

Lost in Translation: Academic and managerial discourses of knowledge transfer

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Declaration

- I have composed this thesis
- The thesis is my own work
- The thesis has not been submitted for any other degree or professional qualification except as specified.

Signature:

Acknowledgements

The desires to learn and explore have been with me from an early age. Thank you both mum and dad for giving me both of these things.

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ABSTRACT OF THESIS

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This thesis investigates how Knowledge Transfer (KT) Policy in Scotland is understood, translated and put into practice by managers and academics in a new university in Scotland. KT Policy has entered the higher education arena as the 'third sector' alongside teaching and research: it puts new demands on universities, and could be said to attempt to redefine the relationship between the university and wider society. The (relatively few) studies of KT Policy highlight the problematic nature of the term 'knowledge transfer' and there is a substantial literature that illustrates the difficulty of 'translating' policy into practice. In understanding KT and its implementation, this thesis argues that account needs to be taken of the fact that in the expanded UK higher education (HE) sector there is no single idea of a university and thus the reception of KT policy needs to be understood in ways that are sensitive to the various (and possibly conflicting) meanings attached to the policy by managers and academics.

The thesis adopts an interpretive methodological approach that draws on critical discourse analysis (CDA) to uncover the meanings attached to KT Policy as it is translated and enacted. KT policy is viewed as a 'text' that can be read in a variety of ways, and that is amenable to alternative readings that may be at variance with those encoded by policy-makers. Research methods include document analysis, semi-structured interviews, and observant participation. The findings illustrate how managers and academics attach multiple and conflicting meanings to KT policy, with quite significant implications for policy implementation. The different meanings of the policy are explained in terms of contrasting managerial and academic discourses.

This study adds to knowledge about KT and also adds to knowledge about policy and its reception when it enters the university environment. Analysis of how policy is received and communicated using a CDA approach illuminates the university as a space through which ideas flow and are shaped by the meanings attached to them in that process. This case of translation of KT policy has more general applicability in terms of its illumination of the enactment of meaning in different ways in different institutional cultures.

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ABBREVIATIONS

ADRKT	Associate Dean Research and Knowledge Transfer	
ALT	Academic Leadership Team	
AUT	Association of University Teachers	
BCIS	Business and Community Interaction Survey	
BIS	Business Interaction Survey	
CAT	College of Advanced Technology	
CDA	Critical Discourse Analysis	
CES	Centre for Educational Sociology	
CIHE	Council for Industry and Higher Education	iii

CMU	Coalition of Modern Universities (later to be renamed the Campaign for Mainstream Universities, and consequently Million+)
CNAA	Council for National Academic Awards
CPPR	Centre for Public Policy Research
DA	Discourse Analysis
EBP	Evidence-Based Policy
EIS	Educational Institute of Scotland
ERA	Education Reform Act
ESRC	Economic and Social Science Research Council
HEFCE	Higher Education Funding Council for England
HE	Higher Education
HEI	Higher Education Institution
HOD	Head of Division
IP	Intellectual Property
JSMP	Joint Statement of Mission and Purpose
KT	Knowledge Transfer
KTG	Knowledge Transfer Grant
KTP	Knowledge Transfer Partnership
LEA	Local Education Authority
NAPSS	National Association for the Promotion of Social Science
NewSU	The University in which the research was carried out
NPM	New Public Management
OECD	Organisation for Economic Cooperation and Development
PCT	Public Choice Theory
RAE	Research Assessment Exercise
RCDO	Research and Commercial Development Office
RIS	Research and Innovation Services
SCoRE	Scottish SME Collaborative Research Programme
SED	Scottish Education Office
SEEKIT	Scottish Executive Expertise, Knowledge and Innovation Transfer

SEELLD	Scottish Executive Enterprise and Lifelong Learning Department
SFC	Scottish Funding Council
SG	Subject Group
SE	Scottish Executive
SHEFC	Scottish Higher Education Funding Council
SME	Small and Medium Enterprise
SOED	Scottish Office Education Department
SOEID	Scottish Office Education and Industry Department
SPI	Scottish Practical Intellect
US	Universities Scotland
WB	World Bank

GLOSSARY OF TERMS AND WORKING DEFINITIONS

NewSU: This is the name that I used for the university in which I carried out this research. It is one of five new universities in Scotland and the acronym was used to disguise the identity of the organisation. I have also used the NewSU prefix to disguise university documents and other data sources, including those from the internet.

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Chapter One

Policy Context, Aims and Objectives

Introduction

This thesis examines the response of a ‘new’ university, hereafter referred to as NewSU, to knowledge transfer (KT) policy in Scotland. The overall aim of the research is to investigate how KT policy is understood by institutional managers and academics, and to explore issues arising from the translation and implementation of KT policy in to practice.

KT policy emerged at the end of the 1990s. According to Ozga and Byrne (2005) its antecedents can be found in earlier policies aimed at increasing the commercialisation of university knowledge and technology transfer. The importance attached to KT in Scottish higher education (HE) policy has grown significantly since 2001, when KT was accorded the status of the ‘third sector’¹ of HE activity. Its status has been underlined by a knowledge transfer grant (KTG), through which universities have been given access to funding additional to that provided for teaching and research. While there have been several studies of knowledge transfer policy in Scotland, notably from researchers of Edinburgh University’s Centre for Educational Sociology (CES), most of this work focuses on the macro, policy level, with less attention so far given to translation and implementation at the level of individual institutions and academics. This thesis aims to fill part of this gap. By focusing on translation and implementation of the policy at an early stage of its life, it is the intention of the thesis to enable Scottish higher education institutions and those working in them to develop appropriate responses to it in the future.

KT in its policy context

The emergence of KT in the last ten years as a major HE policy direction in the United Kingdom (UK) can be attributed to a number of factors. The first of these is policymakers’ desire to ensure the country’s success as a ‘*knowledge economy*’ and

¹ In this dissertation I will use the terms ‘third sector’, ‘third arm’ and ‘third stream’ interchangeably as they are all used interchangeably in policy texts to describe ‘knowledge transfer’

'*knowledge society*²', a society in which the most valuable economic resource is knowledge:

"Our vision of a knowledge economy is an ambitious one. A fully developed knowledge economy will have a thriving and creative higher education research base providing new and innovative processes and products which reach the market through a wide variety of routes. Universities will be funded to take these opportunities to market, but industry will also be used to contacting universities and 'pulling through' opportunities. Higher education will be in a continual and increasingly productive dialogue with industry, professional and statutory bodies." (Universities Scotland, 2003:3)

Reinforcing this perspective, the Scottish Higher Education Funding Council (Shefc) believes that higher education institutions (HEIs) in Scotland "*can contribute to the development of a knowledge-based economy and society*" (Shefc, 2001:4), and expects universities not only to produce new and 'better' knowledge, but to find applications for the knowledge they generate and to disseminate it for wider use. Shefc introduced financial incentives for universities in 2001, in the form of the knowledge transfer grant (KTG), to encourage them to respond to the policy.

The second factor is that policy makers worldwide³ believe that higher education has a key role to play in economic development through the transfer of knowledge to local institutions, organisations, and people. In what is commonly referred to as the 'post-industrial era' (Bell, 1976) the demands placed on universities as prime producers of knowledge appear to have multiplied:

"The decline of manufacturing and the rapid expansion of higher education have transformed the relative economic importance of universities within their cities and regions...." (Lambert Review, 2003, Chapter 5, p.65)

The third factor is a higher education (HE) policy environment in which government sees a need to evaluate the impact of publicly funded teaching and research on the economy and society in order to identify more clearly a range of justifications, beyond the moral and social, for increasing investment in higher education.

² These goals are set out in Scottish Executive (2001) document "*A Smart, Successful, Scotland: Ambitions for the Enterprise Networks*, Scottish Executive, Edinburgh. Available from www.scotland.gov.uk

³ This is evident in policy documents from multilateral institutions such as the World Bank (WB), The Organisation for Economic Cooperation and Development (OECD), regional policy makers in the European Union, as well as British and Scottish higher education policy.

Policy-makers are consequently seeking a closer relationship between university research, policy and practice (Ozga, 2004), and to achieve this they are steering research towards problem-solving and the consolidation of knowledge of ‘what works’. The fourth factor is a large increase in the numbers of students attending UK universities, which has not been matched by proportionate increases in government funding (Stevens, 2004:75), which in turn has led to government introducing competitive incentives to encourage universities to generate additional income from research activity to secure both survival and growth (Jones, 2005b:11).

Knowledge transfer policy and its implications for Scottish higher education institutions thus deserve closer scrutiny as KT is both a new policy direction in higher education, and a new activity required of universities and those who work in them. Increases in funding to date for KT in Scottish higher education institutions indicate that it is likely to become an increasingly important activity and therefore one that policy makers, representatives of business and those working in HEIs have an interest in understanding better.

The Concept of Knowledge Transfer

The general principle of transferring academic knowledge from universities into a range of practical uses outside the university is widely accepted (Barnett, 2000). Universities have long been regarded as producers and guardians of knowledge (Becher, 1987) and governments, the professions and commerce have historically looked to universities to transfer knowledge and expertise to them through a variety of mechanisms, ranging from teaching and research to advising on matters as experts in given fields. In establishing the Knowledge Transfer Grant (KTG) in 2001, Shefc (2001:HE/24/01) defined the purposes of knowledge transfer to be:

“The dissemination and exploitation of the outputs of higher education - research, knowledge, skills, expertise or ideas – to achieve economic, educational, social, healthcare and cultural benefits for society.” (para.15, p.4)

Such a concept of knowledge transfer can be linked to recent demands from policy makers and practitioners for greater use of ‘evidence-based practice’ (EBP), i.e. practice that is better informed by research evidence of what works (Nutley et al, 2003). Nutley et al’s interest in EBP arises from widespread recognition of

difficulties in the tasks of integrating research evidence with policy, and using evidence to inform and change practice. They argue that these difficulties stem from a lack of clarity about what constitutes knowledge⁴; a preference in universities for ‘know-what’ knowledge over other forms of knowledge (including ‘know-how’) and uncertainty over the uses⁵ to which different types of knowledge can be put. This last point links to the concept of ‘transfer’, a term that arguably implies a linear process through which knowledge (theoretical) that is generated in universities is transferred to users (policymakers or practitioners) outside academia. However such linear notions of transfer are increasingly challenged. For example, Gibbons et al (1994) argue that knowledge production systems in contemporary society are changing, and in proposing distinctions between ‘Mode1’ and ‘Mode2’ they argue that knowledge produced in the latter mode does not follow such a linear path, and at the same time results in immediate or short time to market dissemination or use. Nedeava (2008) asks whether knowledge transfer activities are different from the ones already performed by the universities; whether they are new, and whether they are commensurate with teaching and research. These questions, together with multiple understandings of knowledge and transfer, represent potentially serious challenges to those tasked with translating and implementing policy, leading Jones (2005a:6) to argue that:

“If even these ostensibly rudimentary terms are capable of multiple (and possible quite divergent) interpretations, it is reasonable to anticipate still a wider range of meanings arising as they become subject to the vagaries of policy development and documentation.”

Knowledge of KT activity in Scotland

Published research about KT activity in Scotland is limited. This perhaps reflects the fact that it is a recent activity demanded of universities, and one that may not yet be established. In order to improve understanding of KT, the Scottish Funding Council

⁴ For example, the authors draw attention to differences between tacit and explicit knowledge (after Polyani, 1967; Squire, 1987; Nonaka, 1994). They also classify knowledge in the following five categories: know-about problems; know-what works; know-how to put into practice; know-who to involve and know-why knowledge.

⁵ Drawing on Weiss (1998), the authors suggest that research can be used in four main ways: It can be fed directly in to decision-making (instrumental use); it can be used to provide new ways of thinking (conceptual use); it can be used as an instrument of persuasion (for mobilisation of support); and it can alter policy paradigms or belief communities (can exert wider influence).

(SFC) introduced a higher education business interaction (HE-BI) survey in 1998, and the Economic and Social Research Council (ESRC) started to support research of a more qualitative nature, as well as promoting KT activity through dissemination of the research that it funds (see www.esrc.ac.uk).

The HE Business Interaction Survey

The HE-BI survey was introduced in 1998 and 1999 by higher education funding councils in Scotland and England respectively as a response to the National Committee of Inquiry into Higher Education's⁶ call for greater collaboration between universities and industry. For example, recommendation number 38 of this report stated:

“We recommend to higher education institutions and their representative bodies that they examine, with representatives of industry, ways of giving firms, especially small and medium sized enterprises, easy and co-ordinated access to information about higher education services in their area.”(Dearing Report, Chapter 12, para.49)

Its primary aim was to capture details of the nature and levels of universities' interactions with industry and commerce. The 2006 survey⁷ was extended to capture 'community' interaction thus transforming the survey into the HE business and community interaction survey (HE-BCI). This reflects a broadening of KT policy goals since 1998 through the addition of a civic dimension, particularly in relation to public and social policy and the cultural field. However the focus of the survey remains largely on the commercial. This is reflected in activities recorded, such as numbers of university spin-outs, staff and graduate start-ups, and other forms of commercialisation of knowledge generated by HEIs. Surveys to date have recorded annual increases in both the number and value of HEI interactions with business and the community. They have also reported significant investments in the development of universities' infrastructure to support commercialisation. According to the 2006 survey, Scotland relative to the United Kingdom (UK) is better served by HEIs. While Scotland's population accounted for around 8.5% of the UK, Scottish based HEIs accounted for 11.6% of UK HEIs (i.e. 19 out of 164) and received 10.8% of all UK total income and 13.1% of all UK research income (i.e. directly funded by the

⁶ This Committee was chaired by Lord Dearing, and produced the “Dearing Report” (1997).

⁷ The 2006 survey provides results for academic year 2003/04

Funding Councils and Research Councils). These figures suggest that, judging by their ability to attract funding for research, HEIs in Scotland as a group have the potential to be leaders in KT activity in the UK. However, the report records unevenness in levels and types of interactions by Scottish HEIs, which may suggest different levels of commitment and engagement with knowledge transfer, and perhaps different capacities⁸. Allocations⁹ of the 2006/07 KT Grant (SFC, 2006) suggest that the nature and intensity of KT activity of older, research intensive universities differs considerably from those of newer universities which have different missions, traditions and cultures. New universities have traditionally placed emphasis on teaching as their main mission, and this is reflected in survey results that indicate Scottish HEIs feel that their greatest contribution to economic development is via ‘access to education’ (79%), followed by ‘technology transfer’ (53%), ‘research collaboration with industry’ (26%), and ‘developing local partnerships’ (26%).

ESRC-sponsored research on KT in Scotland

Ozga and Jones (2006) confirm the predominance of the technology transfer and commercial dimensions in KT policy in Scotland at the level of both government and HEIs. In a review of university websites in Scotland they find that most HEIs have a section on knowledge transfer and that most of these place a heavy emphasis on technology, science and business. In identifying recurrent terms such as ‘Leading edge technology’; ‘Industry’; ‘Spin-out companies’ and ‘Knowledge Transfer Partnerships’(KTPs) they conclude that an economic and financial perspective seems to shape the institutional perspective, and that this runs contrary to stated Shefc KT policy that attempts to encourage a broader civic agenda. At the same time the authors acknowledge that a web survey such as this cannot be taken to represent a comprehensive picture of *actual* KT activity, and they suggest that this is an area in need of exploration. This thesis attempts to build more knowledge in this area.

⁸ The survey shows that the majority of commercialisation activity in Scottish HEIs, of which they record 19, is concentrated in 8 HEIs, and that 5 HEIs account for 91% of total IP income; 3 HEIs account for 64% of total income from Collaborative Research; 84% of the total number of Research Contracts are performed by 5 Scottish HEIs while 1 HEI accounts for 29% of total income from these contracts; 5 HEIs account for 63% of the total value of Consultancy Contracts

⁹ Edinburgh, Glasgow, Aberdeen, Dundee and Strathclyde accounted for over 66% of the £15.98 million KT Grant allocated for 2006/07 (see Appendix 2).

In subsequent papers (Ozga, 2005; Ozga and Byrne, 2006) the researchers set out to explore the implementation of KT policy in Scottish universities in the fields of education, technology and health. Among the conclusions reached are that university researchers do not have a clear understanding of KT, and that they understand it as an activity distinct from research, perhaps due to the heavy institutional emphasis on KT as a commercial activity to which they are not attracted. The authors suggest that this is one of several barriers to the development of KT in universities in Scotland. They identify other barriers in terms of the time and costs needed for dissemination of research; funding and resource constraints; anti-intellectualism in both policy and practitioner communities; and the focus of the research assessment exercise (RAE) on “blue skies” research rather than on applied or practice-related research (McNay, 1997b, 2003).

KT Policy development and responses: Global or Local?

It is against the backdrop of a relatively new and little understood higher education policy that this research is being carried out. Research to date suggests that KT is a product of its time, emerging in tandem with wider policy preoccupations that focus on the creation and sustainability of a knowledge society and economy. Ozga and Jones (2006:1) state that policy for knowledge transfer:

“...may be understood both as ‘travelling’ policy shaped by globalizing trends in pursuit of successful competition in the new knowledge economy (KE) and as ‘embedded’ policy mediated by local contextual factors that may translate policy to reflect local priorities and meanings.”

I understand the term ‘travelling’ policy to be directly related to ‘globalisation’, and to illuminate a tendency in the literature to examine two specific aspects. The first is the congruence of educational policies in western societies (Marginson 1997; Dale, 1999); and the second are the international effects of global governance of education by multilateral institutions such as the Organisation for Economic Cooperation and Development (OECD) and the European Union (EU) (Lawn 2001; Lawn and Lingard, 2001). These authors tend to identify widespread, converging changes in approaches to educational governance that have resulted in similarly convergent

pressures for change in professional practice¹⁰. However, a major exception to the ‘globalisation explains all’ thesis, and one that reflects a view of policy as being ‘embedded’ is Dale (1999, 2000), who in a similar vein to Ozga and Jones (op.cit) emphasises the importance of investigating how and why a particular meaning system may come to appear dominant in particular places. I feel that such views are particularly relevant to this thesis. While I broadly accept that, at least rhetorically, KT policy is part of wider developments, part of the “*pursuit of the new KE {that} drives education policy across the globe*” (Ozga and Jones, 2006:5), there is reason to believe that the specific history of universities in Scotland, and the specific governance arrangements for higher education in Scotland (to be discussed in some detail in Chapter Two), will elicit a specific, local, ‘embedded’ response shaped by local priorities and meanings. Some important specificities of Scotland are now discussed briefly below.

The Specificity of Scotland: Universities

The distinctiveness of education in Scotland is widely documented, both as ‘fact’ and ‘myth’¹¹. It is indisputable that although Scotland is (at the moment) an integral part of the United Kingdom (UK):

“Education provides a particularly interesting case of policy-making because it has been organised separately in Scotland since the Union of 1707.” (Brown et al. 1996:107)

This separate organisation reflects a distinctive history of provision. Universities in Scotland pre-date the Union: for example St. Andrews, Glasgow and Aberdeen were established as fifteenth century foundations created by papal bull, while Edinburgh was founded in 1583 as a civic university. This history captures a set of specific values that are attached to education in Scotland. Paterson (2003:3) maintains that:

“In contrast to the essentially private traditions of Oxford and Cambridge, the four ancient Scottish universities in St. Andrews, Glasgow, Aberdeen and Edinburgh were founded for public purposes and, by the time of the inquiries into the universities in the Victorian period, had come to accept themselves as being public and national institutions which the state had every right to govern and reform.”

¹⁰ See also Amaral et al (Eds.) (2002). *Governing Higher Education: National Perspectives on Institutional Governance*.

¹¹ For an authoritative collection of papers on Scottish Education, see Bryce and Hume (Eds.) (2003) *Scottish Education: Second Edition Post-Devolution*.

The distinctiveness of higher education in Scotland from other parts of the UK does not stop at the ancient Scottish universities. For example, specific to Scotland were the ‘*central institutions*’, colleges¹² “*established mainly in the cities as central sources of technological advice for the various regions*” (Paterson, 2003:14), and responsible directly to the Scottish Office¹³, the UK Government Department responsible for Scottish Affairs. These features reflect what many consider a strong civic and public history and status of universities in Scotland, and this in turn raises the question of how and to what extent this history affects how universities in Scotland understand and respond to knowledge transfer policy.

The Specificity of Scotland: Governance

Another specificity that warrants mention in the context of researching the possibility of an ‘embedded’ response to KT policy is the establishment of a separate parliament in Scotland in 1999, as part of wider political devolution in the UK. Keating (2001:2) highlights the fact that political devolution in the UK built on existing administrative devolution in which each of the UK territories had distinctive ways of making policy and delivering services. This was, and is, significant. For example since the Education (Scotland) Act in 1872, Scotland has had its own administrative structure for education within the UK in the form of a Scottish¹⁴ Education Department (SED). Anderson (2003:223) claims that when the SED became part of the Scottish Office in 1885, its early secretaries:

“... turned it into a powerful bureaucracy, giving Scotland a more centralised and uniform state system than in England.”

However, while Scotland has always retained control over education as part of what Paterson (2003:1) calls the ‘*holy trinity*’¹⁵, of Scottish national institutions, according to Donn (2003: 123):

¹² Several of which were later to become Universities, as discussed in Chapter Two

¹³ This was the case until 1999 and political devolution in Scotland

¹⁴ Please note that this department was called the “Scotch Education Department” until 1918 when it was renamed the “Scottish Education Department” (Anderson 2003:222). The name of this structure has further evolved over time to become the Scottish Office Education Department (SOED); to the Scottish Office Education and Industry Department (SOEID) and following devolution to the Scottish Executive Enterprise and Lifelong Learning Department (SEELLD).

¹⁵ Paterson’s ‘Holy Trinity’ refers to the church, the legal system and education

“Devolution in 1999 was seen as an opportunity for Scotland to reclaim Scotland’s education; to harvest once again the human capital produced through a social welfarist approach to education policy and to distance, with great....astonishing? – speed, the education policies of Scotland from those of the more commercially oriented, consumerist and managerialist policies, said to be being developed and adopted south of the border.”

This ‘reclaiming’ may explain Ozga and Jones’ assertion (2006:10) that the very existence of the parliament radically changes the context in which education policy in Scotland is developed, with some evidence of increased divergence in the policy field in education in the UK from 1999-2000 onwards as the Scottish parliament began to function. For example, the Scottish Executive did not follow Westminster practice of a unified department to cover all levels of education. Instead, it created one department to deal with school education, and another to handle further and higher education. The latter, the Scottish Executive Enterprise and Lifelong Learning Department (SEELLD), was also responsible for economic development and Caldwell (2003:69) suggests that this:

“...signals something substantive in policy terms, namely that the Executive sees HE as having a central role in its economic development strategy...there is purpose behind it, and it has won support from both the HE sector and the business community.”

(Following the June 2007 elections, the two education departments were brought together under the umbrella of the newly formed Directorate of Education)

Furthermore, in terms of KT, Ozga and Jones (op.cit) claim that another diverging feature is the invocation of cultural and social knowledge transfer in addition to the broadly accepted commercialization agenda. Ozga and Jones also make reference to key informants in their research on KT expressing the ‘moral duty’ of universities to engage in KT for civic society and to ‘cultural engagement’ rather than KT as a better term to describe the ‘enlightenment aim’.

Summary, Research Aims, Objectives and Thesis Structure

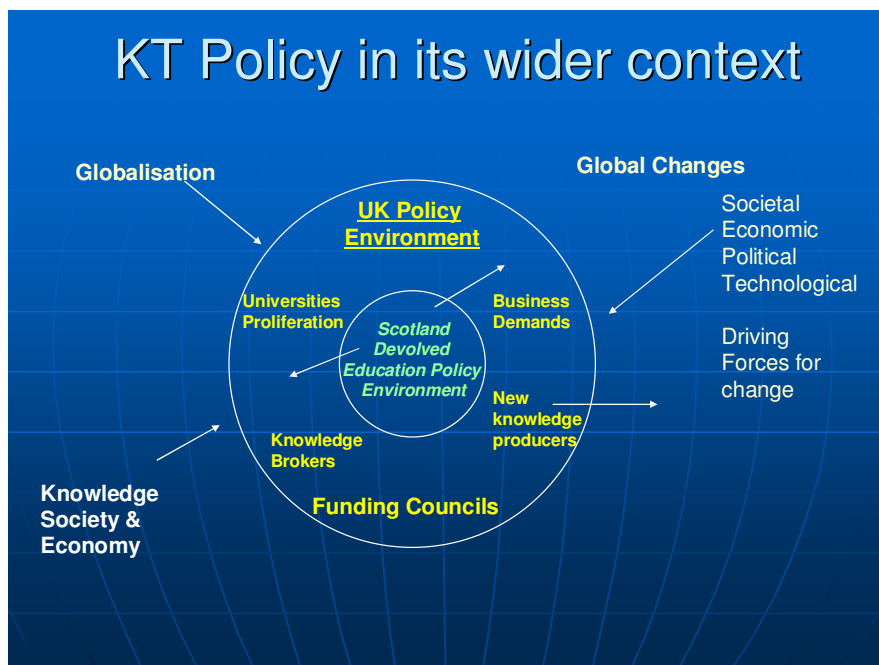
Knowledge transfer is a new policy direction in UK higher education. The principal aim of this dissertation is to build on work carried out to date by investigating how knowledge transfer policy in Scotland is understood by institutional managers and academics in the universities at which the policy is aimed. Of particular interest are issues arising from the translation and implementation of this policy in to practice.

In approaching this task, it is necessary to acknowledge the importance of context. Firstly it is important to acknowledge the global pressures that are facing universities today: pressures to be economically productive on the one hand, and pressures to contribute to society in a wider sense on the other. Secondly, while ‘nesting’ Scotland within the global context of moves both to create and sustain a knowledge society and economy, it is important to understand the specific UK context of administrative and political devolution. This has arguably reflected specific educational values in Scotland, and with it, the potential for an embedded response to KT policy reflecting what Appadurai (1996) calls ‘vernacular globalisation’. Lingard (2000:81) suggests that in terms of the adaptation of ‘travelling’ policy, vernacular globalisation:

“Resonates with the idea of ‘glocalisation’: the way local, national, and global interrelationships are being reconstituted, but mediated by the history of the local and the national and by politics, as well as by hybridisation, an important resulting cultural feature of the multidirectional flows of cultural globalisation and the tension between homogenisation and heterogenisation.”

Such interrelationships provide the context for this thesis and are illustrated below in Figure 1.

Figure 1: KT Policy In Its Wider Context (Source: Author)



Knowledge transfer as a concept carries a strong economic message but in its relationship with society it may also be a democratic force, giving people more knowledge on which to base decisions about their lives. In considering the particular case of the response of universities in Scotland to the calls of policy-makers to engage in more and different forms of knowledge transfer, it is important to take in to account their civic and public history and status, as these may affect the way in which KT policy is understood and acted upon. As the idea of the university in the Scottish tradition has the same democratising potential as KT, this raises the question of whether a good match exists between the two, or if the commercial aspect of policy conflicts with any 'embedded' local, civic interpretations.

Research Aims and Objectives

To contribute to an understanding of this question, the overall aim of the research is to investigate how KT policy in Scotland is understood and operationalised by managers and academics in a new university. In pursuing this aim I am particularly interested in how KT is 'translated'¹⁶ as it enters the university: where and how it fits in to the university strategy, how responses to KT policy are operationalised and implemented, and whether the history and culture of the university affect this. The literature (for example, see Hill, 1997) suggests that policy implementation is a contested terrain. This thesis expects to illuminate whether this applies to KT policy as it enters the university, and if so how and by whom it is contested.

To achieve my aim, this research sets out to answer the following questions:

1. How is KT policy understood and translated at an institutional level?
2. How does the university's history affect its interpretation and response to KT?
3. What mechanisms does the institution use to implement KT policy?
4. How do academic staff understand and translate KT policy?
5. What are the main issues arising in the implementation of KT policy?

¹⁶ I use the term translation in the sense of a meaning-making activity, and discuss the concept of policy translation in Chapter Three.

Thesis Structure

In Chapter Two I focus on a selection of issues from the literature on the history of universities. The selection is guided by my understanding of KT policy to be as much about the relationship between universities and wider society as it is about knowledge transfer in a narrow commercial, transactional sense. The main issues I cover are dominant ideas about the university and its purposes; how universities have changed over time and in particular in the latter part of the 20th century; and how, as a consequence, the knowledge that is produced in universities is changing in response to these policy pressures. In Chapter Three I will present my research methodology and methods, followed by my findings in Chapter Four and a discussion of the findings in Chapter Five. Conclusions, an assessment of the limitations of the work and ideas for future research are presented in Chapter 6.

Chapter Two Literature Review

Introduction

It is beyond the scope of this chapter to attempt to review all of the extensive literature on universities. Rather, I am focussing on some key texts about what the university is, and what it has been, as it is my belief that KT policy enters a space occupied by pre-existing sets of assumptions, not all of which are congruent. For this reason the chapter is arranged around a number of inter-related major themes that chart significant beliefs or dominant views about the purposes of the university.

The over-riding theme is that of university-society connections, as KT policy emphasises the growing importance of the university in the context of building and developing a knowledge society and economy. Policy-makers present the university as a major contributor to both the economy and wider society, producing knowledge that can boost competitiveness, inform government decision-making and make people better informed. For this reason I start the review with a discussion of early ideas and espoused purposes of the university, drawing on the ideas of three major thinkers of the 19th century: Von Humboldt, Bentham and Newman, each of whom expressed the university connection with society in a different way.

A second theme concerns the governance of universities. In the context of the United Kingdom, universities have been established in different periods, by different bodies, with different governance arrangements. Of significance for this thesis is that Scotland historically enjoyed what is known as ‘administrative devolution’ in the field of education (Johnstone and MacKenzie, 2003:87), before broader political devolution in 1999. This has led to differences in the higher education sector in Scotland from that of other parts of the UK. Additionally, the governance of universities has changed throughout the UK as the state has taken increasing responsibility for their financing, and introduced a range of new mechanisms to make universities more accountable.

A third theme relates to repeated attempts to steer universities and shift them away from being relatively autonomous, to institutions that are increasingly subject to government agendas. The amenability of universities to government steering varies and is linked to the history of the institution and to traditional systems of governance. While the general trend in the UK university sector has been one of a loss of autonomy, this has not applied straightforwardly to post-1992 universities in Scotland, as these HEIs have moved from a history of direct government control to a situation of relatively greater autonomy. Steering of universities by government can be thought of as a way of making them more responsive to the demands of industry and commerce, and of ensuring greater economic relevance.

The Idea of the University

A debate about the idea and purpose of the university as a higher education institution has been ongoing for many years now¹⁷. Prominent in most texts on the subject are three ideas made explicit in the 19th century, the first two by Jeremy Bentham and Wilhelm von Humboldt, and the third by John Henry Cardinal Newman. In brief, their ideas promote the University as a site of useful knowledge (teaching and/or research), as a research-and-teaching institution, and as a teaching institution respectively. However, embedded in these ideas are competing views of the nature of the university-society relationship.

Bentham

In order to understand the impact of Jeremy Bentham's (1748-1832) idea of a university, it is important to note that the major universities in England at the time, Oxford and Cambridge, were strictly denominational and exclusive in nature. Moreover, their location and style, originally located out of towns and cities and sometimes cloistered by walls, reinforced a perception of them as elite institutions that were somewhat cut off from society and the everyday world. Bentham sought to modernise the university and make it useful, and his idea of a university was shaped by his theory of utilitarianism. This proposes that actions and institutions should be

¹⁷ For example see "The Idea of Higher Education", (Barnett, R.1990); "The University in Ruins", (Readings, 1996); "The Idea of a University", (Smith and Langslow, 1999)

judged by their contribution to utility, which is measured by calculating the relative contribution to happiness or pleasure, as opposed to pain. This led to his thesis that the aim of government should be “the greatest happiness of the greatest number”. Following these principles, he was instrumental in the establishment of University College London (UCL) in 1826, the first university to be established in England since Oxford and Cambridge. He enshrined a clear utilitarian purpose for the university, one of ‘service’ made possible by professional training or research, claiming that “*the test of any institution’s worth was whether it served the general interest or satisfied public opinion*” (Rothblatt, 1997:6). In this way Bentham’s idea of a university advocates close university links with society, and implies an emphasis on ‘useful’ and ‘relevant’ knowledge.

Von Humboldt

Although von Humboldt was a contemporary of Bentham, his idea of the university configured university-society relations quite differently in the context of Germany as it began to emerge as a modern nation state. According to Schlegel (2004:5):

“Von Humboldt’s university staked its claim to relatively autonomous self-government, to its independence from the State, on the notion that its researches would lead to truths that would then be taught to the citizenry.”

