CHAPTER 1 BEGINNINGS

INTRODUCTION

Before the Second World War, higher education in the Western World was the domain of the elite and the preserve of the university. There had been little fundamental variation to the way in which these universities conducted their affairs for the first 40 years of the twentieth century, and little variation to the kind of people who studied in them. After the War this all changed dramatically. First, there was a rapid increase in participation in education beyond school fuelled by returning servicemen and accelerated by the 1960s 'baby boom' generation. Secondly, there was the establishment of alternatives to universities in many Western countries to meet this demand, alternatives which were generally less expensive and which catered for 'less academic' students. Thus was the notion of government-driven institutional diversity developed and promoted. Thirdly, in more recent years, there was the advent of market competition between institutions, both universities and the alternative tertiary institutions, for students, funding and prestige. This promoted institutional ambition and the desire to be distinctive for competitive and, more recently, survival reasons.

The university was therefore transported from a sheltered, protected and somewhat disconnected pre-war world to the highly visible, competitive and exposed higher education world of today. It could no longer sit back and wait for a very small percentage of the population to seek permission to enrol. Instead it had to present its virtues to the world in the hope that a far more discerning 'customer' would consider purchasing its services rather than those of the rival university next door. To make matters worse for the university, it

also had to compete for these 'customers' with a new and alternative breed of institution, which provided shorter and cheaper education that was arguably more useful.

This period of dramatic change to the world of higher education was characterised by three inter-related developments. One was the frequently stated policy of national governments to promote diversity amongst the institutions of their higher education systems. Another was the rise of institutional ambition as these institutions gained greater autonomy and control over their futures in a quasi-market environment. The third was the intended and unintended influence of the former on the latter, and the manner in which national policy either assisted or confounded the desire of individual institutions to be distinctive.

It is against this backdrop of change and institutional ambition for distinctiveness that this study is presented.

PURPOSE OF THIS STUDY

This research emanates from a deep personal and professional interest in the development of my own institution and the extent to which such an institution can carve out its own future of distinctiveness within a national higher education system. The nature of the professional doctorate for which this study is submitted as partial fulfilment is particularly congruent with this interest, and with my desire to seek practical answers to problems that have significance in my own professional life.

It is important to briefly describe my own current position and role. This not only helps to illustrate the background from which my interests have developed, but it also signals some limitations to the approaches that I might have wished to take in my research. I am currently the Vice President, Academic of UNITEC Institute of Technology, the New Zealand institution used to illustrate this study. I have worked at this institution for some 20 years, and have seen it develop from a small skills-based technical institute to its current

status as the largest polytechnic in New Zealand with an institutional ambition to become a different kind of university within the New Zealand higher education system.

Over the last ten years at UNITEC, I have occupied a range of senior planning and academic management roles, culminating in my current position. Significantly, throughout the 1990s I have been a central player in the development of UNITEC's case for university status, and in the unfolding complexity of its progress towards redesignation. The fact that UNITEC has yet to be successful in its ambition, and that this ambition has been temporarily thwarted by political intervention, has had a major influence on my desire to attempt to unravel the complex interrelationships of institutional ambition and national policy, and their impact on systemic diversity.

My employment at UNITEC provides the reason for my interest in this topic, but it also underlines some limitations to my role as researcher. First, I have to acknowledge that I have written this thesis against a recurring risk of bias towards my own institution, that if not contained would have shifted the thesis into advocacy, and would therefore have undermined its potential value. Notwithstanding this risk, I believe that I have retained an objective stance as far as UNITEC is concerned. Secondly, my senior role in UNITEC's progress towards university status, and the fact that the current impasse is potentially a matter for legal resolution, has limited my access to key players in the events that have unfolded over the last five years. To some extent this has been countered by access to Government correspondence and memoranda made available through the Official Information Act in New Zealand. However, it has meant that the research design has had to accommodate these limitations.

From this context of personal and professional involvement in the progress on my own institution, there are two primary purposes for this study. First, I seek to increase understanding of how institutional diversity can be promoted and maintained within a higher education system. Secondly, I hope to provide some contextual depth to the

ongoing understanding of the interrelationships between institutional diversity, institutional ambition and policy development. Progress in each of these areas will, I hope, provide the professional enrichment that is fundamental to the notion of the professional doctorate.

RESEARCH APPROACH

Notwithstanding my specific professional interest in UNITEC's progress towards becoming a distinctive university within the New Zealand higher education system, the research question that has been developed for this study addresses issues of more general applicability. The answers that flow from this study may therefore provide some clarity to the complex relationships between institutional differentiation and the factors which influence its development.

Research question

To what extent does the influence of factors such as the environment; policy; funding; competition and ranking impact on institutional diversity?

In order to investigate this broad question, the following propositions are offered in relation to each influencing factor:

A. The environment

- 1. The greater the uniformity of the environmental conditions within a higher education system, the lower the potential for systemic diversity.
- 2. The greater the variation in environments within a higher education system, the greater the potential for systemic diversity.

B. Policy

- 3. A deregulated policy environment is not a sufficient condition for institutional diversity.
- 4. Systemic differentiation requires formal policy intervention.

C. Funding

- Policies based on financial incentives which do not discriminate according to institutional mission and capacity promote institutional convergence.
- 6. Policies based on financial incentives which do discriminate according to institutional mission and capacity promote institutional diversity.

D. Competition

- 7. During periods of high student demand and resource flow in a deregulated competitive market, the potential for institutional convergence increases.
- 8. During periods of low student demand and limited resources in a deregulated competitive market, the potential for systemic diversity increases.

E. Ranking

- 9. Within all higher education sectors there will be, to varying degrees, a prestige hierarchy of institutions and institutional types.
- 10. Where institutional ranking is well established within a higher education system, there is a greater potential for institutional convergence.

Methodological framework

As a gross simplification, there are three alternatives by which the researcher can come to terms with an appropriate methodological approach to his or her study. These are methodological primacy, paradigmatic primacy or pragmatism.

The researcher who focuses on 'methodological primacy' establishes allegiance to a particular research methodology and then identifies the encompassing higher order paradigm from that perspective. Methodological primacy, as implied by Schwandt (1990, p.194) 'reduces the issue of paradigmatic conflict to the problem of allegiance to different collections of methods'. This approach implies that the researcher's choice of methodology will, by nature of the concept of allegiance, fall into a particular paradigmatic frame. It suggests that an eclectic collection of useful methods spanning both traditional quantitative and qualitative methods is not possible. It also implies that while the focus is on methods, reality is based in the paradigm, even if the researcher does not fully appreciate this.

In a similar light, McGrath (1982) identifies some fundamental dilemmas for the researcher in reconciling conflicting methodologies. He contends that research ideally seeks to maximise three criteria:

• the generalisability of findings, through, for instance, a random sample survey;

- precision and control in measurement, through, for example, a classical experiment that controls or eliminates independent variables; and
- the existential realism of what is studied, through, say, an ethnographic enquiry.

The dilemma for the researcher is that each of these criteria can be maximised, but only at the expense of the other two. Arguably this forces researchers to anchor their research in a higher level paradigm that then determines the solution to this operational dilemma.

The focus on 'paradigmatic primacy' requires a commitment to a specific research paradigm from an ontological and epistemological point of view, and then the generation of methods of enquiry that are compatible with this paradigm. Writers such as Egon Guba and Yvonna Lincoln clearly favour paradigmatic primacy. (Guba 1990b, Lincoln, 1990, Guba and Lincoln 1994). Lincoln, in particular, maintains that

the adoption of a paradigm literally permeates every act even tangentially associated with inquiry, such that any consideration even remotely attached to inquiry processes demands rethinking to bring decisions into line with the worldview embodied in the paradigm itself (Lincoln, 1990, p.81).

At first sight, this view seems to be in conflict with Guba and Lincoln's assertion that 'both qualitative and quantitative methods may be used appropriately with any research paradigm' (Guba and Lincoln 1994). However, the essential element of their perspective is that the paradigm has primacy, and that decisions on methods, be they qualitative or quantitative, must be made from within that framework. Never the less, given their undisguised commitment to the constructivist paradigm, it would appear unlikely that quantitative methods would play a significant part in their research design.

Researchers who favour 'pragmatism' focus entirely on methods of enquiry suited to the research question at hand, and leave the philosophical paradigmatic debate to those who wish to pursue it. Pragmatism is the alternative of the practical researcher, in contrast to the philosopher. It suggests that 'researchers should pursue their work, be open to an

ecumenical blend of epistemologies and procedures, and leave the grand debate to those who care most about it' (Miles and Huberman 1984, p.20). Such a stance is supported by Firestone (1990), who argues for an accommodation between the so-called extremes of quantitative (positivist) and qualitative (constructivist) paradigms. Firestone believes that in an operational sense the differences between these two seemingly incompatible paradigms is not as great as it might seem. He argues that both paradigms allow for the social construction of reality, the recording of local interpretations and beliefs, researcher theorising about what takes place, judgement on the adequacy of research, and nervousness about generalisation while looking for some basis for application. The differences relate to matters of extent and primacy.

Leedy (1993) has a similar pragmatic view, believing in the axiomatic status of the research question as the key to methodology. According to Leedy, the research question and the nature of the data that are required to answer it dictate the methodology the researcher employs. In the broadest sense, the research question and required data for this study require an essentially qualitative approach, the key features of which have been thoughtfully described by Eisner (1991). They can be summarised as follows:

- 1. Qualitative studies tend to be field-focused.
- 2. The qualitative researcher is considered an instrument of the research that engages the situation and makes sense of it.
- 3. Qualitative research is interpretive and seeks meaning for events and the experiences of others.
- 4. Qualitative studies display the use of expressive language and the presence of voice in the text.
- 5. Qualitative studies pay attention to particulars.
- 6. Qualitative research becomes believable because of its coherence, insight and instrumental utility.

Significantly, Eisner also makes it clear that qualitative and quantitative research are not mutually exclusive. He states that

[t]he term qualitative suggests its opposite quantitative and implies that qualitative inquiry makes no use of quantification. This is not

the case. ... The difference between 'qualitative enquiry' and 'quantitative research' pertains mainly to the forms of representation that are emphasised when presenting a body of work. (Eisner, 1991, p.5)

The form of representation emphasised in this body of work is clearly qualitative, even though quantitative data are utilised in various parts of the investigation.

According to Leedy (1993, p.141), '[t]he task of the qualitative researcher is one of analysis and synthesis'. This is particularly true with respect to historical data, which is integral to this study. Historical data, from various sources, must be synthesised to form a meaningful whole, and then interpreted to find meaning. The interpretation of the history of the university, and more specifically the recent histories of the higher education systems of Australia and New Zealand, form an essential context from which the research question and associated propositions of this study may be considered.

Within this qualitative framework, the basis of this research lies in the principles of the case study and of policy-oriented research. Case study has become a common approach to qualitative enquiry. This is because of the flexible and adaptive nature of the method – it can accommodate a variety of research designs, data collection techniques, epistemological orientations and disciplinary perspectives. According to Burns (1994), a case study is a bounded system, an entity in itself. The boundaries for this case study are drawn around the higher education systems of Australia and New Zealand, and the perspective of the study is the ebb and flow of institutional diversity under the influence of national policy within these two systems. It is believed that such an investigation, of two contiguous national systems, placed in a context of international higher education, will provide a basis for an informed answer to the research question posed for this thesis, and for the discussion of the sustainability of the propositions that flow from it.

According to Yin, cited in Merriam (1988), a case study method is a design particularly suited to situations where it is impossible to separate the phenomenon's variables from their

context. Such is the case with this study. Context is considered critical to an understanding of the evolutionary interrelationship between institutional differentiation, institutional ambition and policy formulation. Merriam goes on to describe four characteristics which are considered essential for a case study, namely, that it is

- Particularistic focusing on a particular situation, event, programme, process or phenomenon, thus making it a particularly appropriate design for the practical policyoriented research of this study.
- Descriptive offering rich, 'thick' descriptions of the phenomena under study, utilising
 multiple variables and their interaction. This study relies on a wide range of qualitative
 and quantitative data which provides a series of comparative analyses of university
 diversity according to a variety of stakeholder perspectives.
- Heuristic illuminating readers' understanding of the phenomenon under study. It is certainly the intention of this study to provide new insights into the relationship between institutional diversity and policy development.
- Inductive relying mainly on inductive reasoning to discover new relationships, concepts and understandings of the phenomenon under study. The propositions put forward to illuminate the research question in this study have in essence evolved from the inductive research process itself.

However, 'the real value of a case study is to provoke ideas about a new way of viewing the world, to fill in an idea with vivid detail, or to suggest new perspectives' (Baldridge, 1971, p.33). It is in this context that the case study approach has particular application in this thesis.

As has been described earlier, my role as an active participant in the UNITEC university application which is described in detail in this thesis, and the possible legal issues currently affecting the progress of that application, create some limitations on the means by which I have been able to gather relevant data within New Zealand. My access to and/or ability to conduct objective interviews with a number of key players, within UNITEC, within the

New Zealand Government and within the New Zealand Vice Chancellors' Committee, is therefore very constrained. My role at UNITEC also places genuine limitations on access to, and objective observation of, other universities in New Zealand. However, in the context of the research question, it remains important to provide some illustrations of the way other institutions have sought to establish and maintain their distinctiveness, and how institutional diversity in other higher national education systems has ebbed and flowed with time.

The decision has therefore been made to use the Australian experience to provide an appropriate context from which to examine the New Zealand situation in general, and UNITEC's case in particular. Using Australia's higher education system as a contextual basis for comparison with that of New Zealand is considered valid for a number of reasons. Both countries share the same history of British colonialism, and the same roots to their higher education systems; both have evolved along parallel paths and each has learned from the other at different times in their histories; both systems are based around the British model of the university, and have retained close ties with their United Kingdom counterparts; universities of each country have established close relationships with one another; and, of course, both use English as the language of instruction.

Data Collection

Two primary kinds of data collection have been used for this study: quantitative and qualitative data collection from primary and secondary sources, and data collection from semi-structured interviews. Each of these is discussed in broad detail in the sections to follow.

1. Data collection from primary and secondary sources.

Seeking relevant data from primary and secondary sources exposes one of the major differences between the Australian and New Zealand higher education systems for the researcher. While Australia has exemplary and comprehensive data and statistics

collection, analysis and publication through the Department of Education, Training and Youth Affairs (DETYA), New Zealand suffers from a very limited and unreliable set of annual statistics published by the Ministry of Education. This unreliability is also manifest in the primary source of institutional data: the annual reports of each institution, which should provide identical data to that published by the Ministry given that both are derived from the same institutional source.

