely to be attracted to a topic that offers greater ease and/or short time in production. On this hypothesis, it might be that some departments have focused on topics that are perceived as easy, whereas the focus in other departments has been on what is perceived as hard. Is there any evidence that might support this argument, and what form would it take? Clues might be had by looking at the spread of theses across subdisciplines within each department.

Table 6.2: Average numbers of PhD and Masters thesis output across subdisciplines and across departments per year. The numbers in brackets are the absolute total numbers produced.

Subdiscipline	Otago	Canterbury	Victoria	Auckland	Massey	Waikato
clinical	0.26 (29)	1.2 (110)	0.58 (52)	0.76 (63)	0.93 (27)	1.06 (31)
cognitive	0.15 (17)	0.52 (48)	0.14 (13)	0.47 (39)	0.10 (3)	0.14 (4)
cross-cultural	0.0 (0)	0.16 (15)	0.14 (13)	0.03 (2)	0.0 (0)	0.35 (10)
developmental	0.04 (4)	0.23 (21)	0.06 (5)	0.51 (42)	0.14 (4)	0.28 (8)
medical	0.04 (5)	0.18 (17)	0.06 (5)	0.55 (46)	0.14 (4)	0.66 (19)
behavioural	0.02 (2)	0.39 (36)	0.17 (15)	0.95 (79)	0.07 (2)	0.86 (25)
I/O	0.0 (0)	0.56 (52)	0.10 (9)	0.10 (8)	0.7 (20)	0.45 (13)
systems	0.01 (1)	0.16 (15)	0.01 (1)	0.10 (8)	0.07 (2)	0.10 (3)
physiological	0.11 (12)	0.46 (42)	0.17 (15)	0.71 (59)	0.10 (3)	0.31 (9)
social	0.31 (35)	0.96 (88)	0.43 (39)	1.02 (85)	0.86 (25)	2.31 (67)
testing	0.05 (6)	0.14 (13)	0.09 (8)	0.08 (7)	0.03 (1)	0.14 (4)
totals	**0.99 (111)**	**4.97 (457)**	**1.94 (175)**	**5.28 (438)**	**3.07 (89)**	**6.66 (193)**

These data are shown in Table 6.2. As with Table 6.1, the key variable is the rate of thesis production as previously defined. But, as before, absolute numbers are shown in brackets. The order of department is as for Table 6.1.

This table certainly shows that, overall, the rate of thesis production in the clinical and social categories has been high when compared with all of the other subdisciplines. However, there is some variation across departments in these two categories (eg, Otago's rate is well below the other five centres). But, it is reasonable to argue that these two categories have been an across-department focus. This table also shows that the rate in some categories has been low across all departments (eg, systems and testing). Other categories are a mixed bag, such as cross-cultural, developmental and medical, where the rate varies considerably across departments.

The behavioural category in particular has been differentially favoured across the departments, with Auckland at one extreme (0.95 per annum) and Otago at the other extreme (0.02 per annum). Of initial surprise to me was the high rate for Waikato (0.86 per annum) with its orientation as discussed in Chapter 5. However, on reflection, I noted that Waikato had on its staff Parsonson, Foster and Temple, all three of whom had a behavioural orientation. The physiological category, too, has been differentially treated, with Auckland (0.71 per annum)) having given it considerable focus, and Otago very little attention (0.11 per annum). Otago's rate is surprising in view of the university's strong medical tradition. However, as pointed out elsewhere in this thesis, there has been a long standing tension between psychology and medicine at Otago, so one cannot expect any correlation between these disciplines. Similar comments could be made about the remaining categories, but enough simple analysis has been conducted to show that no particular patterns emerge that would convince the reader that there is a linkage between rate of thesis production in given categories and total rates within departments. One can single out anomalous cases, such as behavioural at Auckland and I/O at Massey. At Auckland, this was the result of the tight and dedicated focus of one senior academic over just one decade. The situation at Massey is quite different in that I/O psychology had been the focus of Professor Shouksmith from the outset, and he brought in people (eg, Mike Smith and Beryl Hesketh in the 1980s) to prosecute that focus.

However, as interesting as the figures in Table 6.2 are, they throw no clear light on why there is such a wide difference in output across departments. They certainly do not help with the *hard-long* and *easy-short* dichotomy.