When establishing Berlin University in 1810, von Humboldt offered a focus on specialised graduate study, but was insistent that teaching and research should be strongly linked through the union of the two, and that education should take place throughout a person’s life. He put freedom of thought and enquiry at the centre of university life, removing previous theological and political constraints in the pursuit of truth. He put the emphasis on the university as a home of pure science, “*the locus of lofty and abstruse research and specialised graduate training*” (Smith and Langslow, 1999:54), believing that a university could not be a serious place unless it encouraged specialised research by faculty members. However, while arguing for freedom of thought and research for university scholars, von Humboldt perhaps sowed some seeds for future tension between universities and government by

establishing the principles of '*lehrfreiheit*'¹⁸ and '*lernfreiheit*'. In the context of the university, Schlegel (op.cit: 2) explains the relevance of these terms as follows:

“Professors were to be free of state interference as they sought and conveyed knowledge (Lehrfreiheit) and students were similarly to be free to pursue their studies as they wished (Lernfreiheit).”

Newman

Newman's idea of the university was one of a community of scholars and teachers whose efforts are directed to the training of the intellect and the pursuit of knowledge for its own sake. In contrast to von Humboldt, *“For Newman and others, truth was received, not researched”* (McNay, 2005:40). Newman's idea offers the weakest direct link of the three ideas between the university and government in the sense that it strongly opposes a narrowly instrumental use of knowledge. Dulles (2002) argues that for Newman, university education should not be content to produce an efficient work force for the factory or the market place, and that the primary end of education was not the acquisition of useful information or skills needed for a particular occupation in life, but cultivation of the mind. In his “Discourses” (1852) that led to his book “The Idea of a University”, Newman argued that the primary function of the university was to teach, and to develop the intellectual capacities of students. He states (Ker, 1976, Preface: 5):

*“The view taken of a University in these Discourses is the following: - that it is a place of **teaching universal knowledge**. This implies that its object is, on the one hand, intellectual, not moral; and, on the other, that it is the diffusion and extension of knowledge rather than advancement. If its object were scientific and philosophical discovery, I do not see why a University should have students.”* (Original emphasis)

It can be said that all three of these ideas still co-exist to a certain extent today, albeit with different emphases in England and Scotland, and also within Scotland itself. For example, universities in Scotland from an early date put an emphasis on the training of professionals in the legal and medical professions, capturing Bentham's ideas of utility. They also followed Newman's idea of teaching all that was known in a given discipline, but unlike in England, this was to everyone, and not only to the privileged. At the same time, they were a driving force before the Enlightenment

¹⁸ *Lehrfreiheit* can be associated with the English term academic freedom.

and beyond, developing empirical research and pushing back the boundaries of knowledge, as witnessed by Scotland's many philosophers, scientists and practical engineers and chemists.

From Idea to Purpose of the University

Diffusion of these ideas foregrounds the issue of the purpose(s) of the university. Paterson (2003) claims that the proper public role of universities has been a matter for public debate since universities were founded. He juxtaposes two contrasting views of the university; one view that universities are 'universal' and an opposing view that they are 'socially embedded'.

The Universal View

The universal view posits that academics' main concern is the disinterested pursuit of knowledge, and that their primary loyalty is to the academic disciplines into which knowledge has been traditionally organised, a behaviour which Becher (1989) characterises as that of "academic tribes". The argument suggests that academics, and universities as their employers, require freedom from political pressure and intellectual autonomy if they are to succeed. If a question of social purpose arises the common response is that freedom of research and teaching is ultimately for the good of a liberal society. This view reflects the spirit of modernity, an ideal of which according to Delanty (2001:34) is the university as a cradle of autonomous knowledge, and knowledge as an end in itself (ibid:39).

The Embedded View

The contrasting view is that European and other universities are culturally embedded institutions that owe their existence to explicit political acts by public authorities such as the church, cities and states. Among the motives given for the establishment and development of universities are a range of social goals from the education of a ruling class, to provision of equal opportunity, and provision of people and expertise to develop the economy. Kerr (1990) argues that in the United Kingdom in the second half of the 19th century, the State intervened to modernise Oxford and Cambridge by opening them to non-Anglicans and later to women, and by putting

greater emphasis on research. In England this provoked the controversy of whether universities should place emphasis on production of the ‘man’ or the ‘book’¹⁹, an argument won by universal science, and one that arguably reflects the competing ideas of the university discussed earlier (Newman versus von Humboldt and Bentham).

Purpose of the University in Scotland

It has been argued that universities in Scotland are strongly embedded cultural institutions that follow the European tradition. While the ancient²⁰ English universities of Oxford and Cambridge were ecclesiastical foundations that long resisted interference from the state, the stance of the ancient Scottish universities was quite different, reflecting national traditions. Carter & Withrington (1992:69) quote the principal of St. Andrews as saying that:

“...from the first, the Scottish Universities were under State control. The State was responsible for them and bound itself to maintain them in full efficiency.....The Scottish people held that all education concerned the common weal, and that the just and wise method of action in regard to them was to compel the various members of the State to contribute to their support in proportion to their means.”

Paterson (2003:3) supports this view of distinctiveness of Scottish universities:

“Academic work was a public service, the apex of a similarly public system of national schooling. According to the dominant epistemology of the Scottish universities, knowledge itself was public, a matter of clarifying and making rigorous the ‘common sense’ of society. The whole body of belief was later called ‘democratic intellectualism’ (Davie, 1961, 1966).”

It is not my purpose here to explore whether the claims made above are correct, but to note the importance of the statement as a shaping myth or idea that may influence current thinking in Scotland, and arguably as a resource that could be mobilised by policy-makers and academics in support of stronger university-society links.

A further specificity of the university in Scotland is the traditional openness of access. In most countries universities have historically served the elites and ruling

¹⁹ According to Kerr (1990: Note 12) the ‘man’ relates to a man with British values as seen by Cardinal Newman in “Idea of the University” and the ‘book’ relates to knowledge as universal science.

²⁰ Ancient refers to universities founded before the 19th century.

classes, whether they came from royalty, the church, governments, the rich or the professions²¹. In England, this idea of ‘eliteness’ of universities is supported by a historically small percentage of the population attending universities²², and the occupation of leading roles in society by university graduates²³. In Scotland, however, a different picture emerges, based on a combination of the different traditions already discussed and also on the meritocratic principle. Universities were open to all talents, irrespective of social status. This accessibility is reflected in the idea of the ‘lad o’ pairts’, who encapsulates the democratic tradition of education in Scotland. The ‘lad o’ pairts’ refers to:

“...a talented youth, usually the son of a crofter or peasant who had ability but insufficient means to benefit from schooling.” (McCrone, 2003:240)

Although this idea has become mythologised, it holds significance in practice and continues to have resonance, as current policy differences over university tuition fees may suggest.

While students of higher education in Scotland often quote Davie’s (1961) idea of the “democratic intellect²⁴” as a major differentiating feature, Kerevan (2003:677) adopts a different view by coining the phrase the “Scottish Practical Intellect” (SPI). By this he refers to the “...unique links the traditional Scottish universities always maintained with the commercial and civil world” (p.677). He goes on to stress the traditionally practical orientation of the university in Scotland by means of a stark comparison between English and Scottish ancient universities. The point is made by claiming that, unlike in Scotland:

“... during the English industrial revolution and even after, classics and theology predominated over science and medicine at Oxbridge.”(ibid.)

The notion of SPI seems to be acknowledged by Lowe (1990:9), who states that the first industrial revolution in England²⁵ made comparatively few demands of the

²¹ The main professions being teachers, doctors, lawyers, and with the onset of the Enlightenment, scientists

²² See the Robbins Committee on Higher Education Report, Cmnd. 2154, 1961-63

²³ See Wright, P.W.G. (Ed) (1990), Industry and Higher Education, Chapter 1 for a useful overview.

²⁴ The democratic intellect can be thought of as a broad-based, liberal arts tradition of education.

²⁵ Lowe is referring to the period prior to 1870

formal education system due to little need for literacy and numeracy. He goes on to claim that many of the pioneers of the industrial revolution who devised new processes and techniques had themselves received only the barest of educations, or else been educated at Scottish universities or in Dissenting Academies due to what was:

“... a complete absence of the teaching of ‘really useful knowledge’ in the English universities.” (Lowe, 1990:9)

Civic Traditions in the UK: The Committed and the Hesitant ?

According to Kerevan (2003) the Scottish Practical Intellect resulted from seamless interaction between the academy, business and middle-class culture, due to the fact that eighteenth century universities in Scotland *“collaborated with practical businessmen and vice versa on a terrain of mutual respect and understanding”* (p.678). This civic tradition does not seem to have been as prevalent in England until much later.

The Hesitant?

Civic universities in England emerged in the latter part of the 19th and early part of the 20th century in response to emerging needs of industrialisation, and as a response to the perception of industrialists of a gap between universities and English cities. Lowe (1987) quotes John Percival of the National Association for the Promotion of Social Science (NAPSS), who answered his own question of *“who frequent our universities?”* as follows:

“Not the men who are directing the life of Manchester, Newcastle, Liverpool, Bristol or Birmingham, but the sons of country gentlemen or men destined for certain professions, or a few sons of the wealthier merchants and manufacturers; whilst the names of Oxford and Cambridge are strange to the mass of those who are guiding our industrial and commercial enterprise...Who can fail to lament the want of real living connections between our old universities and the great commercial and industrial centres?” (Lowe, 1987:10)

The civic universities were established to remedy this perceived problem. Sanderson (1972:58-59) points out that expectations of these new civic institutions by industry were for *“scientists and technologists, men with specific skills that could be directly applied to production or research.”* However, while this expectation may have been met in the early years of formation, Lowe (1987:11) claims that the orientation of

these institutions changed when they were given formal university status. Determined to appear academically respectable, these 'redbrick' institutions with a civic mission mimicked the ancient English universities of Oxford and Cambridge, often by recruiting the majority of senior staff from there, and succumbing to a system of Oxbridge patronage which saw it as part of their duty to ensure that the right people got the top jobs. The result was a transformation from local institutions making a serious attempt to service their local communities and industries, into institutions which emphasised the liberal arts. Lowe (ibid.) writes that in the process there was a shift away from providing part-time courses, many of whose students were young workers in local industrial and commercial concerns, towards full-time provision over three years of more markedly academic content. In an attempt to fill the gap left by the 'abandonment' by the redbrick universities of their civic mission, local authorities throughout the country established new technical colleges to fulfil this civic role. As a consequence, what emerged in England at the start of the twentieth century was in effect a tripartite '*system*' of higher education which in some sense remains to this day; a system headed by the ancient universities, followed by the redbrick civic universities, with technical colleges, assuming the mantle of civic institutions, at the bottom of the hierarchy. Amongst the latter were also vocationally-oriented institutions often endowed by wealthy local benefactors.

The Committed?

This contrasts with the picture in Scotland, where the civic tradition of the ancient universities was extended in 1901 through the establishment of a new group of institutions called "Central Institutions" (CIs) under the umbrella of the Scottish Education Department (SED). As already mentioned, these were established mainly in Scottish cities as central sources of technological advice for the various regions (Paterson, 2003:14). In 1895, and perhaps expressing elements of both the democratic and practical intellects discussed previously, the SED had proposed that a proper system of technical education should have as its special duty the aim of showing "*that industrial capacity has an intellectual side*" (Cowper, 1970:51). Cowper further reports that some academics saw this as a means of spreading higher education to the working class, very much in the claimed 'democratic' tradition.

Furthermore, in 1906, the SED stated that the aspiration of CIs was to become “industrial universities” (Anderson, 1995:277).

It is worth noting at this point that SED governance of higher education in Scotland resulted in a unitary, albeit segmented higher education system, at least until the establishment of the UK-wide University Grants Committee (UGC) in 1919. The UGC was established to manage the increasing state allocation of funding to universities in all parts of the UK, and the ancient universities in Scotland subsequently turned to the UGC for what they saw as a more stable source of funding, and also for protection from government interference in their affairs. The tradition of a unitary system in Scotland is in contrast to the overtly hierarchical system that emerged in England. This history is relevant to later discussion in three respects. Firstly it shows a degree of commonality and shared agendas between government and universities in Scotland. Secondly, it helps to explain the extent of collaboration rather than competition as a policy principle in Scottish HE, in contrast to England where a competitive, market-based system seems to be more widely accepted. Thirdly, the CIs, many of which became Universities after the 1992 Further and Higher Education (Scotland) Act, have been traditionally accustomed to direct steering from the SED and Scottish Office, and it is only in the last fifteen years or so that they have enjoyed a little more autonomy following incorporation.

Categorisation of UK Universities, governance and mission

As a result of some of the differences discussed so far, universities in the United Kingdom have been categorised in several ways. In what was arguably the first major review of higher education in Britain, Robbins (1963:22) split universities in to seven groups, and expressed differences amongst them in terms of their age and governance systems. The categories used by Robbins are shown in Table 1 below. What is notable in Robbins’ categories is that while the ancient universities in Scotland were amongst the first in the United Kingdom, he reported that they had always had a standing of their own, with many of their traditions likened more to

those on the European Continent²⁶ than those in England and Wales. Of particular relevance to the question of university-society connections was Robbins' view (ibid.) that the governing bodies of the ancient Scottish institutions included a substantial lay element. This model of connectedness with society through lay member influence on governing bodies is one that was adopted by English civic universities later, in preference to the Oxford and Cambridge model characterised by an arms-length relationship with society that Halsey (1992) labelled "*donnish dominion*".

Table 1: Categories of UK Universities pre 1963

Institutions
Oxford and Cambridge (12/13 th centuries)
St. Andrews; Aberdeen; Glasgow; Edinburgh (15/16 th centuries)
University of London, Federation of Colleges and Schools, 1836
First wave English civic universities: late 19 th century; pre-World War 1. Durham, Manchester, Birmingham, Liverpool, Leeds, Sheffield and Bristol
University of Wales (Federation of Colleges and Schools): 1893
Second wave English civic universities Reading (1926), Nottingham, Southampton, Hull, Exeter and Leicester (post WW2)
Third wave English civic universities: 1958 Sussex, Norwich, York, Canterbury, Colchester, Coventry and Lancaster

Adapted from Robbins (1963)

Filmer's Categories

Of course, significant expansion has taken place since the Robbins Report (1963) and new categorisations of universities have emerged. For example, Filmer (1997:48²⁷) suggests four groupings of universities in Britain, arguing that changes in the structure and funding of universities have made it difficult to sustain a unitary concept of the University. The transition from elite to a mass university system, he

²⁶ For example a broader curriculum, rather than the more specialized English approach to higher education.

²⁷ In Smith & Webster (1997) "The Postmodern University?"

argues, is producing change both to the functions of universities and the character of the university as a social institution. Bone and McNay (2005) share this concern and suggest that the significant expansion of HE in the 1990s may have:

*“...led to a loss of the essentially **human** side of the higher education experience....and led to behaviour that may push the boundaries of acceptability within the **values** that have been of the essence of higher education.”* (Bone and McNay, 2005:4) original emphasis.

Filmer’s first grouping reflects the ideas of Cardinal Newman and is representative of the Oxbridge model. This sees universities as places to pursue knowledge as its own end, and places that provide a liberal education free from, and untainted by, worldly preoccupations (Barnett, 2000:25).

Filmer’s second idea is illustrated with reference to London University and is representative of the older civic universities (very much modelled on the ancient universities of Scotland), influenced by Bentham’s utilitarian ideals. This idea contrasts with the Oxbridge model, and is one of a modern university, appropriate to the conditions and concerns of a new industrial bourgeois society, and ready to embrace the applied as well as pure sciences, the study of political economy and the social sciences as well as the classics and humanities.

The third idea according to Filmer (1997) is that of the university:

“...tied to the ideal of the white-hot mid-century technological revolution that underwrote the Labour Party’s 1964 election campaign and was implicit in some of the recommendations of the Committee on Higher Education (1963) headed by Lord Robbins.” (Filmer, 1997: 50)

This idea is representative of the English colleges of advanced technology (CATs) and some Scottish central institutions (e.g. Strathclyde and Heriot Watt) that were granted university status in 1964 and 1966 respectively, and which were essentially centres for the study of the applied sciences and their technological application. Filmer (ibid.) claims that these universities sought to consolidate the ideal of the metropolitan university by complementing their focus on technology with a rational scientific humanism, usually by creating departments of social science. Filmer’s fourth idea is linked to the new post 1992 universities, created by the dissolution of the binary higher education system. In England these included the large polytechnics

which developed a significant collective identity following their establishment in 1966 as part of the post-Robbins expansion of higher education. In Scotland they included five former central institutions that became Abertay, Glasgow Caledonian, Napier, Paisley and Robert Gordon universities respectively. In addition to the traditional range of academic provision, the new universities offer a range of professional and vocational courses of varying duration and provide a variety of sub-degree, degree-equivalent and post-graduate qualifications.

Shared Academic Values

While the classification of universities by a form of age group is a useful way of differentiating these institutions, it is important to stress some important similarities and historically shared values²⁸ of the universities, irrespective of origin. The most important one of these is the idea of independence, or autonomy. It is significant that Robbins (1963:228-237), in his higher education report to Parliament in October 1963, devoted considerable attention to this question in a chapter entitled “*Academic freedom and its scope*”. He opened the chapter with the following statement:

“We have now to approach the most important and the most difficult of all the problems we have had to consider – what machinery of government is appropriate for a national system of higher education in this country... effectiveness in this sphere can only be achieved if a nice balance is kept between two necessities: the necessity of freedom for academic institutions and the necessity that they should serve the nation’s needs.”

He went on to say:

“The urgent question is whether in the conditions of today, the freedom from control that the universities have enjoyed in the past, and to which such importance has been attached, can be expected to persist unchanged; and whether it can be extended in various degrees to other institutions of higher education.”

The Committee (paragraph 35) concluded that:

“We therefore lay great emphasis on the principle of control through general block grants administered by an independent committee or commission appointed for its expert qualifications, not for its political affiliations. We regard this principle, exemplified in the present system by the Universities Grants Committee, as one of the significant administrative inventions of modern times: and we attach great importance to its retention and development in the machinery of government in the future.”

²⁸ For a wide ranging discussion of values in higher education see S. Robinson and C. Katalushi (2005) (Eds.), *Values in Higher Education*.

The government's preference to interface with the Universities through the University Grants Committee (UGC), manned by those with 'expert qualifications'²⁹, reflects the relatively autonomous nature of universities in the 1960s and the high degree of control and freedom enjoyed by academics in managing their own affairs. Moodie and Eustace (1974:44) state that:

"The universities in the United Kingdom are autonomous institutions. They are, without exception, independent corporations, able to own property, to sue and be sued, and to regulate their own affairs within the wide powers granted to them by the instruments of their incorporation.... The chief formal restraints upon complete autonomy are the obligation to keep within the powers granted by these instruments; the need to obtain the permission of the Privy Council³⁰ for important alterations to these instruments; and the restrictions imposed by law upon the use of their endowments."

The legal and institutional autonomy and freedom was underpinned by an internal system of governance in which most decision-making was made by academics, despite the presence of non-academics on the 'supreme governing body' known commonly as Council or Court³¹. According to Becher & Kogan (1992:178):

"The autonomy was made legitimate because it seemed consistent with the nature of the higher education task."

They also say:

"The case for autonomy rests on the contention that the exercise of creativity by individuals or relatively small collegial groups is the essential socio-technological condition of good academic work; there is an assumption here of a functional link between the nature of the task and the requisite organisation for it." (ibid:100)

From Idea to Ideology: Pressures for Change in Universities

While the relative autonomy and independence of the university sector seemed secure in the immediate years following the Robbins report the situation had changed significantly by the late 1970s and early 1980s and the idea of a university as an autonomous, self-governing institution came under increasing threat. A combination of factors contributed to such a situation. First amongst these was the rapid expansion in the number of universities and students in higher education (McNay, 2006; Scott, 1995); secondly was the associated cost of this expansion (ibid.), and thirdly was the deteriorating economic performance of the United Kingdom in what

²⁹ Often, but not only senior academics, professors.

³⁰ Or, where appropriate, as in Durham and the ancient Scottish universities, of Parliament

³¹ For useful accounts of University governance see "Power and Authority in British Universities" (Moodie & Eustace, 1974) or "Process and Structure in Higher Education" (Becher & Kogan, 1992)

was an increasingly competitive world. The result was increasing pressure from the government of the day for universities to be more responsive to the national economic agenda, and to secure a leading place for the United Kingdom in the emerging 'knowledge economy'.

The Shift to a Knowledge Economy

Many explanations for the emergence of this phenomenon have been given, very prominent amongst them are increased global economic competition, and a shift from industrial to post-industrial economies. The intensity of global competition in the 1960s and 1970s is reflected in the erosion of the previously dominant position in the world economy of English-speaking countries, notably America and Britain, and the emergence from post-war reconstruction of Japan, the development of newly industrialising countries (South Korea, Singapore, Taiwan, Hong Kong) and the growth of China. Slaughter & Leslie (1997:32) quote Castells (1993:25, Table 2.1):

“If we look at national shares of world output, we see that Japan increased its share from 5.8 percent in 1967 to 7.7 percent in 1986, and the developing Asian countries increased from 10.8 per cent to 17.4 percent. Japan and China raised output more rapidly than any other country in the world, and the developing Asian countries far outdistanced any others. The United States and the United Kingdom lost shares, Australia and New Zealand held steady, and Canada made a very slight gain. The United States declined from 25.8 percent in 1967 to 21.4 percent in 1986; the United Kingdom declined from 4.8 percent to 3.5 percent. Australia and New Zealand held a steady 1.2 percent share, and Canada grew from 2.1 to 2.2 percent.”

Academic economists, corporate managers and government officials attributed the competitive decline of advanced economies in this period to a slowdown in productivity (Barrow, 1996). At the same time, advanced economies had been shifting to a post-industrial economy based on information, service, and technology-based industries as they chose to compete in post-industrial sectors where they enjoyed a comparative advantage in the global economy, ceding low-technology, low-wage mass manufacturing industries to developing countries. They assumed that this strategy would enable them to maintain their competitive advantage either because they had a lead in cutting-edge products or services; or because automation and technology-based manufacturing processes would allow them to compete on a cost-unit basis due to superior workforce productivity (Johnstone, 1991). The heightened intensity of competition on a global scale and the adverse economic

effects of oil price increases in 1973 led to significant policy changes in a number of advanced economies. While these changes are wide-ranging and complex, they started with reductions in social expenditures in the mid 1960s (Pollitt, 1990:30) before more radical changes in the 1980s when social-democratic politics and policies were replaced by neo-liberal ones.

Ideological Shift

Social democratic politics, influenced by Keynesian economic principles, advocated:

“...a form of macroeconomic policy whereby governments actively intervene in the economy to assist its regulation and assure the provision of public goods which the market did not provide or provided inadequately.” (Olssen et al, 2004:113)

In contrast, the neoliberal perspective:

“...deemphasizes the polity, instead increasing the role of the market in national economic success. The neoliberal school sees market forces as impersonal, disembodied, and inexorable, as supplanting national economies with a global market. To compete in the new global market, nations have to cut back, reducing social welfare and entitlement programs, freeing capital and corporations from taxation and regulation, allowing them to operate unfettered.”(Slaughter & Leslie³², 1997:34)

The consequence of this shift in policy in advanced economies was pursuit of :

“...supply-side economic policies, shifting public resources from social welfare programs to economic development efforts, primarily through tax cuts for the business sector but also through programs that stimulated technology innovation, whether through military or civilian R & D.” (Ibid.³³)

In this sense, and in contrast to classical liberalism which represented a negative conception of state power characterised by Smith’s (1776) “*invisible hand*”, neo-liberal policies represented:

“...a positive conception of the state’s role in creating the appropriate market by providing the conditions, laws and institutions necessary for it operation.... In neoliberalism the state seeks to create an individual that is an enterprising and competitive entrepreneur....” (Olssen et al, 2004:136-7)

The shift to neo-liberal policies in advanced economies is often associated with trade liberalisation, deregulation, privatisation, marketisation, and globalisation, a

³² With reference to Friedman (1981, 1991) and Friedman & Leube (1987).

³³ With reference to Jessop, 1993; Mowery, 1994)

problematic term with many meanings³⁴. With specific reference to the education sector it is also associated with a reduction in funding of the public sector, and the application of neo-liberal theories of human capital, public choice theory (PCT) and new public management (NPM) to public sector institutions in the interest of making public sector institutions subject to similar costs and benefits that operate in the private sector (Olssen et al, 2004:153).

Managerialism

In this regard neo-liberal policies are also associated with the rise of managerialism³⁵, which has been described alternatively as:

“...an optimistic, almost a romantic creed. For it suggests that solutions lie within our own hands, that determined, clear-sighted leadership can achieve fundamental changes and can give a new sense of purpose and achievement.” (Pollitt, 1990:1)

and

“... a set of beliefs and practices, at the core of which burns the seldom-tested assumption that better management will prove an effective solvent for a wide range of economic problem.” (Ibid.)

In terms of the latter, managerialism is often associated with the three ‘E’s of economy, efficiency and effectiveness (Becher and Trowler, 2001:10). Becher and Trowler further suggest that managerialism promotes a strong orientation towards the customer and the ‘market’; an emphasis on the power of the top management to bring about corporate change; a legitimacy to change organisational culture, structures and processes; and a conceptualisation of knowledge and learning that they describe as atomistic, mechanistic and explicit. The impact of new government higher education policies in the UK in the transition period to a knowledge economy, with managerialism very much at the centre, is therefore clear to see. Confronted by stronger global competition, and wishing to build more knowledge-based industries to compete in the emerging knowledge economy, the UK government paid greater attention to the whole of the education sector than was previously the case. While

³⁴ For comprehensive treatment of definitions of globalisation and the globalisation debate see Held & McGrew (2000) *The Global Transformations Reader*.

³⁵ For a comprehensive account of managerialism see Pollitt (1990). It should be noted that the terms managerialism and new managerialism are often used interchangeably.

funding of the higher education sector was cut as part of the shift in funding priorities from social (welfare state) to economic spheres, the demands placed on the sector increased as a consequence of growing recognition of the importance of the education sector to national competitiveness in the new knowledge economy. Nedeva (2008) suggests that in the process universities were recast as “*agents of the knowledge society*”(p.7). This contrasted with earlier government policies towards the higher education sector which Maclure (1987) describes in the following way:

“Policy for the universities was obscure and ambiguous. For much of the time, over large areas, the policy was to have no formal policy at all, except to give autonomous institutions as much or as little money as the Government thought it could afford.” (Maclure, 1987:11)

Repositioning knowledge in a different social context

In the period between 1966 and 1992 the UK higher education system moved from a binary system made up of ‘elite’ universities on the one hand and vocationally-oriented institutions on the other, dominated by the former, to a mass unitary system dominated by the latter. The result of expansion and changes in HEI governance arrangements was an increase in numbers of HEIs in the United Kingdom in the period 1962 - 2005 from 31 (5 in Scotland) to a total of 168 (20 in Scotland), as shown in Table 2 below.

Table 2: Number of Higher Education Institutions in the United Kingdom

	Universities	University Institutions	Other HEIs	Total No. of HEIs
England	72	92	41	133
Scotland	13	13	7	20
Wales	3	12	0	12
Northern. Ireland	2	2	2	4
United Kingdom	89	114	54	168

Source: Universities, UK 2006

This shift reflects the perceived need of policy makers not only to rapidly increase the numbers entering higher education to satisfy increasing demand from industry and commerce, but also to shift the focus from a liberal education to one that focused

on specific skills needed in the knowledge economy, notably science, technology and management.

“...by the 1990s, the crucial role of higher (and further) education in producing individuals with the knowledge and skills increasingly deemed necessary in the knowledge-based economy could be powerfully emphasised in the series of ‘Competitiveness’ White Papers on economic development strategy, initiated by the then President of the Board of Trade, Michael Heseltine.”(Rees & Stroud, 1990:81)

The pressures of global competition put further pressure on policy-makers to demand more useful knowledge from the university sector to support the drive for greater competitiveness. To achieve this, the government legislated to change higher education governance structures that it considered either too autonomous (i.e. the traditional university sector), or potentially unresponsive (i.e. the polytechnics and colleges) because they were accountable to local education authorities of a different political persuasion. In the 1980s the UK government worked with business leaders to establish an enterprise culture in tertiary education (Slaughter & Leslie, 1997:41). This move was reflected in the findings of the Jarratt Committee (1985), chaired by a leading industrialist, which called for more effective and efficient management of universities, typical of private sector organisations. Business leaders’ desire to have a greater say in the higher education sector led to the establishment of the Council for Industry and Higher Education (CIHE), an independent body supported by the private sector. CIHE was composed of thirty two heads of large companies and twelve heads of tertiary institutions. Pratt (1992:38) described its aim as:

“...to encourage industry and higher education to work together, and its policy paper Towards Partnership (1987) argued for greater access to and more variety in higher education, as well as a shift toward science and technology provision.”

This group, through its lobbying, secured an increase in higher education places in science and technology, particularly in the less costly public sector HEIs, and lobbied to increase civilian research and development, integrating it with economic development. The government’s desire to reform governance arrangements in the sector, as a means of making higher education institutions more responsive to its economic agenda, is reflected in the 1987 Education White Paper and the 1988 Education Reform Act (ERA), which according to Simon (1990:97) had a goal to:

“...steer all further education colleges (including polytechnics) away from local authority control towards development as institutions directly serving business interests.”

Managerialism, Marketisation and Enterprise in the HE Sector

The 1987 Education White Paper *“Meeting the Challenge”*, strengthened managerial, enterprise and market imperatives as the government called for:

“major changes....to improve the effectiveness and purposes of higher education”. It stated that *“...higher education should serve the economy more effectively...have closer links with industry and commerce, and promote enterprise...take greater account of the country’s need for highly qualified manpower”* And in terms of research, it argued that this should be targeted *“with attention to prospects for commercial exploitation.”* (DfES, Cm 114, 1987:iv)

Installing Managerial and Business Approaches

The 1988 Education Reform Act consequently introduced new governance arrangements in to the University and Polytechnic sectors, abolishing the Universities Grants Committee (UGC) and National Advisory Board (NAB) and replacing them with smaller boards dominated by business leaders. The presence of industry representatives on governing bodies also served to introduce elements of private sector management in to the sector as the government believed that there was scope for further improvement in the quality and efficiency of higher education. This led to the strengthening of managerialism in the sector, and was interpreted as a powerful attack on the autonomy of academics, symbolic of an end of an era of independent academic culture (Shattock, 1994). Governance changes were accompanied by increased conditionality and steering, and Johnes (1992:173) reports that the government decreed that:

“... state expenditures on higher education should be regarded as payments for services provided rather than as block grants to institutions.”

Competition and Market Relations

As a result, higher education institutions became involved in competitive bidding for students to improve institutional cost effectiveness. This was a precursor to abolition of the HE binary line between universities and polytechnics (CIs in Scotland) in 1992. The 1991 White Paper *“A New Framework”* announced (para. 17:12) that:

“The Government believes that the real key to achieving cost effective expansion lies in greater competition for funds and students. That can best be achieved by breaking down the increasingly artificial and unhelpful barriers between the universities, and the polytechnics³⁶ and colleges.”

The increased ability of the government to steer HEIs was enhanced by differentiation of funding for teaching and research which had previously come from a single grant. Funding for teaching became dependent on a combination of numbers of undergraduate students that HEIs could attract, and teaching quality based on quantifiable outcomes. Research allocations previously incorporated in large institutional grants awarded to universities were replaced by a system of competitive bidding for research grants from research councils. In 1984, the Universities Grant Committee (UGC) published “*A Strategy for Higher Education into the 1990s*”, in which they announced plans to allocate research funds through the Research Assessment Exercise (RAE), rather than on a pro rata basis through the block grant:

“We argue in this section that research is vital to the nation’s future well-being, and that the universities must be given the resources to sustain their contribution to the total effort. At the same time we must ensure that those resources are put to the best possible use. We therefore intend to develop a more systematic and selective approach to our allocation of funds for research. This will not be effective unless the universities make a complementary effort to develop explicit research strategies and improve their management.” (UGC, 1984:15 – original emphasis)

Subsequent to this, research allocations previously incorporated in large institutional grants awarded to universities were replaced by a system of competitive bidding for research grants from research councils. Martin, Irvine & Isard (1990) report that general university funding in the United Kingdom between 1980 and 1987 grew by ten percent, while separately budgeted funding increased by 32%. This forced university researchers to compete for funds targeted to the government’s strategic goals, an increasing number of which were directly related to economic and industrial policy, and sectors considered central to the knowledge economy - specifically to “high technology” (Reich, 1991), the “information economy”(Castells, 1993) and “technoscience” (Aaronowitz & DiFazio, 1994).