In fact, individual institutions in New Zealand are far from consistent in the derivation of key performance indicators and the ways in which they are reported. For example, there are significant institutional differences in the ways that 'academic staff' are identified and counted, thus affecting the calculation of core indicators such as the student staff ratio. The reporting of statistics by the Ministry of Education is also limited by the somewhat arbitrary nature in which some data are defined, and the equally arbitrary nature of the mid-year date of collection. The central difficulty that these limitations create for this study is that it becomes problematic to identify institutional similarities and differences in relation to institutional diversity. These limitations are further discussed in Chapter 6.

By comparison with limitations of institutional statistics, the use of internal reports and other documents from UNITEC provided an excellent source of relevant material relating specifically to UNITEC's application for university status. Similarly, the events leading up to the key Government decision to prevent this application from proceeding have been unravelled by access to a wide range of ministerial and Ministry correspondence and memoranda through the provisions of the Official Information Act. These documents have been utilised to provide depth of understanding to the issues and events surrounding the conflict between UNITEC's institutional ambition for distinctiveness and the Government's policy and political priorities.

A further source of relevant information about higher education institutions that is used in this study is that of published institutional missions and values. These are accepted as tangible statements of fundamental organisational direction and belief. Interestingly, some sort of mythical and symbolic importance appears to become attached to the notion of a university's *unspoken* 'mission', when it is invoked (without being stated) to defend or advocate for a major decision. By contrast, the *published* mission frequently seems to be dismissed as a corporate necessity to be consigned to charters, strategic planning documents and annual reports. However, in spite of this quite unproven perversity, the published statements are all that the researcher has to use when trying to compare the institutional purpose and values of different universities.

These published statements present a number of problems for the researcher intent on content analysis which accurately reflects differences and similarities between institutions:

- They are frequently hard to locate. This supports the suggestion that some universities do not attach a great deal of importance to these statements, or regard them as significant for internal, but not external, purposes. For this study, both institutional websites (mainly in Australia) and annual reports (mainly in New Zealand) were utilised to access these statements.
- They are not consistently named. Headings such as 'mission statement', purpose statement', 'vision statement' and 'strategic intent' are used to describe what is essentially the same thing. For the purposes of this study, the 'mission statement' was used wherever it was identified specifically, and alternatively named statements were used if the 'mission statement' did not exist. To avoid confusion in the text of this study, the term 'purpose statement' has been used as the generic term to describe these statements, regardless of the actual term used by the individual university.
- They vary considerably in length. For some universities, the only published purpose statement is a short pithy statement which is more of a slogan than a 'mission statement'. For others, the equivalent statement may extend for half a page or more. Clearly, the longer statement provides greater opportunity for the extraction of key words than a shorter one, and can distort the interpretation of data. The critical factor

- then becomes the identification of those few key words that symbolise more extreme positions than words that one could reasonably expect all institutions to use.
- They may or may not include separate values statements. Some universities overtly express their values as a series of key words or phrases in a separate statement. Others publish no such separate statement, but tend to incorporate values statements in the body of their (frequently longer) purpose statements. Still others appear to make no published reference to values at all. For the purpose of this study, phrases or words concerning values were extracted from whatever statements contained them.

To combat these limitations, it was decided to utilise all those purpose statements that were reasonably accessible to the public through website or hard copy publication. This decision was made on the basis that these statements were placed in the public domain because the university wished the public, as a key stakeholder, to understand and appreciate their primary purpose and direction. The process of analysis of the data presented in this way was simple. Key words were extracted and charted, and a subjective interpretation made on the meaning attached to them, and whether that meaning was unique or essentially the same as that attached to a different word used by another university (for example 'quality' and 'excellence' were taken to mean the same thing). Details specific to the analysis of university purpose statements from Australia and New Zealand are addressed in Chapters 4 and 6, respectively.

2. Data from interviews from senior staff at selected universities

Early in the development of this study it was decided to use in-depth illustrations of institutional ambition and differentiation from the Australian higher education system, rather than from the New Zealand system. The reasons for this were two-fold. First, there are few (perhaps only one: Auckland University of Technology) good examples of universities in New Zealand that have deliberately chosen a path of institutional differentiation within the national higher education system. Secondly, even if several good

examples existed, there remains the major obstacle of researcher access and potential bias which was outlined earlier in this chapter.

The choice of universities for these illustrations was based on three key factors:

- The intention to investigate 'newer' universities that could provide access to sufficient senior staff who played key roles in the institution's establishment as a university, and who could comment on its current focus and performance.
- The desire to use universities that deliberately and overtly sought to be different from longer established 'traditional' universities within the Australian higher education system.
- The desire to use universities with similar missions, values and directions to that of UNITEC in New Zealand.

For these reasons, the selected universities are all universities of technology belonging to the Australian Technology Network (ATN). The three universities actually used in this study were chosen because, first, they each have somewhat different university origins; secondly, they have each chosen a different way of demonstrating their university status and distinctiveness through their name; and thirdly, for pragmatic reasons of researcher access and participant willingness to participate. The three universities are: Queensland University of Technology (QUT), Brisbane; RMIT University (RMIT), Melbourne; and the University of South Australia (UniSA), Adelaide.

For each university, the staff to be interviewed were selected because they had direct knowledge of the events surrounding their institution's redesignation, and remained with the new university for some period after redesignation. The objective was to provide illustrative case study material that would improve understanding of the relationship between institutional ambition for distinctiveness and factors that constrained or supported that ambition. Significantly, permission was sought and granted for each interviewee's name to be used in all references and quotations used in this study. This was considered

essential given the small number of staff interviewed at each university, and the fact that the person's name added to the interpretive significance of the statements made. Critical interviews were held with the vice chancellors of each university.

It is important to recognise that each interviewee contributed his or her unique perception to the events surrounding the redesignation of their institution, and that these perceptions provided the critical perspective sought from this element of the overall research. The number of interviewees varied from university to university, largely depending on the extent of access to key players in each university history. Four staff were interviewed at UniSA, and three at QUT. Only two interviewees were used from RMIT, and the resulting analysis reflects the strength of contribution from the inaugural vice chancellor, Professor David Beanland. However, it is exactly this vivid and 'colourful' contribution that was sought in these interviews, and the absence of further interviews at RMIT was not considered a limitation to the value of the RMIT analysis.

Each interview was semi-structured, and lasted from one to two hours. Each explored three key themes:

- 1. The extent to which diversity and differentiation were central to each institution at the time of redesignation, and the manifestation of that differentiation at that time.
- 2. The extent to which each institution has retained its differentiation since redesignation, and the current manifestation of that differentiation.
- 3. The impact of the political, funding and market environment of higher education on diversity in the system as a whole and on the differentiation of each institution and its neighbouring institutions.

The interviews were taped, transcribed, and analysed using QSR¹ NUD*IST² version 4 software. QSR NUD*IST is a computer package designed to aid researchers in the handling of non-numerical and unstructured data in qualitative analysis by supporting processes of coding data in an index system, searching text or searching patterns of coding, and theorising about the data. It was considered a most useful research tool to manage the raw

¹ OSR stands for Qualitative Solutions and Research

² NUD*IST stands for Non-numerical Unstructured Data Indexing, Searching, and Theorising

data from the interviews and to explore and systematically categorise the key themes which emerged from the set of interviews from each university.

For each university, the interview transcripts were imported into NUD*IST as 'raw files'. These files were then browsed under each of the key themes around which the interview questions were based. From this browsing, an initial categorisation of issues was established as a series of 'nodes' that collectively formed a preliminary 'tree diagram'. These 'nodes' and the 'tree diagram' were then refined and elaborated during the systematic analysis of each interview to create a comprehensive pattern of responses coded to each node. The resultant 'tree diagram' which shows the way in which these themes and issues are linked is illustrated in Figure 5.1. The coded responses under each node were then reviewed, and the interrelationship between the three themes described above and the specific response categories that emerged were interpreted. The resulting analysis is presented in Chapter 5.

STRUCTURE OF THIS STUDY

This study is divided into three parts, each of which provides a blend of context, illustration and analysis of issues impacting on systemic diversity in higher education in Australia and New Zealand, and the ways in which this diversity may be realised.

Part One provides the underpinning context for this study. Chapter 2 introduces the broad international canvas on which a brief history of the university is painted, together with an overview of the contemporary university and its uncertain future. From this can be drawn some of the threads that help to identify the characteristics of a contemporary university that will in turn provide a basis for considering the extent of differentiation possible between universities.

Chapter 3 looks specifically at diversity and differentiation in higher education in an international context. It offers an explanation and definitions of systemic diversity, and provides a series of seven vignettes of diversity in national systems of higher education from Europe and North America. In each case, the dramatic growth in participation in higher education after the Second World War is identified as a catalyst for government policy aimed at increasing the differentiation amongst higher education institutions, and thereby increasing access and choice for student consumers. These illustrations provide examples of the intended and unintended outcomes of this government policy on matters of institutional diversity and institutional ambition, and form a context from which a more indepth study of the higher education systems of Australia and New Zealand will be made in Parts Two and Three.

Part Two of this study looks specifically at Australian higher education. Building on the general international history of the university outlined in Chapter 2, Chapter 4 provides a detailed summary of Australia's post-war higher education history, focusing on the government's responses to the rapid growth in participation that took place after the Second World War. It then explores the ebb and flow of diversity within higher education in Australia, and draws some tentative conclusions about the current extent of systemic diversity in that country.

Chapter 5 offers detailed illustration to the canvas painted in Chapter 4. It does this by investigating the ambitions and priorities of three Australian institutions that have deliberately set out to be distinctive universities by comparison with their more traditional counterparts. These three institutions, each a member of the Australian Technology Network of universities of technology, have established and maintained a distinctiveness that, in spite of some inevitable convergence between them and more traditional universities, continues to reflect the institutional ambition that marked their designation as universities.

Part Three of this study runs a similar story line to that of Part Two, but in this case the setting is New Zealand, and the illustrative detail is that of a single institution, UNITEC Institute of Technology, and its ambition to be recognised as a distinctive university within the New Zealand higher education system. Chapter 6 provides a contextual history of postwar New Zealand higher education. It charts the development of New Zealand's eight universities and 22 polytechnics, with a particular emphasis on the evolution of the higher education system over the last ten years in response to major policy reforms of the late 1980s. The chapter then considers the ebb and flow of differentiation amongst these institutions from a variety of perspectives, and compares this with that of Australia over the same period.

Chapter 7 uses the context established in Chapter 6 to look in detail at the progress of a single institution, UNITEC Institute of Technology, towards its ambition of becoming a distinctive higher education institution. This is presented as a case study of UNITEC's progress towards establishment as a 'university of technology' in an environment of unclear policy and intrusive politics. The chapter concludes by reflecting on UNITEC's ambition to become a distinctive kind of university in New Zealand in the light of internal perceptions and external constraints.

Chapter 8, the final of this study, draws together the various threads of evidence about institutional diversity to answer the research question and reflect on the propositions which were first formulated in Chapter 1. Each of the ten propositions about the enhancement or inhibition of diversity in a higher education system is reviewed on a basis of the evidence from the various investigations and illustrations presented throughout this study. The chapter concludes with some reflections on the environments in which institutional ambition and government policy may or may not combine to promote diversity in a national higher education system.

PART ONE THE CONTEXTUAL SETTING

PREAMBLE

Part One of this study establishes the international context in which the illustrative material from Australia and New Zealand of Parts Two and Three respectively will be analysed and interpreted. It consists of two chapters. First, in Chapter 2, an overview of the history of the university is presented, concluding with a picture of the contemporary university and its uncertain future. This chapter provides an important historical context from which to interpret institutional diversity. It shows that the university, as the enduring institutional form in higher education, has undergone many transformations, and has suffered many dislocations during its 600-year history. Arguably the institutional diversity documented through its history is far greater than all but the most extreme models proposed for its future.

The second chapter of Part One looks specifically at diversity. It examines the published research on diversity in higher education and confirms the definitions and terminology that will be used throughout this study. It then takes a series of snapshots of diversity in a range of higher education systems in different parts of the Western World. The range of countries chosen is eclectic, and relates more to the existing body of research in the field of diversity than it does to any deliberate selection of particular countries for specific reasons by the writer. The chapter indicates that there is a very wide range of approaches to diversity amongst national higher education systems, and that any evaluation of their individual worth or success must be linked firmly to reasons for which the relevant government policy was implemented. Sadly, though perhaps not surprisingly, the reasons for these government policy initiatives tend to be obscure or ill-defined.

CHAPTER 2

THE UNIVERSITY: PAST, PRESENT AND FUTURE

INTRODUCTION

The concept of institutional diversity has an understandable focus on the differences between institutions - how one university can be differentiated from another, and how one group of universities can be distinguished from another group. However, inherent in the fundamental questions of what makes one institution different from another, and what contributes to diversity amongst a system of universities, is another, equally important, question - what is it that all of these institutions have in common? In other words, what makes an institution a university? or in Cardinal Newman's words, what is the idea of a university? To begin to answer these questions it is necessary to look into the history of the university, to trace its development, and to ponder its uncertain future.

This chapter will therefore present a brief history of the development of the university, from an international perspective. It will conclude with a review of the literature on the contemporary Western university and identify some key trends for the future of the university in a post-modern world. This will help to answer some key questions which arise later in this study about the potential for institutional diversity amongst the universities and other higher education institutions.

A BRIEF HISTORY OF THE UNIVERSITY

The university is amongst the oldest and most durable of institutions in Western society. According to the Carnegie Council, of the sixty-six Western institutions in existence today that were also in existence in a similarly recognisable form in the mid-1500s, sixty-two are universities (Coaldrake & Stedman 1998). Much of the heritage and tradition that characterises the university today can be traced back to this period.

However, in recognising the antiquity of the institution of the university, it is also important to appreciate that a high proportion of universities existing today have been created in the second half of the twentieth century and have very short histories (Brennan, Fedrowitz, Huber and Shah 1999).

While popular notions of the origin of the university have it emerging as a discrete institution in medieval Europe, there are also strong arguments to suggest that its true beginnings were in ancient Greece, born out of the traditions of Socrates, Aristotle and Plato. The difference, according to Patterson (1997), stems from one's concept of the university in terms of either its organisational characteristics or its intellectual tradition. To take the latter perspective to an extreme, the university is, in its elemental state, best described as a 'state of mind' (*ibid.*, p.8). In other words, the university tradition is more appropriately based on a way of thinking, not on a physical and legal existence. Interestingly, such a concept is revisited by contemporary writers (Readings 1996), (Barnett 1997a, 2000) on the future of the university and is considered central to the university's survival into the twenty-first century.