Yet another factor is the extent to which departments were equally focused on enrolling graduate students. In view of the comments above about the importance of research, I have assumed that there would be little variation in this factor across all six departments. This may not be valid, and some departments may have planned for a smaller intake of graduate students so as to able to focus on other facets (eg, staff research or production of undergraduates). One unique situational factor worth highlighting in this respect is that of Massey's with its large extramural component. Staff at Massey have found that the near one-to-one focus that distance education demands at times (eg, individual handling of phone calls and letters) has detracted from their research and supervision activities[17]. However, beyond Massey's unique case, all other departments appear to have maintained a balance between research activities (staff and student) and undergraduate teaching.

One final factor in the differential production of theses across the departments might be regional differences and the needs of would be graduates in those differing regions. In demographic terms the Auckland region is the most populated, with the Auckland urban area alone having almost a third of the entire population of the country living there. It also has the widest socio-economic groupings in the country[18]. However, while this might account for Auckland's large thesis output across categories, we cannot apply the same reasoning to the Waikato which has an even higher overall rate yet has a much smaller population and a narrower socio-economic range[19]. On this reasoning, with the Wellington urban area having a larger population than that of the Waikato, and having a very much wider socio-economic range, Victoria's output ought to be comparable with Waikato's yet is well down.

While the issue of differential thesis output across departments is an interesting and important one, a complex analysis is beyond the scope of this thesis. It warrants detailed research in its own right, where the variables

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[17] Discussion with Dr John Podd, Psychology Department, Massey University.
[18] New Zealand Official Yearbook: 1996, 99th Edition.
[19] Ibid, footnote 18.

mentioned above, along with other factors, could be examined both across and within departments.

THE NEW PROVIDERS OF PSYCHOLOGY AT THE TERTIARY LEVEL

Until relatively recently, the universities have dominated higher education, and were certainly the only providers of degree level qualifications. This situation began to change toward the end of the 1980s when the Labour Government, under David Lange via the Education Act of 1989, encouraged non-university providers to enter the field. For example, some of the larger polytechnics, traditionally providers of vocational training, acquired accreditation to offer degrees under the then newly set up New Zealand Qualifications Authority (NZQA). To the best of my researches[20], only one of these degree providing polytechnics, The Open Polytechnic of New Zealand (TOPNZ), offers degree level courses in psychology. But more on this shortly.

The only other psychology courses offered by the polytechnics are not at the degree level, but usually consist of short certificate courses. For example, Auckland Institute of Technology's TV Learning Course, based on the use of video material, and a Sports Psychology Course, both as part of its Nursing Studies programme. Similarly, there is Carrington Polytechnic's Introduction to Psychology Course offered within the Faculty of Nursing. The smaller polytechnics were not in a position to take up this option, but some of them offer certificates in the helping professions, such as in psychological counselling or social work[21]. While students in these certificates certainly study psychological theory and practice, it is not at the degree level (this by definition on the NZQA Framework). There are also several private providers who offer courses in psychology as, for example, Stotts College in Wellington and the International Correspondence School, now called ICS Learning, also based in Wellington. However, these providers are not offering degree level programmes, and their psychology courses are very much at the introductory level. In a different category are those few polytechnics, such as Hawkes Bay Polytechnic, which offers some papers in Massey University's Bachelor of Social Work degree, who have an articulation agreement with a New Zealand University. While psychology is offered at the first year within some of these

[20] An examination of New Zealand polytechnic brochures and calendars over the past decade.
[21] For example, the programmes offered by Aoraki and Bay of Plenty Polytechnics.

articulation agreements, the degree-granting body remains the university concerned and not the polytechnic.

The major current exception to the above story, as indicated, is The Open Polytechnic of New Zealand (TOPNZ) which offers a major in psychology within its Bachelor of Applied Science degree programme. TOPNZ entered the degree-granting market in the early 1990s with its Bachelor of Business degree. The success of this degree programme led TOPNZ, in 1994, to offer a Bachelor of Applied Science. At that time, this programme offered three majors, *communications*, *environment* and *psychology*. Since then, other majoring options have become available, such as a double major in psychology and communications. The psychology major comprises courses at Stages I, II and III. Note that *stages* are referred here because the term *year* is not applicable in TOPNZ's mode of delivery, where the dominant mode of delivery is by distance means, but supplemented by face-to-face seminars and student-conducted off-campus laboratory work. Students have access to their lecturer by several means such as mail, email, an 0800 free-phone line and computer technology[22].