³⁶ This also applied to CIs in Scotland

Competition for research funds is reflected in a number of ways. Firstly, in an increase in selectivity of research funding from 14% in 1989, to 100% in 1992. Secondly, in the change of the Higher Education Funding Council for England (HEFCE) definition of research for the 1996 RAE to include the phrase:

“...work of direct relevance to the needs of commerce and industry” immediately after the sentence stating that research:

“...includes scholarship; the invention and generation of ideas, images, performances and artefacts.” (HEFCE, 1995, Annex A, quoted in Willmott, 2003:132)

According to Willmott (2003), the threat of loss of research funding increased pressure on all universities either to raise performance levels, or to use the prospect of losing funding as a means of stimulating the entrepreneurial development of alternative income streams. McNay (1997b) observes that many ‘modern’ universities had development plans in place that took what he called an entrepreneurial approach which linked research to industrial liaison, consultancy, and enterprise initiatives, something which could:

“...put them more in tune with government policy and funding initiatives through the Research Councils, now the responsibility of the Department of Trade and Industry, as part of the government’s drive for competitiveness.” (McNay, 1997b:38)

Willmott (1998) confirms the government’s focus on entrepreneurship with comments on the 1998 UK Competitiveness White Paper, which he says champions the case of entrepreneurship, stresses the role of higher education in making entrepreneurship the lifeblood of the new British economy, and bemoans how few people come out of universities with innovative ideas and know-how. The 1998 White Paper announced the intention to:

“...fund up to eight new enterprise centres in Universities to bring entrepreneurship training and business skills into the science and engineering curricula.” (DTI, 1998, Chapter 2, Para: 15)

Willmott (1998:18) goes on to argue that:

“As state funding diminishes relative to the expanding size and costs of higher education, the higher education sector is becoming more responsive to initiatives shaped by the private sector and articulated in public policies.”

This view seems to be supported by the changes in the pattern of resource input into British university research reported by HEFCE (2000, Annex K) and discussed by Tapper & Salter (2003). The latter state that between 1984 and 1997 the relative input of the Funding Councils declined sharply (from 58.8% to 35.1%) with increases in the inputs of the research councils (from 17.2% to 24.1 per cent), UK industry (from 5.6% to 7.0%) and, most significantly, charitable bodies (from 7.0% to 13.6%). Tapper & Salter (2003) refer to Salter, Rich and Bird's (2000) claim that this led to increasing co-operation between state and private finance in sustaining massive, long-term research projects. Tapper & Salter (2003:21) claim that:

“...those universities that are interested in augmenting their research base on a grand scale have to work out strategies for sustaining state funding, increasing the input of the market, and learning how to bring together state and corporate interests in a viable system of governance.”

Marketisation and gaining access to alternative funding sources is a major theme of two major policy documents of 2003: the Lambert review on Business-University collaboration, and the White Paper on the Future of Higher Education

Encouraging University – Society Linkages

The 2003 Lambert Review on Business-University collaboration was designed

“To illustrate the opportunities that are being created by changes in the way that business is undertaking research and development (R & D), and in the way that universities are opening their doors to new forms of collaboration with business partners .” (2003 Lambert Review, Foreword)

The report highlighted many good examples of excellent business-university collaboration, but called for further development and investment. It recognised that the UK Government was pursuing an agenda of regionalisation and devolution and argued that the devolved administrations would have to consult on how best to take the recommendations forward. The increased attention given to the importance of the link between regional economic development and universities is reflected in a 2006 project approved by the Economic and Social Research Council (ESRC) under the title “The Overall Impact of HEIs on Regional Economies” (www.ewds.strath.ac.uk). The authors of this study developed a methodology of trying to quantify such impacts, with further work now underway to apply it. This

work follows on from other research work supported by the ESRC on “Knowledge Transfer in HE in Scotland” (www.esrc.ac.uk), underlining the importance attached to knowledge in society, and in particular in a regional context. The Centre for Public Policy for the Regions (CPPR) published a report in 2006 on this topic, using economic modelling methods. The full report is available from

<http://www.esrcsocietytoday.ac.uk/ESRCInfoCentre/Forums/attach.aspx?a=270>

Competition and Market relations: Policy Divergence in Scotland

The 2003 White Paper and subsequent 2004 Higher Education Act which introduced “top-up fees³⁷” in Universities in England, and Wales is commonly understood as further marketisation of higher education in the UK, a way for universities to fund more rapid growth from private sources, and to compete in the global system for education. Commenting on a discussion paper from the previous year (DfES, 2002), Stevens (2004:134) quotes the UK Secretary of State for Education as saying:

“It is hopeless to pretend that all universities are the same or even similar since they are manifestly not. This should be recognised, even celebrated...government should acknowledge this in the way universities are funded ...and should try and offer universities the opportunity to find their own vision and then carry through with minimal central government interference.”

The Scottish Parliament, however, adopted a different line on this matter, reinforcing the specificity of educational values in Scotland, and emphasising the scope for divergence in educational policy between Scotland and England discussed earlier. Namely, following announcement of the introduction of university tuition fees by the UK Labour Government in 1997, and following the formation of a Labour-Liberal Democrat coalition at the first parliamentary elections in Scotland in 1999, the Scottish Parliament chose not to introduce means-tested tuition fees, and replaced means-tested student grants with the introduction of a graduate endowment, to be paid following graduation. It also reintroduced means-tested grants to cover at least part of the maintenance costs of students from low income families. Even greater policy divergence emerged following the 2007 parliamentary elections in Scotland and the formation of a nationalist government, with the announcement in June 2007

³⁷ The right to charge student tuition fees up to £3000 per year. Wales needed separate legislation.

of the abolition of the graduate endowment, and hence an end to university tuition fees.

Emerging Discourses: Knowledge Economy, Managerialism, Enterprise

It can therefore be seen that interpretations of change in higher education have a number of common threads running through them. Central amongst them are discourses of change related to the knowledge economy, managerialism, marketisation and enterprise. I elaborate on the meaning and significance of discourse for this thesis in the following chapter on research methodology; however in general terms I use discourse in Thrift's sense (2005:24):

“Discourses are metalanguages that instruct people how to live as people. They are best represented as great rivers of communication.”

It is unclear whether the emerging discourses are part of Scottish Executive responses to ‘real problems’ that exist ‘out there’ in Scotland, or part of a UK agenda for higher education in which ‘problems’ are ‘created’ and ‘given shape’ by the UK policy proposals that are offered as ‘responses’ (e.g. managerialism and the need for universities to be more entrepreneurial). To make sense of this it may be useful to draw on Goodwin (1996:67) who argues that policy viewed as discourse:

“...frames policy not as a response to existing conditions and problems, but more as a discourse in which both problems and solutions are created.”

Knowledge Economy Discourse

The knowledge economy discourse can be understood in the context of the transition from industrial to a post-industrial, global ‘knowledge economy / society’ and seen both as a driver of change, and a justification to increase demands on universities.

According to Barnett (2000:17):

“The knowledge society has need of knowledge and so the university now has new opportunities opened to it to harness and make available its knowledge capacities to potential knowledge users.”

Bullen, Robb & Kenway, (2004:3) emphasise the global nature of the demands, stating that:

“The combined forces of globalization and the global economy have exerted pressure on higher education and research institutions to serve the needs of the

*emergent knowledge economy*³⁸. *Knowledge economy policy increasingly tends to evaluate the worth of knowledge along economic lines rather than as a social good. Thus, the academy increasingly situates itself as a supplier of knowledge and knowledge workers – those capable of converting research and knowledge into economic commodities.*”

On similar lines, education policy according to Ozga & Jones (2006:2) reflects :

“...a policy trajectory that is preoccupied with the construction of a ‘knowledge economy’ and ‘learning society’. Within this trajectory schooling/education/training systems are acknowledged to be significant instruments of economic and social change: for building intellectual capital and capacity for innovation; for enhancing workforce development in ways that realize economic and, to a considerably lesser extent, social and civic outcomes.”

From the preceding analysis it can be seen that over the last thirty years higher education policy has legislated to erode the autonomy of traditional universities and make them more responsive to government economic policy. Successive governments have put particular emphasis on universities meeting the needs of business and industry, something they have achieved through reform of governance and funding arrangements and an emphasis on the management of the university’s assets and resources. This change in higher education is captured in Lyotard’s (1984) assertion that:

“Knowledge is now judged not on its power to describe the world but through its use value. Knowledge has to perform, to show that it has an impact on the world.” (quoted in Barnett, 2000:38)

The knowledge economy discourse can thus be interpreted very much as a discourse of change. Prior to the introduction of neo-liberal reforms, the education sector had been structured by a commitment to two modes of coordination: bureaucratic administration and professionalism (Hoggett, 1994; Newman and Clark, 1994). The two in tandem were known as ‘bureau-professionalism’ (Clark and Newman, 1997:6), a partnership in which bureaucracy offered a stable system of governance in which people would be treated impartially, while professionalism provided expert judgments. However deteriorating economic conditions led to attacks on this form of governance, which was increasingly portrayed as:

³⁸ The term knowledge economy is used but the authors acknowledge the use of variants including the new economy, knowledge society, information economy/society, and others.

“...an inappropriate and inefficient organisational form – ill-adapted to the demands of complexity and change in the modern world.” (ibid:12)

Managerial Discourse

Consequently, successive governments put forward the application of private sector corporate management techniques as an alternative to bureau-professionalism, and several authors claim that what was to become known as ‘new managerialism’ drew heavily on a set of ideas from the work of Peters and Waterman³⁹ (1982). The UK Government saw managerialism and its array of private sector business techniques as offering the possibilities of creating ‘public entrepreneurship’ in the public sector (Osborne and Gaebler, 1992), in effect challenging the values of the bureau-professional order and attempting to replace it with values oriented to the market and newly-constituted consumers. However in the context of this research it is important to consider managerialism not simply as an array of management techniques, but also as an ideology⁴⁰ and a discourse, something on which I will elaborate on further in the discussion of methodology in Chapter 3. For example, Clark and Newman (1997:32) in discussing the restructuring of the public sector, including education, claim that:

“Managerialism has played a central role in this restructuring both as an ideology that legitimates the development of new organisational forms and relationships and as the practical ideology of being businesslike that promises to make the new arrangements work.”

The introduction of managerialism in to universities as a means of changing the way that universities are run led Parker and Jary (1995) to put this in the context of a power struggle, in which management decisions take precedence over academic ones as managers exercise what Pollitt (op.cit:3) calls their ‘right to manage’, something which gives them the freedom to make decisions about the use of organisational resources to achieve desired outcomes. They propose that :

“Our ideal-type 1990s UK university hence exhibits greater managerial power, structural centralization, substantial growth of organization size, rising student-staff ratios, more emphasis on marketing and business generation and the rationalisation

³⁹ This refers to Peters and Waterman’s book *In Search of Excellence* (1982). See Pollitt (1993) and Parker (2000) for accounts of the link of this text to the concept of new managerialism.

⁴⁰ For in-depth treatment of ideology in the higher education sector refer to Barnett (2003) and his book *Beyond All Reason: Living with Ideology in the University*

and computerization of administrative structures....change is hence necessarily predicated on weakening professional control structures in order to intensify professional labour.”(Parker and Jary,1995:324)

Enterprise Discourse

The attempt by government to intensify professional labour through the discourse of managerialism is reinforced in a discourse of enterprise which is evident in earlier discussion in this chapter. Slaughter and Leslie (1997) coined the phrase ‘academic capitalism’ to capture the way in which academics were becoming increasingly enterprising and entrepreneurial. They argue that universities and academics have been forced to develop enterprising and entrepreneurial behaviour in response to government budget cuts and increasing resource constraints. Changing patterns of resource dependency are forcing academics to search out new sources of funding as government sources dry up. This has led to the emergence of what Clark (1998) calls the ‘entrepreneurial university’, universities that actively search for new, more effective and efficient ways of doing things and look for different configurations of knowledge in order to be able to sell it to outside clients. Clark (1998) coined this concept to describe the way in which he sees higher education institutions are:

“Pushed and pulled by enlarging, interacting streams of demand, universities are pressured to change their curricula, alter their faculties, and modernise their increasingly expensive physical plant and equipment – and to do so more rapidly than ever.” (Clark, 1998:xiii)

As demand for university education has increased, as the number of universities has multiplied, and as competition for funding from both public and private sources has intensified, universities are now ‘positioning’ themselves within the sector to ensure their continued survival and/or growth.

University Positioning in the Market

Universities are not only positioning themselves as individual institutions, but as part of wider alliances. It is possible to identify the ideas of von Humboldt, Bentham and Newman in the stated purposes of these groupings; with the first two ideas being more prominent. One grouping is the Russell Group of universities, an association of 20 research-intensive universities of the United Kingdom, the stated aims and objectives of which are :

“To promote the interests of Universities in which teaching and learning are undertaken within a culture of research and excellence, and to identify and disseminate new thinking and ideas about the organisation and management of such institutions.” (www.russellgroup.ac.uk)

A second grouping is the 1994 Group which describes itself as:

“...committed to meeting the diverse needs of students, staff and policy makers. The 1994 Group provides a framework for collaboration between research-intensive universities in the UK. The aim of this collaboration is to enhance the ability of member universities to act collectively where appropriate whilst maintaining their individuality and thriving in the highly competitive higher education sector. The Group’s main aims⁴¹ are to secure widespread recognition that enables it to influence decision and policy making groups....”

The 1994 Group of 16 smaller research-intensive universities was founded to defend their interests after the larger research-intensive universities founded the Russell Group. According to Universities’ UK “*Patterns 3*” 2003 report:

“the Russell Group and the 1994 Group share many features, but are distinguished chiefly by the fact that most members of the Russell Group have medical schools, and an emphasis on science and technology. Within the Russell Group a small number of institutions are outliers on the basis of the statistical information available, and if these were excluded from the analysis, the Russell Group and the 1994 Group would show very similar characteristics.” (www.universitiesuk.ac.uk)

A third grouping of universities, the Coalition of Modern Universities (CMU), subsequently renamed the Campaign for Mainstream Universities and more recently renamed again as “Million+”, differs starkly from the Russell and 1994 Groups in emphasising teaching and what they call “*relevant*” research (reflecting the Benthamite idea). It was launched in the summer of 1997 and includes 28 of the university institutions incorporated in 1992. The original CMU website (www.epolitix.com) stated that CMU:

“Represents the largest group of universities in the sector, educating more than half a million students, 50% are part-time; and supports targets to widen participation in higher education and believes that students should be able to attend universities which are well resourced whatever the course they choose and wherever they choose to study”. It goes on to say that “CMU universities are hugely successful in widening participation, delivering diversity, quality and relevant research.”

⁴¹ The website provides a list of five main aims and four values. See www.1994group.ac.uk/level1/About

A more recent fourth group of universities appeared in the sector under the name of the “alliance of non-aligned universities” (www.bbc.co.uk/1/hi/education). BBC news reported on May 3rd 2006 a “*new voice in universities debate*”. A main focus for the group is reported to be the future of the Research Assessment Exercise (RAE) that the government is proposing to replace in 2008 in favour of a formula-based system for allocating university-wide research grants. The new alliance wants to keep the RAE, but would like to base future funding more on formulae. Another focus is reported to be the regional role of universities and the growth of knowledge transfer activities in higher education. The group is reported to consist of universities who are not members of the Russell, 1994 or CMU groupings and expects to have about 30 members.

Positioning of the Universities in Scotland

While some of the above groupings refer to universities from different parts of the United Kingdom, a combination of historical factors and political devolution in Scotland provides the potential for the development of higher education in Scotland as a separate group in itself. This is despite a clear segmentation between the four ancient⁴² Scottish universities, the four 1960s universities⁴³, and the five post-1992 universities⁴⁴, each of which have their own values based on history and tradition. The Scottish Executive’s choice to abolish university tuition fees and to fund this through the public purse reflects a public good view of higher education in Scotland, and a traditional commitment in Scotland to open access to higher education and HE ‘for the common weal’. At the same time it helps to maintain, at least at face value, a picture of a unified higher education sector.

While the decision on tuition fees may be good news for students, that is not necessarily the case for university managers. In terms of the drive towards a knowledge economy and society, the Scottish Executive’s policy not only to reject

⁴² The ancient universities are St. Andrew’s, Aberdeen, Glasgow and Edinburgh

⁴³ The 1960s universities are the former central institutions of Strathclyde and Heriot Watt; the newly constructed Stirling University; and Dundee, which was a former college of St. Andrew’s

⁴⁴ The post-1992 universities (former central institutions) are Abertay, Glasgow Caledonian, Napier, Paisley and Robert Gordon. For recent discussion of universities in Scotland, see Gallacher, J. “*Differentiation and Stratification in Scottish Higher Education*”, in McNay, I. (Ed.) (2006).

tuition fees, but to abandon them altogether, deprives universities in Scotland of a potentially valuable, non-governmental source of income. This opens up the prospect of universities being increasingly reliant on Scottish Executive funding in the future, and arguably subject to greater steering; unless, of course, universities can increase their funding from other sources, for example through income-generating forms of knowledge transfer. In this respect, Sutherland (2003:687) points out that universities in Scotland need to carefully define their identities. He suggests (ibid:688) that this may be done in a number of ways. First of all along the lines of teaching (T), research (R) and a mix of the two (X). Secondly in terms of a regional (R), national (N) or international (I) focus, paying special attention to whom the university serves and who their external research partners are. And thirdly, in terms of C for Community. Sutherland (ibid: 689) argues that there are no context-free social institutions, and that decisions on identity cannot be made without reference to the communities in which universities are located. Sutherland (ibid: 690) argues that:

“The trick, in part, is to decide what for any institution counts as ‘its’ community, (R), (N) and (I) are all selectively relevant here and again the mix will vary for each institution and in some cases for the department. The point is that in the model which has been offered, (C) is a variable, but it is not an optional extra.”

Differentiated Missions of Universities

It can be seen from the above that throughout the UK, the main differentiators between these groups of universities seem to be in terms of emphasis on different types of research (pure versus applied); in different emphases on teaching; and emphasis on community. The latter differentiator seems to be an attempt to play a more obvious civic role, contributing to the local community and city and region in which the university is located. This is a role that is more likely to be played by universities with a traditional civic tradition, i.e. close to society, supported by local authorities and/or business people, with strong contacts in the local community. Such a profile seems ideally matched to key elements of government knowledge transfer policy.

The extent to which academics are responsive to playing a civic role and will engage with knowledge transfer policy has been the recent topic of different strands of

research. For example, Paterson (2003) carried out a comparative study of academic values in Scotland and England and found that academics in both countries demonstrate a widespread attachment to a civic role for higher education, but that academics in Scotland tend to a more civic view. He concludes that this national difference is a product of distinctive national systems of higher education, since academics of English origin in Scotland share in the majority Scottish view. Evidence of this research would seem to suggest that academics in Scottish institutions are likely to embrace knowledge transfer policy wholeheartedly if it were appropriately expressed in a way to appeal to this civic orientation. Other researchers see additional issues. For example, Jones (2005a, b); Ozga and Jones (2006); Ozga (2006) and Ozga & Byrne (2006) suggest that knowledge transfer may well become a 'strategic' activity of universities; however, that it is a concept that can be understood in a multitude of ways; and that institutional differences and varying levels of understanding of knowledge transfer policy by academics are likely to have a major influence on how knowledge transfer policy will be interpreted and implemented. Moreover, there are possible tensions and contradictions between what might be called 'civic and social' and 'commercial knowledge economy' knowledge transfer (Ozga and Jones, 2006:13).

Conclusion

The context for analysing knowledge transfer in Scotland can be viewed in the wider context of change, amidst discourses of the knowledge economy, managerialism and enterprise, and strong government steering of the activities of universities. Universities are faced with global pressures not only to be economically productive, but also to contribute to society, enabling governing by providing research knowledge, and enabling society by making people better informed. These global pressures are played out in 'local' and 'national' arenas with histories and politics of their own. In terms of Scotland within the United Kingdom this is particularly complex because of historical administrative, and more recent, political devolution. As discussed, education in Scotland has been recognised as separate from the UK since 1707, and, indeed, earlier. Therefore, while the UK government exerts pressure on policy for HE in Scotland through the Treasury, the Scottish Executive

and Scottish Funding Council make the policy themselves. A key question, therefore, is the extent to which the Scottish context makes a difference to the way in which universities in Scotland are responding to these pressures.

The review of interpretations of change in higher education points to the emergence of a number of interlinking themes. The first is a perceived increase in the importance attached to knowledge in the ‘knowledge economy’, and intensified demands by government for universities and academics to make a greater contribution to the economy through the development of ‘knowledge transfer’ as a strategic activity. The second theme relates to an increased importance attached to governance and management of universities, as there seems to be an assumption made by government that universities could and should make a greater, more *direct* contribution to economic development– but to do this universities must change some of *what* they do (e.g. making research and teaching more relevant); and *how* they do it (e.g. become more managerial). The managerial theme is tightly linked to the third theme of a need for universities to be more enterprising, and to develop a greater capacity for commercialising its activities, a need arising from a reduction in government university funding and increased pressure to become financially more self-sufficient. While these themes may be fore-grounded, they do not conceal the background theme of “knowledge control”. By this I refer to a struggle between government on the one hand, and university academics that have historically been seen as the primary producers and users of knowledge, on the other. Closely associated with the theme of “knowledge control” are issues of institutional autonomy and individual academic freedom (governance issues), which seem to capture the traditional values of universities and the academics who work in them. At the same time, there is a potential tension between institutional autonomy and academic freedom. That is, as the institutional environment has become increasingly ‘managerial’, the ‘space’ that individual academic freedom has traditionally occupied in universities has come under increasing pressure from policymakers and managers. These are themes that will be considered in design of the research, considered in the next chapter.

Chapter Three

Research Methodology

Introduction

In the previous chapter I showed how successive higher education policies attempted to steer universities in directions associated with being more managerial, market oriented, relevant, commercially-minded and enterprising. In this chapter I aim to describe and discuss the methodology and methods that I used in order to explore how these directions are understood and acted upon inside the university.

My starting point is that the higher education policies discussed in the literature review can be understood as part of an ongoing discourse⁴⁵ about the role of the university in society, part of a wider “*order of discourse*” (Fairclough, 1992:68-71) embedded in managerialism (Pollitt, 1993) that is shaping what Winter (1991) called the “new higher education” (NHE). To examine KT policy in more detail I opted for a methodological approach that draws on critical discourse analysis (Fairclough, 1989; 2001) an approach in which my focus is on knowledge transfer ‘texts’, a term I use in the broad sense of spoken as well as written language (Halliday, 1978). Following Trowler (2001) I view education policy discourse, and in this case KT policy, as a polysemic ‘text’ that can be read in a variety of ways and which is amenable to alternative readings at variance with those encoded by policy-makers. Consequently this led me to focus on the ‘translation⁴⁶’ of Scottish knowledge transfer policy by higher education institutions as a meaning-making activity, and one that is best explored by means of an interpretive research methodology.

I believe that policy texts attempt to create both meaning and action, reflecting Ball’s notion of ‘policy as discourse’ (1993); and that translation and implementation of policy as it enters organisations is an area of contestation due to ways in which policy texts are understood, interpreted and acted upon. It is not my intention to undertake a review of the considerable literature on policy translation and

⁴⁵ Definitions of ‘discourse’ and ‘order of discourse’ are provided later in the chapter but draw mainly on the work of Fairclough (1989, 1992, and 1993).

⁴⁶ The concept of ‘translation’ is important in my methodology and is elaborated upon below.

implementation⁴⁷; however I feel that it is important to introduce the concept of ‘translation’ in to my methodology discussion at this stage as a key object of my analysis.

Policy Translation and Implementation

A key concept in policy translation and implementation studies is the idea of ‘negotiated order’ (Strauss et al, 1963; Strauss, 1978) and the role of negotiation between actors in understanding policy-driven organisational change (Barrett, 2004). Such a view of policy translation and implementation runs contrary to rational models of policy-making which conceive the policy system as tightly bounded, and its operations upon the external world as unproblematic (Hill, 1997:8). Barrett and Fudge (1981) support the Straussian view of policy by arguing that:

“...rather than treating implementation as the transmission of policy into a series of consequential actions, the policy-action relationship needs to be regarded as a process of interaction and negotiation, taking place over time, between those seeking to put policy into effect and those upon whom action depends.” (Quoted in Hogwood and Gunn, 1997:223)

The concepts of interaction and translation are central to this piece of research as I aim to understand the meanings attached to Scottish knowledge transfer policy and the ways in which they may guide action. An increasing interest in meanings attached to policy is reflected in an emergent literature in policy studies (e.g. Fischer and Forrester, 1993 Fischer, 2003) which draws on variants of discourse analysis to explore the “*language of policy, its relation to the social environment and to the practice of language reproduction*” (Greener, 2004:304). Here I aim to build on this as I focus on meaning-making at the level of higher education institutions and specifically on meaning-making at the institutional (meso) level and the micro level of individual academics. I seek to argue that the way that policy makers, HEI managers and academics frame and translate knowledge transfer activity may produce different conceptual and cognitive structures which shape both how knowledge transfer is viewed and in turn, how it is enacted (Goffman, 1974; Snow et al, 1986). This process of ‘framing’ and ‘re-framing’ can be understood in terms of a

⁴⁷ For discussion of policy implementation refer to Pressman and Wildavsky (1984) *Implementation*, Berkeley, University of California Press

‘translation metaphor’ for policy , a term I am borrowing from Latour (1986) along with his conceptualisation of policy diffusion⁴⁸.

Policy Diffusion: A Translation Perspective

The concept of diffusion was popularised in the field of innovation by Rogers (1995) who defines the term as the process by which an innovation is communicated through certain channels over time among the members of a social system. According to Rogers (ibid.) a prerequisite for diffusion to take place is communication, which in the communication field has been most widely understood as the ‘*transmission of messages*’ (Fiske, 1990:2), as a type of conduit. In this perspective, the means of communication, most often in the form of language, is understood to act as a container in which the sender puts a coded message that is picked up and decoded by the receiver (Reddy, 1979). Failure in communication is attributed to something happening between sender and receiver. There is an assumption that communication filters may interfere with and hinder the communication process, and critically there is an assumption that it is actually possible for the receiver to decode the message in the manner intended.

Latour (1986) criticised this approach to diffusion on the grounds that it is implicitly or explicitly based on a natural science metaphor, and therefore unsuitable for the social sciences. His translation perspective of diffusion, often called the ritual or semiotic model (Johnson and Hagstrom, 2003) draws on an alternative communication metaphor where communication is mainly interpreted as “*production and exchange of meanings*” (Fiske, 1990:2). The main implication of this alternative model is that the message is problematised and can be interpreted in a variety of ways, and can never be said to be imbued with a fixed, definitive meaning. Applying this metaphor to the communication of KT policy, the policy manifests itself as a “*bearer and generator of meaning*” (Johnson and Hagstrom, 2003:367). Managers and academics, through their values and interpretations of, and attitudes to, the policy will influence the realisation of the policy in the institution.

⁴⁸ For readings on policy diffusion see Berry (1994); Eyestone (1977); Savage (1985); Mintrom (1997).

With a focus on exploring the effects of KT policy discourse on managers and academics, and how this is expressed in meanings attached to, and translation, of KT policy by university managers and academics, I formulated the research questions below.

1. How is KT policy understood and translated at an institutional level?
2. How does the university's history affect its interpretation and response to KT?
3. What mechanisms does the university use to implement KT policy?
4. How do academic staff understand KT policy?
5. What are the main issues arising in translation and implementation of KT policy?

Links to Previous Studies of KT Policy in Scotland

Previous studies of KT policy in Scotland have traced the origins of knowledge transfer policy in Scotland as a policy direction (Ozga and Jones, 2005; Jones, 2005a); carried out analyses of the discourse in KT policy texts (Jones, 2005b; Jones, 2007); problematised implementation issues related to KT policy in Scotland (Ozga, 2006); and analysed academics' understandings and interpretations of KT (Ozga, 2006; Ozga and Byrne, 2006). In this study I aim to build on this work, and also to fill a research gap by describing and analysing attempts to translate and implement KT policy in a new university in Scotland, and exploring issues that arise in this process. In Dale's terms (1986:61⁴⁹) this vision of education policy research can be considered a 'social science project' with the main concern focussed on finding out what is going on rather getting a policy to work better. At the same time, drawing on Ozga (2000:40) it is my goal:

"...to connect to practice through improving practitioners' understanding of the nature of the problems they encounter, through better understanding of the social world."

Adopting a translation perspective, I decided to focus on the interpretations and responses of institutional managers and academics⁵⁰ to Scottish knowledge transfer policy in a single HEI in Scotland. I aimed to capture similarities and differences in

⁴⁹ Dale (1986) identifies three main categories of policy research: the social administration project; the policy analysis project and the social science project, each with a different focus. See Ozga (2000, Chapter 3) for a useful discussion of these categorisations in education policy research.

⁵⁰ It is recognised that some academics have dual roles and are therefore both academic and manager.

how these two professional groups understand and translate knowledge transfer policy, with the purpose of assessing the implications for implementation. I decided to pay special attention to how language is used in the translation process and am drawing on critical discourse theory (CDA) for analytical purposes.

Discourse

My interest in discourse derives from an increasing body of education research that has sought to examine the discursive effects of policy on educational institutions (e.g. Fairclough, 1993; Hall, 1993; Trowler, 2001; Taylor, 2004; Gewirtz, Marney and Dickson, 2004). These authors are unanimous in attributing an increased importance to the language used in policy documents to persuade people of the need to change; and all of them argue for greater use of discourse analysis for understanding drivers for change in education. However these authors arrived at different conclusions about the effects of discourse once policy enters the domain of implementation, particularly in my field of higher education. For example, Fairclough (1993:153) suggests that education policy using new market discourse “*easily becomes part of one’s professional identity.*” In contrast, Hall (1993:15) suggests that market discourse in higher education does not change “*for a minute what is in {academics} hearts and minds.*” In discussing the socially constitutive power of new higher education (NHE) discourse in the UK Trowler (2001:183) concludes that:

“The dialogical nature of universities means that the impact of NHE discourse on organisational practices is mitigated as it is read and reacted to in varied ways: that academics are not fundamentally ‘captured’ by this discursive form.”

These contrasting views suggest that analysis of the discursive effects of higher educational policy at the stage of translation and implementation is a fertile ground, all the more so as Scottish knowledge transfer policy has not yet been subject to any such analysis. The few studies on Scottish KT policy to date have adopted a different focus and used different research strategies and methods. Studies of the macro level of KT policy emanating from the Scottish Executive, Parliament and the Scottish Funding Council (SFC) used documentary analysis and discourse analysis (Jones, 2005a; Jones 2005b; Jones 2007; Ozga and Jones, 2006). Meso and micro-

level studies that attempted to uncover ways in which academics understand KT policy inside higher education institutions used both surveys (Ozga, 2006; Ozga and Byrne, 2006) and semi-structured interviews (Ozga and Byrne, 2006) with no use of discourse analysis.

The Importance of Interpretation

My focus on policy translation, language use, and meaning-making suggested a broadly interpretive methodology. In aiming to provide a trustworthy description of what happens to knowledge transfer policy when it enters the university, I attempted to capture what this *means* to the people engaging with it. I am drawing here on Guba and Lincoln's (1994) notion of "trustworthiness" as a more appropriate way of expressing issues of quality in qualitative research. This approach uses the criteria of credibility, transferability, dependability and confirmability to judge the quality of qualitative research.

An important dimension of attempting to capture meaning was seeking to understand phenomena not on the basis of my own perspective and categories, but rather those of the participants, namely from an 'emic' rather than an 'etic' perspective (Headland, Pike and Harris, 1990). I refer to meaning here in Maxwell's sense (1992:288), to include:

"...intention, cognition, affect, belief, evaluation, and anything else that could be encompassed by what is broadly termed the 'participants' perspective, as well as communicative meaning in a narrower sense."

I concluded that an interpretive approach provided me with the means to offer, through documentary analysis, a 'rich description' (Geertz, 1973:10) of the institutional translation and implementation of KT policy, and through interviews, the means to tap in to managers' and academics' feelings and personal experiences of KT as the policy enters the university environment. While the decision to adopt an interpretive rather than a positivist methodology follows from my emphasis on meanings and understandings (very much 'how' questions rather than 'what' questions), choices about precise methods were far more difficult. After considerable thought I concluded that I was better served by drawing on a range of

methods, rather than a single method, adopting the position of a ‘bricoleur’ (Levi-Strauss, 1966:17), using ‘bricolage’, “ *a choice of practice that is pragmatic, strategic and self-reflexive*”. (Nelson et al., 1992:2)

In my methods I borrowed ideas from critical discourse analysis (CDA) to analyse a range of texts and used semi-structured interviews to gather data in the form of ‘first and second order concepts’ (Van Maanen, 2002:103). I also gathered data as an ‘observant participant’ (Czarniawska, 2004:66). I use this term because I selected my own university as the site of research. This demanded a reflexive stance from me as I found myself both a participant in, and researcher of, KT policy translation and implementation.

Interpreting events in one’s own organisation

My decision to locate the research in a single university was influenced by several factors, important amongst them Jones’ (2005a:14) suggestion that in studying institutional responses to Scottish knowledge transfer policy there is:

“... a need to take institutional differences in to account, which is reflected in the two streams of funding contained within Shefc’s Knowledge Transfer Grant.”