The origins of the 'organisational' university, 'as an autonomous, permanent, corporate institution of higher learning...that evolved into an immensely flexible institution, able to adapt to almost any political situation and form of society' (Perkin 1991, p.169), can be found in twelfth-century Europe. The first recognisable universities were established in Bologna and Paris to train the elite to serve the bureaucracies of church and state, and for the emerging professions of the clergy, law and medicine. There is a certain irony that these early universities were so overtly vocational, given the apparent reluctance of the university establishment of the twentieth century to accept an overtly vocational mission for a modern 'university of technology'.

The word 'university' comes from the Latin *universitas*, meaning guild or society, and refers to the fact that these first universities were essentially guilds of masters (in Paris), and students (in Bologna) who organised themselves against external hostility from the church and the local citizens. It could be argued that universities have been organising themselves against one form or another of external criticism and hostility ever since. In

spite of this defensiveness, this was a time of great vitality and zestfulness for the university in which the thirst for knowledge was seldom quenched. This thirst for knowledge, coupled with the demand for learned men in church and state bureaucracies, and the growth of wealth and leisure, stimulated an unforeseen expansion in advanced learning. Thus was the mission of the university formed: 'advanced sophisticated learning, free of external censure, meeting the interests of individual scholars, yet serving the needs of medieval society' (Ross 1976, p.13). This was also the period in which the distinctive character and structure of the university was established as

...a self-governing community with an elected hierarchy, separated from the world of commerce, involved in a mission to learn and to teach at an advanced level, using mysterious rituals and dress to dramatize its uniqueness, and requiring from its members deep loyalty to and enduring support for each other and the university. (*ibid.*, p.13)

The question of the extent to which this mission and distinctive character have, and should have, relevance in today's universities is the subject of examination later in this chapter.

The spread of universities throughout Italy and France and later into England and Germany was largely initiated by the migration of scholars forced to flee their university in the face of 'town and gown' riots. Oxford University in 1167, and Cambridge University in 1209, were established in this way. The fact that these were the only universities in England until the nineteenth century has had a profound influence on the development of English higher education and that of British colonies such as Australia and New Zealand.

In the rest of Europe, universities grew steadily in number from around 16 in the thirteenth century to around 38 in the fourteenth century and 72 by the fifteenth century. By this time they were well-established corporate entities typically with faculties of arts, law, theology and medicine. Their power in their communities grew as they became the principal service industries of many cities and the *alma mater* of church and civic leaders. They also became the power brokers in the growing intellectual wars between the Catholic church and the state, which culminated in the effective triumph of secular

forces over the church when Martin Luther nailed his ninety-five theses to the door of the church at the University of Wittenberg in 1517. While this was seen as a triumph of secular forces and the universities over the church, it was in fact 'to become a greater threat to academic freedom than the heresy-hunting church' (Perkin 1991, p.178). The battle with the state for academic freedom is one that is still central to the university creed.

For England, the Reformation had important consequences for Oxford and Cambridge that were to influence their development through to the twentieth century. The dissolution of the monasteries saw their land and assets gobbled up by the ruling nobles, and but for Henry VIII's intervention, these universities may well have suffered the same fate. In fact, the king restricted these universities to arts and theology training for the Anglican clergy. Subsequently, in order to survive, both universities started training the landed gentry (as paying customers) in the social graces and political awareness. Thus began the great tradition of general (liberal) education of the ruling elite that was to survive in England until after the Second World War.

After a long period of growth and expansion during the sixteenth and seventeenth centuries, the universities again lost momentum, gradually reduced to training the clergy and little else. In England, there remained only two universities: Oxford and Cambridge. Both were dominated by the crown and the Anglican Church, to the extent that entry to these universities required adherence to the Thirty-nine Articles of the Anglican faith. Dissatisfaction with Oxford and Cambridge was such that groups of academics sought to establish their own institutions outside the approved university system. These new institutions offered advanced education in a broader field of learning than that provided by Oxford and Cambridge, with an emphasis on science and discovery. Their success was resented by the universities, which constantly argued for their disestablishment on the grounds that they did not conform to traditional established notions of what a 'university' should be. In fact, it was not until after the Napoleonic wars that the first English secular or 'godless' university, the University of London, was formed in 1826. It is difficult not to draw parallels between this and the opposition that some present-day

universities have to the establishment of a different kind of university, namely a 'university of technology', in New Zealand.

It would be fair to say that the Industrial Revolution was responsible for the birth of the modern university. It gave rise to a significant change to the social function of higher education from education for the ruling elite and their religious supporters to training the leaders of a much wider range of groups from industry, commerce, state bureaucracies and the new professions. It also led to the emergence of the research university.

Research during much of the Industrial Revolution in fact took place outside the universities in the newly formed mechanics institutes of England, and the *grandes ecoles* of France. However, in Scottish and German universities, the employment of subject specialists to replace traditional regent masters (who taught everything) led to the former's involvement in innovation in their specialist fields to progress industrial reform. Thus was the involvement of universities in research formally initiated.

In the mid to late eighteen hundreds, the university monopoly of Oxford and Cambridge in England was finally broken with the establishment of the great civic universities of London, Durham, Manchester, Leeds, Bristol, Sheffield, Liverpool, Nottingham and Birmingham. These 'redbrick' universities were 'more responsive to the technological manpower needs of society, more aware of the progress of research in the German universities, and more sensitive to the pragmatic approach of some universities in North America' (Ross 1976, p.37). In many ways they were the forerunners of the modern conception of the university of technology. By contrast, Oxford and Cambridge were slow to change, and although some science and technology research began at these universities in the late eighteen hundreds, the tradition of liberal general education for the elite remained, and continued to have a significant influence on higher education developments in the colonies and the United States.

In nineteenth-century Europe, another profound influence on the form of the modern university was initiated with the state appointment of Wilhelm von Humboldt to found the University of Berlin in 1810, which he saw as 'the moral soul of society and the source of the nation's culture and survival' (Perkin 1991, p.185). Essential to this mission was absolute freedom from state influence in teaching and learning, a formalisation of the concept of academic freedom. According to Perkin, (*ibid.*, p.186) '[T]hus began one of the paradoxes of the modern university, that it increasingly came to depend on the state both for material support and defence of its freedom from its most dangerous threat, the state'. This paradox is arguably even more apparent in today's universities as they face increasing intrusion into their affairs by governments which demand greater public accountability for diminishing financial contributions.

The University of Berlin (later renamed in Humboldt's honour) also set the pattern for the modern notion of the 'research university' and the Ph.D. degree, both of which were adapted and introduced into the United States in the late 1800s. Before the American Revolution, universities in colonial North America had been established initially as religious seminaries. The great institutions of Harvard, Yale and Princeton, amongst others, were founded in this way. They were based on the Oxford and Cambridge model, emphasising general education and the training of moral character, and gradually expanded to become liberal arts colleges for the wealthy.

After the Civil War (1861-1865), American universities began their rapid expansion (doubling enrolments around every 15 years until the end of the Second World War). Four ideologies competed for predominance:

- 1. The 'classical school' based on the study of Latin and Greek grammar to strengthen mental faculties, character and work habits.
- 2. The 'utility school' based on the usefulness of education and its role in promoting public service.
- 3. The 'research school' based on the German model of empirical enquiry.
- 4. The 'cultural school' based on the humanities and the desire to develop the aesthetically sensitive all-round student.

While no one ideology dominated university development in the latter part of the nineteenth century, a prevailing sense of pragmatism extracted the most desirable

attributes of each ideology. This sense of pragmatism was based around the realisation that university education was needed 'to help young men to become better farmers, mechanics, and merchants' (Morrison 1965, p.287). Pivotal to this realisation was the Morrill Act of 1862 which established the 'Land Grant' colleges specialising in agriculture and engineering. These colleges were the forerunners of the American State Universities which were founded on a tradition of practical education not dissimilar to the civic universities of England. And, like the 'redbrick' universities, it is possible to draw parallels between the aspirations of these new 'practical' American universities and those of the modern university of technology.

More or less at the same time as the establishment of the Land Grant colleges, the German research university concept was introduced to American higher education, initially at three new universities which gave emphasis to research and postgraduate education: Johns Hopkins University (1875), Clark University (1889) and the University of Chicago (1892). Later, the development of graduate research was promoted at Harvard, Yale and other private and public universities across the United States.

Around eighty years later, at the conclusion of the Second World War, the greatest expansion of higher education occurred since the twelfth century. More than just an increase in participation, this dramatic growth saw the transition from elite to mass higher education. According to Perkin (1991, p.199), this unprecedented expansion of higher education occurred for two reasons. First, because of 'the demand of a more complex and highly geared economy for applied science and technology and for social and administrative sciences', and secondly, because of 'the demand in a post-industrial society providing more sophisticated services for highly educated personnel to operate and service them'.

The modern university was thus established in the United Kingdom, the United States and most other English-speaking countries as an institution engaged in both teaching and research, open to students from all walks of life and social and economic backgrounds, which cherished its right to academic freedom and its responsibility to act

as a critic and conscience of society, and at the same time protect and preserve the national culture and heritage.

THE CONTEMPORARY UNIVERSITY

The transition from elite to mass higher education after the Second World War has been an international phenomenon driven by demographic, social and economic pressures. A critical element of this huge increase in university participation was the role played by central governments, which embraced and supported this growth and committed major increases in public expenditure to the higher education sector. With increased expenditure went increased central planning, co-ordination and control, in what was to become a dominant feature of the university systems of the United Kingdom, Australia and New Zealand.

Goedegebuure and Meek (1997) have identified five phases of higher education development in the post-war years.

- 1. A rapid expansion during the late 1950s and early 1960s.
- 2. Diversification during the 1960s and early 1970s as government funding continued to increase.
- 3. Consolidation during the late 1970s, and the establishment of alternative, more economical, forms of post-secondary education.
- 4. A focus on specific issues such as diversity, quality improvement, institutional efficiency and the internationalisation of higher education in the 1980s.
- 5. Reduction in public expenditure and an increased focus on economic viability of the 1990s.

The 1990s have also been characterised by the growth of competition and market forces in higher education. Paralleling, and to some extent fuelling this change, has been a progressive move towards recognising the private benefits of higher education. These significant developments in higher education have taken place against a state-

institution tug-of-war over the fundamental issues of institutional autonomy, academic freedom and accountability.

There is little argument about the impact of these and other effects of the continuing growth in participation in higher education that was sparked by the shift from elite to mass education after the Second World War. According to Shattock (1995):

...it remains a fact that in nearly all countries universities are suffering something of an identity crisis under pressures of rapid increases in student numbers, falling unit costs, increasing government control, and some evidence of rising public disenchantment. (p.157)

There are several important inter-related consequences for the future of higher education in these trends, all having their origins in the move to mass higher education. First, as participation in higher education increased over the last forty years, so did the size of the government's financial contribution. This has promoted an increase in the requirement for institutional accountability and related central bureaucratic intervention. These effects are interpreted by many as major impediments to academic freedom, which still remains a central tenet of the traditional university *raison d'etre*.

Secondly, mass education has promoted a progressive loss of distinctiveness amongst universities. As enrolments increase, and at the same time unit funding falls, the disposable income of universities decreases, creating fewer resources for institutional identity. Major stakeholders such as students and funding agencies cease to readily distinguish one institution from another and, perhaps worse, tend to attribute the faults of one institution to them all. Unfortunately the same does not tend to be true when an individual institution is regarded as outstanding.

This loss of distinctiveness has been accentuated by the ideological drive by many Western governments to increase the efficiency of institutions (and therefore reduce the costs to government), through the promotion of a competitive market environment. This competitive market was designed to encourage diversity and student choice. In reality, the reverse has happened in many countries, with market-driven funding

systems actually breeding conformity rather than diversity, as individual institutions all react in the same way to funding system changes. This is a recurrent theme in this study, and is discussed in depth in later chapters.

Thirdly, the value of a qualification has tended to diminish as it loses its exclusiveness. Before higher education became accessible to all, an undergraduate degree was highly valued, and its recipient had considerable status in society. Today, when such degrees are so commonplace, the status of the graduate is lowered, and the value of the degree is diminished in the eyes of employers. Inevitably, students are now looking to postgraduate qualifications to re-establish their status and employment edge.

The drive for a polytechnic, such as UNITEC Institute of Technology in New Zealand, to seek university status is in part promoted by a parallel trend of 'qualifications creep' at an institutional level. Work-related qualifications which were once at certificate level are now at diploma level, diplomas have been replaced by undergraduate degrees, and employment opportunities that used to be met by the undergraduate degree now require a postgraduate qualification. In such an environment, the institution inevitably raises the academic level of its programmes, and in the process assumes more and more of the characteristics of a university. Eventually, it becomes an issue of parity of esteem for the institution and its non-university degrees relative to the established university, and the most obvious means of eliminating this problem is for the institution to become a university itself.

However, an institute of technology, such as UNITEC, has a mission that is significantly different from that of a traditional university. To grow its market share in a highly competitive New Zealand market, and at the same time hold on to its fundamental institutional values and philosophy, it therefore must maintain its distinctiveness and offer an alternative form of higher education to its students as a different kind of university. The paradox of this solution is that institutions such as UNITEC are required to qualify under the terms established for 'traditional' or 'classical' universities, and therefore to become the very kind of institution that they

wish to distinguish themselves from. UNITEC's institutional ambition to achieve university status is examined in depth in Chapter 7.

It is against the backdrop outlined in the previous section that many writers are seriously considering the future of the university, and its ability to survive in its current form. According to Renner (1995, p.57), the era of the modern university may be over, and 'if the 1990s are the beginning of the Post-Modern era, which is marked by a new social, economic and political reality, then higher education is more connected with an unknown future than a known past'. Similar sentiments have been expressed by other contemporary writers on the university. These writers have a tendency to portray the modern university as being 'in ruins' (Readings 1996), or 'discontented' (Rothblatt 1997), or 'on the brink' (Coaldrake and Stedman 1998), or even 'dead' (Barnett 1997a).

However, some still believe in the worth and durability of the traditional model. Rosovsky (1990), based on his long association with Harvard University, promotes a view of the university mandated on tradition. Jaroslav Pelikan, in his eloquently written re-examination of Newman's 'Idea of a University' (Pelikan 1992), makes a personal case for the place of the traditional university. By contrast, Bill Readings, in his provocatively titled book, *The University in Ruins* (Readings 1996), views this as an attempt to recall us to a lost mission of liberal education. He puts forward his own perspective on the future of the university by arguing that universities have lost their guiding idea of culture as an essential function. He believes that the modern (or 'post-historical') university must develop a transnational perspective which will grow with the decline of the nation-state and of culture as a national ideology.