As the focus of this thesis is the development of psychology, and because TOPNZ is the only polytechnic provider of a degree in psychology, this institution will be used as the basis for what follows. However, what is said for psychology at TOPNZ can be equally well said for other disciplines and other polytechnics.

In order to offer its major in psychology, TOPNZ had to undergo a rigorous accreditation procedure, conducted by the NZQA, in which all aspects of the institution were carefully vetted (eg, organisational structure, policies and procedures and academic staff qualifications) before it received approval as a degree-granting institution. TOPNZ also had to seek out the opinions and endorsement of the likely employers of its psychology majors. The universities, on the other hand, with their long-established degree-granting history in this country, have never had to submit to such a process. In marketing terms, TOPNZ has to operate in a consumer-driven market, in which psychology consumers (students and employing bodies alike) are carefully surveyed in terms of their needs. Conversely, the universities have

[22] I speak with direct knowledge here as the Head of Psychology at TOPNZ.

had (still do have) a basically product-driven approach in which the consumer has no input to the nature of the *product* and takes it or leaves it.

The accreditation process submitted to by TOPNZ raises some interesting questions in relation to the existing dominant degree-providing culture (ie, the universities). Initially, the universities felt no threat and, seemingly, patronisingly smiled at the whole situation, feeling so strong in their ivory towers. The phase beyond this (when TOPNZ launched its psychology major) seems to have stopped the smiling and caused some modicum of reflection on this new happening. TOPNZ has now held the first of its graduation ceremonies for its psychology graduates, where these graduates have been finding good employment positions in their chosen disciplines. Thus, TOPNZ now presents a serious threat to the long hegemony of the six New Zealand universities, who are forced to take this seriously[23].

TOPNZ is clearly turning out high quality psychology graduates, demonstrated by the very nature of the procedures it had to submit to, and by the quality jobs its graduates are getting. This must make the more reflective thinkers in the university system wonder about the quality of their own programmes, at least at the under-graduate level. It is ironic that TOPNZ's essential judge and jury in its application for degree provision (the accreditation panel appointed by the NZQA) were university academics. The irony and the injustice of this has not been lost on staff at TOPNZ when they know full well that the universities escape such judgement and that the quality and up-to-datedness of some of their programmes are questionable. In fact, more recently, senior academic members of a monitoring panel have admitted that the quality of the teaching materials and the teaching processes of the polytechnics are much better than that in their own university[24].

However, be these aspects as they may, the provision of degree level qualifications in psychology by the polytechnics is now a permanent feature of the New Zealand higher education scene. This has introduced new dynamics into the overall system, and can only act to cause the universities to sharpen up their own provision. It may well lead to the universities losing large numbers of their psychology undergraduates. For example, many

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[23] I speak here with direct experience, having been deeply involved in the accreditation process of the psychology major of The Open Polytechnic's Bachelor of Applied Science degree. The phases described in this paragraph became very evident to me and others at the Polytechnic.

[24] Ibid, footnote 23

departments now operate a cap on student numbers, especially at the undergraduate level. The new providers can take advantage of this, especially those who can operate in a *distance education* mode, such as TOPNZ, which can service its students regardless of their physical location or numbers.

The non-university providers such as TOPNZ are free to seek accreditation at the post-graduate level, by which I mean offering Masters and Doctoral programmes. This is permissible within the NZQA Framework, and TOPNZ as an example has staff sufficiently qualified to be able to offer this level of education. At present, most such providers have not had their undergraduate programmes running for long enough to want to enter the post-graduate field. But I would predict that, by the turn of this century (now only three years off) we will see a move into the post-graduate levels by the non-university providers. In line with this move, I also predict that we will see several of the larger polytechnics change their status and become universities in their own right.

The degree in psychology offered by TOPNZ is viewed as being as valid and as valuable by employers as equivalent degrees offered by the universities[25]. However, while employers do not distinguish between university and polytechnic degree holders, the universities themselves have been slow to recognise polytechnic degrees for the purposes of cross-crediting arrangements[26]. This will hamper TOPNZ psychology students, who have graduated with a polytechnic degree, from then going on to study at the post-graduate level at a university. This, in turn, will cause some would-be students to think twice before enrolling in a polytechnic degree programme. I speculate that this, in part, is an undeclared strategy on the part of the universities in being so tardy in giving full recognition to polytechnic degrees. This failure to recognise polytechnic degrees is not confined to the universities. The New Zealand Psychological Society will not recognise psychology degree students of TOPNZ for the purposes of becoming Student Members of the Society[27]. The reasons given are frankly feeble, and are quite ironic in view of the fact that the Society had input into the pre-accreditation process.