This decision was further influenced by the prospect of gaining easier access to data, with the convenience and time-saving advantages that this can bring (Mercer, 2007:6). However, the decision to carry out research in my own institution also raised several ethical issues that required careful consideration throughout the research process. I will discuss these as I progress through this chapter, with specific reference to the concept of ‘insiderness’ (Merton, 1972). This concept is based upon the idea that particular groups have ‘monolithic’ or, at least, ‘privileged’ access to particular kinds of knowledge (Merton, 1972: 11), and this may serve as a ‘filter’ in the process of interpreting data.

“In this conception, Insiders are the members of specified groups and collectivities, or occupants of specified social statuses. Outsiders are the nonmembers.” (Merton, 1972:21)

As a member of staff in NewSU business school, I occupied the position of an ‘insider’ in this research. However, at the same time I share the view that “*individuals have not a single status, but a status set*” (Merton, 1972:22) and that “*as*

situations involving different values arise, different statuses are activated and the lines of separation shift" (Merton, 1972:28). For example, during the research I interacted with individuals who could be 'classified' as academics, managers, and/or academic-managers. Furthermore, I interacted with individuals in my own academic division, and with individuals outside it; with academics in the same, and in different subject areas. My own position as an academic in NewSU arguably made me more of an 'insider' when interacting with 'academics' and those in the same subject group, and less so, perhaps even, an 'outsider' when interacting with managers and those academics in other subject areas. On this basis, I agree with suggestions that the boundaries between being an 'insider' and 'outsider' are 'permeable' (Merton, 1972:37) and 'highly unstable' (Mullings, 1999:38) and that we are all 'multiple insiders and outsiders' (Deutsch, 1981:174).

One consequence of being both 'insider' and 'outsider', and at the same time researcher and academic, was that I constantly faced the dilemma of 'managing' the research process and reflecting on my own views on the topic in the same context. At the same time, I can only speculate about whether informants considered me to be an 'insider' or an 'outsider', and whether there were any implications of such views in the way that I collected and analysed my data. However, I was very much aware of the potential dangers of doing research in my own organisation, constantly remembering Coghlan & Brannick's (2005:70) observation that:

"While doing any research in an organisation is very political, doing research in and on your own organisation is particularly so (Punch, 1994)...Indeed it might {even} be considered subversive."

Some advantages and disadvantages of 'insider' and 'outsider' positions

Despite these potential dangers, my choice was positively influenced by the potential advantages of my 'insider' position:

"The {insider} researcher knows his/her environment well, knows by instinct what can be done and how far old friendships and favours can be pressed, just when and where to meet up for interviews, what the power structures and the moral mazes and subtexts of the company are and what taboos to avoid, what shibboleths to mumble and bureaucrats to placate. They are familiar with the organisational culture, the routines and the scripts." (Hannabus, 2000:103)

From my position inside NewSU I interpreted an early and serious attempt by institutional managers to promote knowledge transfer in the university and this boded well for my research. I felt that my position inside the organisation could provide me with an invaluable opportunity and resource, not only in terms of ongoing access to documents, discussions and events, but also in terms ‘social capital’ and trust built up in the social relations inside NewSU during my five years of work there. I felt that these factors would help me to create favourable conditions for discussing the translation of KT policy inside NewSU in an open manner. As a colleague in the institution I was familiar with the context, I felt that I understood peoples’ positions in the university, and while I did not socialise with fellow-colleagues out of the work environment, they nevertheless knew me well enough to feel comfortable to express a range of views. From an ‘insider’ perspective:

“Subjects are less likely to conceal information from their like, as whatever the researcher writes about them is also true of the researcher. In effect, because the wider social structure classifies the researcher and informants in a similar or identical fashion, this creates confidence between the parties....One of the results of this trust and exposure to the most intimate of details is that the insider researcher is able to appreciate the full complexity of the social world at hand. The result is a potentially accurate portrayal, rather than a simplistic caricature.” (Hockey, 1993:204, 205)

As a member of staff I was aware that I would be a participant in discussions and events related to the development of knowledge transfer in the university, and this would provide first-hand opportunities for observing and understanding it. The interaction with my research topic was thus continuous as I moved between roles of researcher, participant, and ‘observant participant’. This put me in a situation where it was at times hard to tell where my research started and where the rest of my university life and everyday practice began, a situation echoing accounts from Scott (1985:120). At the same time, I was aware that due to my familiarity with NewSU, I was faced with the issue of “making the familiar strange” (Hockey, 1993:208), and I needed to be conscious of dangers of taking things for granted, developing a myopic view of KT translation, and assuming that my own perspective on KT might be shared by informants. Other dangers of ‘insiderness’ are well documented, although I acknowledge Mercer’s view (2007:2) that despite an exponential rise in small-scale practitioner research in education in the last twenty years, this has not been matched

by a corresponding growth in the literature on the methodology of insider research in education. For this reason, much that has been written on the topic comes from the fields of anthropology, sociology and management. For example, Hockey (1993:206) suggested that one danger of being an insider researcher is that the 'obvious' question might not be asked and that assumptions might not be challenged (ibid: 202). Preedy and Riches (1988) claimed that the 'sensitive' topic might not be raised, and Platt (1981:82) argued that seemingly shared norms might not be articulated and data might become thinner as a result. I was also conscious of the fact that, in Drever's terms (1995) "peoples' willingness to talk to you, and what people say to you is influenced by who they think you are" (1995:31). In other words, "Known or expected alignments or loyalties are crucial to the way in which an interviewer is perceived" (Powney and Watts, 1987:40). However it was less clear to me what the implications of this would be in terms of any potential informant bias.

Interpretive Methodology

My choice of an interpretive methodology, after Bryman (2001:13) is:

"...predicated upon the view that a strategy is required that respects the differences between people and the objects of the natural sciences and therefore requires the social scientist to grasp the subjective meaning of social action⁵¹."

While I believe that 'reality' is not merely 'out there', but more a construct of the human mind (essentially a constructivist ontology), at the same time I accept the existence of structures and processes (for example policy) that help to produce the 'reality' of social phenomena such as knowledge transfer. However, at the outset I would like to signal my belief that people have the capacity to shape and interpret such phenomena, and in so doing I reject a structuralist view of the world (Pecheux, 1982). In Bhaskar's words (1989:4) I believe that "*the social world is reproduced and transformed in daily life*" not least by meanings attached to phenomena, as well as values and behaviours. I see the relationship between structures and actors as a dialectical one. I believe that people perceive and construe the world in ways that

⁵¹ This is an epistemological position often, but not always, conditioned by a constructionist ontological orientation.

are often similar but not necessarily the same, and thus that I am confronted with multiple interpretations.

First and Second Order Concepts

I found it useful to think of these interpretations in terms of what Van Maanen (1979, 2002:103) calls ‘first order concepts’, and ‘second order concepts’. The first of these terms refers to the ‘facts’ of an investigation, and the second to what he calls the ‘theories’ used by an analyst to organise and explain these facts. Facts are said to come in different forms. On one level certain descriptive properties of the phenomenon being studied serve as facts, but these do not speak for themselves. Van Maanen (2002:104) argues that:

“...the fieldworker must therefore deal with another level of first-order “fact”, namely: the situationally, historically and biographically mediated interpretations used by members of the organisation to account for a descriptive property.”

Second order concepts are the notions used by the researcher to explain the ‘patterning’ of the first-order data, described by Van Maanen as “interpretations of interpretations” (2002:104). This use of first and second order concepts resonates with Denzin’s (2002:354) concept of a double hermeneutic circle, described in the following manner:

“The subject who tells a self-story or personal experience story is, of course, at the centre of the life that is told about. The researcher who reads and interprets a self-story is at the centre of his or her interpretation of that story. Two interpretive structures thus interact. The two circles overlap to the degree that the researcher is able to love his or her way into the subject’s personal experience stories and self-stories. These circles will never overlap completely, for the subject’s experiences will never be those of the researcher.”

I also drew on Denzin’s premise (2002:362) that interpretive studies embody elements of what he calls ‘illumination’ and ‘thickly contextualised materials’:

“An interpretation must illuminate or bring alive what is being studied. This can occur only when the interpretation is based on materials that come from the world of lived experience. Unless ordinary people speak, we cannot interpret their experiences.....Interpretations are built up out of events and experiences that are described in detail. Thickly contextualised materials are dense. They record experience as it occurs. They locate experience in social situations. They record thoughts, meanings, emotions, and actions. They speak from the subject’s point of view.”(Denzin, 2002:362)

I concluded that an interpretive approach is suited to an investigation such as this one that is focussing on actual practice *in situ*. I rejected modernist assumptions that there are ‘real’ social realities, subjects and theories that can be expressed accurately through language as I believe that language is a medium that can create only a particular view of reality. According to Hardy & Palmer (1999) language use, as discourse, produces the very objects of which it speaks. This view draws on the term ‘discourse’ in Foucault’s sense (1972:49), referring to interrelated sets of texts that “*systematically form the objects of which they speak*”. Fairclough (1992:63) proposes that discourse should be seen as a social practice, thought of as:

“...different ways of structuring areas of knowledge and social practice...discourses do not just reflect or represent social entities or relations, they construct or ‘constitute’ them; different discourses constitute key entities...in different ways, and position people in different ways as social subjects.” (Fairclough, 1992:3)

Discourse Theory

As demonstrated in the literature review, I am looking at KT policy in the context of wider social change in which I see the nature of knowledge being revalorised and policymakers making increased demands on universities. These changes make the university an increasingly contested terrain, in which a struggle is being played out over the ‘idea’ of the university, its purposes and the activities it should be engaged in. In viewing KT policy as a discourse, I accept that discourse as a field of study is “*fuzzy*” (van Dijk, 1997) and that there are different approaches to the analysis of discourse shaped by a number of disciplines such as linguistics, sociology, anthropology, cognitive psychology (Fairclough, 1989:9).

Critical Discourse Theory

For the purpose of this research I am drawing on the approach of critical discourse theory (Fairclough, 1992; Parker, 1992b) that proposes attention to language use, the production and dissemination of texts, and analysis of interactions between actors in organisational and institutional settings. Central to this approach is a view that discourse plays a role in the social construction of reality and that discourse analysis: “*...emphasises the way versions of the world, of society, events and inner psychological worlds are produced in discourse.*”(Potter, 1997:146)

Potter and Wetherell (1987) assert that discourse not only describes reality, but that it also ‘does’ things. Fairclough (1992:86) stresses the ideological dimension of this ‘doing’ by framing discourse as a social practice reflecting power relations, and arguing that discursive practices are material forms of ideology. Discourse is both socially constituted and socially constitutive as it produces objects of knowledge, social identities, and relationships between people (Fairclough and Wodak, 1997). According to Hall (2001) discourses lay down the “*conditions of possibility*” that determine what can be said, by whom, and when. Discourse:

“...governs the way that a topic can be meaningfully talked about and reasoned about. It also influences how ideas are put into practice and used to regulate the conduct of others. Just as a discourse ‘rules in’ certain ways of talking about a topic, defining an acceptable and intelligible way to talk, write or conduct oneself, so also, by definition, it ‘rules out’, limits and restricts other ways of talking, of conducting ourselves in relation to the topic or constructing knowledge about it.”
(Hall, 2001:72)

In this way, discourse ‘disciplines’ subjects in the sense that actors are known, and know themselves, only within the confines of a particular discursive context (Mumby, 2001). However, objects, identities and relationships are subject to change and for this reason Mumby and Clair (1997:181) claim that in discourse analysis:

“ the communicative practices of members are examined for the ways that they contribute to the ongoing (and sometimes rather precarious) process of organising and constituting reality.”

Some writers argue that the power relations of discourse are beyond the control of actors (Condor and Antaki, 1997). However, after Fairclough (1992:65) my stance is to view the relationship between discourse and structure as a dialectic one that acknowledges the power of agency of actors. However, I believe that the degree to which individuals engage with and read discourse in its ‘intended’ form is constrained by a number of factors. Amongst these are the available “*members resources*” (Fairclough, 1989:118) which can be thought of as “interpretative procedures” or “background knowledge”⁵² that people bring to readings and reactions to a text. A related reason is that most contexts are sites of multiple discourses that provide actors with choices about which meanings they will draw on

⁵² Fairclough (1989:118) finds the term knowledge unduly restrictive as he believes that many of the assumptions behind the term knowledge are ideological.

in the act of interpretation, a concept termed “*interdiscursivity*” (Fairclough, 1992:46). In addition to this, the take-up and impact of discourses is affected by the specific context in which they are produced and consumed:

“Discourse is not produced without context and cannot be understood without taking context into consideration....Discourses are always connected to other discourses that were produced earlier, as well as those which are produced synchronically and subsequently. In this respect, we include intertextuality⁵³ as well as sociocultural knowledge within our concept of context.”(Fairclough and Wodak, 1997:277)

In the literature review on the university I demonstrated the importance of context in the development of the university as an institution, characterised by significant political, economic and social changes, and a move away from the welfare state to neo-liberal policies. My reading of the literature pointed to a number of categories that make up the policy discourse. These categories relate to the ‘knowledge economy’, ‘commercialisation’, ‘service’, ‘entrepreneurship’, ‘relevance’, ‘marketisation’, and have been instrumental in the development of my research design.

Research Design

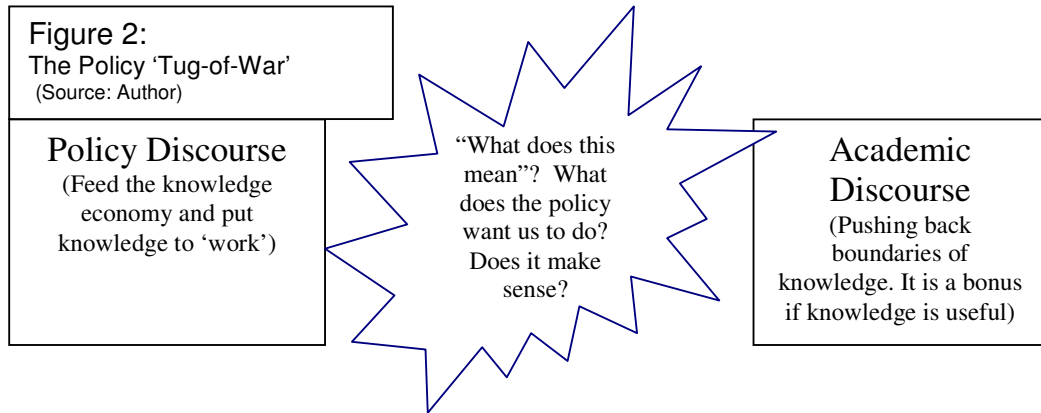
While the content of KT policy at the macro level provides a critically important contextual element of this work, my central concern was with what happens to the policy once it enters the higher education (HE) environment. Policy is not simply something that is implemented without question (Gunn⁵⁴, 1978). Policy ‘texts’ do not simply make something happen, and even if they do the outcomes will not necessarily be uniform. Responses will be different, conditioned by a range of factors, among which will be institutional orientation, values, and the resources available. This reflects Ball’s view (1994:16) that:

“...we can see policies as representations which are encoded in complex ways....and decoded in complex ways (via actors’ interpretations and meanings in relation to their history, experience, skills, resources and context).”

⁵³ For discussion of origins and meaning of intertextuality, see Fairclough (1992, Chapter 4). On page 84 of the same text, Fairclough describes intertextuality as “*basically the property texts have of being full of other snatches of texts, which may be explicitly demarcated, or merged in, and which the text may assimilate, contradict, ironically echo, and so forth*”.

⁵⁴ In his article Gunn offers a number of reasons why ‘*perfect implementation*’ is virtually unattainable.

I therefore see entry of policy into higher education institutions as contested and open to interpretation as at least two different discourses meet. This can be conceptualised in the following way in Figure 2:



On one side is the policy discourse that is encouraging universities to adopt a stronger market orientation, a view that knowledge should have greater use and exchange value (Barnett, 2003: 69), and that knowledge needs to be managed so that higher returns on investment in higher education can be realised (ibid.). On the other side is the academic discourse that understands the pursuit of knowledge largely (but not solely) as an end in itself, and the main users of its outputs the wider academic community.

The field in the middle of this illustration is a contested space, where universities are located. It can be thought of as a tug-of-war over the meaning of knowledge transfer, with the contestants coming from managerial and academic perspectives. In this conceptualisation, each university in the contested space faces a different challenge as the receptivity and attachment to managerial and academic discourses will differ according to, among other things, the historical profile, its system of governance, its resources, networks and other institution-specific factors. It can be thought of as a struggle of values (Bone and McNay, 2005), in which traditional attachments to bureau-professional and managerial regimes discussed in the literature review are acted out. The configuration of this middle space will be determined very much by the way in which KT policy is translated after it exits from the policy world, and

flows into and is translated in the institutional and ‘street level’⁵⁵ worlds, where policy and strategy are converted in to action. These three worlds are outlined in Table 3.

Table 3: The Worlds of KT Meaning

Policy World	Institutional World	Street Level World
(Macro Level)	(Meso Level)	(Micro level)
Policy Makers	University Managers ⁵⁶	Academics and Managers

The Site of Research

In terms of the contested space introduced above, an early decision was needed about whether to study the translation and implementation of KT policy in one or more of the 20 higher education establishments in Scotland. I briefly outlined my reasons for focussing on one institution on Page 53 but elaborate on this in more detail here as it has been a major decision that allows me to clarify some of my assumptions. Firstly, that policy (in this case KT policy) is struggled over and as Ozga argues (2000:1): *“is not delivered in tablets of stone to a grateful and quiescent population.”* KT policy attempts to redefine the ‘idea’ of a university, and in so doing attempts to influence and change aspects of university life. While the policy is ‘real’, it is little more than an idea, albeit one that attempts to establish and reinforce a certain ‘reality’. Secondly, I assume that the policy will adopt a different form in different situations on the grounds that Scottish higher education establishments have different histories and characteristics, and of course different people working in them. It is such factors that have led to the establishment of different groupings of universities as discussed in Chapter Two. Similar to Parlett and Hamilton’s description of schools as “learning milieux” (1977:11), I believe that universities represent a network or nexus of cultural, social, institutional and psychological variables, the configuration of which depends on the interplay of a range of factors. Amongst these

⁵⁵ I use the term “street level” drawing on the work of Lipsky (1980) and issues related to policy implementation.

⁵⁶ It is accepted that some of these managers may also be academics or former academics.

are constraints on the activities pursued by a university (in particular the financial ones); pervasive operating assumptions made by faculty (“what we do”); and individual characteristics of academic staff conditioned by a variety of factors such as professional orientation, experience, qualifications and private goals. This leads me to my third assumption that different elements of the policy will be emphasised, de-emphasised, expanded or truncated as managers, academic managers and academics interpret and translate the policy for their own particular setting. I follow Clark and Newman (1997:88) in assuming that although policy prescriptions may promote change energetically:

“Change has unintended consequences: innovations are transformed during the process of change, through social actors shaping them to make them more consistent with existing procedures in order to maintain stability in the face of pressure for change.”

Single Site Case

In contrast to other studies of KT policy in Scotland discussed earlier, I decided to use a single site case study⁵⁷ as I wished to gather rich data by using a range of qualitative methods that I felt would provide me with a better understanding of how people feel about this policy; the meanings they attach to it, and how they are experiencing it. I set my research in a university business school as it is a context that has not been included in studies of KT in Scotland to date. Business is a discipline where the debates over the purpose of university business schools, the relevance of management research and knowledge, and conceptions of knowledge as ‘Mode1’ and ‘Mode2’ have been raging for several years now (see Tranfield and Starkey (1998) for a summary of these debates). In choosing a single site case study, I considered possible concerns over the generalisability of findings. Bryman (1988:88) asked:

“How do we know...how representative case study findings are of all members of the population from which the case was selected?”

In quantitative research, questions of generalisability are normally addressed by statistical sampling procedures, which are argued to have two functions (Silverman,

⁵⁷ I appreciate the range of definitions of case study: for useful accounts see Bassey (1999); Yin (1989); Stake (1978)

2000:102). Firstly it allows one to feel confident about the representativeness of the sample; and secondly such representativeness allows one to make wider inferences:

“If the population characteristics are known, the degree of representativeness of a sample can be checked The purpose of sampling is usually to study a representative subsection of a precisely defined population in order to make inferences about the whole population.” (Arber, 1993:70 and p.38)

However, I did not believe that such a sampling procedure was applicable in my case. This did not mean that I did not believe that findings would be of use outside the given context, but rather that alternative concepts better captured the value of individual case studies. For example, I preferred Alasuutari’s concept of ‘extrapolation’ (1995, pp. 156-7) and Bassey’s concepts of ‘fuzzy generalisations’ and ‘reliability’ (1981:85). Alasuutari (op.cit) claims that:

“Generalization is...a word...that should be reserved for surveys only. What can be analyzed instead is how the researcher demonstrates that the analysis relates to things beyond the material at hand...’extrapolation’ better captures the typical procedure in qualitative research.” (Quoted in Silverman, op.cit, p.110)

Bassey (1999, Chapter 5) shares Alasuutari’s scepticism regarding attempts to seek ‘generalisation’ of case study research findings in a positivist manner, arguing that educational case study findings can be disseminated through what he labels “*fuzzy generalization*” (ibid:5), which employs “...*the kind of statement that makes no absolute claim to knowledge, but hedges its claim with uncertainties*”. In earlier work, Bassey, (1981:85-86) suggested that the concept of ‘reliability’ was more appropriate for case study research, in preference to generalisability:

“An important criterion for judging the merit of a case study is the extent to which the details are sufficient and appropriate for a teacher working in a similar situation to relate his decision-making to that described in the case study. The reliability of a case study is more important than generalisability.....if case studies are carried out systematically and critically, if they are aimed at the improvement of education, if they are reliable, and if by publication of the findings they extend the boundaries of existing knowledge, then they are valid forms of educational research.”

While focussing on the translation of KT policy inside a single institution I believed that the findings would be ‘reliable’ and relevant to other HEIs in Scotland for a

number of reasons, not least because “*We need the sample*”⁵⁸ to persuade people that we know something about the whole class” (Becker, 1998:67). At the same time, while in Chapter Two I showed that higher education institutions differ, I also recognise that they share many characteristics, and these provide the grounds for ‘extrapolation’ of findings beyond this particular case. For example, Scottish universities are part of the higher education system in Scotland and are all subject to Scottish Parliament policy pressures. They all receive core funding from the Scottish Funding Council (SFC) and this funding is partially applied on a formula basis for all institutions. They are all enmeshed in debates over the ‘idea’ of a university. Academics in HEIs are part of the same profession, and engage in a common set of activities (teaching, research, administration), facing similar sets of problems in the process.

Data Collection inside the case:

As indicated in Table 3 (p.62), my analysis focused on two levels. The main ‘translators’ of KT policy in NewSU are managers and academics, some of whom play both roles. My theoretical perspective (CDA) suggested that managers and academics had the potential to respond to KT policy with different ‘texts’ of their own that reflected their values and interests. To identify and analyse these I selected four sources of data.

The first set of data is from institutional sources, documents that might be expected to ‘speak’ to Scottish knowledge transfer policy, reflect NewSU’s corporate response to KT policy, and its place in the university strategy. The second source of data is from managers and academics who I knew from my participant position had interests and/or responsibility in the development of research, knowledge transfer, and links with external bodies. The third source of data is from academics with no such obvious role but with what could be considered ‘typical’ academic responsibilities (normally covering teaching, research and administration). The fourth source of data was myself, as an academic in the institution, as a participant in a variety of events related to knowledge transfer, and as an observer of life in the university.

⁵⁸ I understand sample here to represent the single university studied in this thesis.

Research Methods

My choice of methods was driven largely by theoretical considerations. At the same time my approach as researcher can be compared to that described by Parlett and Hamilton (1977:14) in their exposition of what they called “*illuminative evaluation*”:

“At the outset the researcher is concerned to familiarise himself thoroughly with the day-to-day reality of the setting or settings he is studying. In this he is similar to social anthropologists or to natural historians. Like them he makes no attempt to manipulate, control or eliminate situational variables, but takes as given the complex scene he encounters. His chief task is to unravel it; isolate its significant features; delineate cycles of cause and effect; and comprehend relationships between beliefs and practices and between organisational patterns and the responses of individuals.”

Observant Participant

My privileged role as observant participant proved a valuable resource as I was already familiar with the day-to-day reality of the setting of my research. However I was conscious of the potential negative charges of subjectivity that my dual roles as participant/observer and employee could provoke. On the question of doing research as an ‘insider’ in familiar settings, Hockey (1993) suggested that:

“On the one hand the researcher possesses an intimate familiarity with the informants’ world under investigation, a familiarity that should be of great assistance in explaining the social processes and meanings of that world. On the other hand there are potential disadvantages to possessing such a priori ‘insider’ knowledge, namely that social processes will be taken for granted – assumed and not dealt with as topics for analysis.” (Hockey, 1993:201)

Questions about what constitutes research, the importance of ‘objectivity’ in research and the advantages and disadvantages of quantitative and qualitative research have been debated extensively (see for example Denzin and Lincoln, 2000). Reliability and validity are key considerations in all research methods textbooks (see Bryman, 2001, for example). However, following Parlett and Hamilton (op.cit, p.18) I believed it erroneous to assume that methods of research exist that are immune to prejudice, experimenter bias and human error. As Rosenthal (1966) points out in his study of experimenter effects in behavioural research, all research requires skilled human judgement and is therefore vulnerable to this charge. Had I chosen not to do research in my own institution in an attempt to be more ‘objective’ I would still have been affecting the data I collected when choosing the institution to study, whom to

speak to, which documents to collect, and by analysing the data in a specific way. I therefore took the view that there were no compelling reasons for me to try to stand back. After all, the field of study affects my own professional practice, and this was a significant motivation for choosing this topic in the first place. At the same time I accepted the need to employ my chosen methods in a way as to reduce any potentially harmful effects of partiality, for example by being clear about my theoretical position, explaining why and how certain events or data were recorded, and being clear on any categories that I employed in data collection and analysis, as well as on the selection of material from interview transcripts.

During the research I attended several meetings and events where knowledge transfer was on the agenda. Observations and notes were taken at all of these. However for the purposes of this research I chose to be selective and to focus on two events. One of these was a business school conference at which restructuring of the business school was presented; and the second was a seminar on knowledge transfer held by the university unit responsible for supporting the development of KT in the university. I selected these events for theoretical reasons, using personal judgement to identify them as events amenable to analysis from my theoretical stance, and events that assist in addressing the research questions posed.

Interviews and Informants

The purpose of using this method was to explore individual understandings, interpretations and responses to government and institutional knowledge transfer policy, based on their personal experiences. The over-arching question in analysing the interview material was:

“How are NewSU institutional managers and academics understanding and responding to government and institutional knowledge transfer policy?”

In designing this phase it was necessary to determine how many interviews I needed to answer the questions posed, and with whom. I selected two categories of informants; some whose position made their viewpoints noteworthy, i.e. informants who had some sort of responsibility for the development of KT activity in the University (4); and several academics (9) with no such direct responsibility.

In terms of the location of the thirteen participants (see Appendix 3) in the university's organisation structure, two were at what can be termed the "corporate level", three were at the level of the "school", and eight were academics in the division, some of whom had dual roles as managers and academics. In terms of 'insider' issues introduced earlier in this chapter, it can therefore be seen that informants did not fall in to simple categories, and the degree to which I was possibly affected by 'insider' or 'outsider' status during interviews was not clear cut. In terms of locating myself amongst the key informants I would locate myself as a 'street level' academic (see page 62), with no managerial responsibilities other than at the module level, and no direct responsibility for implementation of KT policy other than as an academic. However, as an academic I had been engaged in substantial income-generating consultancy work since my arrival in the university, and this was known to some but not all participants. In terms of reporting lines, one of the informants was my Head of Division, but other than this, all relationships could be described as 'peer' relationships. Platt (1981:76) states that:

"One's peers have a variety of relevant characteristics: they are in a diffuse sense one's social equals, they are one's equals in role-specific senses, they share the same background knowledge and subcultural understandings, and they are members of the same groups or communities. Some of these characteristics may, of course, occur without others, and the consequences vary accordingly."

At the same time, I accept that some of the relationships I had with my informants could be considered 'unequal' as I myself had lecturer status, while some of my informants were senior lecturers and Professors, and others Associate Deans and one, an Assistant Principal. Scott (1984:171) found that in this regard the definition of peer can be problematic:

"It became evident that we were not interviewing our peers but individuals with different positions and involved in different sets of relations."

Recognition of these differences was important in order to help me to understand the positioning of the different informants, and treating their views with respect.

Negotiating Access

I sought the participation of informants by telephone and face-to-face discussion, followed up by a note confirming the purpose of my research, the topic, the expected

duration and the time and place of the interview. I felt it important at an early stage to raise issues of anonymity and confidentiality, guaranteeing as far as I could, that no-one taking part in the research would be identified by name, and that the content of discussions would be kept confidential and no statements attributed to named individuals. All those approached agreed to take part in interviews up to 90 minutes, although I experienced difficulties finalising the date for an interview with one key informant. In terms of access and participant consent, I evaluated this as being “informed consent” (Saunders et al, 2000). That is, participants agreed to take part knowing that this was part of my doctoral research; that information collected would not be attributed to named individuals; and that it would not be used for any other purpose other than my Ed.D dissertation or subsequent journal articles.

Preparing for interviews

Foremost in my mind when preparing for the interviews was designing them in a way that would help me to both answer my research questions, and to develop and improve them as I progressed. I was conscious that in adopting an interpretive, qualitative methodology I was looking to “*document the world from the point of view of the people studied*” (Hammersley, 1992:165) and therefore needed to be careful to minimise interviewer bias. I felt that taking care of these issues would help me to address issues of ‘trustworthiness’ as suggested by Lincoln and Guba (1985) and Guba and Lincoln (1994), by taking steps to maximise my chances of achieving credibility, transferability, dependability and confirmability⁵⁹. Guba and Lincoln (1994) developed this alternative framework for assessing the quality of qualitative research as they felt that the simple application of reliability and validity standards to qualitative research erroneously presupposed that a single, absolute account of social reality was feasible.

After consideration of the advantages and disadvantages of structured, semi-structured and open interview, I opted for semi-structured, in-depth interviews. This choice seemed appropriate for an exploratory study of this kind, and I expected, in

⁵⁹ As discussed earlier, these four criteria were designed to provide an alternative framework to the generally accepted criteria of reliability, replicability and validity used to evaluate the quality of research, especially quantitative research.

the words of Robson (1993:42) to “*find out what is happening and to seek new insights*”. A structured interview was inappropriate as I was aiming to go beyond eliciting biographical, historical and factual information, and was focusing on discourse, something that required me to look at how language was being used. I also felt that exploration of KT policy as an emergent policy direction was ill-suited to a rigid structure. At the same time, I rejected a totally unstructured interview as I had identified several themes in the literature that I wished to explore further because I understood these as an important part of KT policy discourse and wanted to study possible effects and responses to it in interview ‘texts’.

Interview Guide

I compiled an interview guide (see Appendix 4). This was amended slightly on two occasions to reflect some of the responses in interviews, and after I had read internal and external documents which informants gave me. The open nature of the questions was designed to give the interviewee considerable leeway in how to respond, with the intention of making it an “informant interview” (Robson, 1993), in which it is the interviewer’s perceptions that guide the conduct of the interview. I followed Smith (1995:15) in hoping that an interactive, conversational approach to the interviews may yield more extensive data and this made me amenable to a certain amount of digression from the interview guide, and willing to reorder some of the questions in the interview guide in the interests of maintaining rapport during the interview. I felt comfortable with the conversational approach due to my ‘insider’ status but I nevertheless followed the advice of Holstein and Gubrium (2003:13) in keeping myself largely out of the interview process. I did this as “*the interviewer who reveals his or her personal viewpoint can distract the interviewee, encourage acquiescence, and even sets up a self-fulfilling prophecy*” (Powney and Watts, 1987:42).

Pilot Interview

I treated my first interview as a pilot and opted to do the first interview without a tape recorder. In retrospect this was an error⁶⁰, as the circumstances of the interview turned out differently to those I anticipated. My informant brought along a colleague, and this added an extra dimension to the interview. I did reflect on whether there was any meaning behind this unexpected addition to the interview, but quickly dismissed reading too much in to this. I did so on the grounds that the new informant had a KT-specific responsibility and was very much up-to-date on university efforts to implement KT policy. I consequently interpreted this as a helpful contribution, despite the slight ‘discomfort’ it caused me during the interview process.

During this interview I felt a need to address both informants, and not simply one of them. I consequently found myself eliciting different views on the same issues and topics and annotating who was saying what proved more difficult than anticipated. At times the interview turned into a debate and discussion between informants, which, while valuable, made accurate recording of the interview very difficult. As a consequence I chose later to return to one of these informants and requested an individual interview, to which the informant agreed. The subsequent interview offered me an opportunity to clarify unclear points from my previous notes, and to explore points that I felt I had not covered in the first interview. This early experience refocused my mind on issues of dependability and confirmability.