Readings describes one destiny of the contemporary university to be 'the university of excellence, where excellence names a non-referential principle that allows the maximum of uninterrupted internal administration' (*ibid.*, p.120). However, while recognising this as a real trend, exemplified by the current preoccupation with quality in institutions of higher education around the world, Readings believes that this development should be resisted, as it has no referential ideology to sustain it. He

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further believes that the university 'is becoming a transnational bureaucratic corporation' (p.3), a view shared by others (Renner 1995), (Peters 1997).

Renner is, in fact, quite forthright in his criticism of the current parlous state of the university. He believes that we are at a time in history of fundamental change to the purpose and function of the university. Central to this belief is his identification of the coming of the 'Information Age' and/or the 'Knowledge Age' (which are not entirely the same thing), and the profound changes that the university will have to make to survive in this new environment.

In 1996, a colloquium was held in Oxford, shared by two contrasting universities. One was the oldest in England, Oxford University, established in the late twelfth century, and one was amongst the youngest; Oxford Brookes University, established in 1992. The objective of the colloquium was to consider the character of the university in a period of radical and rapid change (Smith and Webster 1997a). Paul Filmer, one of the contributors to this colloquium, identified five distinctive models for the modern university (Filmer 1997):

1. The traditional Oxbridge model.

This is based on the idea of the university as the preserver of the culture of the minority in the face of mass civilisation. This is the notion promoted by F.R. Leavis, (Leavis 1948) based on the traditional Oxbridge model and the idea of a university promulgated by Newman in the mid-1800s.

2. The metropolitan University of London model.

This model is based on the idea of a university as a response to 'the conditions and concerns of a new industrial burgeois society' (Filmer 1997, p.49) with an epistemology which 'embraced the applied as well as the pure sciences, the study of political economy and the social sciences as well as the classics and humanities' (*ibid.*).

3. The 'Robbins' technological university model.

This is based on the idea of a technological university in which the focus was on the study of applied sciences and their technological application. Set up in the provinces, these modern 'plateglass' universities tended to emphasise the social sciences rather than sciences and technology, and to drift towards the Oxbridge model of elitism.

4. The polytechnic university model.

This model is based on the new universities created by the 1992 legislation in the United Kingdom. These universities, as former polytechnics, brought a range of vocational and professional programmes at postgraduate, undergraduate and subdegree level to the university environment, and thus significantly expanded the established higher education sector in that country. They are marked, according to Filmer, by their strong managerial institutional cultures.

5. The Open University model.

This is based on the open-access model of the Open University, which was established in the 1970s. Variations of this model have since been established in both the public and private sector to provide vocational education and training to specialised groups. The advent of the Internet has given a new impetus for the expansion of institutions of this model.

Filmer believes that a coherent picture of what constitutes the modern university cannot be found amongst this wide range of institutional types, and is cautious of 'the relatively recent differentiation of the higher education system into its diversity of forms' (Filmer 1997, p.52). He does, however, identify three clear functions that a modern university can (?should) perform for modern society, namely cultural reproduction, research and training. There is little argument about the latter two functions, but writers such as Bill Readings would strongly contest the contemporary university's role as guardian of a nation's cultural identity.

At the heart of the transformation of the university in the second half of the twentieth century is the very significant move from elite to mass higher education. This had its roots in post-war support for returning servicemen, accelerated with the 'baby-boom' generation of the 1960s, and further expanded with the incorporation of other types of tertiary institution into the university fold (like, for instance, the collapse of the binary systems of Australia in 1987 and the United Kingdom in 1992).

No one will argue that the university has not changed through developments such as:

- reductions in state funding;
- the need for entrepreneurship and income generation;
- the advent of vocational specialisation at the expense of general education;
- the transition from collegiality to managerialism;
- the onset of technology; and
- the information explosion and the plurality of knowledge;

to name just a few. The issues of debate centre on the extent of the changes that have flowed with these developments, the extent of differentiation amongst higher education institutions that has eventuated as a result of these changes, and whether some universities of today have any right to use that name or have anything much by way of common institutional features.

Smith and Webster (1997b) are critical of the notion that systemic (or institutional) diversity is inherently good, to the extent that it excludes the notion of a hierarchy of higher education institutions.

It is all very well to claim the common title 'university' for in excess of 100 institutions in Britain today, and it is superficially appealing to contend that each is distinguished from all others (as well as being internally fractured). But while this highlights the complexities of locating universities on matrices of difference, it is an absurdity - and one that is ultimately injurious, especially to students - to suggest that differences are such as to subvert hierarchy. (*ibid.*, p.105)

A recurrent theme in contemporary writing about the university is its place in a world that, according to whom you believe, has either entered the post-modern condition, or is about to enter it. The very notion of post-modernity is a matter of debate and confusion, much of it to do with the underlying sociological or philosophical context in which it is used. The former is descriptive, and the latter value-laden. Barnett (2000) makes a clear distinction along these lines when talking about the future of the university. He differentiates between the use of the expressions 'post-modern' and 'postmodern'. The former he uses to refer to the sociological description of a 'new

world order' which is partly the result of globalisation, the information technology revolution and other forms of change. The latter he uses to refer to a philosophical position which invites a value position. In line with Barnett, in all references to the future of the university, it will be the post-modern condition to which reference will be made in this thesis.

Barnett's post-modern world is one of 'supercomplexity' in which 'the fundamental frameworks by which we might understand the world are multiplying and are often in conflict. Of the multiplication of frameworks, there shall be no end'. (Barnett 2000, p.6) He contends that the university is one of the institutions principally responsible for this situation, simply because 'this is what it is paid to do' (*ibid.*, p.76). The university, according to Barnett, is expected to generate new ways, or frameworks, of understanding the world. It is also expected to provide critical scrutiny of these frameworks, and to help society to cope with the ever increasing complexity that they generate. This would seem to be a long, long way from the original establishment of the *universitas* as a guild of scholars established largely for reasons of self-preservation.

Barnett's view of the essential role of the university as one which promotes supercomplexity and, at the same time, helps society to cope with living with supercomplexity, is in stark contrast to that of Readings, who describes the modern (?post-modern) university as a functional tool of a nation driven by global economic imperatives. It would be easy to think that Barnett describes the university as he wishes it to be, while Readings writes, perhaps sadly, about the university as he believes it is. Either way, there is no doubt that the university has undergone some profound changes over the last 50 years, perhaps more profound than those of the preceding 500 years. Some of the more distinctive changes that have occurred since the Second World War are outlined in the paragraphs to follow, and are summarised in Figure 2.1.

Figure 2.1 The developmental trends in higher education towards the post-modern university

The post-war university	The modern university	The post-modern university
Participation		
elite	mass	universal
Consumer Perception		•
privilege	expectation	right
Funding		
government	government/consumer	consumer
Control		
co-ordinating authority	government	corporation
Context		
institutional	national	international
Decision-making		
collegial	institutional	corporate
Teaching technology		
blackboard	overhead projector	computer
Teaching style		
tutorial	lecture	Internet
Product		
'educated' person	expert person	specialist
Academic staff		
intellectual	academic	professional
Academic authority		
absolute	questioned	replaced
Knowledge		
monopoly	regulated	privatised
World-view		
confined	universal	supercomplex

Without doubt, the single most influential change to have affected the character and function of the university since the end of the Second World War has been the dramatic increase in participation. The transition from elite to mass higher education is well documented. In all countries of the Western world this has been driven by deliberate government policy. What is less clear is the driver for the current transition to a post-modern higher education environment in which participation is considered a right rather than a privilege or even an expectation, and as such is moving from a condition of mass education to one of universal education. While national governments applaud such a trend from a social perspective, they are rightly concerned about its implications from a fiscal viewpoint.

Over the last 40 years, both the Australian and New Zealand higher education systems have undergone more growth in participation than had occurred in the previous one hundred or so years. In Australia in 1960 there were around 53,000 students enrolled in higher education institutions; in 1999 this figure had reached 686,000. Similarly in New Zealand, enrolments have increased from 27,300 in 1960 to over 225,000 in 1998. Initially this growth was funded by major increases in expenditure by central government, but progressively, the level of unit funding has decreased as the level of participation has increased.

This has required the university to seek its income from elsewhere. In the 1990s this has increasingly come from the student in the form of tuition and associated materials fees. A recurrent debate which has characterised the modern university has been whether higher education is a private or public good. Now the debate has shifted to one concerned not about whether students should pay, but about how much they should pay. Arguably, if the modern university is characterised by an acceptance that the government should provide only a partial subsidy towards the cost of higher education, and that students should contribute in a significant way, perhaps the post-modern university will be characterised by an acceptance that the government does not need to contribute at all through subsidy, and that universities are expected to generate their income through a combination of student fees and entrepreneurial activity. In such an

environment it is hard to visualise the Barnett model of a university, and all too easy to imagine the Readings one.

Paralleling the growth in participation, and the complementary growth in government funding, there has also been a developmental trend away from institutional independence and 'separateness' towards more integrated national systems as governments have sought to establish some control over their growing investment in higher education. While the post-war university operated with a reasonable degree of institutional independence, and certainly a low level of government interference, that can certainly not be said of the modern university. This is clearly the case in Australia and New Zealand, where the respective governments

have asserted control over the universities through the dismantling of co-ordinating authorities, the strategic application of direct and indirect financial steering mechanisms, and the implementation of accountability and quality assurance processes. (McInnis 1995, p.40)

If this is the situation in which the modern university exists, then perhaps a post-modern university, if it is no longer dependent on government funding, will be essentially free from government control. While this might seem a desirable state of affairs, it avoids the critical issue of where the funding comes from once the government winds back its contribution. If, as is increasingly becoming a reality, universities turn more and more to the large national and multinational corporates for funding, admittedly on a fee for service basis, then it is hard to avoid a reality that these same corporations will exert a stronger and stronger influence on the institutions they fund. The university could find itself leaping from the government pot into the corporate fire.

Universities are not only in a fascinating transition with respect to external influences, they are also undergoing a revolution from within. At the end of the Second World War, the pervasive education technology in the university was the blackboard and, to a lesser extent, the movie projector. Indeed, the blackboard had reigned unchallenged in the university classroom for several hundred years before this. For the modern

university of the 1980s the blackboard was complemented by, and to some extent replaced by, the whiteboard and overhead projector, and the movie projector by the video recorder. While these were significant technological developments, they were, in reality, only providing new tools to apply to the existing well-tried teaching methods of the classroom and lecture theatre, and a prevailing didactic pedagogy that had changed little since the twelfth century. The genuine breakthrough in education technology has come with the computer, and more recently with the advent of the Internet.

The importance of technology and the Internet, and the profound impact that this will have on the nature of the post-modern university, and indeed all aspects of tertiary education, is emphasised by numerous writers. In particular, Tiffin and Rajasingham (1995) present a vision of what education could become as information technology develops. They present a glimpse of a new kind of institution that is virtual, not real, and is so radically different to today's university that it is hard to believe that such a transformation may well occur within the next ten years. Norris (1997) and Norris and Malloch (1997) pursue a similar theme in their advocacy for a dramatic technology-driven transformation of the modern university to maintain the legitimacy of its contribution to teaching and research.

The new information technology has not only brought with it a totally new perspective to teaching and learning - a new pedagogy - it has had an even more profound effect on the university. It has removed the university's monopoly on information and knowledge. The post-war university still retained a virtual monopoly on knowledge creation and preservation, and maintained its self-proclaimed position as the keeper of the nation's culture and identity. Research was the unquestioned responsibility of the university, and new knowledge was created, tested and passed on by university staff who were intellectual in their approach, set their own curricula and regarded their academic freedom as an unchallengeable right. This might not been sustained in the post-modern university. In the face of huge increases in student participation, knowledge is arguably becoming commodified and regulated, curricula standardised, and academic freedom reduced. The self-contained intellectual has become the faculty

academic, balancing personal research and teaching objectives with those of the institution, and conforming to externally driven expectations about the quality of his or her performance.

The Internet and the 'information age' are changing this yet again, not only in how universities teach and how students learn, but what they teach and learn. There is now so much information available that the post-modern university will have to genuinely rethink its mission and justify its existence. According to Kumar (1997)

There are indeed many competing sources of information and knowledge. Knowledge itself has become fragmentary, 'timeless values' increasingly contested, pluralism and relativism proclaimed in every sphere. If universities were only about the communication of knowledge or the transmission of imperishable values, then it is difficult to see how they could defend themselves against the charge of being expensive anachronisms. (p.28)

Bauman (1997) expresses a similar concern about the loss of academic authority in a post-modern information age (although, in contrast to Barnett (1997a, 2000), Bauman is, strictly speaking, concerned with the 'postmodern' rather than 'post-modern' condition). He suggests that the 'last rampart of authority' of the university might be in the 'exclusive entitlements of the credentials-certifying agency' (*ibid.*, p.23). Bauman further contends that, to survive in a postmodern world, the university must be left to chart its own course, to respond to the myriad uncertainties in its own way. As Kumar puts it,

...let the hundred (or so) varieties of British universities bloom. Do not let governments impose a standard curriculum or a central regulating body. That would kill off the very variety that, in a changing and largely unpredictable environment, allows some - we cannot tell in advance which - institutions and disciplines to nurture relevant and creative kinds of skill and knowledge. (Kumar 1997, p.28)

Technology will undoubtedly have a profound effect on the nature of the university of the future. The debate is probably more with how this effect will manifest itself than with the fact that it will occur. It may be one of the critical factors that promotes a new distinctiveness and diversity amongst higher education institutions.

The effect of these fundamental changes on institutional diversity are complex and contradictory and will be explored in later chapters.

CHAPTER 3

DIVERSITY AND DIFFERENTIATION IN HIGHER EDUCATION

INTRODUCTION

Nowhere is diversity in higher education more apparent than in the United States, where it has long been widely upheld as an essential characteristic of its higher education system and is seen to provide a wide range of benefits, many of which accrue to the primary consumer of this education, the individual learner. For example, Stadtman (1980) states that institutional diversity

- increases the range of choices available to learners
- makes higher education available to virtually everyone, despite differences among individuals
- matches education to the needs, goals, learning styles, speed and ability of individual students
- enables institutions to select their own missions and confine their activities to those which are consistent with their location, resources, levels of instruction, and clienteles
- responds to the pressures of a society that is itself characterised by great complexity and diversity
- becomes a precondition of college and university freedom and autonomy because the greater the differences are among institutions, the more difficult it is for a central authority to convert them into instruments of indoctrination rather than education (*ibid.*, pp. 98-99)

It is hard not to believe that these are inherently beneficial outcomes of a diversified higher education system, that diversity is therefore inherently good, and that national systems will benefit from government policies to promote diversity. However, in spite of the widespread debate on diversity in higher education over the last thirty years, the lessons from different countries suggest that this is far less clear-cut than it might first appear. According to Meek (2000) this debate 'has resolved neither how

diversity is to be achieved, whether or not it is an inevitable result of expansion, nor even if it is a worthwhile goal' (Meek, Huisman and Goedegebuure 2000, p.1).