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[25] Ibid, footnote 23.

[26] Evidence of this is held by the writer as a result of corresponding with university psychology departments on behalf of The Open Polytechnic.

[27] The writer has correspondence as proof of this.

This behaviour by the universities and the Society have the quality of a rear-guard action, in the face of an inexorable change in degree education. For far too long, the universities, via the immense power of the Vice Chancellors' Committee, and the University Grants Committee, have totally dominated higher education in this country. This fact is now being recognised in government circles, where the long-standing dominance by the universities is being questioned[28]. In a free-market situation, where students are paying very large sums of money for their higher education, variables such as status and a long history will cease to be viable measures of quality education.

The bottom line for the would-be student of psychology will become more and more the value and quality of the degree obtained. This, surely, is the only fair basis for competition between degree providers of what ever shade and colour? I speculate that, shortly after the turn of this century, we will see a blurring of the boundaries between the university degree and those offered by non-university providers, at least at the under-graduate level. This will be further complicated by the high likelihood that several large polytechnics will become universities under the Law. This will introduce a new dynamic to the provision of degree-level qualifications in psychology in this country. Institutions such as TOPNZ, with its long-standing expertise in distance teaching methods, is already placed to lead the way. A major factor in these new developments is computer-based technology. TOPNZ has been using such technology for some time now, and the writer is currently involved in a project to develop interactive CD-ROM technology for use in delivering psychology practicals at the under-graduate level. It is planned that this will lead to delivering entire courses by this means, eliminating the large volumes of paper traditionally associated with distance education.

THE ISSUE OF CONSCIOUSNESS IN NEW ZEALAND PSYCHOLOGY

Finally, I now wish to return to the key issue which has occupied my attention throughout this thesis, that of the topic of human consciousness. There are three different ways or frameworks within which the topic of human consciousness can be considered:

- Its implications for the mind-body wrangle (the domain of philosophy).

[28] Personal discussions with senior executives within the Open Polytechnic.

- As a factor in societal development (the domain of sociology).
- As a topic of study within the discipline of psychology (the domain of psychology).

In regard to the first framework, Chapters 2 and 3 have explored the philosophical dimension of human consciousness, and its relation to the mind-body problem, so I will not repeat this here. However, I wish to remind the reader that, in my view, whether overtly or covertly dealt with, the mind-body problem is a major substratum of psychological thinking, research and practice. This dichotomy has dominated thinking since psychology began to emerge as a separate strand of enquiry in the modern era. (Note that this actually began in the times of ancient Greece with thinkers such as Aristotle.) The philosophy of Descartes brought the mind-body dichotomy to an extreme head, and psychology has not yet recovered from the shock of that.

Globally, there is sufficient evidence[29] to show that psychology has adopted a mainly physicalist-reductionist position on the mind-body issue, and that this has influenced the subsequent development of its theories and practices. The following line of argument is typical of reductionist reasoning where sociology can be explained in terms of psychology, psychology in terms of biology, biology in terms of chemistry, and chemistry in terms of physics in which the latter, at least at the quantum level, seems to be an unreal world of mathematical probabilities. In this *regression absurdum* one has to wonder where it leaves psychology, never mind the issue of consciousness.

Some might ask, "But what about the influence of Freud's theories and practices"? While it is true that Freud's writings are permeated by references to psychic processes and structures, this should not be taken as evidence against his belief that consciousness (and subconsciousness) had anything but a neurological basis. One only needs to recall Freud's training as a medical doctor, and his research interests in the central nervous system to be convinced of this. Others might want to cite the Gestalt School, as evidence of a persuasion toward the *mind* side of the dichotomy. While it is true that the Gestaltists were not reductionist (quite the opposite in fact), and espoused an essentially Rationalist stance as opposed to Empiricist, there is no evidence that they saw consciousness as a something separate from the central nervous system.

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[29] Refer to the exposition in Chapter 2 of this thesis.