I had earlier decided not to use⁶¹ a tape recorder as I had felt that knowledge transfer was perhaps a sensitive topic, and that the prevailing climate of uncertainty and change in the business school was not conducive to recording peoples’ views. However in light of my experience I decided to ask participants to agree to tape

⁶⁰ This was an excellent lesson for me in the value of tape-recording interviews. The interview was attended by two people (not one as I had expected) and went on for two hours (I was expecting a maximum 90 minutes). As such I struggled to capture all that was said – reflected in the fact that my notes for this two-hour in-depth interview comprise four and a half pages; while the average number of sides for the taped interviews lasting between 60 and 90 minutes was seven pages!

⁶¹ This is a good example of how the researcher’s assumptions can influence research.

recording of the interviews so that I would have a complete, accurate⁶² and permanent record not only of what was said, but how it was said. This served to enhance the credibility and dependability (Guba and Lincoln, 1994) of the data. I felt fortunate that no-one objected, not only as I felt that it made my note-taking easier, but also because this represented their trust in my capacity of interviewing them as a researcher, and treating what they said in confidence. The process of typing up the interview notes was more difficult and time-consuming than I anticipated, as I had to replay short segments of tape several times in order to get an accurate transcript. The overall transcribing time was about forty five hours. Tape quality was overall very good, however the presence of building works on the University campus did lead to some noise on one of the tapes, and repeated playback was required to get an accurate transcript.

Document Analysis

I used document analysis as the primary means to understand the institutional translation of Scottish knowledge transfer policy, and to analyse how the institution presents its views on KT policy to stakeholders. The types of documents considered were annual reports, website pages related to research and knowledge transfer, promotional materials, minutes of governing bodies (University Court, Senate), notes from meetings where knowledge transfer activity was on the agenda, and internal memoranda. Some of these documents were statutory (e.g. annual accounts); some promotional (e.g. the university website); and some internal management documents (e.g. Court and Senate papers). See Appendix 5 for a list of NewSU documents used. Table 4 below summarises the relationship of data sources to research questions.

Data Analysis

The approach I adopted to data analysis was conditioned by my methodology and connects to my literature review. From my literature review I identified a number of emergent themes that characterised the directions in which recent legislation attempted to steer higher education institutions (see page 37). I used these categories

⁶² I accept that even a tape recorded interview may not necessarily represent 100% accuracy due to non-verbal communication.

as a device to organise my initial approach to analysis. In this sense I used a form of ‘*prior instrumentation*’ (Huberman and Miles, 1984:36) and looked for patterns of matching and contradictions in the different data sources that might illuminate the degree to which KT policy discourse was influencing how managers and academics were translating the policy.

Table 4: Research Questions and Data Methods

Research Question	Sources of Data / Research Method Employed
Q1. How is KT policy understood and translated at an institutional level?	Annual reports; Internal documents; University website; Promotional documents; Interviews
Q2. How does the university’s history affect its interpretation and response to KT?	History of Scottish Education; History of NewSU ; Interviews
Q3. What mechanisms does the university use to implement KT policy?	Internal Documents; Interviews; Events; Observant participation
Q4. How do academic staff understand KT policy?	Internal documents; Interviews; Events; observant participation
Q5. What are the main issues arising in translation and implementation of KT policy?	Interviews; Own analysis. Observant participation.

Process of Analysis

I started my analysis from institutional documentation as I was aware from internal communications of increasing attention being devoted to ‘knowledge transfer’. Moreover, as knowledge transfer policy carries with it financial resources from the Knowledge Transfer Grant (KTG), it was reasonable to expect institutional managers to be responding to it in some way. However, while I started the process of data analysis by looking at institutional documents, the whole data analysis process became iterative by virtue of my being a member of the organisation and a participant in conversations, discussions and events that illuminated institutional responses to knowledge transfer. In pursuing iterative analysis of data using different methods, and delving deeper in to the literature to further hone my analytical sharpness and make greater sense of data, I employed a form of methodological “triangulation” (Mason, 1996:25) which I believed would add

“...*rigor, breadth and depth to my investigation*” (Flick, 1992:194), and serve as an alternative to positivist notions of validation (ibid.). The iterative nature of analysis led me to better understand what it meant and felt like to carry out research as a ‘bricoleur’:

“...*performing a large number of diverse tasks, ranging from interviewing to observing, to interpreting personal and historical documents, to intensive self-reflection and introspection.*”(Denzin and Lincoln, 1998:4)

Practical Procedures in Data Analysis

In terms of my approach to handling the data, these differed for each set, namely for the document analysis, the interview data analysis and the events analysis. In terms of the document analysis, I borrowed from the method of critical discourse analysis (Fairclough, 1992; 2001), without undertaking the detailed semiotic analysis that this method can entail. In analysing university documents I looked for language use and meaning that was reflective of Scottish knowledge transfer policy (see earlier categories), and language use that I felt reflected the discursive power of the policy discourse. While familiar with policy texts and key words and categories within them, after Potter (1997) I resisted the idea of codification, choosing to opt for an “*analytic mentality*” that Potter (ibid:147) described as “*a craft skill, more like bike riding or chicken sexing than following the recipe for a mild chicken rogan josh.*”

With regard to interview transcripts I went through a number of phases of analysis, making different ‘cuts’ on the data in three main stages. Although I mention three main stages of data analysis I am aware that the iterations made up many more and possibly started with transcription of interview tapes themselves and was continuous from that stage. As stated by Ochs (1979) “transcription is theory”. I transcribed interviews as I carried them out (creating first-order concepts) and developed themes as I went along (the second order concepts). For example, it was clear from the first few interviews that knowledge transfer meant different things to different informants, and was understood to have both single and multiple meanings. As the number of transcripts multiplied, some of my second-order concepts ‘solidified’, and new themes led me to categorise additional themes. This can be thought of in terms of Silverman’s “*constant comparative method*” (2000:179) in which a sample of

responses is read, points of similarity and difference noted, categories generated against which to test new responses, and new categories generated.

Organising the Material

The first major stage following transcription of all interviews was re-organisation of the data from individual transcripts in to the clustering of responses according to the core questions that I had used during the interview process. I found this stage useful as it presented me with chunks of the same data in concentrated form and gave me a greater sense of the 'bulk' and range of responses related to selected questions. This was in effect a re-ordering of data from being vertical (by respondents) into being horizontal (by question across all respondents). My second stage was to take dominant themes from the literature review and to analyse the data for language use and statements that I considered a match for the themes. This stage in effect represented a third 'cut' of the data that was neither by respondent nor by question, but wholly by theme. In the third major stage of analysis I looked for patterns within themes that illustrated conflicting meaning and reflected difficulties amongst actors in establishing shared meanings. My process of analysis was informed by Ritchie and Spencer's data analysis framework (1994) which includes analytical steps of indexing (developing a thematic framework), charting (plotting responses against themes) and mapping and interpretation (making sense in terms of concepts, associations, etc.). The procedures for analysing each of the events were different again due to the nature of the data I was analysing. The events were very different in nature and duration. One of them was a two-day conference and the second was a 90 minute presentation and discussion.

Each of these events provided documentary material, some of which was used for analysis. However, the value of the data from these events, attended by some 180 people and 10 people respectively, was not merely in the texts, but in the mood that they expressed, in particular at the large scale event at which a major change initiative was launched. These events constituted a different type of data from that collected from documents and interviews, and their forms led to a less structured

method of both data collection and analysis, relying more on scribbled notes, mental impressions and anecdotes for the basis of my analysis.

Physical approach to data analysis

My 'physical' approach to data analysis was characterised by use of pen, pencil, highlighting pens, and computer. In the transcribing process, while I paid careful attention to transcripts, I did not make use of word processing functions (e.g. highlighting, annotating) other than to type. Following transcription of a tape I printed it off and read it carefully before using pencil and highlighter pens to make annotations, select statements that I thought were rich in meaning, and categorise sections of text. Once done, I went back to the PC and extracted segments of text I had annotated and put them in a separate data file. For example, one of these files was labelled "definitions"; another was labelled "commercial perspective"; and a third was named "barriers". At mid-point of the thesis I decided to try a copy of nVivo software as I was curious whether this would add to the quality of my analysis. I found the software easy to use and useful for organising data content. However I did not find that it offered any significant advantages to me in terms of exploring and analysing *meaning* of the various texts. I found that conventional tools of 'cut and paste' inside word processors, combined with working with hard copies of documents and interview transcripts, pencils and highlighters, offered me a flexibility that a computer programme could not offer. I did not therefore pursue data manipulation with nVivo but found it a useful learning exercise.

Researcher Reflexivity

I cannot complete this section of data analysis without a brief discussion about reflexivity, for as Alvesson and Skoldberg (2000:245) maintain:

"Reflection means thinking about the conditions for what one is doing, investigating the way in which the theoretical, cultural and political context of individual and intellectual involvement affects interaction with whatever is being researched, often in ways difficult to become conscious of."

In approaching data analysis from a critical discourse perspective, and borrowing ideas from critical ethnography (Carspecken, 1996) I am conscious of bringing a value system to the analysis of data. While I needed skills in listening, reading and

interpreting data, reflexivity was an integral part of what I was doing, and at the same time part of the way I analysed the data and presented my findings and conclusions. Finlay (2003:532) describes this sort of process as: “...*continual evaluation of subjective responses, inter-subjective dynamics and the research process itself*”. In doing this research I found it necessary to critically examine how I interpreted meanings and how my position and past experience shaped the findings. Earlier in this chapter I made reference to Denzin’s (2000) notion of interpretation as a double hermeneutic cycle. However to this I could add a third cycle to make it a case of “*triple hermeneutics*”. This encompasses:

“...the critical interpretation of unconscious processes, ideologies, power relations, and other expressions of dominance that entail the privileging of certain interests over others, within the forms of understanding which appear to be spontaneously generated. Critical interpretation involves a shift in focus, so that the balance between what appears self-evident, natural and unproblematic on the one hand, and what can be interpreted as the freezing of social life, irrational and changeable on the other, moves in favour of the second, thus enabling it to become the object of further scrutiny.” (Alvesson and Skoldberg, 2000:144)

Personal, Functional and Disciplinary Reflexivity

Wilkinson (1988) suggests that reflexivity can be looked at from three dimensions: the personal, functional and disciplinary. In her view, personal reflexivity is needed to openly reveal interests, values and sources of connection to the research being undertaken. Functional reflexivity is concerned with the usefulness of the chosen research methodology and the associated ontological and epistemological assumptions, and disciplinary reflexivity relates to wider issues in the social sciences that should be considered.

On the issue of personal reflexivity, I feel that my background helped me to understand from personal experience the managerial and academic values and arguments that take centre stage in the context of knowledge transfer policy. In twenty seven years of work, I moved several times between commercial, academic and governmental sectors. I spent my first ten years in the corporate environment of a multinational company; the next five as a university lecturer teaching and researching in the field of international business and strategy; I then spent five years working for multilateral and government organisations, implementing international

development projects (the European Union, the European Bank for Reconstruction and Development, Scottish Enterprise) in transition countries; before returning to the university sector seven years ago, where I combine academic work with consultancy. I could consider myself 'bi-lingual' (Gewirtz et al., 1995), or using Deem and Brehony's terminology, even 'trilingual'(2005:227). This relates to having attachments to my subject discipline, traditional ideas about humanistic higher education, and also being able to 'speak' management. While drawing on my past experience when carrying out this research, I used supervisory meetings and presentations to peers both inside and outside my institution to help me to step back from my research 'object' on a regular basis, something I felt was both necessary and useful given my privileged position inside the organisation under study. In terms of functional reflexivity I attempted to be transparent in my reporting of the research process and assumptions as I believe that any and all findings are constituents of a particular reality, in this case my own. I was able to do this by referring to records, notes and observations that I kept throughout the research process. In terms of disciplinary reflexivity I attempted to adopt the spirit of the qualitative, interpretive paradigm within which I chose to carry out my research. This was achieved through immersion in the Ed.D programme, seminar discussions, assignments, readings, and in the writing of the dissertation itself through discussion with my research supervisor, and reference to key authorities of qualitative research (e.g. Denzin and Lincoln, 2000; Huberman and Miles, 2002).

Insider and Outsider Positions

My final comment on reflexivity is that in carrying out educational research in my own institution, I was mindful of what Anderson and Jones (2000:430) have called "*the unique epistemological, methodological, political and ethical dilemmas*" facing people in my position⁶³; and also mindful of my position as an 'insider' as outlined by Merton (1972:15) and discussed earlier. While I am aware of some of the arguments surrounding 'Insider' and 'Outsider' positions, I followed Hammersley (1993:219) in believing that:

⁶³ Mercer (2007) provides useful in-depth discussion of issues, ethical and other, related to insider research in the article "*The challenges of insider research in educational institutions: wielding a double-edged sword and resolving delicate dilemmas*".

“There are no overwhelming advantages to being an insider or an outsider. Each position has its advantages and disadvantages, though these will take on slightly different weights depending on the particular circumstances and purposes of the research.”

This position is one that echoes Hawkins (1990:417) who argues that what insiders gain in terms of *“their extensive and intimate knowledge of the culture and taken-for-granted understandings of the actors”* may be lost in terms of *“their myopia and their inability to make the familiar strange.”*

Ethical Issues

While I embedded treatment of key ethical issues inside my discussion of methodology I feel it is necessary to clarify my position on three issues. The first concerns the funding of my doctoral research. The second relates to use of what Mercer (2007:13) calls ‘incidental’ data. The third relates to the identity of the institution in which I work, and individuals who took part in the research.

On the question of funding, the doctorate for which I am carrying out this research was generously funded by my institution. However I would like to state that the topic of knowledge transfer, and the epistemological position I adopted were purely personal choices, with no ‘strings attached’. In an institution with very strong managerial and vocational histories I am therefore delighted that the spirit of ‘Lernfreiheit⁶⁴’ is alive and well.

In terms of incidental data, this refers to data that was not negotiated. Griffiths (1985) describes how she chose not to use material from informal staffroom chats, or meetings with restricted access, because the collection of these data had not been negotiated. Griffiths (ibid: 201) asserts that:

“To release such data would be a betrayal of trust and an abuse of access. Herein probably lies another key to the research position, and that is the need for an understanding of the difference between research and voyeurism.”

⁶⁴ Lernfreiheit is a German term that is used in relation to the Humboldtian concept of the university in which students have open access to knowledge and the right to study what they wish.

In this research I did not subscribe to such a view. Most of the data that I used was indeed openly negotiated, especially the data that relates to informant interviews. However the data gathered at the events and other data ‘produced’⁶⁵ from my position as an academic within the institution cannot be described as ‘openly negotiated’ but were accessible by virtue of my position as an observant participant, known to others at the events. I feel that not using such opportunities would have represented a lost opportunity and would not have been in tune with my critical epistemological position. At the same time I would like to stress that I did not include comments overheard from informal discussions or formal meetings in which I participated, where I felt that might compromise the position of colleagues. In the rare cases where I used data that was not clearly negotiated I did not, as throughout the dissertation, attribute it to any named individual.

Lastly, in terms of confidentiality I disguised the name of the institution in which the research was carried out and gave it the name of NewSU, reflecting the fact that it is a new university in Scotland, and in the belief that many of the issues raised in this dissertation will be particularly pertinent to all 5 of the post-1992 universities in Scotland, if not others. In addition to this, and in line with negotiated access to informants, I anonymised the names of respondents. Furthermore I removed references to web materials where I felt this could lead to obvious identification of the institution in which the research took place. Where I used quotations that relate to the specific city or regional location, I replaced the real names with “City” and “Region” respectively. In taking these measures to maintain anonymity and confidentiality, I am nevertheless mindful of Burgess’ view that:

“While I am certain that I have guaranteed their anonymity in the wider sense I consider it an impossible task to disguise members of the same institution from each other.” (Burgess, 1985:192)

Now that I have outlined my research methodology, I will go on to present research findings in the next chapter.

⁶⁵ I use the term ‘produced’ here in relation to data in Dey’s sense (1993). Dey suggests that whatever the method employed, data is ‘produced’ and not out there to be collected like rubbish bags.

Chapter 4: Findings
The translation of knowledge transfer policy from institutional world
and ‘real world’ academic perspectives.

In this chapter I present the findings of the research, structured in three inter-related sections, as presented in Table 5.

Table 5: Structure of Presentation of Findings

<p>Section 1</p> <p>Institutional Context of NewSU</p> <p>History and Development of the Institution based on Secondary Sources</p>
<p>Section 2</p> <p>Institutional World Response to KT Policy</p> <p>Official Response based primarily on Secondary Data</p>
<p>Section 3</p> <p>‘Street-Level’ Response to KT Policy</p> <p>Interviews with Academics and Managers</p>

In the first section, I discuss the institutional context in which I carried out the research: the context of a ‘new’ post-1992 University in Scotland. In the second section I present what I call the institutional world response⁶⁶ to KT policy. By this I mean the translation and operationalisation of KT policy by senior management of the university as found in official university documents and communications. In the third section I present findings from interviews with university managers and business school academics. This has four elements. The first of these discusses the multiple meanings of the term ‘knowledge transfer’; the second discusses the purpose of KT; the third element compares the institutional and ‘street-level’ world responses to KT; and the fourth element examines responses in the context of the goal of creating a KT-oriented university.

⁶⁶ See Table 3. on page 62

Section 1: The Institutional Context

NewSU was created in 1993 from an amalgamation of two Scottish central institutions, one with origins dating back to 1875, and the other to 1971. While the older of the two institutions was designated a central institution in 1908, the younger one was only granted this status in 1985. Despite the differences in history it is interesting to note that following the Further and Higher Education (Scotland) Act of 1992, it is the younger of the two institutions that satisfied the requirements to become incorporated as a university as a stand-alone institution (Thomson and McCallum, 1998:235). The decision to merge is indicative of NewSU's ambitions and was driven by the attraction of starting a new life as a larger rather than a smaller university (ibid.).

From College to Central Institution to Polytechnic to University

NewSU started its existence on its current site as a college of technology (CT) in 1971, established by local government as a consequence of the introduction of polytechnics in England. Indeed, Thomson and McCallum (1998) claim that from its very birth, CT put forward successive, but unsuccessful arguments to the SED to be given the right to carry the name of 'polytechnic'⁶⁷, before it was granted CI status in 1985, and the title of a polytechnic in 1991. The reason behind CT's wish to become a polytechnic or central institution was status and resource-driven, as colleges under local authority control were less well funded than central institutions directly responsible to the Scottish Education Department (ibid.).

To locate CT in the wider UK context, polytechnics were established in England in 1969⁶⁸ as alternative providers (to existing universities) of higher education. At the time of establishment, the polytechnics constituted a new "public sector" higher education that was to be "under social control" and separate from universities that were labelled the "autonomous sector" (Pratt, 1997:7-18). In contrast to the older universities, the polytechnics operated as institutions with highly restricted formal and operational autonomy, owned and managed by local education authorities

⁶⁷ The term 'polytechnic' was not formally used in the Scottish education system as it was associated with vocationally-oriented institutions in England established in 1966; equivalent institutions in Scotland were known as either central institutions or colleges.

⁶⁸ The 1966 White Paper laid out the plans for the establishment of these Polytechnics.

(LEAs), subject to a combination of local and national governmental regulation and control, and dependent on the Council for National Academic Awards (CNAA) for degree validation. They possessed none of the seven elements of autonomy listed in Frazer's categorisation (Frazer, 1997, in Kogan et al., 2000:99-100). These relate to the legal status of the institution and whether it is a separate legal entity; to the academic authority of the institution and its ability to award its own degrees; to the institution's mission and whether it sets its own goals; to governance and questions of who appoints the governing body; to control over financial expenditure decisions; to whether the institution employs its own staff; and to the degree of academic decentralisation and control of its own curriculum.

While CT was not a polytechnic, its status as a local authority controlled college in Scotland until 1985, when it was elevated to central institution status, meant that it had a history of similarly tight control. Elevation to central institution status in 1985 provided CT with access to more resources, but this shift from regional education authority to direct SED control did not bring any additional institutional autonomy.

Governance of New Universities

While polytechnics in England, and central institutions in Scotland such as CT, were allowed to apply for the 'title' of University in the 1992 Further and Higher Education Act, they were not given the autonomy that came with a Privy Council university charter⁶⁹. Subsequently, NewSU was established as a 'higher education corporation' with charitable status, and was required to adopt articles of government approved by the UK Secretary of State for Education. Thus, in terms of governance :

"Whereas the pre-92 universities had been offered a 'model charter' with the potential for negotiation around a proposed norm, the incorporated polytechnics and their successor universities were given a firm legal prescription for the number and sources of members of their governing board: indeed, their first board was appointed by the then Minister (they later became effectively self-perpetuating). The powers and duties of the new governing boards – including not only finance and resources but 'determining the educational mission' of the institution – were also prescribed, and in terms which clearly distinguished them from the powers and duties of the pre-92 universities' councils as these had been previously understood." (Fulton, in Amaral et al (Eds.), 2002:195)

⁶⁹ For a full account see Moodie & Eustace (1974), "Power and Authority in British Universities".

The governance arrangements of post 1992 universities suggest that they would be more responsive than older universities to government initiatives and steering. In the case of the former central institutions in Scotland, tight control and steering were not particularly new, given that CIs had been directly accountable to the SED. It is therefore perhaps not surprising that NewSU's first "Joint Statement of Mission and Purpose" (JSMP) in 1993 reflected key elements of government policy at the time, particularly as that related to widening access, increasing demands for vocational and employability skills, and calls for universities to be more responsive to the needs of the Scottish economy:

"The new University will be founded on the conviction that Higher Education in the 21st century must seek to extend its provision to meet the changing needs of a wider group of students and clients, industry, commerce and the professions in order that, through its innovative teaching and learning and applied research and consultancy, it should be able to make a full contribution to the prosperity and regeneration of Scotland's economy." (Thompson and McCallum, 1998: 238)

Searching for Identity

As a new university, NewSU was explicit in its efforts to differentiate itself from the provision of existing older institutions in Scotland, using the marketing term of "positioning itself" to signal its market orientation, and an awareness and readiness to compete:

"The new university will create an identity for itself based on the principles it regards as fundamental to its philosophy of education. It will seek to position itself in the minds of students, employers and the wider community as distinct from the current Higher Education provision in Scotland...." (Ibid.)

It claimed to be seeking a role in regional economic development, a claim reinforced by its membership of the Coalition of Modern Universities (CMU), which collectively claimed on its website to be "... key players in regional and local regeneration as well as being net contributors to the national economy. (www.epolitix.com/EN/Forums/Campaigning+for+Mainstream+Universities/home.htm)

The NewSU JSMP placed special emphasis on teaching and learning and a commitment to being "...a provider of non-elitist high quality education and training" (Thompson and McCallum, 1998: 238), very much in line with HE policy to widen access to higher education.

The institution's commitment to research and consultancy was described as being "applied", signalling relevance and problem-solving, rather than basic or pure research. NewSU's historical mission of teaching, and to a lesser extent applied research, led to a corresponding reliance for the majority of its funding on teaching. For example, the NewSU annual report and accounts for 2004 (p.17) show teaching to account for over 92% of grants from funding councils, with just over 4% from coming from research.

The historical reliance on government funding for teaching has contributed to a willingness among institutional managers to embrace new HE policy initiatives that promised new streams of income (such as KT) more readily than academics. It could be argued that the relative weakness in research capacity in NewSU, as measured by the research assessment exercise (RAE), raises serious questions about the university's capacity to transfer knowledge on the grounds that studies of the production and dissemination of knowledge suggest that knowledge equates to research⁷⁰, be that of a pure or applied nature.

Different Types of Knowledge: Different Responses to KT

The RAE historically privileges "Mode 1" type knowledge (McNay, 2003), knowledge produced by university academics for the academic community, and categorized in terms of academic disciplines with little attention given to exploitation by practitioners (Starkey & Madan, 2001). In contrast, knowledge transfer policy encourages production of what Gibbons et al (1994) call "Mode 2" knowledge, often referred to as being 'trans-disciplinary', 'produced in the context of application' and:

"...characterized by a constant flow back and forth between the fundamental and the applied, between the theoretical and the practical. Typically, discovery occurs in contexts where knowledge is developed for, and put to, use, while results – which would have been traditionally characterized as applied – fuel further theoretical advances." (Gibbons et al, 1994:19)

If one accepts a close correlation of "Mode 2" knowledge production with "applied research", then this suggests that NewSU is well placed to respond to knowledge

⁷⁰ See Brew (2001) for a wide-ranging discussion of the link between knowledge and research. *"The Nature of research: Inquiry in Academic Contexts"*

transfer policy as an entrepreneurial initiative. The possibility that institutions with different knowledge bases will respond in different ways to knowledge transfer policy is a view shared by Shefc (2002):

“The spectrum of knowledge transfer activities could be expected to vary from university to university in ways that reflect their individual strengths. Whilst start-up, spin-out and licensing could be expected to be pursued by all institutions, other strategic objectives might reflect individual strengths. For example, internationally competitive research groups would be the obvious ones through which to attract research intensive inward investment, and given the tradition of local engagement in many post-'92 universities, interactions with SMEs might be a key focus for their research.”(Shefc, 2002:10, para. 5.2)

The latter point suggests an expectation on the part of policy makers that new universities such as NewSU will focus their KT efforts locally and regionally and put emphasis on the transfer of knowledge to small and medium enterprises (SMEs). This is a conclusion shared by McNay (2003:53), who asserts that the UK government 2003 White Paper on Higher Education (DfES, 2003):

“...suggests that, outside the elite research universities, research should be linked to knowledge transfer (which teaching is, surely?) working with regional partners.”

Summary of Section 1

NewSU is a relatively new HE institution, despite the fact that it merged with an institution 100 years older than itself when being incorporated as a university in 1993. It is important to note that its origins are as a teaching institution, with particular emphases on professional and vocational training and widening access. Research activity has been of an applied nature, with coordinated efforts to develop an RAE capability starting only after incorporation in 1993. The brief history suggests that the institution has a strong managerial culture, a feature often emphasised by Thomson and McCallum (1998). This is a result of its birth as a local authority controlled college, followed by direct management by the Scottish Education Department when it became a central institution in 1985. The strong managerial culture, and an accompanying ambition, is reflected in the pursuit of HE status even before its foundation as a college. As a university it is reflected in a willingness to respond quickly and positively to government initiatives, a recent one of which is knowledge transfer policy. The next section will therefore examine NewSU's institutional response to KT policy as a recent policy direction.

Section 2: The Institutional World Response to KT Policy

In the second section I present the institutional world response⁷¹ to KT policy in three sections, as illustrated in Table 6.

Table 6: Institutional World Response to KT Policy:

Institutional Translation of KT Policy Part I The University Executive Strategic Translation of KT Policy Documents (Annual Reports; Strategy Documents) Laying out the Vision, Mission, Strategy and Strategic Objectives
Institutional Translation of KT Policy Part II University Executive and University Senate KT Strategy Implementation Vehicles: NewSU Futures and NewSU Business Development
Institutional Translation of KT Policy Part III KT Strategy Operationalisation New Responsibilities Support for KT Workshop Restructuring the Business School (Mode2)

Part 1: University Vision and Mission-

The starting point for analysis is 2002, the year of a major review of NewSU's strategy. A significant outcome of the strategy review was the formulation of a new "vision" statement known as the "2010 Vision"⁷², and a new mission statement. The 2002/03 university annual report foregrounds these two statements with language and terms that resonate strongly with key messages from the KT policy discourse. There are, for example, multiple references to the growing importance of knowledge to the economy, the crucial role of universities in contributing to economic development, and the need for universities to transfer more of their knowledge to

⁷¹ See Table 3. on page 62

⁷² NewSU annual accounts 2002-2003 states on page 6 that "*The University embarked on a major reappraisal of its mission and strategic positioning in its tenth year as a University. In the autumn of 2002, a widespread consultation involving the University Court, Senate, Executive and the whole University took place*".

non-academic partners. Analysis of one small extract from a Shefc KT policy document, followed by reference to the new vision and mission statements of NewSU illustrates the apparent effects of KT policy discourse on NewSU. The joint Shefc / Scottish Enterprise Taskforce report (2002:10, para.5.1) states:

“...universities will need to commit themselves to proactive knowledge transfer in support of economic development as part of their core mission.”

The university annual accounts for 2002-2003 (NewSU, 2003) open with a statement of the University’s distinctive role in Scottish Higher Education, emphasising amongst other things: -

“Promoting the regeneration of the Region⁷³ through the generation and transference of higher skill levels, partnering others in applied research and the commercial development of the regional knowledge base.”(NewSU, 2003:1)

The ‘economic development’ mission of the university is elaborated further in the following year’s 2003-04 annual report and accounts introduction. Here, NewSU attaches particular relevance to its work with outside stakeholders, and emphasises its role as a direct contributor to the economy of the Region:

“NewSU is a modern University.... Close links with employers ensure that programmes are highly relevant. Growing research capacity ensures not only that the curriculum is fully informed by the latest research but that the University, through knowledge transfer and consultancy, can make a significant contribution to the economy of the Region.”(NewSU Annual Report, 2004:1)

Constituting an Image

This last statement is significant in a number of ways. Firstly, in the emphasis placed on “close links with employers”, a central plank of KT policy to connect with business; and secondly in the emphasis on the word “relevant”, echoing policy makers’ and industry’s pleas for useful and relevant knowledge, and an opportunity to position NewSU in a different space from older universities. However, at the same time this statement expresses some self-doubt as it claims that the university “can make” as opposed to “is making” a significant contribution to the economy of Scotland. It suggests a future state not yet realised, a statement of the university’s

⁷³ I have used the word Region here to disguise the actual location of NewSU. I am using this method throughout the analysis of secondary data.

aspirations⁷⁴. The associated ‘vision’ statement serves to reinforce corporate attempts to ‘constitute’ a future identity for the university by expressing a strong commitment to change in order to achieve this:

“NewSU will be entrepreneurial. We will change to be actively focused on exploring and creating opportunities to become Scotland’s most dynamic, confident, innovative and responsive university, working in partnership with all our stakeholders in responding to and creating demand for our learning, research and consultancy services.” (NewSU Annual Report 2003:6)

The words used are forceful and unambiguous, twice repeating the word “will” in order to communicate the intent to become entrepreneurial and be committed to change. The emphasis on being “entrepreneurial” and on “change” are further examples of the effects of KT policy discourse. The additional emphasis put on “partnership” mirrors the strong encouragement inside KT policy documents for enhanced collaboration between HEIs and outside constituencies (Jones, 2005b). The words “responding to and creating demand for...” suggest an attempt to create an identity that reflects a responsive, outward-looking organization with an entrepreneurial spirit. The use of business and marketing language serves to strengthen this. The claim to be “...*creating demand for our learning, research and consultancy services...*” (op.cit) captures what policy makers acknowledge to be a Scottish business environment characterized by:

“a low level of locally-based SMEs and corporations capable of developing research findings being ‘pushed’ from universities, suggesting that Scotland does not lack “institutional push” but rather “industry pull.” (AIM, 2004:12).

The institutional drive to communicate a business-oriented identity is further reflected in the following excerpt from the University website:

“We are proud of our growing reputation as a provider of high quality research, consultancy and training services to local, national and international businesses. Our recent work includes collaborations with organisations such as Microsoft, Bovis Lend Lease (Scotland), CISCO Systems and Scottish Enterprise in the development of programmes, facilities and research capacity.” (www.NewSU.ac.uk)

However, what is notable here is reference to large companies and the regional economic development agency, rather than reference to SMEs. This reflects a

⁷⁴ This is not unusual for mission statements. See David (2005) for useful discussion on mission statements.

managerial wish to associate the university with large, household names rather than lesser-known SMEs, and is an example of what Gewirtz et al. (2004) call ‘impression management’, and the use of discourse to create ‘reality’.

University planning documents attempt to operationalise these vision and mission statements by setting out six strategic objectives, one of which specifically includes the term ‘knowledge transfer’, and reinforces the commitment to make contributions to economic and social development. The 2003 Strategic Plan expresses the research and knowledge transfer objective in the following terms:

“To advance research and scholarship and to foster innovative commercial activities, supporting knowledge transfer for the economic and social development of Scotland, the Region and the City.” (NewSU Strategic Plan, 2003:39)

Further Effects of KT Discourse

NewSU managers seem to have translated quite literally the KT policy aim of putting knowledge transfer at the core of the university mission. The connection with official, macro KT policy is strengthened through use of the ‘knowledge economy’ discourse as a means of justifying the strategy. For example, the joint Shefc / Scottish Enterprise Taskforce report cited earlier states (op.cit, p.5) that:

“As we move to a knowledge based economy and the need for an ever more skilled and flexible workforce, higher education has an important role to play in delivering the science, knowledge and skills to sustain this.”