This chapter explores these notions and provides an overall context within which aspects of the diversity of the higher education systems of Australia and New Zealand are compared and evaluated in Parts Two and Three of this study. The chapter starts with a review of the concepts and definitions associated with diversity in higher education and, in particular, provides a series of definitions of key terms such as diversity, differentiation and diversification, which will be used throughout this study.

The next section provides an overview of diversity in practice, linking to aspects of the history of development of the university presented in Chapter 2, and illustrating the ebb and flow of diversity in higher education from the choice available to students of the University of Paris in the twelfth century to the sameness of universities in pre-war Great Britain. It also explores the distinction between intended, government policy-driven diversity and unintended institutionally driven diversity.

Finally, the chapter illustrates these concepts with a series of snap shots of diversity in a range of international settings. The countries used for these illustrations are an eclectic mixture, selected because reasonably accessible information exists from which the extent of systemic or institutional diversity can be described. In some, but by no means all cases, it is also possible to identify the national education policy on which the country's diversity has been based.

CONCEPTS AND DEFINITIONS

According to Huisman (1995), 'in the context of higher education, the terms differentiation and diversity refer to establishing or maintaining differences between entities - institutions, programmes, sectors - of the higher education system.' (*ibid.*, p.1). Huisman distinguishes between the processes of differentiation and diversification by reference to their application as biological concepts. Differentiation occurs with the

emergence of several distinctive parts from an initially integrated whole, which then depends on the parts for its continued existence (for example, progressive cellular differentiation in the human body). By contrast, diversification occurs when the variety of entities in an arbitrarily defined system increases, but the system does not depend on the entities for its existence (for example, species in a community). While these biological concepts do not translate well into higher education, they do have some application. In particular, Huisman emphasises that differentiation and diversification are processes, and diversity the product. However, he also concludes that 'it seems untenable to maintain the ideal-typical distinction between differentiation, diversity and diversification'. (*ibid.*, p.51), and that the terms differentiation and diversification both relate to increases in the size of the population under study. This view is also adopted by van Vught (1996), who defines differentiation as a process 'in which new entities emerge in a system' (p.42). Interestingly he makes no reference to the process of diversification.

Notwithstanding Huisman's and van Vught's views, the biological analogy can also be used to demonstrate that differentiation leads to diversity through a process of change, while diversification promotes diversity through an increase in the number of entities. As summarised by Goedegebuure, Meek, Kivinen and Rinne (1996, p.4), 'like differentiation, diversification is a dynamic process, but here the focus is on the change of numbers of units within a community rather than on the relationship between a single unit and the environment'. This appears to be a useful distinction that will be elaborated on later in this section.

A further and closely related distinction between the processes of diversification and differentiation should be made, however. This distinction relates to *initiation*. In the simplest terms, consider a whole made up of a number of parts. The process of diversification is initiated from the whole to create greater diversity within the whole. The process of differentiation, on the other hand, is initiated by the part, and likewise results in greater diversity within the whole.

This is best illustrated by considering a system of different types, with each type comprising a number of entities. In the higher education environment, the system may be the higher education system of a particular country; the types may be the different types of higher education institutions within the system (for example, the universities and colleges of advanced education in the pre-UNS¹ era of Australian higher education; the ten categories of US higher education institutions classified by the Carnegie Foundation, and so on); and the entities may be the individual institutions which belong to each type.

The higher education system (the whole) may increase in diversity through a deliberate process of diversification, commonly initiated by government policy. This may be achieved by increasing the number of types (for instance, creating a new type of higher education institution) and/or increasing the number of entities within a type (for instance, establishing new universities). Either outcome, or both, may result in greater diversity. By contrast, an individual entity (for example, a university) may adopt a deliberate policy to differentiate itself from other universities for market or other reasons. Therefore, through a process of differentiation, there is an increase in diversity within the type (the universities) and within the system, without an increase in the number of entities or types within the system.

These relationships are shown diagrammatically in Figure 3.1 in which a hypothetical higher education system is depicted comprising three types of institution. In this diagram:

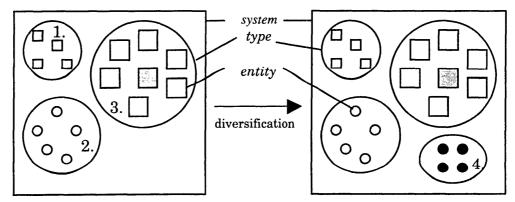
Type 1 contains four similar entities (institutions).

Type 2 contains five entities, three of which share a particular set of similarities, and the other two a different set of similarities.

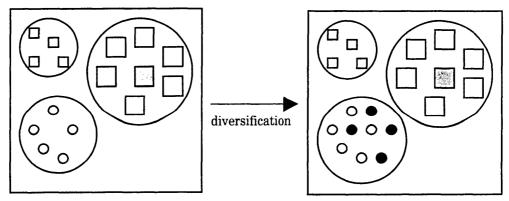
Type 3 contains seven entities of which three share one set of similarities, another three share a second set of similarities, and one has a third set of similarities.

¹ UNS: Unified National System established in Australia in 1988

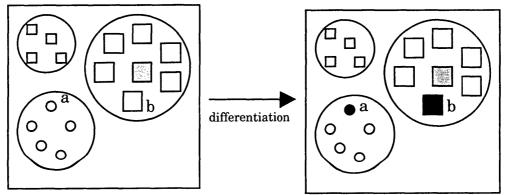
Figure 3.1 The promotion of diversity in a higher education system by diversification and differentiation



A. Diversification: a new type of institution is created comprising 4 new and similar institutions. Systemic diversity increases from 6 to 7 different entities.



B. Diversification: 4 similar but new institutions of an existing type of institution are created. Systemic diversity increases from 6 to 7 different entities.



C. Differentiation: institutions a and b differentiate themselves from other institutions of their type. Systemic diversity increases from 6 to 8 different entities.

Greater diversity for the system as a whole is depicted as being achieved by three principal means:

In A, the diversity of the system is increased by the creation of a new type of institution (Type 4) comprising four new and similar entities. The number of institutions (entities) and the number of types increases. The process is one of diversification.

In **B**, the diversity of the system is increased by the creation of four new and similar entities of an existing type of institution which are different to the other entities of this type (Type 2). The number of institutions (entities) increases. The process is one of diversification.

In C, the diversity is increased by specific entities (institution (a) of Type 2, and institution (b) of Type 3) changing sufficiently to differentiate themselves from other previously similar institutions of the same type. The number of institutions in the system does not change. The process is one of differentiation.

It is interesting to note that while in cases A and B the number of institutions in the system increases from 16 to 20, the diversity (measured simply by the number of different types of institutions) increases from 6 to 7, while in case C, although the number of institutions remains unchanged, the diversity (by the same measure) increases from 6 to 8.

A number of significant implications flow from this proposed use of the terms diversity, diversification and differentiation.

- 1. If the number of types of institution increases, the diversity of the system increases (through a process of diversification).
- 2. If the number of institutions increases, the diversity of the system may or may not increase. If the institutions are 'different' to those already in the system, diversity increases (through a process of diversification). If the new institutions are 'the same' as those already in the system, then diversity does not increase.
- 3. If the number of institutions remains unchanged, the diversity of the system may or may not increase. If one or more institutions differentiate themselves from other

institutions, the diversity increases. If no differentiation occurs, the diversity of the system does not change.

4. The number of institutions in a system has no direct relationship to the diversity of that system.

Apart from these fundamental distinctions in the use of the terms diversity, diversification and differentiation, various authors have also defined a range of types of diversity (Stadtman 1980; Birnbaum 1983; Huisman 1995; Kivinen and Rinne 1996). Birnbaum, in particular, distinguishes between internal and external diversity. 'Internal diversity refers to differences within institutions; external or institutional diversity refers to differences between institutions' (Birnbaum 1983, p.39) (italics in original). As Birnbaum points out, an increase in the internal diversity of institutions may result in those institutions becoming more like one another. When this occurs, internal diversity correlates negatively with external diversity. This becomes a significant factor in evaluating the diversity of unitary higher education systems in which the market is the prime driver of institutional change.

Birnbaum (1983) also defines seven forms of diversity:

• programmatic diversity: differences in the programmes offered (qualifications,

levels, disciplines etc.)

• procedural diversity: differences in the way programmes are offered

(delivery systems, student policies, administrative

process)

• systemic diversity: differences in institutional type, size and control within

a single system

• constituential diversity: differences in family backgrounds, abilities, gender,

ethnicity etc. of students

• reputational diversity: differences in the reputation of the institution

• values and climate diversity: differences in institutional culture and environment

• structural diversity: differences in legal authority, accountability etc.

All of these forms of diversity impact on institutional (systemic) diversity², and provide a useful framework from which to evaluate (albeit qualitatively) institutional differences and therefore the diversity of the system to which the institutions belong. The literature on diversity in higher education, however, tends to concentrate on only three of these types of diversity: systemic diversity, structural diversity and programmatic diversity (Goedegebuure, Meek *et al.* 1996), presumably because they are more readily observable, and have a more discernible impact on the higher education systems in which they occur.

To conclude this introductory discussion on the definition of diversity and related terms, the general definition of diversity offered by Trow (1995), and quoted by Meek, Huisman and Goedegebuure (2000) is considered a most useful general statement that will be utilised throughout this discussion:

By diversity in higher education I mean the existence of distinct forms of post-secondary education, of institutions and groups of institutions within a state or nation that have different and distinctive missions, educate and train for different lives and careers, have different styles of instruction, are organised and funded and operate under different laws and relationships to government. (*ibid.*, 2000, p.3)

This general definition of diversity aligns with Birnbaum's terms 'external diversity', 'institutional diversity' and 'systemic diversity' (Birnbaum 1983). In this study the principal focus is on differences and similarities *between* institutions and the terms 'systemic diversity' and 'institutional diversity' will be regarded as synonymous and will therefore be used interchangeably.

Within the body of literature concerning diversity and differentiation there are a number of other terms that are commonly used to depict similar or identical processes or outcomes. To avoid any later confusion these terms are listed below and defined and

² Institutional diversity refers to differences in institutional type, usually but not exclusively within a single system. It is synonymous with systemic diversity when used in reference to a single system.

related to the concept of diversity in the way that they will be used in the ongoing discussion:

uniformity an absence of diversity

homogeneity a low degree of diversity

conformity a low degree of diversity

heterogeneity a high degree of diversity

convergence decreasing diversity

divergence increasing diversity

distinctiveness that which an institution seeks through the process of

differentiation

THE MEASUREMENT OF DIVERSITY

While the concept of diversity in higher education systems is well established in the literature and in practice, attempts to quantify differences between institutions are relatively uncommon. Birnbaum (1983), Huisman (1995, 2000), Meek and Wood (1998) have all proposed approaches to the measurement of diversity and differentiation, and have specified a variety of variables and statistical methods which could be used in longitudinal and cross-sectional research designs to determine changes in systemic diversity with time or changes in diversity across systems. A particularly thorough utilisation of institutional characteristics for the purposes of determining the similarity and diversity of institutions has been undertaken by the Australian Department of Education, Training and Youth Affairs (DETYA³) (Department of Education, Training and Youth Affairs (DETYA³) (Department of Education, Training and Youth Affairs 1998). The outcomes of this investigation will be reviewed in Part Two of this study, but it is appropriate here to consider the variables DETYA selected and why.

³ The Department of Education, Training and Youth Affairs (DETYA) has had a variety of names. It was previously called the Department of Employment, Education, Training and Youth Affairs (DEETYA). For consistency, all references to the Department in this study will be made under its current name (DETYA).

The DETYA Report on the Characteristics and Performance of Higher Education Institutions (*ibid.*) identifies five key reasons for the selection of variables:

- relevance related to the purpose and objectives of the institution
- reliability based on consistent data
- auditability data are able to be scrutinised
- transparency data are able to have clear meaning; and
- timeliness data to support the indicators are currently available.

Significantly, none of these reasons actually reflect the need for an end-user perspective on the evaluation of institutional diversity. As will be amplified below, different variables have different significance for different stakeholder groups, and rarely will a 'one-size fits all' approach be satisfactory.

Using the guidelines outlined above, the DETYA report establishes a range of 'dimensions of similarity/dissimilarity' (*ibid.*, p.23) and associated indicators. These are summarised in Table 3.1. Indicators for each dimension were established by using factor analysis, and these were then used to provide the basis for the clustering of institutions. Unfortunately, as Huisman (2000) comments, there is no amplification of the rationale used to establish the five dimensions. Huisman also analyses the merits of cluster analysis using different methods (the single linkage method and the Ward method) and then considers ordination as a means of 'showing relationships, detecting outliers, and summarising the data set' (*ibid.*, p.50). He also demonstrates the use of simple graphical methods to illustrate the relationships between two variables and the changes that occur over time. Finally, Huisman reviews the use of diversity indices and compares the results using seven different indices taken from ecology studies and from Birnbaum (1983).

The conclusion to be drawn from these and other similar quantitative studies is that the results are very dependent on the variables selected and the analytical methodology employed. There is also a fundamental reality that the end result may provide useful scope for theoretical research into diversity, but be of little use to the stakeholders who may wish to interpret the data according to their own perspective.

Table 3.1 <u>Dimensions of similarity/dissimilarity and associated indicators (from Department of Education, Training and Youth Affairs 1998)</u>

DIMENSIONS OF SIMILARITY AND DISSIMILARITY	INDICATORS	
Size	Number of Students	
	EFTSU	
	Number of staff members	
	Total Revenue	
Overseas Orientation	Share of Overseas students 1996	
	Share of Overseas students 1997	
	Revenue from overseas students	
Diversity	Postgraduate fields of study	
	Undergraduate fields of study	
Internal/Full-time orientation	Share of internal students	
	Share of full-time students	
	Student-staff ratio	
Research orientation: primarily financial indicators	Research revenue	
•	Research revenue in total income	
	Research quantum in Commonwealth grant	
	Research revenue per research postgraduate student	
	Share research staff	
Research orientation: primarily staff indicators	Share of higher level staff (above senior lecturer)	
- · ·	Share of staff with PhDs	
	Share of research postgraduate students	
	Research revenue in total income	
	Research quantum in Commonwealth grant	

One of the fundamental difficulties with the measurement of diversity is that diversity means different things to different interest groups, and therefore variables which might be meaningful to one stakeholder have less significance to another. For example, the government is a key stakeholder in the higher education system of any country, and frequently, government policy is predicated on the notion of a differentiated higher education system. For the government, this systemic diversity is measured by a consideration of the system as a whole, and the range of institutions within the system based on broad institutional parameters such as mission, student load, programme level and research activity. For the student, diversity equates to choice, and is based on parameters such as access, location, qualifications, reputation and cost. For students, diversity is also only meaningful for that group of institutions to which they can readily go. Systemic diversity across a nation is meaningless to students if the only institutions

to which they can reasonably go are all the same. By the same token, institutional diversity can also mean different things to different groups of students within the total student population.