Because academic psychologists in New Zealand largely have been importers and consumers of overseas psychological thinking and practice, the situation here seems little different in its developments when compared with the more global scene. However, in this, one needs carefully to distinguish three quite separate global sources of psychological thought: North American, British and Continental European. Thus, it is important to define these different strands, to tease out which of the three strands has had the most influence, and whether there has been a differential effect across the decades and across departments of psychology in this country.

The analysis and definitions in this paragraph have their derivation in Robinson's insightful analysis (Robinson, 1986), along with other sources as cited in Chapter 2 of this thesis. Without being too generalistic or simplistic in regard to the effects of these three major strands in psychology, it is possible generally to characterise them while allowing for the norm-breakers within any given strand. The North American strand of psychology has probably been the most reductionist of the three strands, which shows itself most in an adherence to biological determinism. But this same strand, in the heights of Skinnerism, shown itself in elementalism (the reduction of behaviour to elements). The other strong thrust in North American thinking has come from developments in the digital computer where this has influenced the methodology, but has also provided a seductive metaphor for cognitive science. The British strand has been less reductionist, but has strongly favoured British Empiricism, which is hardly surprising in that this school of thought arose there. There has also been in British psychology a strong experimental thrust, which is linked to the Empiricist leanings. Continental European psychology has tended much more to the Rationalist viewpoint, where the Gestalt School is one of the clearest examples of this allegiance. It has not rejected the biological nature of humans and has utilised the experimental method. However, it has always been comfortable with the notion that mind might have its own separate existence, even though dependent upon a brain for its space-time expression. After all, the philosopher (Descartes) who elucidated the mind-body problem was French. Also, Germanic philosophy from Leibniz onwards, with its strong metaphysical bias, has influenced psychological thought about mind and consciousness,

In the days when psychology was being taught within departments of philosophy at the New Zealand university colleges, the influence was almost wholly British. The teachers were either British, or were New Zealanders who had studied under Britons. In this period, psychologist academics in the New Zealand colleges were generally of an Empiricist persuasion. Their respect for and ability in experimental psychology would have depended on their own *alma mater*. For example, Cambridge had a strong experimental tradition, as did Edinburgh, whereas, at least for a time, Oxford was somewhat anti-experimental[30]. Thus, in terms of the mind-body problem, while there was likely a healthy respect for Cartesian thinking, mind (hence consciousness) seems to have been dealt with as an extension to body rather than something separate from it. The focus was on the nature of perception, sensation and cognitive processes.

This *British* phase lasted well into the period where psychology began to emerge as a separate discipline. This is not to say that there was no North American or European influence, but it is safe to say that it was minimal. This phase began to change with the growing availability of North American texts, and then with the arrival of North American academics who took up senior positions in psychology at our universities (eg, Barney Sampson's arrival in the mid-1950s at Canterbury, then his appointment to the Chair at Auckland).

This is not to say that allegiance to British thinking evaporated overnight. It did not, nor has it gone completely even now. One has to recall that the professional body to which many academic psychologists in the 1950s and 1960s belonged was the British Psychological Society, of which New Zealand had its branches in the main centres. However, the then new ideas coming from North America were powerfully seductive, and must have seemed fresh and youthful by comparison with the long-standing British ideas. It is of interest that, despite its Empiricist leanings, British psychology was not seen as being pragmatic, whereas North American psychology was seen as very applied across wide regions of application such as clinical, educational and industrial. This would have appealed to the New Zealand psyche, with its practical, down to earth, no-nonsense, agricultural outlook. We have not been a land of dreamers or mystics. Application is looked for in any endeavour. This may be why European philosophy and hence psychology never really took hold here.

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[30] See the discussion in Chapter 4 of this thesis.

Eventually, North American thinking came to dominate in our psychology departments, and effectively still does to this day. The sheer plethora of North American psychology texts, from basic introductory psychology through to those covering advanced and specialised topics, is measure enough of this. But, in addition, we have employed a significant number of North Americans (or North American educated) academics in our psychology departments[31]. The overall effect of this in terms of the mind-body issue has been that of down-playing the notion that mind might in some fashion be a separate entity from the brain.