In similar vein, the research web pages of NewSU state that:

“A wide range of education activities contribute to the development of a knowledge based society and economy, including – research, commercialization, professional development, skills acquisition and training programmes, networks and partnerships. A knowledge society and economy is also characterized by multidirectional exchanges of information, ideas and innovation between academics, business, Government, organizations, communities, and individuals.”
(NewSU.ac.uk/research/servicefact.htm)

From analysis of these statements at an institutional level, the effects of Scottish KT policy discourse on the positioning of the institution are very strong. The vision and mission statements of the institution are explicit about the university having a central role to play in the development of the regional economy in the Region. The institution seems to be positioning itself where policy makers want to see it, that is,

as a producer of knowledge relevant for regional businesses and industry. This is further reflected in the following statement taken from the research and commercial development office's (RCDO) website on its knowledge transfer/outreach page. It is significant that the RCDO adopted wholesale the Scottish Executive's definition of knowledge transfer as they state that:

"A key objective of knowledge transfer at NewSU is to facilitate and strengthen links between higher education, society, government, and economy. This is reflected in Shefc's broad definition of knowledge transfer, which is given as follows:

The dissemination and exploitation of the outputs of higher education - research, knowledge, skills, expertise or ideas to achieve economic, educational, social, healthcare and cultural benefits for society."
(www.NewSU.ac.uk/rcd/knowledge.html)

In the same way that Shefc's stated aims of knowledge transfer policy evolved from a focus on the commercial dimensions of knowledge transfer to a broader, civic purpose (Ozga, 2006), so too did the officially stated aims of the university's research, knowledge transfer and commercialisation policy. This is evident in the university's 2006 annual report which restates its KT aims in the following way, broadening them to add previously unspecified emphasis on the words "healthcare" and "community":

"The University's aims in research, knowledge transfer and commercial development are to maximize the impact of the University's intellectual capital in contributing to economic, social, healthcare, and community development and regeneration in Scotland."(NewSU Annual Report, 2006:2)

The emphasis on intellectual capital in this set of aims reflects added institutional emphasis on research, a move signaled in the 2004 annual report. The research, KT and commercialisation statement of that report on page three announced that:

"The University's revised research, knowledge transfer and commercial development strategy seeks to maximize the contribution of research to teaching within the University and also to the local economy...."
(NewSU Annual Report, 2004:3)

Strategies and Strategic Objectives

The means of translating vision and mission in to action was communicated through the university strategy. Part of this strategy included the establishment of new functions, a major one being the establishment of a unit responsible for the development of research and commercial development (RCD) in the university.

Support Unit for Knowledge Transfer

The RCD section of the university website opened with a statement on the establishment and purpose of this function.

“The Research and Commercial Development Office at NewSU was set up in 2000 primarily to support the development of innovative applied research and to foster the transfer of knowledge to public and private sector stake holders in Scotland via commercial development activity.” (www.NewSU.ac.uk/rcd/knowledge.html)

The date of RCD establishment coincided with significant research and knowledge transfer-related policy developments at the level of the Scottish Executive, Scottish Enterprise, and Shefc such as the Framework for Economic Development in Scotland (SE/2000/58, 2000) and A Smart Successful Scotland (SE, 2001). However, the name of the RCD service changed⁷⁵ twice since its formation. First of all with the incorporation of the term “knowledge transfer” in to the title to read “Research, Knowledge Transfer and Commercial Development” and on the second occasion to read “Research and Innovation Services”. The first change according to its staff was in recognition of the growing importance attached to the term “knowledge transfer” and the need to report specifically on knowledge transfer activities. The second change was designed to convey the desired outcome of knowledge transfer activity, which staff claim to be “innovation”, and a focus on how to do things better.

In other sections of its web pages, RCD communicated elements of its strategy for the development of its research and knowledge transfer activities, making explicit linkages to the university’s 2010 Vision, and emphasising the university’s goal to become a confident, dynamic, innovative and entrepreneurial organisation:

⁷⁵ The precise timing of the first change is unknown to me; the second change took place in early 2007.

“We have made an important strategic decision⁷⁶ to appoint a significant number of additional academic leaders of professorial or equivalent status. They will bring a new focus to the critical domains of applied research, consultancy and knowledge transfer as part of the means by which we deliver our 2010 vision as a confident, dynamic, innovative and entrepreneurial organisation.”
(NewSU.ac.uk/rcd/knowledge.html)

The fact that knowledge transfer was the subject of a ‘strategic’ decision added weight to its importance, as did the reference to intentions to appoint “...academic leaders of professorial or equivalent status”, terms associated with expert status. However it is unclear to whom such statements were directed. Was it to the Scottish Executive, Shefc, potential clients, staff, and students? While this is not wholly clear, it can be interpreted as an attempt to enhance the institution’s external credibility, and links to the marketisation and enterprise trends highlighted in the literature review, and the desire to ‘constitute’ an image through language. The adjectives “confident”, “dynamic”, “innovative” and “entrepreneurial” are increasingly ones associated with a university. Fairclough (1995:140) states that:

“The marketization of the discursive practices of universities is one dimension of the marketization of higher education in a more general sense. Institutions of higher education come increasingly to operate (under government pressure) as if they were ordinary businesses competing to sell their products to consumers.”

Knowledge Transfer Activity: The Outcome to Outreach Framework

While the opening pages of RCD’s website focused largely on commercialisation issues, further exploration of the twelve pages devoted to RCD activity revealed separate pages for “commercialisation”, “knowledge transfer/outreach”, “consultancy”, “events and seminars” and “student enterprise”. There are a number of translation issues arising from this classification of activities. The first of these is the separation of “knowledge transfer/outreach” from activities labelled as “commercialisation” and “consultancy”. This physical separation implies that these are all different activities; and yet this is not at all self-evident. For example one might expect consultancy and commercialisation activity to be classified as KT activity, and indeed this is the case in other internal university documents (to be

⁷⁶ This strategic decision refers to the “NewSU Futures” initiative to be discussed later.

discussed later). The second translation issue is the category labelled as “knowledge transfer/outreach”. I am unsure of the origins of the term outreach as it relates to knowledge transfer policy. However, Cullen (2003) and his colleagues at Glasgow University developed the “outreach to outcome” framework as a means of developing a set of KT metrics. Cullen (ibid.) talks of a spectrum of activity that ranges from outreach to the community, a “socially beneficial activity”, to that which is entirely based on outcomes, i.e. such as the “making a profit” outcome. He further goes on to differentiate these two types of knowledge transfer in the terms outlined in Table 7 below:

Table 7: Differentiating Factors of Outreach and Outcome

OUTREACH	OUTCOME
Objectives are socio-economic Funding public activities Slow and iterative development Build up of intellectual capital	Objectives are economic development Risky activities Fast development (within 18 months)

Adapted from Cullen (2003)

NewSU’s reference to outreach on the research pages is ambiguous. It is used in a taken-for-granted manner, as are other terms on the RCDO web pages, many of which echo the narrative of Scottish KT policy documents, with multiple references to the transfer of knowledge, links with partners, and engagement on a local and regional level. A further illustration of this was found on the knowledge transfer/outreach web pages that stated:

“Within NewSU's eight Schools, there are many examples of past, ongoing, planned and potential knowledge transfer activities which build on the University's commitment to regional, national and international engagement.”
(www.NewSU.ac.uk/business/outreach/index.html)

Both knowledge transfer and links to external partners also figure heavily on the consultancy web pages:

“We are committed to transferring the benefits of our accumulated scholarly learning, applied research and knowledge and know-how, to business, the public sector, the media and the wider public.”
(www.NewSU.ac.uk/business/consultancy/index.html)

Part 2: Vehicles for Implementation

Following clarification of the 2010 Vision, the University sought to engage staff in a search for means of implementation. This involved a university-wide process of identifying and defining initiatives and projects⁷⁷ that would help to realise the University's vision. The aim was to release latent entrepreneurial energy in the organization, and was presented as a 'bottom-up' approach to strategy development. The minutes of the Senate meeting of April 11th 2003 (02.126) reported that:

“Careful consideration by the Executive identified some 20 groupings of ideas or projects which were then developed into eight project proposals for further consideration leading to a portfolio of eight projects.”

All eight projects were approved, two of which strongly reflected core elements of the KT strategy. The first of these was named 'NewSU Futures' and the second 'NewSU Business Development'. The labels given to these two initiatives are significant in themselves. The first initiative, by incorporating the word 'futures', places a clear emphasis on change and moving away from the present. The second initiative is explicitly commercial in using the term 'business development', suggesting the pursuit of sales and profit. Both initiatives reflect the prevailing language of change and enterprise in higher education that were highlighted in the literature review.

Vehicles for Implementation: NewSU Futures

The rationale for the “NewSU Futures” project was outlined in Senate papers of April 11th 2003 (S02/70/1). The initial definition of the project was given as follows:

“To appoint a significant number of key academic leaders of professorial or equivalent status (up to 30) who will bring a new focus to critical domains of applied research, consultancy and knowledge transfer.... These individuals, a new style of “consultant type person”, will inject significant new capacity and expertise to our institution and allow a step change in our progress towards 2010. The profile of each of these individuals will be written to address an impact area that will establish or enhance the distinctiveness of our institution. The holders of these posts will have an international profile and a substantial proportion may be in interdisciplinary areas where existing threads of NewSU activity can be integrated to gain critical mass in order to produce substantial gains within the time frame of the vision.”

⁷⁷ This process was undertaken under the label of “Sparkle” projects.

Two features of this text merit discussion. The first one is the description and profile of the anticipated new appointments; the second is the focus on interdisciplinarity.

What is in a profile?

While academic descriptors were used to describe these posts (i.e. professorial or equivalent status) the new appointments were envisaged to recruit a “new type of consultant person”, details of which were not fully elaborated, but which required an “international profile” and expertise in “interdisciplinary areas”. This description suggests an attempt to reconstitute the profile, role and identity of a NewSU professor. A similar, possibly associated, attempt to reconstitute the identity of business school academics was made in 2005 with the suggestion by one member of staff to rename academics “pracademics”, or what the proposer suggested would be a “Mode2 academic”. The addition of the letter ‘p’ in front of the word academic represents ‘p’ for “practical”, and a wish to construct a more practical academic. This proposal was very strongly objected to by a union representative on the grounds that it challenged sectoral definitions. The proposal was subsequently withdrawn.

Interdisciplinarity

The emphasis here on inter-disciplinarity reflects debates both inside and outside academia about “Mode1” and “Mode2” knowledge (Gibbons et al, 1994), the issue of the “relevance” of knowledge (see Ozga and Jones, 2006), and a wider struggle over meanings of what constitutes knowledge, and what sort of knowledge universities as traditional producers of knowledge should be producing.

It is clear that architects of this initiative felt that NewSU Futures embodied the vision of higher education held by Scottish policy makers. In addition, the initiative was expected to clearly position the university as a leading KT provider and motivate staff. Senate papers (S02/70/1, p.5) asserted that recruitment of a significant number of new blood appointments for this initiative at one time would:

“Send a message to the Scottish Parliament and relevant stakeholders that NewSU is a university that is inextricably linked to the economy, health and welfare of Scotland and is investing in developing knowledge partnerships to take Scotland forward; find enthusiastic support in Shefc as NewSU aligns with government policy; see NewSU strengthen its position as a leading knowledge transfer provider; result in raised staff morale as staff sense the clear direction towards a market positioning.”

The above statement reinforces earlier constructions of relationships with outside bodies, and is significant in its overtly political message, expressing its intention to speak directly to the Scottish Parliament and Scottish Funding Councils. However the generally positive message was undermined by reference to (low) staff morale and a sense amongst staff of 'strategic drift'.

Vehicles for Implementation: NewSU Business Development

A second vehicle for implementation of the 2010 Vision was "NewSU Business Development". The initial definition of this initiative (ibid. p.7) was:

"The project will substantially enhance the university's capabilities in developing commercial activities (i.e. non-Shefc income via e.g. CPD, TCS, short courses, consultancy, technical services) by investing in the enhancement of "business development" activity."

The anticipated impact of this project was clearly in the commercial sphere through the sale of services (which I am taking to mean commercial knowledge transfer).

The outcomes of the project were intended (ibid, p.8) to lead to:

"increased/deepened relationships with employers"; and "a much sharpened business development support service in the University business development activity located directly in income earning Divisions and Centres in the Schools."

In the same way that the NewSU Futures project envisaged both the recruitment of new staff to execute the initiative and a redefinition of the role and work of academics, so too did the NewSU Business Development project. The Senate papers (ibid, p.7) stated:

"New appointments will engage proactively with employers to identify new business opportunities, engage in the development of synergistic partnerships, work up contracts and, where appropriate, act as "account managers" for key clients."

The language used in constituting these new members is typical of that used in a job description for private sector commercial positions and comes very much from a business, as opposed to an academic, lexicon. The types of activities in which these new staff members were to engage, such as "working up contracts" and acting as "account managers" reflect the roles of sales, account or marketing managers. Once again, relationships with employers were stressed, partnerships were stated as key vehicles in realization, and reference to "business opportunities" and "clients" further

reflect the effects of discourses of enterprise and marketisation. Discursive attempts to change the university are further evident in a range of new university configurations and appointments.

Part Three: Vehicles for Operationalisation:

In the 2003 strategy for research, knowledge transfer and commercial development (NewSU, 2003), the authors state that “*research is central to the mission and vision of the University*”. Para 1.5 goes on to say:

“Knowledge Transfer (KT) and commercial development (CD) combine as core activities of the realization of the University’s core vision for 2010. It is KT and CD that together realise the external engagement of the University with business sectors through consultancy, continuous professional development, executive development, product development and other collaborations. Through these same activities, KT & CD will help significantly to realise the University’s vision of contributing to the development of the regional economy and society...and produce the additional streams of income that sustain many desirable aspects of University life.”

New Responsibilities

In order to enhance operationalisation of the strategy, the university Executive allocated new responsibilities to staff. One example of this was the appointment in October 2002 of a “knowledge transfer manager” (NewSU Strategic Plan, 2003:14). On a more senior level, the titles of Associate Deans of Research in the university were changed in 2004 to “Associate Dean of Research and Knowledge Transfer”. One Associate Dean, commenting on the change to his role title, said:

“These posts, associate deans of research and knowledge transfer, were created about two and a half years ago and we never had posts in the University that had an explicit knowledge transfer responsibility in a sense elevated in to the title of the post. When you look at the role description it’s quite general – support and promote – there is no really well-developed understanding within the University – to some extent the associate deans that were put in to these posts were told in a way to invent the job for themselves – there was an expectation that they would try and find ways of working with colleagues – what that really amounts to in almost all cases is supply-side – capacity building, capacity building.”(R8)

This statement, from the ‘real world’ of operationalisation, contrasts starkly with the confident language found in the documents analysed earlier in this chapter. This is particularly evident in the expression that “*there is no really well-developed understanding {of KT} within the University*”. Moreover, with a very heavy

emphasis on capacity building, this statement suggests a significant gap between where NewSU is at the moment and the way in which NewSU is being constructed discursively. Managerial efforts at operationalising the strategy were increased further when an Assistant Principal was given special responsibility for knowledge transfer in August 2004. When asked about this role, he responded:

“The role came in to being on August 1st last year, 2004. Prior to that there was no formalised role. Again this reflects the recognition that this is an important area which needs a little bit more strategy and promotion. I think also to an extent it reflects a time lag. We did not really kick in to research as an important area until about 7/8 years ago when we decided to establish a research and commercialisation office.....so it kicked in to research as an area where the Uni said we need to drive it as opposed to be responsive...and it kicked in to KT 12 months ago when it was decided we need to drive it rather than be responsive to it.”(R7)

From Managerial to Staff Commitment

It has already been established that in order to support the implementation of the university’s research and commercialisation strategy, the university established a RCD unit in 2000. Such moves were not uncommon in the late 1990s as Shefc provided incentives to do so through the professionalisation of commercialisation grant. These incentives reflect efforts to make universities more entrepreneurial and commercially-minded (Slaughter and Leslie, 1997; Clark, 1998). While I have already given a brief outline of the evolution of the name of this unit, I would like to expand on this with analysis of a seminar to promote KT, held in February 2007, as it captures the scale of the gap between the managerial and academic understandings of KT, and suggests varying levels of commitment to the KT project.

Seminar to Promote Knowledge Transfer

The seminar in question was one of five lunchtime seminars held in a single week to mark the re-branding of the department for innovation and research services. It was attended by six faculty members and four members of the RIS team. I was struck by the low numbers attending, but was advised by a member of the RIS team that there had been some fifty people⁷⁸ in attendance during the seminar series up to that point. Each attendant received a glossy pack of information, which included a copy of the university’s research strategy, a brochure explaining RIS activities, copies of slides

⁷⁸ I am unaware whether these were all different people or some attending multiple events.

to be presented at the workshop, and separate leaflets on intellectual property and knowledge transfer partnerships (KTPs). In an introduction to the presentations and discussion, a brief explanation of the week's events was given, as was a rationale for the change in the name of the support unit. Participants were told that the University and newly constituted RIS wished to move from what I interpreted as a "know-what" to a "know-how" approach, which was expressed by one of the presenters as "*an innovation-driven approach that focused on helping organizations to think about how things could be done better.*"

The first presentation was given by the Commercial Manager (CO). This was significant in itself as it reflected the predominant commercial orientation of this unit and focus on outcome as opposed to outreach KT (Cullen, 2003). The topics to be covered were: "Intellectual Property Issues"; "Commercialisation Routes to Market"; and "Basic Business Plans". The focus of these topics was heavily on technology transfer, a point reinforced by information given that over two thirds of all business plans presented to RIS were technology based. The second presentation was given by the Knowledge Transfer Manager (KTM), with items on the agenda covering KTPs, and the Scottish Enterprise SCoRe and SEEKIT programmes (which are primarily science and technology-oriented schemes). The obvious focus on technology transfer was accompanied by a clear commercial focus in the presentations, and a predominance of business-oriented language in both presentations.

For example, the presentations were filled with references to "customers", "taking your idea to market", "ask what your unique selling point is", "what is the market size", "business plan", "return on investment", "creating your own brand". In answering questions related to barriers in the way of greater realisation of knowledge transfer in the university, participants were told that business plans presented were:

"...more like an essay than a business plan, arguing why I should get the money ahead of someone else.... I've seen some business plans go the Executive Office that did not come to us and they were more like an academic paper ...In future we will put the emphasis on investment, because investment means a return and not a spend. The University will look at future proposals in the same way that an investor would, using the same processes." (R1)

This brief exchange presents in somewhat stereotypical form the gulf between managerial and academic orientations. For example, from an RIS perspective, spending is thought of as an investment, and the university is aiming to apply private sector criteria to bids for internal and external funds. To illustrate this point further, a representative of RIS made reference to the recent television programme “Devil’s Den⁷⁹” which conjured up images of people under stress “pitching” themselves and their products to attract financial support. The RIS representative then compared an internal academic bid for university funds with “pitching” to venture capital managers for funding. Judging by the facial expressions of those present, this did not appear to be an attractive prospect to those in attendance.

Representation of the way that academics present funding proposals was in this case expressed in terms of an internal barrier to the university realising more KT. A member of the RIS team went on to offer other, external reasons for lower than expected KT activity in NewSU. For example, the head of the unit stated that many Scottish Enterprise programmes were targeted at improving collaboration between HEIs and SMEs but that:

“Ninety two percent of Scottish companies are SMEs and 70% are family-owned, the majority of which have no contact with HEIs. SCoRe and SEEKIT attempt to bridge this gap, but we are being pushed to work with constituents who have no interest in working with HEIs in the first place and that makes it extra difficult.”(R1)

Operationalisation of KT inside the Business School (BS)

The Business School (BS) is one of eight schools in the University, and since 2002 went through a review and restructuring process, driven by a strong perception of the need to change in order to realize the 2010 vision. With regard to the knowledge transfer agenda, the associate dean of research and knowledge transfer (ADRKT) put forward proposals on a KT strategy to the BS Board in a memorandum of March 19th 2003. The proposals included three main topics. The first was the issue of defining what the BS understood by the terms research, knowledge transfer, and advanced scholarship; the second addressed the issue of staff development needs required to

⁷⁹ This television programme involved people with business ideas being given 30 seconds to present their idea to a panel of successful financiers.

help to deliver research and knowledge transfer objectives; and the third ended with recommendations which had been “unanimously accepted” by the NewSU business school senior management team one week earlier.

Attempts to Differentiate Research and Knowledge Transfer

Senior managers attempted to establish a clear distinction between research and knowledge transfer by adopting earlier definitions produced by University Senate, as shown in Table 8.

Table 8: University Definitions of Research and Knowledge Transfer

Senate / BS Research Definition	Senate / BS KT Definition
<ul style="list-style-type: none"> a) Fully refereed research publications (journal/conferences) b) Research chapters in edited collections c) Monographs d) Artefacts e) Graduations (Masters and Doctorates) f) Competitive research income g) Other research income h) Other research publications i) Research achievements j) Research standing (invitations; international/national visibility and standing; industrial collaboration and involvement) 	<ul style="list-style-type: none"> a) Evaluation research income b) Reports to clients on evaluation research c) Consultancy income d) CPD courses delivered e) Master classes given f) Disclosure meetings g) License, lease and equity agreement h) Royalty income i) Sale of equity j) Patents k) Spin-outs l) Start-ups m) Contract research income n) Teaching company schemes (now KTPs)

Source: Author’s compilation from NewSU documents

This attempt to differentiate research from KT raises a number of fundamental issues in regard to the translation of KT policy in to practice, and in particular what it is that differentiates ‘research’ from ‘KT’. For example, in two cases it seems as if it is the

addition of the word “income” after certain terms (e.g. evaluation research income; contract research income) that converts ‘research’ in to ‘knowledge transfer’. However, the fact that “competitive research income” is classified as ‘research’ and not ‘KT’ renders such an interpretation invalid, as does the classification “other research income” simply as research. While an attempt was made to make KT more ‘operational’, the translation left much ambiguity, leaving it very much up to academics to “translate the translation”.

Staff Development Issues

In terms of staff development needs to progress the KT strategy, the business school proposal was for:

“HOD⁸⁰s to review KT opportunities at Divisional level and identify a lead individual for such activity and report through the Dean to SMT by end-April 2003. The ADRKT to work with these individuals to identify a programme of staff development activity that is tailored to Divisional/cross/divisional needs. We can then negotiate with the RCDO for a bespoke programme of development events in session 2003/04. The divisional KT nominee (with HoD support) would need to assure the attendance / participation of nominated staff at such events.” (Internal memo, March 19th 2003)

The above NewSU BS statement reflects a top-down attempt to cascade university policy in to Schools, and then further down to Divisions and individuals. I now give selected examples of this cascading process in order to build up a picture of how the university as an institution attempted to operationalise and implement its knowledge transfer strategy.

Cascading the University KT Strategy: Proposals for Change

The key thrust of knowledge transfer implementation inside the business school was linked to proposals to radically restructure the business school. Proposals to do so arose from a review of the business school and were presented to the NewSU BS Board on July 4th 2005 (NewSU BSB/04/34/1). Three recommendations were made, two of which explicitly addressed the knowledge transfer agenda. The first of these related to the establishment of a NewSU BS Development Unit responsible amongst other things for international collaborations and partnerships, NewSU BS marketing

⁸⁰ HODs refers to Heads of Divisions

and web development, business liaison and marketing of KT services. The second, a radical change in the organisation of the business school, involved what was termed a reorientation to professional fields and the practitioner world. This involved:

“A restructuring of academic staff from the current 8 Divisions into 7 alternative Subject Groups that reflect contemporary themes, professional fields and multi-disciplinary contexts. One of the key premises of this proposal is that theme-based structures match more accurately the structures and challenges of contemporary business organizations and this is borne out in much of the literature in the field. Many top schools in both Europe and the US have adopted such structures as they seek to develop communities who are able to add value to the practitioner world (indeed Henley College announced a theme-based re-structuring at the end of June).” (Internal memo July 7th 2005)

The implementation of the knowledge transfer agenda in the business school is striking in the way that it attempted to persuade business school academics of the need to change the way that they think about knowledge in their cognate fields. The thrust of the proposed restructuring was to move from single discipline-based divisions organized around business disciplines such as accounting and finance, economics, marketing, management and human resources, to what were called multi-disciplinary thematic groupings such as “strategy and leadership”, “innovation, creativity and entrepreneurship” ,“knowledge, risk and decision analysis”, and “change and management learning”. The proposed changes were not only justified on the grounds of financial need, but also by explicit reference to academic literature (e.g. Tranfield and Starkey, 1998; Starkey and Madan, 2001; Huff and Huff, 2001) that argues the case for business schools to be more responsive to professional and practitioner needs and to be more relevant:

“One of the key aims of the re-configuration is to position NewSU BS in a more relevant and effective way against the University’s 2010 Vision while providing the foundation for developing a more community-driven and practitioner-focused knowledge production and dissemination School.”(Internal memo July 7th 2005)

The use of academic arguments⁸¹ to support the proposed changes can be interpreted as an attempt to legitimise managerially-driven changes with academic language.

⁸¹ By academic arguments I mean the references made by the proposers of change to management and business thought leaders writers with academic credentials writing in mainstream academic publications.

Relaunching the Business School as a Mode 2 School

The proposals to restructure the business school were formally launched at a two-day conference of all business school staff in September 2005, the first time in the history of the business school that all members had gathered together. The conference was organized in a business-like manner and was held in a well-known city centre venue. There was a buzz in the reception area as staff registered and exchanged impressions (a mixture of anticipation, anxiety, and scepticism) over coffee. Over the summer, staff had been informed of plans to replace 'Divisions' with 'Subject Groups (SG)' and an associated re-allocation of staff to the new formations. The economics, marketing and management disciplines were most affected by these moves. Academics with strong disciplinary allegiances who had worked together for several years were unhappy about the re-organisation as the move entailed not only a shift in physical location, but a requirement to embark on a mission to create "new knowledges" that were more marketable.

As participants were invited to enter the first plenary session, loud music played in the background. The large screen at the front projected 23 consecutive quotations on a black screen using white letters for effect. The twenty three quotations all related to 'change', and included quotations from famous leaders (Gandhi); philosophers (Proust); politicians (Disraeli); poets (Tennyson) and pop stars (Dylan). The quotations were played in a loop and so repeated several times as people took their places. This scene illustrates the link between change and managerialism that has been discussed at considerable length in the literature. For example, Clark and Newman (1997:38) state:

"The radical progressive terminology of values and visions, of transformation and revolution, of empowerment and liberation, now belongs to Tom Peters and other management experts. The need to 'love change' and 'thrive on chaos' has helped to constitute a tyranny of transformation which has served to legitimate the processes of state restructuring. It is through the power of these discourses of change, we argue, that the unthinkable became the thinkable; the unspeakable became speakable; and things which at first appeared to be terrifying inversions of older certainties came to be a normal part of everyday practice. Management has not just been the means through which change is to be delivered: managerialism as a discourse has energized the very process of change."

When everyone was seated, a twenty minute video recording of an interview with the newly appointed business school Dean was played, presenting challenges that the business school faced and the rationale for a move to create a “Mode2 Business School”. Staff were surprised by the ‘managed’ style of the event, and commented on the business-oriented language used in the video. There were a number of words used repeatedly during the video presentation. “Mode2” was repeated many times, as was the theme of change that greeted participants. The words, “business”, “clients” “consultancy”, “customers”, “profit” further reflected marketisation and enterprise discourses that I highlighted in earlier analysis of university documents.

The Dean pronounced:

“We have one of the most positive agendas that you could possibly imagine for a business school. If you wanted to look at raw indicators of success we would see a big change in the balance of our current portfolio of work. We would see a change from undergraduate towards postgraduate. We would see a change from Shefc-funded programmes to non-Shefc funded programmes. We would see a number of major consultancy contracts coming through the door. We would see very satisfied customers walking out of the door and coming back for more business. We would see a range of business clients looking to NewSU BS as their first port of call for business services across research, training and education, from taught postgraduate programmes, to CPD programmes to one-off research projects to major interventionist consultancy projects, to major facilitatory consultancy projects. I think that in five years we should aim to be the first service provider for many, many regional businesses in this market....I would want to see growth in revenues; growth in profit; a major increase in services....”

This pronouncement of the future state of the business school was both business-like and managerial. The preamble to the need for change was legitimated through something resembling what Clark and Newman (1997: 40) call a familiar structure of narratives for change: “*I see change as normal...The World has changed, Britain has changed...the Sector has changed...We must change.*” The outcomes of the proposed changes and the “indicators of success” reflect a managerial performance orientation, as does the description of the institution as a “service provider” and the outcomes of “growth in revenues”, “growth in profit”. The desired shift in the portfolio of activities reflects a strong commercial, income-generating intent, focusing as it does on non-Shefc funding, postgraduate programmes, and different types of consultancy projects.

Following the video, a team of external consultant/facilitators talked everyone through the two-day schedule, which was organized as a series of break-out groups, brainstorming sessions and plenary sessions. The majority of staff participated in the event out of a sense of duty, and I felt that the proceedings were characterised by a mood of considerable scepticism. Staff were regularly invited to a “Big-Brother⁸²-like” video room to share their thoughts on how they felt about the event. Some went along with this and shared their views, but many declined the invitation, a sign of indifference to proceedings, of hostility, or even fear. A video of selected snippets was shown at the end of the conference in the form of talking heads, giving brief statements of how participants felt about the conference. These were largely positive statements, which I felt were selected in an attempt to motivate what seemed unwilling participants.

From Divisions to Subject Groups

The reconfiguration of business school structures from divisions in to thematic subject groups was accompanied by a reallocation of academics, and an attempt to separate academic and management functions. This resulted in the formation of a new “Academic Leadership Team” (ALT). However, this was only new in name as the former heads of disciplinary Divisions took these positions without a challenge. The reallocation of academics from disciplinary divisions to theme-based subject groups was carried out by senior management on the basis of where they saw academics’ expertise ‘fitting’ in to the various subject group themes. This led to the break up of disciplinary formations, and in the case of the economists, to significant protest. They felt that as a dispersed group they would lose the critical mass needed to pursue meaningful scholarship in the economics discipline, and that they would lose external credibility as economists if they did not have a formal economics department or division.

⁸² I make reference to “Big Brother” from the reality television show.

Clash of Managerial and Academic Values

The implementation of business school restructuring focused on commercial aspects of knowledge transfer that promised to “*create a new signature around the Mode2 way of doing things*” (Dean). However the positive messages from the Dean and his team of external consultants was in stark contrast to opposition from academics. Academics said that while they welcomed the aim of increasing the business school’s links with outside stakeholders, they objected to the way in which this was done, claiming that insufficient consultation had taken place, and that there was no need to change structures in the proposed way in order to achieve the stated aims. Academic staff objections to the proposals were so strong that they led to the intervention of academic trade unions. The basis for the objections were laid out in an e-mail communication of October 20th 2005 to all members of CBS, as follows:

“Union members are very concerned that the University has not evaluated either the rationale or the wider implications of the radical restructuring of NewSU BS in accordance with good governance practice and strategic direction of the university. We seek a panel, independent of NewSU BS, chaired by a Member of Court with membership drawn from across the rest of the University (including Union representatives) to consider and report to Senate on the following:

- 1. The appropriateness of consultations with NewSU BS staff on restructuring, given the Senate instruction of 17th December.*
- 2. The appropriateness of the rationale contained within the papers and minutes of the NewSU BS Review Group, Senate and NewSU BS School Board.*
- 3. Given the Senate instruction of 17th December, the appropriateness of any rationale disseminated to NewSU BS staff.*
- 4. The appropriateness of the Senate’s decision to delegate consideration of structural change to the School Board.*
- 5. The appropriateness of the Chair of School Board’s subsequent refusal to allow elected members to raise staff concerns about structural change.*
- 6. The views of staff in NewSU BS on the impact of restructuring on inter alia Teaching, Research, Administration, and Knowledge Transfer.”*

The intervention of the unions was the culmination of a prolonged clash of managerial and academic cultures over a restructuring, the success of which was linked to translation and implementation of the knowledge transfer agenda in the business school. It is notable that the unions used language that reflects notions of “collegium” (McNay, 1995:106) and academic freedom in their defence. Objections related not only to the process, but also to the content of KT policy implementation. The request for findings to be reported to University Senate, the major academic

governing organ, emphasises the struggle between managerial (Executive) and academic (Senate) perspectives. Mediated agreement subsequently failed and the dispute resulted in a formal grievance procedure against the University Principal and the Dean of the Business School, signed by 74 academics (of a total of some 180). The grievance was dismissed after due process, reflecting the balance of power with management.

Section 3: Interview Data Analysis, “Street Level” World

In the previous section I presented findings mainly from the “institutional world” translation of KT policy. In this section I add more findings from the “street level world” translation produced from interview data with academics (I have placed one full interview transcript in Appendix 6 to provide readers with a flavour of a full interview). I again used categories from the Chapter Two literature review to direct my analysis, and organise findings from the interview data in to three sections that reflect tensions that I found in the data. These relate to:

- understandings of the purpose of KT in terms of it being a commercial activity or something that is done as a matter of service
- understandings of the institutional response to KT in terms of whether it reflects a managerial or an academic culture
- difficulties in creating a KT-oriented university

However, prior to discussing these tensions, I present findings that illustrate the variety of meanings that academics attached to the term knowledge transfer. The significance of this is in the uncertainty that it created in the minds of academics as to what knowledge transfer means and what constitutes KT activity. It further serves to provide a contrast between the institutional meanings attached to KT as discussed in the previous section, and ‘street level world’ meanings.