DIVERSITY IN PRACTICE

Arguably, diversity in higher education has existed as long as higher education has existed. In the twelfth century, the very first 'organisational' universities, in Paris and Bologna, were developed with quite distinctive *modus operandi*, with Paris being essentially a guild of masters, and Bologna under the control of students. Indeed, Patterson (1997) describes an environment in twelfth-century Paris which would translate remarkably well into the twenty-first century:

... there was plenty of choice for students - they could wander from school to school until they found the course or master that best suited them - and there was the freedom for masters to teach where, and when and what they chose. The availability of choice stimulated competition among the teachers to attract the feepaying students, and this generated new teaching methods and ideas, and a continuing intellectual vitality. (*ibid.*, p.51)

Over the succeeding 800 years new universities and other types of higher education institution were established at an accelerating rate, in response to a wide variety of social and political drivers. From a global perspective, then, diversity in higher education has always existed. According to Neave (2000), 'institutional diversity allied to programme diversity has very respectable historic roots' (p.9). Neave suggests that institutional diversity has its origins in the development of alternatives to the established university when the latter refused to accept a new discipline into its traditional folds. This undoubtedly occurred, but it is important to distinguish between diversity as an unintended outcome or product of some specific activity (such as the establishment of the Schools of Navigation outside the university in Portugal in the sixteenth century), and diversity as the deliberate means to some other intended outcome. The focus of this discussion is on the latter, and therefore addresses the development of diversity in higher education as a recognised need, as a means to some

other end (often poorly defined), and not as an (?unintended) end in itself. Inevitably, this need is defined by government policy. In other words, the focus is on diversity as the driver for national or local action, not as the consequence of some other action. Using the definitional distinctions outlined earlier, if the initiator is the national system, the process is one of diversification. If the initiator is the institution, the process is one of differentiation. In both cases, the outcome is greater diversity for the system, although the rationale for the initiation is likely to be quite different.

The desire and recognised need for diversity in higher education is a relatively recent phenomenon. Before the Second World War, higher education was an exclusive pursuit to which only a very small proportion of the population aspired. The pre-war university of the United Kingdom, Australia, New Zealand and other countries offered a small range of qualifications to support traditional professions such as medicine and law, and general education in the arts and sciences towards a career in the public service. Generally speaking, therefore, one university looked very much like another, and indeed the academic tradition from which they had evolved demanded that this be so. Even where differences between institutions existed, as they certainly did in the United States in the nineteenth century, and in the United Kingdom in the late 1800s with the establishment of the 'redbrick' universities, these differences resulted in a degree of diversity in higher education, rather than being created to meet a centrally mandated need for diversity in a national higher education system.

After the Second World War, however, the higher education environment changed dramatically. Driven by demographic, social and economic pressures, there was a rapid transition from pre-war elite higher education to post-war mass higher education throughout the Western World. The emergence of the mass higher education system did not, however, mark the end of the elite institution. According to Trow (1979) 'mass systems do not eliminate the need for elite functions, which must still be performed somewhere but cannot be accommodated - or afforded - in institutions or units which are primarily oriented to mass access'. (quoted in Fulton, 1996, p.163). This could be argued as an underlying justification for the establishment of a binary national system

of higher education - such a system allows the pre-existing universities to continue their elite function, while the need for mass access to higher education is absorbed by the second tier new institutions. This point is further considered later in this section.

In many countries the move to mass higher education was driven by government policy which provided financial support for returning servicemen to further their education (for example, the GI Bill in the United States, and the Commonwealth Reconstruction Training Scheme in Australia). This 'new breed' of first-generation higher education student was not necessarily suited to the traditional university education of the pre-war era, and required different experiences and outcomes for his or her⁴ education. Thus, it could be argued, central policy-makers recognised that diversity in higher education was an essential means of achieving equity in opportunity and increased participation in higher education. Diversity was the means, a more highly educated nation the goal.

The centrally mandated push for diversity in national systems of higher education has remained a feature of most Western governments since the Second World War, but the approaches that different nations have taken to achieving this have varied considerably both from nation to nation and within a nation over time. In Western Europe, for instance, countries such as Great Britain, Germany and France introduced 'short cycle higher education as an alternative to the university' (Neave 2000, p.11). In so doing, they deliberately chose to segment the higher education system through a binary policy that separated the traditional university, with its focus on 'education', from the new forms of institution with their focus on 'vocational training'. These new institutions took the form of polytechnics, colleges, institutes of technology, and *Fachhochschulen*, all of which provided an alternative to traditional university education by offering skills-based vocational programmes generally of no more than two years duration. Similar alternatives to the university were also established in the United States and Canada through the community colleges of those countries, in Australia through the

⁴ For some years after the Second World War, higher education was still very much a male domain. The later rapid increase in the number of women in higher education was a further element in the massification of higher education, which independently promoted the need for greater diversity to meet their specific education needs.

technical and further education (TAFE) colleges and colleges of advanced education (CAE), and in New Zealand through the technical institutes (later to become the polytechnics/institutes of technology). These deliberate government initiatives indicate that 'mass demand for higher education is self evidently one of, if not the most powerful, factors fuelling institutional diversity' (Neave 2000, p.11). It is an interesting sideline to ponder the extent to which this sort of response to the huge increase in demand for high education in the 1950s and 1960s was driven by a desire to ensure that the university was preserved as the domain of elite education, and that mass demand would be catered for by these 'lesser' institutions.

Over the last 15 years, some of these binary policies have either failed or been placed under increasing pressure in the countries in which they were introduced. The core reason for this pressure is, according to Neave, a combination of academic drift and status envy.

Institutions supposedly differentiated from the university, sought for reasons of prestige and standing, to emulate and literally to reproduce their elders if not their betters. Academic prestige and the professional norms of academia are a most powerful lever and tend to drive in an opposite direction to differentiation which takes the form of diversity's most intimate enemy - namely, imitative homogenisation. (*ibid.*, p.13)

It could be argued that one of the drivers for this emulation was, in fact, the reluctance of the traditional universities to accord adequate academic status to their new vocationally oriented cousins. The more the universities emphasised their own superiority and status and, by inference, denigrated the new institutions, the more the latter wanted to 'join the club'.

It must also be stated, however, that academic drift did not occur solely because the new institutions wished to be more like the universities. It also occurred because of the natural upward drift of qualifications associated with people's careers. A position which in the 1960s might have been filled by someone with a two-year certificate was, by the 1980s, requiring someone with a first degree. Similarly, positions requiring an undergraduate degree in the 1960s required a postgraduate qualification 20 years later.

Also, over the last 30 years, there has been a raft of new professions, all seeking credibility and standing through degree-level qualification. Most of these new professions have had a natural affinity with the new institutions. The end result was what Neave calls 'programmatic drift - that is, the academicisation of vocational programmes' (*ibid*.). The outcome, through a combination of these factors, has been institutions which over the years have looked more and more like universities in the level of education they have offered. It was inevitable then that they would seek the mark of prestige of the university by becoming one. In addition, universities tended to assume some of the more obviously beneficial functions of the new institutions through a process of 'vocational drift'. These convergent tendencies are explored in greater depth in the investigation of diversity in Australian higher education in Part Two of this study.

In addition to this centralised policy approach to diversity, the last two decades have seen the promotion of diversity in higher education from quite a different quarter, that of the individual institution. Where governments have embraced an economic ideology resulting in a competitive higher education market, individual institutions have sought to differentiate themselves from their competitors to maintain or grow market share, while other institutions have sought to emulate the success of their competitors by becoming more like them. The breakdown of the binary divide in a number of countries outlined in the previous paragraphs is the result of a combination of government policy on the one hand, and institutional self-determination on the other. The outcome is a dynamic system in which institutional diversity ebbs and flows over time as innovative institutions strive to maintain their distinctiveness, and other less innovative institutions seek to copy them.

Public policy promoting market competition generally makes the assumption that 'market forces are a far better means for achieving functional differentiation of institutional types, programs and activities than centralised government control and regulation' (Meek 2000, p.25). However, there is very mixed opinion about the veracity of this opinion in practice. For example, Roger Geiger in his study of

diversification in United States higher education (Geiger 1996) concludes that the market is a potentially powerful driver of differentiation amongst higher education institutions. In contrast, Marginson (1998), Marginson and Considine (2000), Karmel (1998), Meek and O'Neil (1996), Meek and Wood (1998), and Meek (2000) question this view and suggest that the causal relationship between market forces and diversity is by no means straightforward. What appears to be frequently overlooked when assuming that a competitive market will encourage institutions to differentiate themselves is that being different in a competitive environment is not enough. An institution must also be perceived as being better if it is to flourish in this environment.

Marginson and Considine (2000), in particular, explore the complex relationships between diversity and the market. They distinguish between horizontal and vertical diversity. Horizontal diversity occurs when there are 'no necessary implications for status ranking' (p.180), while vertical diversity is based on 'distinctions of rank' (p.180). This is an important difference when attempting to interpret national policy and evaluate its outcomes. While it is never stated clearly, there is an assumption that government rhetoric about the need for diversity in higher education is an egalitarian promotion of the horizontal rather than the vertical variety. In reality both forms of diversity exist in a market environment but, arguably, the same market tends to promote vertical diversity and reduce horizontal diversity.

Vertical diversity undoubtedly occurs as universities are positioned on formal or informal 'league tables' which rank institutions according to their competitive performance associated with quality, with research income and outputs, with student preferences and so on. But the very existence of this form of diversity generates a determination from those at the bottom of the rankings to raise their status, and this is frequently achieved by imitatory behaviour which Marginson refers to as mimetic isomorphism (Marginson and Considine 2000), which is pursued by the institution voluntarily. This is in contrast to coercive isomorphism where 'conformity is enforced by an external agency such as government or professional association' (*ibid.*, p.183), and normative isomorphism 'resulting from academic norms and practices to a greater

or lesser degree common to all institutions' (*ibid.*, p.183). The latter two types of isomorphism are more likely to have a negative impact on horizontal diversity.

From this overview, then, diversity can be considered in three distinct contexts:

1. Unintended diversity

Diversity which has developed as an unintended consequence of growth and differentiation as institutions have evolved and new institutions have formed in the absence of any guiding national policy. Ironically, historically, this diversity was not only an unintended consequence of some other action, it was an unwanted one, and came about because the traditional university did not want to change its ways to accommodate new disciplines and practices, and therefore forced new institutions into existence outside their 'hallowed walls'.

2. Centrally driven diversity

Diversity as a stated goal of government policy, promoted by direct intervention to achieve desired growth in participation in higher education. Typically this type of intervention resulted in a structural segmentation to create a binary system.

3. Institutionally driven diversity

Diversity that may or may not be a stated goal of government policy, resulting from an institutional desire for distinctiveness in a competitive higher education market, on the assumption that distinctiveness will generate competitive advantage.

The move to mass higher education was undoubtedly a primary driver for diversity in higher education after the Second World War, and was precipitated by deliberate government policy to expand participation in higher education. A complementary policy to promote diversity in higher education as a primary means of achieving greater participation was therefore almost inevitable. However, different countries have adopted quite different approaches to this policy. At the extremes, diversity policy appears to have be hijacked by either interventionist (centrally driven) or free-market ideologies (institutionally driven).

In the United States, for example, there has been a long-held belief that market competition will promote diversity far more successfully than central planning. In other countries, governments have been more reluctant to leave the development of diversity in higher education to the institutions and have imposed a variety of centrally mandated controls on the development of higher education institutions. In both Australia and the United Kingdom post-war governments introduced binary systems to ensure that new entrants to higher education had somewhere to go. The polytechnics of the UK and the CAEs of Australia were established to provide a genuine alternative to traditional university education. These are prime examples of the centrally driven diversity context described above. However, an ideological shift in economic philosophy in more recent years has seen this division abandoned in favour of a single higher education system. In this unitary system all, or nearly all, of the institutions are called universities, and the market is believed to be the primary driver for diversity as individual institutions seek to differentiate themselves in their attempts to increase market share. This is the context of institutional ambition and institutionally driven diversity.

DIVERSITY IN NATIONAL SYSTEMS OF HIGHER EDUCATION

The three contexts in which diversity has either been promoted, demoted or ignored, and has either prospered or withered, have different degrees of relevance in different national settings. In this section an overview of the development of diversity in higher education in a range of national settings will be described. This will provide a backdrop for a deeper evaluation of diversity in the higher education systems of Australia and New Zealand in Parts Two and Three of this study.

Seven national systems have been selected from Europe and North America on the basis that they represent a range of approaches to higher education diversity and offer lessons that may be applied to the analysis of diversity in Australia and New Zealand. The emphasis on examples from Europe is also a reflection on the fact that far more readily

available research has been undertaken on the national higher education systems of these countries than in other parts of the world.

The countries selected are Canada, the United States, Finland, Germany, the Netherlands, Sweden and the United Kingdom.

Canada

Canadian higher education systems operate under provincial control. There is therefore 'no such thing as a "Canadian system" of higher education. There is no federal department of education or higher education, nothing equivalent to a national policy for higher education, and there are no national standards relating to either education or higher education' (Jones 1996, p.81). In terms of Birnbaum's forms of diversity (Birnbaum 1983), the structural and systemic differences between and within provinces should therefore be central to the diversity of higher education in this country. Somewhat surprisingly, then, according to Jones, there is not a great deal of diversity across the provinces in terms of institutional type within the university sector. The reasons for this are multiple, but three in particular are of significance in this study.

The first relates to student choice. One of the fundamental benefits of diversity in higher education is that of the choice it provides to the consumer. Underpinning this benefit is the assumption that students will be able to take advantage of this choice from a physical and financial perspective. In Canada, where the distances between major urban centres are great, this is generally not the case. Geographic accessibility is therefore an important concern and has led to the creation of 'a network of universities that is roughly comparable in terms of the universities' functions and basic structural characteristics. The notion is that most Canadians should have access to a university and that these institutions should provide roughly comparable opportunities'. (Jones 1996, p.85)

The second relates to funding mechanisms. In Canada, there is an equality of funding for universities by their respective provincial governments. Funding is a powerful

equaliser; it promotes a convergence in institutional development as individual institutions all seek the same means to maximise their funded income. Such is the case in Canada, and in other countries where government funding is the mainstay of institutional income.