Thus, while my survey[32] shows that many academic psychologists are now interested in the topic of human consciousness, seeing it as a valid and important aspect of psychology, their views about it are essentially reductionist and physicalist. That is, consciousness is generally viewed as a feature of neurological activity, if not simply a by-product of it. Clearly there are exceptions to this view, and its prevalence does appear to vary somewhat across departments (eg, staff at Waikato seem less reductionist in their views than those at, say, Auckland). But, generally, the approach tends to be North American with its allegiance to physical reductionism and psychobiological thinking. However, in regard to consciousness as a factor in societal development, North American thinking has not played a dominant role.

This societal aspect of consciousness is a vast topic and is well beyond the scope of this thesis. However, one can see that societal consciousness in New Zealand has developed and changed across the decades of the existence of the university system. For example, in the political arena, the feminist movement has wrought huge changes in thinking, as has post-modern thought. However, the full effects of such changes in thinking have yet to translate into wide-spread attitudinal change and policy change (*vide* my discussion above in regard to women academics in psychology). Similarly, dramatic changes have taken place in regard to views on and policies about sexual preferences, where in many organisations there are policies in place to protect the rights of gay and lesbian employees. As a final, and vital, example in this process of the evolution of societal consciousness is the way

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[31] The various New Zealand university calendars across the decades since the 1950s show this.
[32] The final section of Chapter 5 of this thesis.

in which Treaty Issues[33] have been addressed since 1984. While it is true that the progress made is not fast enough for some, few would surely deny that attitudinal changes have been dramatic since the mid 1980s.

My interest in this societal framework for consciousness, at least as far as this thesis is concerned, is the complex way in which the developments in academic psychology have interacted with the development of societal consciousness. This interaction is both complex and two-way. For example, feminism, as fuelled by widespread discontent among women, has been influenced by and has influenced psychological theorising. The same can be said for the gay and lesbian movements. On one hand, the objectivity of academic psychological enquiry has been empowering and liberating and, on the other hand, psychological theorising has been itself challenged and changed by these societal developments. This topic entails the many ways in which the individual and the collective interact and influence each other. Traditionally, psychology has been more concerned with the individual, even within subdisciplines such as social or community psychology. Conversely, sociological analysis has focused on the collective, on vast group processes (political, economic and so on). Clearly, the collective is comprised of individuals with their own individualistic cognitions, emotions and overt behaviours. Yet, just as clearly, the collective is the cultural womb of the individual which cannot exist in a societal vacuum. Psychology has certainly not remained silent about the collective (eg, Skinner's views as expressed in his novel, *Walden Two*) and has experimented with grand theory creation (eg, McDougall, in the 1920s, with his notions about social psychology and the group mind -- see chapter 4 of this thesis). But, more recently, psychological theorising has confined itself to more specific theories, and left sociology to go its own way.

Finally, with regard to the way in which consciousness has been dealt with, as a discipline topic, the record is not very impressive in this country. Across the decades, there have been very few courses that have specifically dealt with the topic. The closest that most courses get to consciousness (there are some exceptions, such as courses that consider consciousness in relation to brain structures and functions) are those in cognition, and that is not very close! I say this, because I distinguish clearly here between courses on

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[33] This refers to the Treaty of Waitangi, an agreement of Partnership between the Maori peoples and the British Colonists, signed in 1841.

cognitive psychology (as dealing with cognitive processes) and courses that deal specifically with either the mind-body problem and/or consciousness. This distinction of mine alludes to the dichotomy of Chalmers (1996), where he makes a clear distinction between *psychological mind* (causal-behavioural), and *phenomenal mind* (conscious experience). Closer to the topic of mind, hence consciousness, would be courses dealing specifically with cognitive science which seeks to address a range of issues in a multi disciplinary fashion (eg, philosophical, psychological, computational and neurophysiological).

Across the decades in New Zealand universities, there are a handful of courses whose titles imply that they might, at least, mention consciousness or the mind-body problem. For example, as early as 1971, Waikato introduced *humanistic psychology* at the third year in its Bachelor of Social Science programme. Not very close you might argue. Perhaps, but this course would have had to address human potential (a major, if not *the* major thrust of the humanistic movement), and hence had to address consciousness at least to the extent that this variable was a key influencer. More recently, at Otago in 1979 Richard Kamman introduced papers on altered states of consciousness, paranormal psychology and human evolution, at stage I in the BA. This is a remarkable exception. Sadly, with the death of Kamman these courses also died. Much more recently, in 1990 at Canterbury, *Cognitive Science* was introduced at the Masters' level, followed closely in 1991 at Auckland with *Issues in Cognitive Science*, again at the Masters' level.