Different Understandings of Knowledge Transfer

Interviews with academics revealed a wide range of meanings attached to knowledge transfer and association with a variety of academic tasks. Informants associated knowledge transfer with undergraduate teaching, postgraduate teaching, research,

applied research, the publication of articles, consultancy and the delivery of continuous professional development courses. This broad understanding of KT contrasted sharply with the narrower one that was fore-grounded in NewSU institutional documents. It is likely to influence academics' understandings of whether they have experience of KT, whether they are engaged in it, how well they are doing it, and whether they should be doing it at all. The confusion over the content of knowledge transfer activity is captured in the following two statements from academic managers:

“Well, this first thing about KT is what does it actually mean and how do you categorise it? There seems to be a blurring of a line, clearly defining what research is and what KT is across the University. And secondly, people therefore being unclear about what KT activity is and how they can contribute to it at an individual level or a subject level, or at a divisional level or at a school level.” (R5)

and

“I think that the problem with doing better in KT is about getting a handle on what it is basically, and in order to make statements about whether you're doing good, bad or indifferent in the sphere of KT you need to be clear about what you're talking about.” (R4)

This ambiguity permeated most interviews and I consider it to be both a very important contextual factor and an important finding in itself. It suggests a misplaced taken-for-granted view on the part of policy makers in both government and universities that activities that constitute knowledge transfer are both universally understood and accepted. The self-evident nature of KT in the eyes of policy-makers and institutional managers overlooks contradictory pressures (and associated incentives) coming, for example, from the research assessment exercise which privileges particular forms of knowledge and research (McNay, 1997b, 2003). As one academic said:

“For many people research is about the RAE, so it's about academic outputs, articles in journals and there has been a lack of effort focused on that further dissemination {in terms of knowledge transfer⁸³}. ” (R3)

Another respondent was quick to point out that *“RAE money is ten times what you can get from the KT grant and so what would you do?”*(R1). By failing to address

⁸³ I am interpreting that the informant referred to dissemination in the sense of transferring findings.

such contradictory pressures, policy makers and institutional managers are arguably asking academics themselves to resolve inherent tensions in this policy field that they do not wish to address themselves. This exacerbates the lack of clarity about KT and puts considerable obstacles in the way of implementation.

The interviews, reflecting discussion in the previous chapter on the institution's origins as a college and central institution, confirmed a strong institutional association with teaching, primarily at undergraduate level, as its core activity:

"We get the majority of our money from undergraduate students, increasingly from postgraduate students, and very little coming from research and KT."(R7)

The academics interviewed saw teaching as an important knowledge transfer activity as they prepared undergraduates for future careers and work. The view that teaching is a key vehicle for knowledge transfer is one shared by Universities Scotland, who in a document entitled "The Knowledge Society" state:

"Facilitating knowledge transfer for the benefit of the Scottish Economy. The most important part of this is effected by the production of graduates, who carry knowledge with them into their careers."(Universities Scotland, 2003:3)

While NewSU today has a broad portfolio of activities that includes postgraduate teaching, research, consultancy and continuous professional development, it would appear that undergraduate teaching still dominates staffs' understanding of NewSU as a HE institution, and by extension, possibly its understanding and translation of knowledge transfer. This may be explained in terms of the evolution of the university from a teaching-led institution, to one attempting to develop competencies in other areas. This arguably resembles an institutional process of 'grafting' research and knowledge transfer activity on to teaching with the result that 'non-core activities' such as KT are more or less visible to staff depending on their backgrounds and experience.

The Purpose of Knowledge Transfer (Commercial versus Service)

Closely associated with the meanings attached to KT, are the purposes with which academics associated knowledge transfer as an activity. Contradictions in knowledge transfer are illustrated by two difficult-to-reconcile beliefs regarding the

purpose of knowledge transfer in NewSU: those of KT as simply an income-generating activity; and those associated with KT as making a contribution to the community. These can be read with reference to discussion about the idea and purpose of the university in Chapter Two.

KT as Commercial Activity

One cluster of interpretations pointed to the purpose of university knowledge transfer very much as an externally-driven commercialisation activity, pursued by universities out of a necessity to generate income to survive, and to satisfy different stakeholder demands. By stakeholders I am referring to external stakeholders such as the Scottish Executive (SE) and the Scottish Funding Council (SFC), and internal stakeholders such as the management of the university, the University Court, the University Executive and senior management. One respondent put the commercial imperative facing NewSU in to the wider context of higher education reforms:

“The government has a key agenda of reducing university reliance on government funding. They want universities to earn more money from extra income generation, whether that is postgraduate or international students. The government is pushing in a big way and supporting universities to engage in other non-governmental funded activities, knowledge transfer being the banner for this.” (R5)

The sense of being steered in to commercially-orientated activity by government is reflected in the following two statements from senior academic managers:

“The government can’t afford universities and is therefore trying to impress on them the need to have additional income streams.” (R1)

“I think that it {KT} is viewed very importantly within the university, partly because the university has external performance standards to meet in terms of generation of non-Shefc income and so in that sense I think that KT is taken very seriously in the University.” (R4)

Interview data suggest that the link between income generation and knowledge transfer is more readily accepted by managers⁸⁴ than academic staff. This perhaps reflects greater pressure on managers to implement official policy wholesale, and the ability of academics to resist such official views of KT as they still retain a degree of academic autonomy, and an ability to ‘manage’ policy very much as “street level

⁸⁴ It should be remembered that some managers are also academics.

bureaucrats” (Lipsky, 1980). When discussing knowledge transfer as a commercial activity, managers and academics sometimes seemed to talk past each other as reflected in the following clusters of statements. From a managerial viewpoint:

“The Principal sees it {KT} as money. If we earn more money we can be more independent of what the government says. The Principal asks “Has there been a change in the behaviour in NewSU in response to the KT metrics?” (R1)

“At the Executive level they see KT as being vitally important because there is potential for the University to receive some reward for the dissemination of knowledge. I think that there is a view at the highest level that perhaps KT can contribute to an additional stream of income for the University.” (R3)

In contrast, academics viewed attempts to commercialise their work with caution and reluctance. On the one hand they objected strongly to notions of the university as a business; and on the other hand they saw the purpose of research activity as being for learning purposes, and not income-generation:

“Knowledge transfer makes sense, but I am antagonistic to KT on a market basis. There may be a market where commercial organisations can make money, but I don’t believe that universities should operate in this way... Of course, it needs to be financially managed. But it is not about making money but to resource what the university is there to do.”(R12)

“At the Executive level they see KT as being vitally important because there is potential for the University to receive some reward for the dissemination of knowledge. If you come to lower levels in the organisation structure, views are much more mixed because KT smacks of commercialisation. For some people their interest is in research for the benefit of their teaching rather than a commercial end result.” (R3)

Knowledge Transfer as Service

While the data suggest that managerial and academic views on knowledge transfer are at odds with each other when understood in a commercial sense, these differences are less stark when knowledge transfer is understood and discussed in terms of an activity that can benefit the economy, society and academics’ professional work. The data indicate a high awareness amongst academic staff of the role that universities can potentially play in economic and social development, with several respondents elaborating on this in the context of international competition and the ‘knowledge economy’. The views of several academics acknowledged the increasing importance of knowledge as a competitive tool, and the importance of

businesses and managers having ready access to different types of university research to enable them to compete internationally. Commenting on drivers of knowledge transfer policy in the university one respondent said:

“The key drivers are focussed on developing the economy, particularly the Scottish economy. The education sector that we have has a key economic development role in transferring what we know to people out there who apparently don’t know.”(R2)

Informants saw the government putting increasing emphasis on knowledge that could be exploited for some practical benefit, and academics were aware of policy-makers’ attempts to focus the efforts of universities on specific areas and problems in order to contribute to innovation and to extract economic, as well as academic value from universities. For example, this was expressed by one respondent in terms of:

“What the government wants to see is some sort of output from Universities that benefits the economy and society.” (R3)

Another respondent put it in the following way:

“The capacity to compete, given the pace of technological innovation and change, really depends on developing the knowledge economy, which really boils down to an economic environment in which organisations have easy access to basic research results, strategic research results and applied research results in a way that allows them to very rapidly develop and innovate new products and processes.” (R8)

To enable this to happen respondents felt that the university needed greater interaction with organisations outside the university in order to share, transfer and make better use of knowledge that was available inside universities:

“The government sees universities as knowledge generators and it’s becoming much more aware that if we become a knowledge economy we should try to get greater connection between those knowledge generators and those who can actually derive some economic and social benefit from it, which is industry and practice.” (R7)

The view that knowledge transfer in the university should be understood in terms of a public service, involving interaction with external, non-academic organisations emerged in several of the interviews. In discussing knowledge transfer as something that was part of an academic’s job, one respondent strongly supported efforts to develop KT activity further, but put the emphasis on professional and educational (as opposed to other) benefits:

“Learning is the central activity one way or another. I am interested in learning. KT is about conversations between institutions, across the boundaries of institutions, about our role in the wider community, and for allowing and facilitating youngsters to move from “lurking” to active participation. In sum everyone must be active outside the institution.” (R12)

This respondent went on to cite the case of mentoring student placements as a good example of productive knowledge transfer, and talked of this in terms of the personal benefits gained from interaction with the ‘real world’:

“We should have more mutually beneficial relationships with real-world communities. For example I learn a lot from Business Studies placements for students. I have twenty three students and I learn a lot from these real worlds as twenty to twenty five per cent of these students end up doing their dissertations in these companies and we supervise.” (R12)

The value of interaction was also discussed in terms of breaking down barriers between academics and non-academics, between theory and practice, and in terms of enhancing and developing new ways of doing things. Some responses expressed this in terms of interaction enabling academics to keep up to date with latest developments in their field and applying knowledge in practice; as well as enabling partners in practice and policy to appreciate how academics look at things:

“There are benefits to academics in that they have a better appreciation of activity out-with their higher education institution if they engage with KT. They know what is happening in the outside world because of their interactions, it creates interactions, and it’s a two-way process. Academics have an appreciation of the world outside higher education and the outside world has a greater appreciation of what academics do and what they can do. I think that it keeps people up to date. It’s particularly important in areas of technology transfer and also in areas like business and management. It’s the reality of management.”(R3)

Income-generation versus Service

In sum, interview data suggest two main purposes of knowledge transfer. The first is knowledge transfer as a commercial activity, and the second knowledge transfer as a service to the community, the economy and society. When informants discussed and framed knowledge transfer as a commercial activity, it did not seem to be with any enthusiasm. This is partly because they felt that they were being steered in this direction, and partly because they felt that the pursuit of income was neither the university’s main function, nor that income generation was their main job.

Objections were less pronounced in cases where it was felt that such activity allowed the university to pursue what were considered to be academic activities such as mainstream teaching and research. In contrast, informants spoke with greater enthusiasm when framing knowledge transfer as a means of making a contribution to the community, the economy or society. While these findings may suggest that a key issue with the purpose of knowledge transfer is whether it is income-generating or not, this is not so clear cut, as the following statement from one manager suggests:

“I see it {KT} as a continuum. For example one can do income generation without knowledge transfer. Some KT is transformational but involves no income generation. Research Universities see it as technology transfer. They also think that if you do not do research then you cannot do KT. However NewSU has a different history and a different position.”(R1)

Institutional Response (Managerialism versus academic culture)

The findings suggest that the institutional (managers’) response to knowledge transfer policy differs significantly from the response of academics, reflecting a considerable contradiction in the policy and creating barriers to implementation. NewSU institutional KT policy seemed to follow two different logics. One logic locates the university in a competitive higher education environment and sees the institution using KT policy as a means of differentiating itself from other Scottish universities as part of its strategy:

“I think that the newer Universities probably embrace the concept of KT more overtly and enthusiastically than the older Universities....It is my impression that the older Universities are much more confident that their research base is strong and for the new universities there is generally less confidence in the research base so there is a tendency to view KT as something that can be used to overcome perceived weaknesses on the research side; maybe we’re not good at attracting lots of grants from the research councils but we can make up for that by being more entrepreneurial and more outward looking and more flexible in terms of consultancy type work so we can overcome some of our research deficiencies by generating income in this other way. I think that this is generally how the newer Universities would see themselves.” (R4)

“This university looks at KT as a mechanism for differentiating ourselves from the ancients.” (R7)

A second logic is more overtly commercially oriented and one in which institutional KT policy is seen as means of generating a new income stream that has the potential to ‘buy’ the university greater freedom from government steering. This perspective

suggests that government steering for universities to engage in more research and knowledge transfer work is influencing academics' views on non-teaching activities:

“This university and the new Universities in particular, have also come to recognise that their income streams are fairly narrowly defined. We get the majority of our money from undergraduate students, increasingly from postgraduate students, and very little coming from research and KT.”(R7)

The strategic case for the pursuit of knowledge transfer activity therefore seems to be heavily influenced by a managerial (commercial) imperative. However, it was justified on the grounds that the knowledge transfer agenda constituted a good ‘fit’ with the institution’s history as a modern, vocationally-oriented higher education institution, to the extent that knowledge transfer was becoming a central plank of the institution’s strategy.

“My sense in NewSU is that the commitment, certainly at Executive level, is actually high. I think that NewSU, as a post-1992 institution has been struggling to find a distinct place for itself in the Scottish higher education spectrum. I think that the current Principal and the predecessor envisaged that this could be a very important, defining route for this Institution, partly because it cut very much with the high level of vocationality that was claimed to characterise our activities as an Institution.” (R8)

For the institution, knowledge transfer was becoming not just an activity, but also a part of the institution’s emerging philosophy, a key pillar of a strategy that aimed to embed NewSU more clearly in its regional context, very much in line with Scottish Funding Council policy for higher education institutions:

“So the university has come to the view that knowledge transfer should be a key sphere of our activity. We should be seen to be inextricably linked to industry and practice in the Region, while not limiting it to the Region.” (R7)

All respondents were aware of the importance attached to KT in NewSU, and how managers were situating it at the heart of the university strategy. This awareness suggests effectiveness in top-down efforts to disseminate the KT message, without necessarily achieving ‘buy-in’. It also suggests that KT is part of a process of change, at least as far as perceptions go from the outside.

“How important is KT in NewSU in its mission, vision? Oh yes! I would say so. That is our business; it’s another way I suppose of describing what we do.” (R2)

“The NewSU strategy has been published. The idea is that we make new professorial appointments with a focus on outreach. The idea is to create a new perception of the University.” (R1)

However, the strategic significance of knowledge transfer to NewSU, while widely quoted in university documents, and at the heart of university policy and managerial appointments, did not seem to be matched in terms of performance and output, as expressed by one manager below.

“I would say that KT’s importance is increasing. I would think that strategically it is one of the key objectives but I don’t think that this strategic importance is reflected yet in terms of output/performance at academic unit level.”(R2)

This was not simply the view of a single manager. The views of several academics reinforced the perception of a gap between the university management’s KT strategy and KT, if we are to exclude teaching from the KT definition, as reflected in the following statement:

“We have seen staff numbers shrink and student numbers increase. If you look at teaching, research and knowledge transfer, the teaching is there and must be done. We are loath to give up research. The one to go will be knowledge transfer, consultancy.”(R6)

However such statements should not be interpreted to mean that business school academics are not interested, or incapable of engaging, in knowledge transfer activity. Rather, the evidence suggests that they are more likely to object to KT activity as a commercial activity; and they may find it more difficult if they are working in a knowledge field where transfer is considered problematic because of the nature of that knowledge. The possibility of business knowledge being more difficult to transfer than scientific or engineering knowledge was put in the following way by one informant:

“ I guess that if you’re looking at it in a University environment it would depend very much on the discipline you look at, so that KT in engineering and biological sciences is perhaps a bit clearer to define, to pinpoint, as it will be based around the transfer of a new prototype engine or something in to industry, or it may be the transfer of some knowledge or process, of some biological process of cell cultures or whatever. But business and management knowledge is different.” (R5)

One academic from accounting argued that even in the business school, some disciplinary areas had advantages over others because of the nature of the discipline, and the close attachment to professional groups:

“We all have different strengths. In accounting we have links with professional accountancy groups. Not all disciplines in the business school have this opportunity.”(R14)

Emerging Tensions

It would therefore seem that interview data are surfacing a number of tensions. On the one hand there are what can be called commercial-academic tensions. On the other hand there seem to be some serious questions about whether all types of knowledge are amenable to transfer. However in addition to this there is also a need to signal the importance of different institutional positions and perceptions conditioned by the nature of ‘real life’ academic work as experienced by informants. The findings suggest a gap between a managerial discourse of being ‘excellent’ in a whole range of academic activities, and the ‘reality’ of academic work. The latter suggests that academics cannot be good at everything and that if academics want to be excellent they need to specialise and focus, and not be asked (or even forced) to do everything. The following statements capture the essence of this gap. For example, in talking about the emergence of knowledge transfer on the strategic agenda of the university, one academic manager said:

“In this institution, having evolved from the Poly level, many of the staff saw themselves as teachers...and this is a little sensitive...many staff came in to teach and therefore understood the organisation to be an organisation that is about undergrad education. Everything reflected that, it was not just the staff. Our marketing was targeted to that, our income came from that, but the University then began to recognise of course you need to do research and so the growth of research began. We have this nice growth of research, then subsequently it was then that we began to get this idea of knowledge transfer, so you have these different streams growing, undergrad, postgrad, we should be doing more research, so more and more people began doing research. Now we need to do some KT. Now there is some connectivity in some areas, but in others there isn’t, and what the University has decided, as these areas have grown almost independently, grown at different times and paces, what we need to do now is consolidate those activities to make something that is sensible in business terms.” (R12)

The view given above raises at least two issues, one related to the range of activities carried out by academics, and one related to the need for putting forward something

“...that is sensible in business terms”(R12). One academic expressed strong disagreement with the latter point in the following way:

“For a while now we have been prone to a managerialist approach. It is not appropriate to talk of the business case here in a university.... There are various trends in which ideology comes to undermine the university as a generator and disseminator of knowledge. For universities it is inappropriate to be treated on a par with other knowledge producers. They say knowledge is of no use unless the transfer can take place.”(R12)

While the managerial view sees the wide range of activities carried out by academics as a valuable resource that can be leveraged if managed correctly, academics see this differently, even standing in the way of more and better knowledge transfer. For example, in an attempt to emphasise the difference between universities and other knowledge producers, many of which specialise, one academic said:

“We are subject to constraints. It’s not as though we are a one-club operation here at the University. Universities do lots of different things and we’re expected to perform at all levels on all the different indicators, but we can’t, there is an issue of priorities.”(R2)

The issue of priorities can perhaps be linked to the evolution of the university from an undergraduate teaching institution, to a university in the process of developing research and knowledge capabilities. Teaching is identified as the core activity of the university, and a time-consuming activity that leaves little time to pursue other activities, and one that engenders different skills to those required to develop other forms of knowledge transfer:

“If we look at the core business of the University it is educating undergraduates and postgraduates and so the amount of time and space left for KT from the normal course of events is not great, and our research activity, while laudable, is not perhaps at such the cutting edge that we’re going to have an easy ride to make the leap from scientific/social research to commercially applicable products that we can sell in the outside world.”(R2)

From the perspective of academics, what emerged was the sense of a vicious circle. As the range of activities grew, each with a slightly different set of requirements, and as the portfolio of activities increased, so did the need to prioritise:

“One of the constraints is timing, other commitments, there’s teaching and there are other things that need doing, programme management, year tutor, and admissions.”(R11)

The dangers of this were acknowledged by both managers and academics as different degrees of academic autonomy were exercised by academics against managerial demands:

“The teachers often think why do I want to do KT as that is a hell of a lot of extra work and researchers think that if I do KT I can’t get a publication out, I can’t get a journal out, I can’t make that application for a grant so what the hell am I doing that for?” (R7)

“NewSU’s core product is teaching, and its output is graduates, this is our core competence. The question is “are research and KT non-core?” Not doing teaching is not an option. What you do is determined by where you can get the money from, whether from teaching, research, KT etc..” (R1)

The sense of frustration was quite evident:

“It’s difficult to do everything. They don’t allow us to specialise. It’s broad brush and difficult to develop expertise as we need to do it all.”(R13)

And this raises other sorts of tensions, as some management views reflected a university belief that it was possible to do all of these activities simultaneously:

“So we are really in a position to deliver on this kind of rounded University that does teaching, research and KT in a way that industry wants. I use industry in its looser sense, as industry/private/public sector practice.”(R7)

and others acknowledged that not all staff would be either interested or trained to be involved in KT:

“There are different categories of staff: A – those who can do it, will get on with it without support. B – there are those that aspire to do it but have no idea to how go about it so they need support, and C – there is the disinterested majority, and here is the issue of attitude of resentment as the burden shifts from those who do to those that don’t.” (R1)

Creating a KT-oriented University (Structures, action and culture)

While institutional documents provided an indication of how the university was planning engagement with, and translation of KT policy, several academic managers with responsibilities for knowledge transfer were asked to comment further on what the university was doing to encourage the development of KT. It has already been noted from document analysis that the university introduced knowledge transfer in to the titles of a number of people (e.g. Assistant Principal with responsibility for knowledge transfer; Associate Deans for research and knowledge transfer at the level

of different Schools; Divisional coordinators of knowledge transfer). One of these managers explained the appointments with specific KT responsibility in 2004 in the following way, suggesting that KT was in some respects an activity that followed teaching and research, and one that required greater top-down direction and support if it were to develop:

“This {appointment} reflects recognition that this is an important area which needs a little bit more strategy and promotion. I think also to an extent it reflects this time lag. We did not really kick in to research as an important area until about seven or eight years ago when we established a research and commercialisation office, so we kicked in to research as an area when the University said we need to drive it as opposed to be responsive, and we kicked in to KT 12 months ago when it was decided we need to drive it rather than be responsive to it.”(R7)

This statement emphasises a top-down approach to the development of knowledge transfer. Another manager suggested that the appointments added extra weight to the university’s push in the KT area, and served to dispel some of the ambiguity surrounding understanding of knowledge transfer in the university. At the same time, this view identified a need to build as well as to direct:

“These posts, Associate Deans of Research & Knowledge Transfer were created two and a half years ago. We never had posts in the university that had an explicit KT responsibility in a sense elevated in to the title of the post. When you look at the role description, its quite general, “to support and promote”, there is no really well-developed understanding within the university. ...To some extent the Associate Deans that were put in to these posts were told in a way to invent the job for themselves. There was an expectation that they would try and find ways of working with their colleagues. What that really amounts to in almost all cases is supply side: capacity-building, capability-building.”(R8)

An additional part of the capacity building was to be achieved by the establishment of new interdisciplinary centres directed by externally-appointed professors. This was part of the university’s strategy to respond to demands for more relevant and applied knowledge, and designed to mainstream knowledge transfer:

“The idea is that we make new professorial appointments with a focus on outreach. The idea is to create a new perception of the University, it’s political and there are a number of different agendas. The idea is to raise money. University Court, the Principal, the Deans of research and knowledge transfer want to know what the impact of our work is on the economy.”(R1)

“The new Centres have a strategic research remit with KT targets and so they were expected to both raise income but also get involved in partnerships, doing market research, engage with organisations, do CPD activity and other things.” (R8)

The corporate efforts to develop knowledge transfer were further bolstered by the appointment of business development managers in an attempt to promote and sell university products and services. One respondent saw business development managers as a key element in expanding knowledge transfer activity on the grounds that academics were often good at their core activity of teaching or doing research, but had little interaction with non-academic networks making it hard for them to find a market for their knowledge and skills. This was viewed as something needed to fill a gap between academic and practice-related worlds:

“First of all we are putting in place business development managers in each school. The thinking behind that is that in many schools, no, in all schools, there is a variable awareness and knowledge of how to work with industry. So you might have someone with a super knowledge of the latest practices in accountancy or whatever, and how to use IT and so forth, but doesn’t know how to find markets where we can do that outside.” (R7)

This approach seems to convey a view that better management of the university’s knowledge is what is required, and that business tools can be effectively employed for this purpose:

“So the business development managers will help us to find markets and help us to help people who do not know how to do it. The mapping of connections and networks and the linking to the CRM (customer relationship management) software will help us to manage that bit better.”(R7)

While the general thrust of NewSU’s institutional response to translating knowledge transfer policy is characterised by emphasis on structure, and allocating roles, responsibilities and appointing business development managers, it was paradoxically recognised that several KT successes to date had been achieved *without* any of these:

“Where we have been able to grow our knowledge transfer through the efforts of individuals, groups, and so forth, we haven’t actually done it in a structured way. And consequently I don’t think that we have supported those individuals either. So we haven’t supported those individuals who are succeeding, neither have we grown others who perhaps don’t quite know how to do it.”(R7)

Structures versus action and culture

The emphasis on structures to develop knowledge transfer activity, rather than facilitating spontaneous activity that was acknowledged to work, raises questions about organisation culture (the university’s reliance on structures and procedures)

and academic culture (including the use of committees and a preference for consensus to get things done), and whether these are conducive to an activity such as knowledge transfer. Findings suggest that some think not:

“Now I think that culture change is something that is really important. I suspect that there are people in the Executive who think that it is purely a mechanistic process that we need to put in place this, this and this, and that will happen. I, and this is a personal philosophy, think that we need to change culture as well.” (R7)

One of the mechanisms to bring about a culture change more conducive to knowledge transfer activity was a series of events organised by the research and commercial development office (RCDO). This was discussed by one respondent in terms of supply-side development, aimed at enhancing understandings of knowledge transfer, and building capabilities in areas that were considered weak. However the supply-led (top-down) approach was acknowledged to be difficult:

“It’s attitude shifting, it’s organising of workshops, seminars, and training events that alter staff perceptions or raise understanding of what KT issues are and what their capabilities might be and what are, for example, the techniques of engagement or selling or what are the means by which we could engage effectively, and again its an uphill task.”(R8)

A reliance on structures to promote knowledge transfer was seen by many to create a tension between bureaucracy and entrepreneurial activity that stood in the way of greater knowledge transfer activity. One respondent said:

“The University, because it has accountability structures and a committee structure, it’s quite ponderous really. Can you say that is very conducive to entrepreneurial activity?” (R2)

Academics’ perceptions of the institutional approach to knowledge transfer seemed to be that it was more rhetorical rather than action-oriented. Academics seemed to favour less emphasis on structure and more on creating an environment in which academics were enabled to respond in a more flexible manner. Interviewees also suggested that there was little practical guidance on offer from those directing university knowledge transfer policy and institutional constraints embedded in the university’s way of doing things. In terms of implementing knowledge transfer policy, one respondent said:

“Don’t try and look for a structured flowchart of how to go about it. I’m sure the university would love to create one, but we can’t work like that and it is a bit more entrepreneurial, it’s got to be a bit more responsive to emerging leads.” (R9)

Another suggested that irrespective of mechanisms put in place to promote knowledge transfer:

“Academics are very good at putting holes in things. It’s kind of a recipe for not doing very much.”(R2)

While academics acknowledged that the university had attempted to put in place new structures and people to both promote and stimulate knowledge transfer, several interviews suggested conflicting perspectives between academics and staff working in RCDO. Such support structures were on several occasions described to be “bureaucratic”, with the cumbersome and risk-averse nature that this word implies. Moreover, procedures required by the university were perceived to be complicated and time-consuming, a factor that some claimed acted as a deterrent to action as funding bids were often subject to quite tight timescales, and yet the process of filling out forms, and then getting the necessary approvals and signatures was complicated.

“I have been in some meetings with the commercialisation people in the past and I know they are trying their best, but we are still caught up in this bureaucracy, which is not easy, the contractual documents are not helpful at all.”(R11)

Another respondent echoed this sentiment, feeling that it was necessary to bend the rules a little and adopt a flexible approach to completing procedures if he were not to jeopardise the chances of winning contracts for external work:

“Getting the forms signed off we had a few hair raising moments. It has taken a long time to get things signed off by the right person, there’s pressure on time to put in a bid. On a couple of projects we’ve said we’ll get the forms signed afterwards, had a gentleman’s agreement with the person we were working with and said ok, we now have to get the forms done, because if we wait for our people to do the forms we could wait until the cows come home.”(R9)

The previous and following statements further suggest a tension between a stated policy of being externally focussed and responsive to the local environment, with what some saw as a ‘permission-giving’ culture in which staff needed to invest a lot of effort to gain approval to undertake activity with outside parties:

“There are a lot of competing interests in the University. If you want to do something, a lot of people say, whoa! wait a minute, we’ve got to think about that. You can’t do that until we’ve had a think about it and maybe we won’t let you do it. We’ve got to get agreement from everybody that you are going to do that.”(R2)

“So we went along and came out the meeting thinking he maybe kind of put us off because it was so bureaucratic and the forms were so unwieldy. We thought do we really want to bother, but we then decided that we would go to the next stage.”(R10)

Summary of Presentation of Findings

It is therefore evident from analysis of findings that the translation of knowledge transfer policy inside NewSU is messy and characterised by a number of tensions. The central one of these is the tension between managerial and academic translations of what knowledge transfer means in the context of the real world of academic work. This and other tensions will be discussed in the following chapter.

Chapter 5: Discussion of Findings

My discussion of findings is structured as inter-related sections that link to the overall aim and objectives of the research. To recap, the aim was to understand how KT policy is understood by institutional managers and academics, and to explore issues arising from the translation and implementation of this policy in to practice. In the process, the objectives were to answer the following questions:

1. How is KT policy understood and translated at an institutional level?
2. How does the university's history affect its interpretation and response to KT?
3. What mechanisms does the university use to implement KT policy?
4. How do academic staff understand KT policy?
5. What are the main issues arising in translation and implementation of KT policy?

In the first section I contextualise my discussion of the findings with elaboration of the discursive approach that I outlined in my methodology chapter, and provide selected references to aspects of Scottish knowledge transfer policy discourse reported by other researchers. These serve to explain the interpretations that I make of the findings. In the second section I focus on the way in which the multiple translations of knowledge transfer policy presented in the findings (what I call triple translation) reflect essential and fundamental differences in meaning being expressed by KT policy on the one hand and academic practice on the other. To do this I draw on some of the major themes from my literature review in Chapter 2, and in particular on issues of power and authority, autonomy and managerialism. This section addresses questions 1-4 listed above. In the third section I discuss practical problems with reference to all five of the questions set out above, before concluding with thoughts on how the main issues from section three can be addressed.

Section 1: Context for interpretation of findings: elaboration of discursive approach

In order to discuss the findings I first return to the question of what KT policy is asking universities to do and how the policy world is justifying this. To do so I found it useful to draw on the work of Stone (1988; 1989; 2002), who illustrates how

people understand policy problems through the medium of policy narratives, of which she identifies two main types. The first of these is a narrative that focuses on decline or crisis, and the second on human helplessness and the need for social control (Stone, 1989). Analyses of KT policy discourse by Jones (2005a; 2007) Ozga (2006) and Ozga and Jones (2006) point to a narrative of the first type. For example, interpreting Scottish KT policy Jones (2007:102) claims that:

“At times the tone is one of considerable urgency, positing an external threat to the Scottish economy. In its less dramatic forms, however, the imperatives theme tends to employ the language of needs, demands, and necessities. The Scottish economy is cast as one amongst many competitors in the global arena, which must strive to take full advantage of its knowledge.”

Construction of a narrative of decline and crisis can further be found in Ozga (2006:2) who cites a joint Shefc/Scottish Enterprise document (2002):

“In the context of the decline of manufacturing and heavy industry, knowledge is a key competitive weapon.”

Bearing in mind Goodwin’s view (1996:67) that policy-as-discourse creates both problems *and* solutions, Ozga and Jones’ (2006:2) citation of Tony Blair’s foreword in a 1998 Department of Trade and Industry (DTI) document on building a knowledge-driven economy can be interpreted as evidence of a narrative describing a crisis situation in the form of change, and a ‘solution’ in the form of being more entrepreneurial and innovative:

“The modern world is swept by change. New technologies emerge constantly, new markets are opening up. There are new competitors but also great new opportunities...This world challenges business to be innovative and creative, to improve performance continuously, to build new alliances and new ventures...In government, in business in our universities and throughout society we must do more to foster a new entrepreneurial spirit: equipping ourselves for the long-term, prepared to seize opportunities, committed to constant innovation and improved performance.” (DTI, 1998, i)

Jones (2005b, 2007) and Ozga (2006) further suggest that Scottish KT policy is asking Scottish universities to assume a more central role in the construction and development of a knowledge society and economy. This is to be achieved through increased levels of collaboration with stakeholders outside of the higher education sector, notably with policy-makers and business; through an emphasis on “strategic” knowledge, “relevant” knowledge and knowledge that “works”. It is against this

construction of Scottish KT policy and what the discourse demands of universities that I approach discussion of the findings.