The third relates to size. There are approximately 70 universities in Canada, 'a number that is small enough to permit national meetings of individuals performing similar tasks at different institutions' (Jones 1996, p.86). This, according to Jones, allows universities to learn from one another, and is why 'a successful innovation at one institution is often adopted by others' (*ibid.*). This suggests a lack of competition between Canadian universities, and probably reflects their common origins within an informal unitary system. This could be seen to contrast with the Australian experience, for example, where different groups of universities have developed varying degrees of exclusivity related to their origins that militate against the sharing approach prevalent in Canada.

While there may be relatively little diversity associated with structural and systemic differences in the type of Canadian university, the same is not true of programmatic diversity. According to Jones, 'there are tremendous differences both in the programmes that are offered and how these programmes are offered' (*ibid.*, p.89). This is in part a reflection of the way in which universities have responded to local needs, and part a reflection of provincial policy to discourage programme duplication.

Overall, then, to use the terminology established earlier in this study, there is little diversity in institutional type amongst Canadian universities, but considerable institutional diversity generated primarily by programmatic variation.

The overview of diversity in Canadian higher education is not complete without reference to the community college sector. In contrast to the universities, there is a diverse range of institutional types within this sector. According to Jones, this is partly because there was no single indigenous model of a community college on which other

colleges could be modelled. It is also a reflection of the sheer number of colleges (over 200) across Canada, and the varying local interests that these colleges have been established to meet. There is therefore a clear contrast between the low systemic and structural diversity of the universities and the high diversity of the community colleges within the one 'multi-system' (Skolnik 1986).

The United States

The United States has consistently been identified as a country with a long history of systemic diversity stretching back to the Civil War (1861-1865), and with a consistently high degree of diversity within its higher education system. Today this system comprises some 3500 colleges and universities together with a growing number of corporate universities and several thousand private institutions (Fairweather 2000).

Before the Civil War, U.S. colleges were pretty much alike, offering the same limited prescriptive curriculum taught in the same manner throughout the country. The springboard for change came with the passage of the Morrill 'Land Grant' Act of 1862 which established state responsibility for its own higher education colleges teaching agriculture and mechanic arts alongside scientific and classical studies (Geiger 1996). 'Thus, unlike Europe, utilitarian education in the U.S.A. came to be offered in the same institutions and at the same level as classical and scientific learning' (ibid., p.190). Parallel with the establishment of these Land Grant colleges, diversity was also increased by the rapid growth of private colleges after the Civil War, many of which became established to meet the needs of a particular student body (such as women, church affiliates, African-Americans), or a particular sponsoring group (church denomination, the YMCA, the local community). Thus began one of the lasting traditions of the United States higher education system, that of systemic diversity reflecting the complexity and sectoral interests of American society. In addition to this rapid growth in small 'niche-market' colleges, institutional diversity amongst the traditional colleges also increased with a move away from a prescriptive, narrow curriculum to a more elective system associated with the emergence of new academic disciplines.

By the turn of the century, the most significant addition to systemic diversity in the United States was the emergence of the university as a true multi-discipline institution, generally comprising two years of undergraduate general education followed by a further two years of professional study. Entry to many universities was largely restricted to those who could either afford it, or who had extracurricular abilities (especially in sport), and, by the beginning of the First World War, a discrete sector of higher education - the 'noble' universities - had emerged.

After the First World War, enrolments in higher education roughly doubled, initiating the transition from pre-war elite education towards mass education, a transition that did not occur with the same clarity in the United Kingdom, Australia and New Zealand until after the Second World War. In the United States, this rapid growth in enrolments was facilitated by the equally dramatic rise in the number of institutional types such as junior colleges, teachers' colleges, and urban service-oriented colleges. In particular, new municipal universities catering in particular for part-time students, offering programmes in engineering, home economics, commerce and teaching, and with a mission to produce employable graduates, grew faster than any other form of higher education institution.

The growth of mass higher education created an inevitable response from the elite institutions. They placed greater emphasis on the quality of undergraduate education, raising the standards of both entry and teaching, and emphasising a true 'liberal education'. They also reinforced the pursuit of knowledge, and the advancement of knowledge for its own sake at the postgraduate level, thus redefining and emphasising the special nature of the research university.

After the Second World War, the United States experienced another wave of dramatic enrolment growth, spurred first by the returning servicemen who received government support to progress their education, and later by the 1960s 'baby boom'. This 'demographic tidal wave' (Geiger 1996, p.195) coupled with rising participation rates

was typical of most Western higher education systems at this time. In the United States, this growth was paralleled by a fundamental change in the nature of the higher education institution caused by the rapid expansion of research and postgraduate education. This was promoted by several inter-related developments. First, post-war industrial growth and the emergence of the Cold War prompted federal, state and private investment in research for international trade, military and political dominance. Secondly, by the late 1960s, graduates of research universities were themselves seeking academic positions and, such was the competition for top graduates in an expanding market, that newer universities needed to recreate the research facilities and postgraduate environment of the elite universities from which these new academics had emerged, in order to attract them.

Thus emerged a relationship between systemic diversity and institutional prosperity. During periods of rapid growth and prosperity, new institutions tended to duplicate arrangements traditionally found at more prestigious universities in order to compete for top academic staff and students. The higher education system therefore drifts towards conformity. Conversely, according to Geiger (1996), 'hard times encourage systemic diversity' (p.200). Struggling institutions are forced to meet the demands of whole new client groups, and to embrace non-traditional students, in order to survive in a low-growth environment.

Geiger believes that the United States is currently in the grips of a new wave of 'hard times', with elite universities forced to make changes in order to survive, and institutions in the mass sector facing a bleak financial horizon.

College-age cohorts will remain small for the rest of the century, and, with the rising graduate unemployment and underemployment, individuals will have less economic incentive to attend or to persist. As a result, mass-sector institutions will once again feel powerful stimuli to offer new services to new clienteles. The remainder of the 1990s may well see innovations and experiments that will significantly enhance systemic diversity. (*ibid.*, p.202)

The United States higher education system could be considered to be broadly predictive in its development from the viewpoint of other countries of the Western World, such as Australia and New Zealand. The higher education systems of both of these countries are now moving into their own 'hard times' after years of almost rampant growth in the early 1990s. It remains to be seen whether systemic diversity will increase as higher education institutions in these countries turn to 'innovation and experiment' with, for example, virtual and for-profit activities, to survive.

Irrespective of the ebb and flow of diversification and convergence within the United States higher education system, there can be little doubt that this system exhibits more institutional diversity than any other in the Western World. This is partly a result of its size, partly due to history, and partly due to the complex interactions of national, state and local policy development. This diversity is well demonstrated by the Carnegie Classification of Institutions of Higher Education (Carnegie Foundation for the Advancement of Teaching 2000).

The Carnegie Classification was originally published in 1973, and has been updated regularly since then. In 1994, the Carnegie Classification comprised 10 distinct categories of higher education institution. In 2000, the classification was revised to comprise five major categories, and a number of subcategories. The two classifications and the changes from 1994 to 2000 are summarised in Table 3.2.

The significant changes from 1994 to 2000 concern first the compression of the doctoral/research categories from four to two, and secondly, the increase of the baccalaureate categories from two to three. These changes could be interpreted as a reflection of a shift in the distribution of higher education institutions away from research-dominated universities towards undergraduate colleges. Indeed, back as far as 1971, the Carnegie Commission stated that it saw 'no need whatsoever in the foreseeable future for any more research-type universities granting the Ph.D.' (Carnegie Commission on Higher Education 1971, p.5). However, in reality, the number and percentage of doctoral/research universities and masters' universities has increased, and

the number and percentage of baccalaureate colleges has decreased over this period, as Table 3.2 indicates.

Table 3.2 Frequency of major categories of US higher education institution in 1994 and 2000, according to the Carnegie Classification (Carnegie Foundation for the Advancement of Teaching 2000)

CATEGORY	1994		2000	
	FREQUENCY	%	FREQUENCY	%
Doctoral/Research Universities	236	6.56%	261	6.62%
Master's Colleges and Universities	529	14.71%	611	15.50%
Baccalaureate Colleges	637	17.72%	606	15.38%
Associate's Colleges	1471	40.92%	1669	42.35%
Specialised Institutions (incl. Tribal Colleges	722	20.08%	794	20.15%
TOTALS	3595	100%	3941	100%

The Carnegie Classification was established to provide a reference and support for research in higher education, and to deflect the preoccupation of policy makers with the country's research institutions by demonstrating the social importance of a wide variety of higher education institutions in the United States (Graham and Diamond 1997). It is therefore ironic that the classification has become a pre-eminent 'league table' for higher education institutions in the United States, and has generated ambition amongst those more lowly placed on the classification to seek to improve their status upward by academic drift and emulation of those above them. The variation in frequency distribution of institutions between 1994 and 2000, with its clear increase in postgraduate institutions at the expense of baccalaureate institutions, suggests that this has indeed occurred.

Finland

Finland is a prime example of a country with a strong tradition of centralised higher education, and national policies promoting convergence and standardisation. Up to the mid-1990s, all institutions were owned by the state, there was virtually no non-university sector, and the structure of degrees conformed to a standard model (Kivinen and Rinne 1996). The responsibility for the approval of degree programmes was held by the Minister of Education, and once approved, a new degree existed for the whole system. Programmatic diversity at the institutional level was therefore limited.

On the one hand, this Finnish experience provides a good illustration of a nationally mandated model of conformity, which demonstrates how diversity can be deliberately minimised by government policy. On the other hand, in more recent years, it is also an illustration of how diversity can occur in spite of government policy. According to Kivinen:

Within the official convergent homogeneity of the Finnish university system, ...many forms of diversification can be recognised. The traditional fundamental duties of the university have become blurred, and its new tasks have led to proliferation in many directions. Further divergence arises from the impact of regional interests. Simultaneously, the clientele has expanded and become more diverse in what it wants and needs; and researchers, teachers and administrators have each evolved into distinct sectors. (*ibid.*, p.110)

The particular lesson to take from this development is the increasing role that consumers (Kivinen's clientele) play in determining the diversity they require in the higher education system that, after all, has presumably been developed to meet their needs.

In the 1990s, the Finnish Government recognised the need to raise the standard of vocational education and to rationalise the structure of the Finnish education system in response to these consumer needs. Central to its reforms was the establishment (initially as an experiment) of a non-university sector of AMK (ammattikorkeakoulu)

institutions or polytechnics. This sector was formalised in 1995, and currently some 32 institutions exist within it.

The Finnish higher education system has now evolved to be a classic binary system with a formal university sector devoted to research and teaching to doctoral level, and a formal polytechnic sector devoted to vocational education to first degree level. The Government still exercises tight control over the system, and is conscious of the risks of academic drift. It has therefore emphasised that academic research is to remain totally within the universities, with the polytechnics doing only limited applied research to meet regional industry needs. It also maintains a clean divide between the two sectors by preventing credit transfer from one sector to the other.

Germany

German higher education has moved from a unitary to a binary system over the last forty years, but over this period, support for one or other structure has ebbed and flowed. According to Teichler (1996), up until the mid-1960s, a unitary system was favoured, and as a result, the use of the term 'university' was broadened to incorporate a range of upgraded institutions specialising in medicine, engineering and teacher education.

However, the rapid growth in participation in higher education and the increasing costs associated with meeting this growth within the universities prompted the establishment of Fachhochschulen as a separate type of higher education institution. The Fachhochschulen were established with a different educational goal and a different approach to teaching and learning to that of their university counterparts. Essentially they had a more applied emphasis and focused on preparation for work. Fachhochschulen programmes were shorter than those at universities and generally terminate at first degree level. Fachhochschulen can therefore be compared with similar post-war institutions such as the TAFE colleges and CAEs in Australia, and the polytechnics in New Zealand.

Interestingly, not long after the establishment of *Fachhochschulen* as a new kind of higher education institution in Germany, the idea of merging all institutions to form comprehensive universities (*Gesamthochschulen*) took hold, and by the early 1970s eleven comprehensive universities had been formed (Teichler 1996). The *Fachhochschulen* have continued to exist as a valid alternative to university education, however, and in contrast to many other countries 'are favourably treated in the public debate' (*ibid.*, p.126) when compared to the somewhat troubled German universities.

There can be no doubt that the establishment of the Fachhochschulen increased the diversity of the German higher education system by a process of centrally controlled diversification. Diversity has been further promoted by policy encouraging greater programmatic diversity within the Fachhochshulen. By contrast, central policy has emphasised that 'the universities are not expected to diversify the structure of course programs further, but rather to revise curricula and course offerings so that the completion of the degree is possible and likely after about four and a half years in most fields, and to offer more advanced and doctoral programs' (*ibid.*, p.131-132). The effect of these two policy initiatives in Germany will be to emphasise the distinctiveness of the two types of higher education institution, and therefore to sustain the diversity of the system as a whole.

There is no doubt that the *Fachhochschulen* represents a very durable and stable alternative to traditional university education in Germany. This is largely because 'their specific educational thrust is highly appreciated in the employment market' (*ibid.*, p.135). However, even these conditions of success and appreciation

... do not free Fachhochschulen from the temptation of strengthening their position through imitating universities. Almost all proposals made in the early 1990s for the improvement of Fachhochschulen could be viewed as aspects of academic drift: improved opportunities for applied research, increase of junior academic staff positions, measures of permeability towards a doctoral degree, etc. (ibid., p.135-136)

When this desire for enhanced status affects the already highly regarded Fachhochschulen, within a relatively long-lasting and well-defined binary system, it is

little wonder that similar, but less highly regarded 'second-tier' institutions in the binary systems of other countries have actively sought to emulate their university counterparts in an attempt to achieve parity of esteem from consumers and other stakeholders.

The Netherlands

The Dutch higher education system is essentially a binary system comprising universities and institutions for higher vocational education (HBO institutions). The universities have, by and large, a rich and long history, while the HBO institutions, while having roots back to guild education in the 19th century, are essentially post-war institutions established to cope with the massification of higher education in a manner that was cheap, convenient for students, and directly beneficial to the Dutch economy (Goedegebuure and Huisman 2000).