This notable failure to deal with the topic of consciousness is underscored by the point made by Professor Mike Corballis in his entry on psychology at Auckland in the *Centenary Handbook of the University of Auckland* (Centenary Handbook, 1983), where he says that, in relation to topics such as consciousness, the psychology department has not been as prominent as it should have been. Reading between the lines of his statement, he seems to be referring to the way in which the strong Behaviourist thrust at Auckland detracted from a focus on the brain, its mechanisms and its relationship with consciousness. While it is true that these remarks were made in 1983, as I show above, there is little evidence that the situation has changed that much in 1997. However, I do concede that, at least, the brain is back on the map, especially at Auckland, due to Corballis' efforts. This, in itself, will eventually force a consideration of consciousness, and may eventually lead to courses

that more overtly deal with the topic. I say this, because the trend overseas is clear, where neuropsychology is playing a key role in consciousness research, as demonstrated at the two international conferences held in Tucson, Arizona in recent years[34].

As mentioned earlier (page 236), Andy Lock talks of the second cognitive revolution, where this is clearly an important shift from the previous focus on mechanism to one of the active interchange between people having cognitions. However, as important as this is, in my view, it does not address the source of cognitive processes. This is done only by considering the topic of consciousness.

If not in New Zealand, then more globally there has been a reawakening of interest in consciousness. Despite all the recent advances made in psychology, consciousness remains an aspect of human behaviour that is as mysterious now as it was in the time of Descartes. One of the exciting features of this reawakening is the multi-disciplinary nature of the quest. As a prelude to this revived quest, we saw in the creation of cognitive science something of this multi-disciplinary cooperation. Now it has been realised that consciousness research demands an even wider range of disciplines. As earlier mentioned[35], the 1996 conference on consciousness in Tucson, Arizona had disciplines as far apart as anthropology, neurology and quantum physics.

In my view, the issue of consciousness is the bedrock of psychology. Only when we have an adequate understanding of it will there be a significant paradigm shift in psychology. In fact, without progress in the topic of consciousness, I argue that psychology will remain pre-paradigmatic, as Kuhn branded it in the 1960s (Kuhn, 1962). Worse than this fate, in lacking an underpinning substratum, psychology is likely to fragment, and lose major aspects of itself to other disciplines. I argue thus because consciousness is the very subjective quality or entity that humans use to perceive and investigate their world, to create postulates about it and to establish theories and paradigms.

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[34] See the reference to this conference in Chapter 5 of this thesis.
[35] Ibid, footnote 34.

However, it is clearly not for psychology alone to come to an understanding of consciousness. On the other hand, psychology's contribution must, by definition, be enormous because only psychology is equipped to deal with the purely subjective aspects of consciousness. While quantum physics may be able to tell us about the subatomic bases of the correlates of consciousness, it cannot tell us about consciousness as a phenomenological entity. Likewise, although philosophy can establish valid questions about the relationship between consciousness and reality, and may even come up with some answers, it is not equipped to deal with *how* type questions. Similarly for the other disciplines involved.

Thus, I have come back to the beginnings of this thesis where, in Chapter 2, I looked at what I regard as the fundamental dichotomy in reality, mind and matter. In this respect, I argue that while it is the task of philosophy to ask the *why* type questions of the mind-body issue, it is the task of psychology alone to ask the *how* questions about the subjective nature of consciousness. In facing up to this duty, psychology will not be able to escape the metaphysical issues. The queen of the sciences, quantum physics, cannot evade these issues. In fact, she is responsible for reawakening an interest in them, with her earlier explorations into the relationship between the mind of an observer of a quantum experiment and its outcome (Bell, 1987). However, as wonderfully precise and predictive as quantum physics is, it is not equipped to deal with subjective issues. This is the one realm that psychology can lay definite claim to, and should now start to do this with greater boldness and courage than hitherto. Thus, I end this rather long thesis with a plea to psychologist researchers and scholars to make themselves aware of the issue of consciousness, and to go boldly forward into this unknown.

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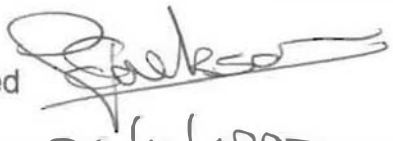
Signed  **Peter A Jackson**

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