During the 1980s, the HBO institutions established a very positive and proactive public image which, in a similar fashion to that of the *Fachhochschulen* in Germany, compared very favourably with that of the universities in the Netherlands. On the back of this positive image, the HBO institutions sought to emulate the universities through requests for programme expansion and funding equality. At the same time, the universities were starting to expand into professional programmes. However, Dutch Government policy made it quite clear that

... the HBO institutions and the universities were different types of institutions and should remain so; society was best served by clearly differentiated sectors. This not only was a warning to the HBO institutions to concentrate on the professional/vocational core of their programmes, it also was a warning to the universities to stick to academic programmes. (*ibid.*, p.140)

Notwithstanding this clear policy statement, the HBO institutions continued to seek advancement. In an attempt to gain a foothold in the lucrative international market, they faced the problem of a generic name for their institutions which had no credibility outside their own country. Initially, they used the name 'polytechnic' for international purposes, but when the British polytechnics became universities in 1992, the HBO

institutions began calling themselves 'universities for professional education' (*ibid.*, p.141), much to the chagrin of the existing Dutch universities, especially when the Government formally approved the change in 1999. In a similar 'back-door' way, the HBO institutions have entered the postgraduate arena by offering the 'professional masters' degrees of the British polytechnics/universities under a franchise arrangement, and have subsequently gained Government approval to grant the professional masters degree in their own right. It is hard to ignore the strong parallels which exist between the aspirations of the HBO institutions of the Netherlands and those of the polytechnics of New Zealand, as both attempt to grow their prestige and status in the face of existing policy and tradition.

Huisman (1995; 1996) has undertaken an in-depth study of diversity and differentiation in the Dutch higher education system, with a particular focus on programmatic diversity within the university sector. Huisman maintains that 'the increase in the diversity of programmes in the Dutch university sector is mainly a consequence of government policies' (Huisman 1996, p.138). However, what is particularly interesting in Huisman's analysis is his contention that 'the increase in diversity has been the unintended effect of reactive and anticipatory behaviour of the Dutch universities to a complex matrix of regulatory and retrenchment policies *not* aimed specifically at increasing diversity' (*ibid.*, p.139) (italics in original).

That increasing diversity should be an unintended outcome of government policy not developed with that end in mind is in ironic contrast to the situation in some countries where a deliberate policy and government intervention to promote diversity in higher education is considered to have inhibited it (Birnbaum 1983; Meek 1991; Goedegebuure, Lysons and Meek 1993).

Sweden

Sweden's higher education system is, formally, a unitary one, governed by a single body of law, comprising nine universities, around 20 undergraduate university colleges and a small number of specialised universities. In practice, however, it is a binary

system in which there is a clear distinction between the universities and the university colleges. University colleges have the legislated right to offer undergraduate programmes, but must apply for the right to offer a Master's degree, while the universities have the right to award Master's and Doctoral degrees, but must apply for the right to offer vocational qualifications. In addition, only the universities are funded to undertake research (Bauer 2000).

Prior to 1993, Swedish higher education was strongly centralised, with a highly regulated environment that provided for little institutional independence, but promoted strong system uniformity. However, the education reforms of that year, with a sharp focus on increased institutional autonomy and accompanying accountability, have been established to promote quality and encourage institutional diversity. According to Bauer, (1996, 2000),

'the homogeneity of the system with its hidden binarity has been changed to stimulate and encourage institutional differentiation ...but, due to 'academic drift' there is also a trend towards more homogeneity in that some of the university colleges aspire to become universities' (Bauer 2000, p.190).

This is a repeat of a familiar story in many countries which have introduced reforms intended to increase institutional autonomy and self-determination - those institutions which see themselves as being of lower status than their university competitors seek to emulate the latter and ultimately to seek university status themselves. In Sweden, there was a clear expectation that increasing competition would encourage specialisation and differentiation amongst higher education institutions. However, according to Bauer, 'there are tendencies for both competition and exchange between institutions to lead in the opposite direction, i.e. towards convergence and increased homogeneity' (*ibid.*, p.196)

The United Kingdom

The post-war higher education system of the United Kingdom (or to be more specific, England and Wales) has been punctuated by repeated attempts to establish a binary system only to have it overtaken by institutional convergence and eventual return to an

essentially unitary system again. The first major attempt to create a genuine alternative to the university (and therefore to establish a formal binary higher education system) was made in 1956 with the creation of the colleges of advanced technology (CATs), from existing technical colleges, with the mission to concentrate on provision for higher technological education. However, by 1963, the CATs 'were sufficiently like universities to be granted university status' (Pratt 2000a, p.71). Thus, by the mid-1960s a unitary system comprising around 43 universities had essentially been re-established.

In 1968, a second attempt was made to formalise a genuine higher education alternative to the university with the establishment of the polytechnic sector. By the early 1970s, some 30 polytechnics had been designated and, over the next twenty years, a number of 'colleges of higher education' attained polytechnic status. In 1992, the Further and Higher Education Act unified the funding arrangements for higher education and the 34 polytechnics were redesignated universities. A unitary higher education system had again prevailed.

The polytechnic 'experiment', as Pratt refers to it, was predicated on a rationale that has been the basis for reform in many countries. Central to this rationale was the rapid post-war growth in demand for post-school education and the need for vocational, professional and industry-based courses that the universities were seemingly unwilling to provide. The polytechnics were therefore to be distinctive institutions concentrating on vocational and higher technological education with a commitment both to part-time and sub-degree level students and to full-time and sandwich first degree students. They were also designed to meet the need for access and to improve equity for people who had previously been unable to engage in post-school education. These characteristics are remarkably similar to those promoted by the Labour Government in New Zealand when redefining the polytechnic sector as part of its sweeping education reforms in the late 1980s.

The new polytechnics were also seen to be the purveyors of an alternative service tradition which had emerged with the growth of the technical colleges from which the

polytechnics were created. This tradition, characterised by Burgess (1977) as 'responsive, vocational, innovating and open' (Pratt 2000a, p.72), contrasted with the prevailing autonomous university tradition, which was seen as 'aloof, academic, conservative and exclusive' (*ibid.*, p.72).

Interestingly, the polytechnics were also established to halt the academic drift towards the university tradition of some technical colleges which were frustrated with their inability to award their own degrees, and jealous of the autonomy of their university neighbours. The new non-university institutions were to be part of a public sector of higher education equal but different from the universities, and they would be able to award their own degrees subject to the accreditation of the Council for National Academic Awards (CNAA).

While there had been significant scepticism about the polytechnics in the early years of their establishment, by the 1990s they had become a recognised alternative to traditional university education. They had expanded to become the largest sector of higher education in England and Wales, and in doing so had established their own tradition as comprehensive institutions offering vocational education from sub-degree to postgraduate level to both full-time and part-time students. In this sense, then, the binary policy of the 1960s had been a singular success. There was genuine diversity in higher education that provided potential students with real alternatives.

In 1992, however, the polytechnics became universities, and the binary higher education system was dismantled to become essentially unitary once more. The reasons for this reversal were multiple, and hold a number of significant lessons for other countries undergoing higher education reform.

First, right from their establishment in the early 1960s, the polytechnics were promoted as 'equal but different' to the universities. They were able to offer the full range of qualifications to doctoral level (subject to CNAA accreditation). This contrasts with binary models in other countries where the non-university sector is restricted to lower

academic level provision (as, for example, the community colleges of the United States, the HBO institutions in the Netherlands and the *Fachhochschulen* of Germany). As the polytechnics expanded into higher degrees so did the demand from CNAA for more underpinning research. Consequently, the polytechnics progressively shifted the locus of their activity away from teaching and towards research, and in so doing became more and more like the universities from which they were established to be different.

Secondly, the polytechnics had an ongoing difficulty with their name. It was not widely understood within the United Kingdom, and even less so outside. Frequently it was perceived to relate to sub-degree education, and retained connotations of second-choice education for those who were not 'good enough' to go to university. Significantly, the adoption of the term polytechnic in New Zealand was based on the United Kingdom model, and New Zealand is now one of very few countries in the World to still use this name and its consequential problems.

Thirdly, while the polytechnics were 'academically drifting' towards the universities by offering higher degrees and becoming more concerned with research, the universities, albeit with some initial reluctance, were 'vocationally drifting' towards the polytechnics. The end result was a convergence, with polytechnics adopting many of the activities traditionally the preserve of the universities, and universities adopting practices and programmes traditionally seen as polytechnic in nature. The latter moves were a clear but grudging acknowledgement of the success of the polytechnic in a highly competitive higher education environment.

Fourthly, the polytechnics were becoming increasingly frustrated with their inability to validate their own degrees. After nearly thirty years of CNAA control, there was a strong feeling that the polytechnics had reached a stage of maturity that should permit self-validation. CNAA acknowledged this reality and set in place a process facilitating institutional progression from single programme validation to institutional accreditation. In this way CNAA 'increased the similarities between the sectors, and incidentally brought about its own demise' (Pratt 2000a, p.83).

The outcomes of the move back to a unitary system, from a diversity viewpoint, have been less than successful. While the Government has continued to promote a policy of diversity in higher education, it has done little by way of specific policy measures to sustain diversity. The new universities (the ex-polytechnics) have not found the grass on the university sector side of the hill as green as it looked. They struggle to compete for research funding with their more traditional counterparts, but continue to be driven towards a more research-led environment because of the significant resource benefits that are attached to research. Paradoxically, funding incentives to recognise growth in teaching and social equity achievements, traditional hallmarks of the polytechnic, are minimal compared with research, and the new universities are inevitably pulled away from their roots towards this well-funded research environment.

Ironically, as well as being at the bottom of the research funding lists, the new universities also found themselves at the lower levels of the published university 'league tables'. These are based on a range of criteria, many of which reflect traditional university ideals (entry qualifications of students etc.) rather than the ideals on which the polytechnics were founded. The new universities are therefore forced to emulate their more highly rated competitors. Institutional diversity within the higher education system is therefore diminished.

Interestingly, the new universities have found that the competitive advantage they had as polytechnics in the 1980s was quickly eroded in the 1990s. As the demand for higher education and funding for its growth has dried up, the new universities have not been able to compete for students with their high-status neighbours. It would seem that it was better to be perceived by the market as a first-rate polytechnic than as a second-rate university. However, it is important to note that the polytechnic success in terms of enrolment growth came at a time of huge demand for higher education, backed by Government policy that funded this demand. This success may well have evaporated anyway in the low-demand environment of the mid-late 1990s, even if the polytechnics had not become universities.

The end result of the abolition of the binary system in England and Wales has therefore been a reduction in institutional diversity based on mission and philosophy, and perhaps an unintended diversity based on less desirable features such as wealth and standards. According to File, Goedegebuure and Meek,

... common teaching funding mechanisms, common QA procedures, and selective research funding are pushing British higher education in the direction of a rigidly stratified hierarchy of institutions, with prestigious research universities at the top, and impoverished predominantly teaching institutions at the other end - with most expolytechnics in the latter group. (File, Goedegebuure and Meek, 2000, p.8)

This is presumably an unintended outcome of Government policy and is an excellent example of Marginson's 'vertical diversity', based on 'distinctions of rank' (Marginson and Considine 2000).

Summary

There are three key features which the national systems of higher education outlined above have in common. These are summarised below.

1. Government reaction to the dramatic rise in participation in higher education that occurred since the Second World War has been consistently met by the establishment of a second tier of institutions with a focus on vocational and professional education which, in most cases, provided short-duration programmes at the sub-degree and/or the undergraduate degree level. In Canada and the USA this resulted in the establishment of the community college sector; in Finland, the AMK (ammattikorkeakoulu) institutions; in Germany, the Fachhochschulen; in the Netherlands the HBO institutions; in Sweden, the university colleges; and in England and Wales, the polytechnics. Similarly, in Australia, the TAFE colleges and CAEs were established, and in New Zealand, the technical institutes were created. While such a mechanism has been successful in meeting the unprecedented demand for higher education over the

last 50 years, there has remained a danger 'of a strong political backlash if a government creates education sectors merely as cheap alternatives for the purpose of soaking up unmet student demand' (File, Goedegebuure and Meek 2000, p.13).

- 2. There has been a consistent trend towards less centralised government control. This has been exercised by deliberate policies of deregulation, frequently accompanied by governments' embrace of the perceived benefits of competition in a quasi-market environment. National governments have not abdicated responsibility for higher education, however, and still exercise active roles in coordination, allowing that their influence is softer and more subtle, frequently characterised by incentives rather than by regulation, but which never the less have unintended consequences.
- 3. National governments have advocated increased diversity for their higher education systems, generally on the assumption that diversity is inherently good for the system, and therefore for its consumers. While the general policy has been the same, in some cases the diversification of the higher education system has been promoted by central regulation (for example, to create a binary system of enforced distinctiveness), and in other cases, by incentive and deregulation (for example, to collapse a binary system into a unitary system with the expectation that competition will promote diversity).

In addition, there are a number of other trends in the evolution of national higher education systems that are present in some and less evident or absent in other systems. For example:

1. A number of countries have actively encouraged amalgamations as a means of creating new institutions to meet the growing and changing needs of their higher education systems (e.g. the new comprehensive universities of Germany).

- 2. Where countries have created binary systems, these systems have only persisted over time when there has been strong central intervention to maintain the boundaries between the sectors (e.g. Finland).
- 3. Where a binary system has existed in a policy environment of the deregulated market there has been a tendency towards institutional isomorphism and a resulting convergence of institutional types. Frequently this has, in the end, resulted in new government policy abandoning the binary system for a unitary one, while still advocating diversity as a key attribute for the system as a whole (e.g. the redesignation of the UK polytechnics).
- 4. While institutional convergence and the tendency to system homogeneity is invariably a consequence of institutional emulation caused by the academic drift of the new institutions towards the older, more traditional universities, it is also caused by a reverse 'vocational drift' of traditional universities towards the professional outcomes of the new institutions (e.g. the Netherlands, UK, Germany). The latter is generated by a combination of market forces, in other words, a desire for increased market share on the part of the universities, and by a genuine recognition that traditional university degrees have become less relevant to the needs of modern education consumers.
- 5. While institutional diversity is generally advocated on a basis of increased student choice and equity of opportunity, this is, in practice, only achieved in national systems where student mobility enables genuine choice to be exercised. In some countries with widely dispersed populations and relatively low student mobility, geographic separation negates the value of a diversified higher education system. In these settings the community is best served by a homogeneous national system with local institutional diversity (e.g. Canada).
- 6. In some national settings there is an apparent correlation between the state of the national economy and the tendency for changes in systemic diversity. In the

United States, for instance, according to Geiger (1996), there appears to be an inverse relationship between the state of the economy and diversity: when the economy is strong, and resources plentiful, institutions tend to do what they want to, rather than what they have to. The less prestigious therefore tend to focus on raising their status by copying the more successful institutions. The result is convergence. Conversely, when the economy is weak, and resources scarce, institutions are forced to do what they have to rather than what they would like to. In this situation, institutions seek new market niches and new customers out of necessity. The result is greater differentiation.

These issues will be further explored in the analysis of diversity in the higher education systems of Australia and New Zealand in Parts Two and Three of this study.