Section 2: Triple Translation

The contested nature of translation has resulted in a confused and hampered institutional response that has serious implications for outcomes. Managerially discursive manifestations of KT policy translation are as much, if not more, in evidence than any sense of shared meaning in the institution. Each translation frames and presents KT in a particular way, and when taken in isolation each has its own logic. There are occasions where the meanings given to KT across the levels, while different in language, can be seen to “connect” in terms of meaning to provide a coherent whole. This can be demonstrated by the following statements from staff working on three different organisational levels:

	Table 9: Frames through which KT is viewed
University	<i>“Promoting the regeneration of the Region through the generation and transference of higher skill levels, partnering others in applied research and the commercial development of the regional knowledge base.” (NewSU Website)</i>
Business School	<i>“Create a new signature around the Mode2 way of doing things...One of the key aims of the re-configuration is to position NewSU BS in a more relevant and effective way against the University’s 2010 Vision while providing the foundation for developing a more community-driven and practitioner-focused knowledge production and dissemination School”. (Dean)</i>
Academics	<i>“Learning is the central activity one way or another. I am interested in learning. KT is about conversations between institutions, across the boundaries of institutions, about our role in the wider community, and for allowing and facilitating youngsters to move from “lurking” to active participation. In sum everyone must be active outside the institution”. (R12)</i>

Each of these three translations locates the university inside its wider community, and suggests acceptance across the levels of the important role that NewSU can potentially play in the community. These sentiments are very much in line with KT policy at the macro level. For example, Universities Scotland (2003:1) state:

“We have reached a consensus in Scotland: we have to build our economy on knowledge because we cannot compete on low wages. In recent years this consensus has come to recognise that higher education has a central role to play in taking Scotland forward, and this has put higher education at the heart of economic development policy.”

However, the findings show that such examples of shared meaning are few, and “thick description” (Geertz, 1973) of the translations, especially in relation to each other, shows them to be problematic, revealing significant obstacles to realisation of the policy as it enters and circulates through the organisation. It is not surprising, but by no means inevitable, that what emerged in the analysis were three translations in unproductive tension, rather than a coherent “*meta-translation*” that accommodates understandings throughout the organisation. As discussed in Chapter Three (p.59), interpretations of text are conditioned by what Fairclough (1989; 2001) terms “members’ resources”, which people have in their heads and draw upon when they interpret texts, resources that include values, beliefs and assumptions. The diversity of “members’ resources” at different levels of the organisation can go some way to explaining such differences, as can the fact that the three levels of translation reflect levels in a hierarchy of power and authority. The analysis suggests that within NewSU, the policy did not simply ‘flow’ from the top in a sequential manner, but was ‘pushed’, first of all by senior (career) management at the university level, before being pushed down to Schools (career and academic managers⁸⁵), and then further down to academics in an attempt to operationalise and implement KT policy. Such a sequence follows the path of rational strategic management and is commonly referred to as a “top-down planning” approach (Taylor and Hussey, 1982).

Managerial Translation

At the University level, KT policy was quickly “mainstreamed” in to the vision and used in an attempt to reconstruct the over-arching purpose of NewSU and link it to its historical mission “for the common weal”. The University was to be:

⁸⁵ I will elaborate on the significance of the distinction between career and academic managers later in this chapter.

“focused on exploring and creating opportunities to become Scotland’s most dynamic, confident, innovative and responsive university, working in partnership with all our stakeholders in responding to and creating demand for our learning, research and consultancy services.”(NewSU Annual Report, 2003:6)

The University Executive attempted to operationalise the mission through its strategy and a set of objectives which were to be realised by staff in the different Schools. Management of the business school translated the policy further in to a rationale for restructuring the business school, using the metaphor of a “Mode2 Business School” as a means of articulating how this would be done. My analysis of data did not detect any tensions or difficulties in the translation of KT policy between and within the university and business school management levels. On the contrary the language was very positive on both levels, sprinkled with words such as “entrepreneurial”, “confident”, “innovative”, “responsive”, and conveying an image of a fleet-footed organisation both ready and able to make a major contribution to Scotland’s economy.

I attribute the smooth adoption of KT policy at managerial levels to three factors. The first of these is the culture of the institution, which I showed in Chapter 4 to be amenable to steering from policy-makers since its foundation as a college of technology in 1971, its graduation to being a polytechnic in 1991, and incorporation as a new university in 1993. The second is the managerial culture that stems from NewSU’s origins as a local authority controlled college with weak academic governance structures. The third are the managerial roles of the people at these two organisational levels, the first of which equates to what we might call the “Corporate” level and the second the “Business Unit⁸⁶” level. These factors combine to produce a heavily managerial translation of KT policy, characterised by an extensive and pervasive use of discourse as a method of persuasion, and accompanying frequent use of language associated with managerial, marketisation and enterprising discourses.

⁸⁶ I am using managerial/business terminology here to reflect the managerial orientation of those leading at these levels. The terms “corporate” and “business unit” level, in terms of Becher and Kogan’s (1992:11) model for higher education correspond to “institution” and “basic unit” levels.

Academic Translation

In contrast to the smooth translation of KT policy at managerial levels, the “flow” of KT policy when it filtered down to academics was interrupted and encountered ‘turbulence’. In stark contrast to the aspirational and positive language transmitted through managerial texts, the language used by academics was characterised by confusion, scepticism, and an air of weariness. While things on the surface (managerial discourse) appeared positive, down on the coal-face (academic discourse) matters were decisively less so. This resulted in a clash of discourses that can be understood with reference to Blumer (1969:19) who states that:

“A network or an institution does not function automatically because of some inner dynamics or systems requirements; it functions because people at different points do something, and what they do is a result of how they define the situation in which they are called upon to act.”

The “clash of discourses” revealed a number of key points of difference. One of these stems from different understandings of what KT “is” and the second one is related to the nature of academic work.

Contested understandings of KT and the nature of academic work

The confusion found over the meaning of knowledge transfer inside NewSU confirms findings of other studies (Ozga, 2006; Ozga and Byrne, 2006; Wedgwood, 2006) that have found academics having difficulty either understanding, or associating with, the term. I propose that the root of these difficulties can be found in the ‘working definitions’ of knowledge transfer at different levels in NewSU.

University Level Understanding

The different NewSU definitions of KT presented below in Table 10 are significant both in terms of the way in which they are presented and the content that they cover. For example, at the University level knowledge transfer was presented in terms of a series of discrete knowledge-based activities, most of which are commercially-oriented (note the presence of the word “income” in several categories), and many of which are related to technology transfer (e.g. patents, spin-outs, start-ups). The fact

that KT was presented as a list of activities reflects a managerial propensity to quantify, set targets and measure (Pollitt, 1993:112) leading to definitions of knowledge that are amenable to such measurement. However, as one respondent remarked, such definitions carry with them their own dangers:

“I think that quantification is something that is of dubious validity, and we need someone to audit it very, very carefully. I think people stick things in to KT that should go in to research and vice versa; and I also think that there are instances when people try to argue that full cost courses and some services which are on the borderline between training and educational provision get shoved in to KT when they could equally be put in to teaching.”(R6)

Table 10: Understandings of KT at different organisational levels

	Official Definition or Main Understanding
University Level	Evaluation research income Reports to clients on evaluation research Consultancy income CPD courses delivered Master classes given Disclosure meetings License, lease and equity agreement Royalty income Sale of equity Patents Spin-outs Start-ups Contract research income Teaching company schemes (<i>now re-named as Knowledge Transfer Partnerships</i>)
Business School Level	“Mode2” knowledge production
Level of Academics	Everything we do can be thought of as a form of knowledge transfer: teaching, research, continual professional development, and consultancy.

Author’s Adaptation from NewSU sources

Business School Level Understanding

At the business school level, management translated knowledge transfer in terms of the production of “Mode2” knowledge, as opposed to “Mode 1” knowledge. As discussed earlier, this view derives from the work of Gibbons et al (1994) and also relates to the more recent concept of “engaged scholarship” by Van de Ven and Johnson (2006). In “Mode1” research there is a:

“...distinction between what is fundamental and what is applied; this implies an operational distinction between a theoretical core and other areas of knowledge such as the engineering sciences where the theoretical insights are translated into applications.” (Gibbons et al., 1994:19)

In this model, dissemination occurs downstream of knowledge production, and little attention is given to exploitation by practitioners which is said to occur, if at all, through dissemination processes that facilitate a ‘trickle-up’ to practice. In contrast, Mode2 offers a different model of knowledge production which is characterised by:

“..a constant flow back and forth between the fundamental and the applied, between the theoretical and the practical. Typically, discovery occurs in contexts where knowledge is developed for, and put to, use, while results – which would have been traditionally characterised as applied – fuel further theoretical advances.”(Gibbons et al, ibid.).

Tranfield and Starkey (1998) suggest that “Mode2” leads to what they call “coupling arrangements” between academics, policy-makers and practitioners around problem or thematic foci and these arrangements result in the application of a variety of measures to the quality of the output, additional to those usually used in “Mode1”. In an attempt to develop the debate over the relevance of management knowledge in the context of “Mode1” and “Mode2” knowledge production systems, Van de Ven and Johnson (2006: 809) put this in different terms:

“Engaged scholarship implies a fundamental shift in how scholars define their relationships with the communities in which they are located, including other disciplines in the university and practitioners in relevant professional domains.”

The business school translation of knowledge transfer in to “Mode2” knowledge production represents an attempt to reconfigure understandings of knowledge within the business school to make knowledge more ‘relevant’ and saleable. This reflects Nedeva’s (2008:29) interpretation of knowledge transfer, one that she believes calls for the re-casting of the relationships between universities and non-academic

domains as a means of transforming its existing functions, thus re-producing it. NewSU attempted to do precisely this. As discussed in the findings, this led to the dissolution of several traditional disciplinary formations inside the business school (e.g. economics, marketing), and challenged traditional academic conceptions of the knowledge they were producing, and what they were transferring. However this approach did not go unchallenged as academics defended their traditional (Mode1) view of their knowledge areas and domains in a 'Becherian', tribal manner.

Academic Level Understanding

In contrast to translations of KT policy at the university and business school levels which defined KT in terms of (largely) income-generating activities and new ways of more commercially attractive knowledge production respectively, the translation of knowledge transfer policy by academics interviewed revealed a different view. This view reflected a feeling of "everything we do can be thought of as knowledge transfer", much of it non-commercial, starting with the core activity of teaching and expanding to research, CPD and consultancy. That academics saw everyday practices as knowledge transfer, in contrast to the managerial perception and emphasis on commercialisation, mirrors findings of research on the implementation of knowledge transfer carried out by Ozga (2006:16), who in a survey of researchers in the fields of education, health and technology, concludes that:

"Dissemination is high on researchers' agendas, but it seems that KT is assumed to be a different kind of activity. This is partly a question of terminology, but probably also reflects a gap between research cultures and institutional, entrepreneurial KT cultures. In fact researchers in this study are strongly committed to, and shaped by, public and policy concerns, but this work is not being recorded or recognised as KT."

The academic emphasis on broader educational concerns, and social and civic, as opposed to a managerial emphasis on commercial KT is further highlighted in Ozga and Byrne (2006: 8), who claim that these different understandings represent obstacles to KT development. In a survey of institutional KT managers and researchers, they found that:

"...commercialisation possibilities continue to shape KT engagement by HEIs. There is evidence of strong commitment among researchers to active dissemination, but a shift into knowledge transfer is inhibited (a) by failure to identify with transfer,

which they understand as commercialisation and (b) by the strong effects of the RAE in pushing researchers towards traditional indicators of recognition and impact.”

The range of meanings attached to knowledge transfer, and in particular academic discomfort with commercially-oriented, economic meanings attached to the KT term by policy-makers and institutional managers, raises a number of questions. One of these can be framed with reference to work by Slowey (2003), who explored the connection between higher education and civil society as operationalised by “third arm⁸⁷” mission of universities in a Delphi study involving 20 academics in the UK and internationally. Finding that many of her informants were unclear about the term “third arm”, Slowey (ibid: 140) begs the question:

“Could the notion of the third arm perhaps reflect a perspective on the academy which has more currency in policy and managerial circles than with those engaged with the practice at the level of academic departments? If so, what might the implications be for all concerned?”

The findings of this research would appear to support a view that KT policy settled in quickly and comfortably inside the policy and managerial discourses, but is still knocking on the door of academic discourse. The fact that knowledge transfer is referred to as the “third arm” may in itself be part of the problem. This is a point raised by one of Slowey’s informants (ibid.) who said:

“The metaphor of third arm is itself odd when one thinks about it. And of course the fact that it is third already symbolizes a hierarchy.”

Theoretical Perspectives on Triple Translation

In the Chapter Two literature review, I suggested that changes in the UK higher education system were reflected in a number of emerging discourses (e.g. marketisation and enterprise), all of which could be located within a broader discourse of change and managerialism (Pollitt, 1993). When further analysing the findings from this study, it is important to remember, as highlighted in Chapter Four, that NewSU is very much a product of the managerially-driven restructuring of the higher education system in the UK in the 1990s, and this can go some way to explaining both the institutional response to KT policy, and the tensions arising

⁸⁷ Slowey (2003:151) asked informants “What do you understand by the terms “third arm” or “third mission” of higher education? And “In relation to community and civil society links, to what extent do you think that these have been supported, hindered or otherwise in recent years?” Slowey says that she used the terms “third arm”, “third leg” and “third mission” interchangeably.

between managerial and academic translations of the policy presented and discussed earlier. As previously highlighted, the findings show that New SU was highly responsive to KT policy, at least discursively. This is evident in the way that some of the institutional translation spoke directly to outside stakeholders such as the Scottish Parliament and the SFC, and in the choice of language used. NewSU's use of the language of KT policy (e.g. very much as a commercial venture) and managerialism (e.g. developing a KT strategy and measurable objectives) can be thought of as a means of seeking legitimation in the prevailing HE policy environment, and also as part of a struggle over the meaning of knowledge transfer inside the institution.

As discussed in Chapter Two, changes in higher education led to the introduction of a number of new institutional practices such as university league tables, the research assessment exercise (RAE) and audits, all of which require a good deal of attention and resources to be spent on legitimating activity, whether this produces increased organisational efficiency or not. As universities increasingly compete for financial resources from governmental and non-governmental sources, as well as for students, reputation becomes more important and being 'responsive', 'well managed' and 'businesslike' is clearly seen as an advantage (Clark and Newman, 1997:89). These authors claim that this leads to the institutionalisation of features of the business world as legitimating practices. In the case of NewSU this is evident in the obvious importance attached to strategic plans, "Vision 2010", the development of business support structures for KT and the formation of new inter-disciplinary academic units. On the question of legitimation, Meyer and Rowan (1991: 41) argue that organisations seek to legitimate themselves by incorporating institutional features valued in the external environment:

"Organisations are driven to incorporate the practices and procedures defined by prevailing rationalised concepts of organisational work and institutionalised in society. Organizations that do so increase their legitimacy and survival prospects, independent of the immediate efficacy of the acquired practices and procedures."

Reinforcing this point, DiMaggio and Powell (1991: 66) state that:

"Organisations compete not just for resources and customers but for political power and institutional legitimacy, for social as well as economic fitness."

However, the search for external legitimation also carries its own dangers. For example, McNay (2002:314) found that:

“In modern universities that I have studied, the pressures to conform to institutional norms for the sake of efficiency have reduced...distinctiveness.”

Despite this, NewSU's response to KT policy can be seen as part of the university's struggle to establish its position in the expanded HE environment. As a new university, established to “*position itself in the minds of students, employers and the wider community as distinct from the current Higher Education provision in Scotland*” (Thompson and McCallum, 1998:238) the data show that some institutional managers see KT as a defining feature of the university. This is perhaps not surprising as senior managers in new universities, such as NewSU, are more likely to be career, rather than academic-managers (Deem and Brehony, 2005; Deem, 2006). This is unlike the situation in pre-1992 universities, where the system of governance is somewhat different, academics take on managerial roles on a temporary basis and have been found to retain academic interests while in managerial roles, especially those related to research. The dominance of career managers in NewSU increases the likelihood of them displaying both a preference, and a capacity, for achieving managerial rather than academic goals. The enthusiastic institutional response to KT in NewSU can therefore be seen as predictable, because in contrast to academic-managers, they do not enjoy other means of gaining status (such as academic recognition for research, or the recognition from students):

“The professional academic does not necessarily want to please their management because they gain status from their relationships with their students and other academics inside and outside their organisation.” (Parker and Jary, 1995:328)

Moreover, in terms of the power of managerial and academic ranks, the balance is with the former. Career managers in universities such as NewSU have no choice but to pursue initiatives such as KT, because they are under pressure to be seen to be responsive, to make money, and to be enterprising (Slaughter and Leslie, 1997; Clark, 1998; Marginson and Considine, 2000). However, their managerial orientation has led them to place emphasis on rhetoric, structures, names and measurable activities, as opposed to a search for shared meaning of KT with

academics prior to the design of a response. This reflects McNay's findings (2005:42) that:

"In many of the universities I have studied, there is a gap between the leaders and the led so that the practices of the professionals making judgements informed locally are at variance with the corporate policy statements, which imply a standard model universally implemented."

Section 3: Practical Problems

The above discussion points to some practical problems that flow from the findings and discussion of findings, and rather than discuss these in isolation, I address them with reference to the research questions set in this thesis.

1. How is KT policy understood and translated at an institutional level?

I suggest that at an institutional level, KT policy has been understood and translated through a strong managerial lens. The findings show that NewSU's response is heavily biased in favour of a commercially-oriented reading of macro policy, a bias that can be explained by two factors. First of all it can be explained by resource-dependence theory (see Slaughter and Leslie, 1997). Namely, KT policy encourages adoption of KT activity through KT Grant funding separate to that available for teaching and research. As NewSU is very dependent on funding for UG teaching and generates few funds from the research councils, it is not surprising that the institution sees KT policy as a commercial opportunity, and focuses on "outcome" as opposed to "outreach". Secondly, it can be explained by university financial reporting procedures that require universities to report on costs associated with three functions, defined as Teaching (T), Research (R) (distinguishing in both cases between that which is publicly funded and that funded from other, non-public sources) and Other activities (O). The findings suggest that this financial reporting structure may be conditioning the institution to think of knowledge transfer as neither teaching nor research, but as "Other" activity, which by definition needs to be different. However, having said that NewSU is responsive to KT policy, it can be argued that the commercial reading of KT at the institutional level in NewSU is not in line with the spirit of Scottish Executive policy. To recap, the official definition of knowledge transfer is:

“The dissemination and exploitation of the outputs of higher education – research, knowledge, skills, expertise or ideas – to achieve economic, educational, social, healthcare or cultural benefits for society.”(SE, 2001:HE/24/01. Para. 15, p.4)

The findings from this research suggest that NewSU adopted a selective and very narrow, commercial reading of KT policy and this was influenced by the institution’s history, which I discuss below.

2. How does the university’s history affect its interpretation and response to KT?

My interpretation of the institutional response to KT policy as being managerial is influenced by my reading of NewSU’s history as summarised in Chapter 4, and elaborated on in terms of the structure of its managerial ranks (this Chapter, p. 138). Drawing on the Chapter Two literature review, I am of the view that “governance matters”, and that the structure of NewSU’s system of governance gave it a strong managerial footprint that goes a long way to explaining its quick and demonstrable response to KT policy. This comes from a history of tight steering, managerially by local government authorities who founded it and later the SED, academically by the CNAA who validated NewSU’s degree programmes, and corporately by a senior management and a governing council made up largely of lay members as stipulated in the 1992 Government Act. The traditional emphasis on undergraduate teaching in NewSU, as discussed, is another factor that made the institution amenable to steering because as the unit of resource for teaching declined dramatically, the institution became hungry for additional resources with which to financially support its ambitions. While findings suggest that NewSU management sees knowledge transfer predominantly as an entrepreneurial, income-generating activity, a strong managerial culture of control is blocking the establishment and institutionalisation of such a culture.

McNay’s model (1995; 1999) of universities as organisations can be a useful tool with which to illustrate this (see Figure 3 below). My earlier discussion of findings suggests that NewSU is characterised by a top-down style of management that

exhibits tight definition of policy and tight control of implementation. Such a reading locates NewSU in quadrant C, and attributes a “corporation” culture to it.

Figure 3: Model of Universities as Organisations
Control of Implementation

Policy Definition	Loose	<i>A</i> <i>Collegium</i>	<i>B</i> <i>Bureaucracy</i>
	Tight	<i>D</i> <i>Enterprise</i> <i>(NewSU desired)</i>	<i>C</i> <i>Corporation</i> <i>NewSU (Actual)</i>
		Loose	Tight

Adopted from McNay (1995)

According to McNay (1995:107) managerial power dominates in organisations with corporate cultures, as:

“...the executive asserts authority, with the vice-chancellor as chief executive...with a consequent reaction of resentment, at times verging on anomie.”

This model suggests that a loosening of corporate attempts to control implementation may facilitate a move in to NewSU’s desired quadrant D. However this depends on the extent to which ‘corporate’ NewSU is willing to devolve power from the Centre to basic units in an effort to stimulate a corporate sense of collegiality. After all, Shattock (2003), in his book on managing successful universities, links successful university enterprise to an essential collegiality in internal processes, and respect for academics’ autonomy, not an obvious characteristic of NewSU.

3. What mechanisms does the university use to implement KT policy?

NewSU used a number of mechanisms in an attempt to implement KT policy, albeit a policy which it read from a commercial standpoint. Amongst these were the mainstreaming of knowledge transfer in to the NewSU mission and strategy; the development of a specialised unit to support knowledge transfer activity (RIS); the creation of new inter-disciplinary centres (NewSU Futures); the recruitment of “Mode2” thought leaders; the recruitment of business development managers with funding from the KT Grant; restructuring of the business school to mirror “Mode2”

knowledge structures; the allocation of responsibility for the development of “knowledge transfer” to senior academic managers, and the elevation of knowledge transfer as a standing item on the agenda of important committee structures. These mechanisms echo elements of Clark’s framework (1998) for the creation of an entrepreneurial university. On the basis of a study of five universities that Clark characterised as being entrepreneurial, he developed a “Pathways of Transformation” model for facilitating such change. The five elements in this model include a “strengthened steering core”; “a diversified funding base”; “a stimulated academic heartland”; “an integrated entrepreneurial culture”; and an “expanded developmental periphery”. However it is notable that the mechanisms employed by NewSU to implement KT policy emphasised structures and procedures, and reflected what could be called “hard managerialism” (Trow, 1993). This term is premised on the idea that systematic changes to institutional processes will, in themselves, bring about improvements in what the university does. This reinforces the managerial position of ‘the right to manage’ (Pollitt, 1993:3) and the freedom to make decisions about the use of organisational resources to achieve desired outcomes. However, while NewSU is using ‘obvious’ managerial mechanisms for implementing KT policy, what seemed to be just as evident was a reliance on discourse in its attempts to produce the change. This explains the ‘dissonance’ between institutional statements and claims, and ‘street level’ academic feelings.

4. How do academic staff understand KT policy?

In contrast to the institutional understanding discussed above, academic staff understood knowledge transfer policy as something that was embedded in their day-to-day work. Teaching, research, CPD courses, and consultancy all constituted knowledge transfer for academics, although they also acknowledged that the majority of work inside the business school related to undergraduate teaching as a result of NewSU’s history as a teaching institution. Academics in NewSU saw knowledge transfer very much as ‘service’ to the community, part of the university’s civic role in society, and they felt uncomfortable with, and resisted the commercial view of KT that they understood institutional management to be adopting. This view of KT as ‘service’ supports Paterson’s findings (2003) discussed in Chapter Two, that

academics in Scottish universities demonstrate a widespread attachment to a civic role for higher education, something that he attributes to Scottish educational traditions. However it should be stressed that NewSU academics who participated in this research saw this as a non-commercial civic role, and felt that KT as a commercial activity did not fit in to their 'ideal type' of academic role that focuses on teaching, teaching-related and to a lesser degree, research work. This does, however, raise the question of the degree to which the teaching heritage of the institution is constraining academics' perspectives of the meaning of knowledge transfer. Moreover, the relatively low level of research carried out in NewSU business school may be depriving academics of a resource with which to counter steering, as it is research capacity that traditionally provided academics with higher levels of autonomy in the university environment (Halsey, 1992).

5. What are the main issues arising in translation and implementation of KT policy?

This thesis raises several issues regarding the translation and implementation of KT policy in to practice. Most, if not all of these, stem from the contested meaning of the term. Tensions over the meaning of KT are not new. For example, Cullen (2003) developed the "outreach to outcome framework", arguing that many activities can be justifiably termed KT activity, but that it is important to acknowledge that they are pursued for different reasons, and that some of these reasons are mutually exclusive, as outlined in Table 11 below.

Outcome or Outreach?

I would raise four issues in relation to this framework. The first one is that it translates knowledge transfer in to 'activities'. While translating knowledge transfer as an activity can be useful, especially for the managerial purposes of measurement and monitoring, it can also be constraining, as activities can convey specific meanings and exclude other possibilities.

The second one is that the framework emphasises the importance of interpretation and meaning-making (Weick, 1995). For example, based on the findings of this

study, some aspects of academic work that NewSU academics consider to be KT are missing from this framework, notably teaching, research and continuous professional development (CPD). I acknowledge that this may be a simple question of labelling, and that while it is hard to envisage undergraduate teaching fitting in to any of Cullen’s categories, postgraduate training and CPD may well be subsumed under headings such as “consultancy”.

Table 11: The Outreach to Outcome Framework (adapted from Cullen, 2003)

	Public Good	Academic Reasons	Profit
<i>Student Placements</i>	Yes	?	No
<i>SME Networks</i>	Yes	?	No
<i>Consultancy</i>	?	Yes	?
<i>Contract Research</i>	No	Yes	Yes
<i>Licenses</i>	No	No	Yes
<i>Spin-outs</i>	No	No	Yes
<i>License to local co.</i>	Yes	No	No
<i>License to global pharmaceutical co.</i>	No	No	Yes
<i>Venture Capital Company Formation.</i>	No	No	Yes
<i>Student Company Formation</i>	Yes	No	No

Outreach ←————→ **Outcome**

The third issue is that the framework gives us an indication of a boundary between the managerial and the academic translations of knowledge transfer in this study. Namely, the findings presented earlier point strongly to academics translating KT either as a public good (the nature of university academic work) or something that they would do for academic reasons (the first two columns); and the managerial translations of KT in this study are best reflected in the right hand column (motivation for profit).

This leads me to the fourth issue, that translating knowledge transfer as an activity precludes what seems to be a viable alternative of framing knowledge transfer as a ‘philosophy’, a way of doing things (be that teaching, research, training, etc..) as much as what is being done. The essence of knowledge transfer as a philosophy is perhaps captured in Gibbons et al’s (1994) concept of “Mode2” or Van de Ven and Johnson’s (2006) “engaged scholarship”, where the emphasis seems to be on broadening communities of practice (Lave and Wenger, 1991) to include academics and practitioners and create networks. However, as already discussed in this thesis, these concepts too are contested.

The Managerial – Academic Divide

Of the four issues outlined above I would like to elaborate further on the managerial-academic divide as the CDA approach adopted in this study highlighted this as a major obstacle to a productive translation of KT policy. I would argue that rather than engage in a debate over which activities constitute knowledge transfer, the key issue is one of developing shared meaning, as findings in this study highlight the serious consequences of not doing so for any form of meaningful implementation. On the basis of the findings in this study, I conclude that a heavy reliance on the use of discourse to establish a productive KT policy is in fact *counter-productive*.

The findings illustrate that the managerial conception of KT not only differs from that of academics, but it also excludes their views. One could argue, after Clark and Newman (1997:54), that academics are being subjected *to* KT discourse, rather than being subjected *by* it. According to these authors, subjected *by* suggests the ideal effects of discourse which produce change agents and enterprising selves, or in this case, academics. Subjected *to*, on the other hand suggests the experience of being regulated by and disciplined through a discourse, without it engaging beliefs, enthusiasms or identification. Rather than enacting it from commitment, such subjects enact the discourse of change conditionally, because ‘there is no alternative’. However, the strong managerial push to create a knowledge transfer-oriented business school both discursively and through changes in structures, resulted in a mixture of open and passive dissent. Academics expressed open dissent in a

grievance procedure against senior managers in NewSU that was unsuccessful but nevertheless sent a message of both the need for, and desire to, engage in dialogue. However other dissent was more passive as demonstrated in my interpretation of the business school conference, where scepticism, cynicism and indifference characterised the response to the inspirational, managerial language of organisational transformation which proposed a change from NewSU business school to a “Mode2” business school.

Jostling Discourses

Despite the above acts of resistance to the KT discourse, there is little evidence to suggest that this prompted an active search for shared meaning. The discursive space in NewSU seems to be dominated by an array of managerialist discourses, of which knowledge transfer is a recent one. The ‘balance of power’ between managerial and academic ranks seems to be heavily in favour of the former, something that can be attributed to the history of the institution and its managerial orientation. This may explain NewSU’s overtly positive response to the government’s KT initiative, something that can be put in the context of Parker and Jary’s assertion (1995:320) that:

“New universities, with little economic or cultural capital, have less shelter from state policy, but may be less constrained by established assumptions about their role. Older institutions, on the other hand, may have greater financial and cultural power but be less able to modify traditional assumptions about their place within the educational and cultural system.”

If one accepts the premise that “context matters” and that context is likely to shape institutional responses to knowledge transfer, then it is surprising to find such a weak “*teaching and learning*” discourse inside NewSU. After all, NewSU was founded as a teaching institution less than forty years ago. As discussed in Chapter 4, it still generates the majority of its funding from teaching, and several informants in this study referred to teaching as a core competence and/or activity of the institution. However, “*teaching and learning transfer*” do not seem to connect overtly with the predominant messages in the institutional “*knowledge transfer*” discourse, and this may represent a lost opportunity for NewSU to align external demands with internal strengths, capabilities, and commitments. This is a significant silence amidst the

jostling discourses, and raises questions about the degree to which teaching, at least at undergraduate level, may be seen as a diminishing resource for establishing a strong academic identity, both on an individual and institutional level.

NewSU Incoherent Culture

The evidence in this research certainly confirms that the academic community in NewSU is vulnerable to managerialist pressure and currently ill-placed to redress this balance of power. This may be because it does not have the history of scholarship and academic research to fall back on, a resource that historically helped to protect universities from managerialist pressures (Halsey, 1992), and give academics greater autonomy. One could say that this has produced in NewSU an as yet incoherent academic culture. With teaching becoming a commodity, and research capacity weak, NewSU is eager to find its place in the changing higher education environment discussed in Chapter Two, and on an institutional level sees knowledge transfer as being a differentiating feature. In view of NewSU's history, and location in a major commercial centre, such a view would seem to carry many merits. However the key issue is "what do we collectively mean" by knowledge transfer. How does NewSU ensure a meaningful translation and not a meaning of KT "lost in translation". As long as the institutional aspirations for KT are not aligned with a shared academic understanding, capacity and commitment, it is likely that the discourse will fail to realise the claims being made.

Section 5: A way forward ?

The above discussion and analysis points to what may be called a "unitary" view of NewSU by institutional management. Burrell and Morgan (1979) argue that a unitary view of an organisation places emphasis on the achievement of common objectives and the organisation is viewed as being united under the umbrella of common goals, striving towards their achievement in the shape of a well-integrated team. This may reflect the institutional, discursive view of NewSU's pursuit of KT presented in this research, but it does not reflect the reality of real-world academic work in NewSU, and the associated objections to the commercial emphasis attached to KT. This may be because the unitary view regards conflict as a rare and transient

phenomenon that can be removed through appropriate managerial action. Clark and Newman (1997:62) reinforce the unitary view of a managerialist orientation by saying that:

“The new managerialism promised a corporate culture of mutual commitment to the overriding values and mission of the organisation. Its mission was to create a homogeneous and shared culture which would bind all workers in pursuit of corporate objectives.”

Morgan (1993:214) claims that unitary characteristics are most often found in organisations that have developed a cohesive culture based on a respect for management’s right to manage, especially those that have a long and continuous history of paternalistic management. However it is clear from the findings that NewSU does not have a cohesive culture. This is not a criticism on my part, but rather comes from my understanding of the nature of academic “attachments”, which Becher (1989) has likened to being tribal. This “tribal” culture is by definition pluralist, and places emphasis on the diversity of individual and group interests. This pluralist mindset of academics is likely to view the university as a loose coalition, similar to Weick’s view (1976) of educational organisations as “loosely-coupled systems”, which has just a passing interest in the formal goals of the organisation as it gives precedence to professional and other interests. As the Education Guardian reported (1995, May 10th, p.4):

“Academic staff often display loyalty to their subject and discipline and also to their students and school. Such loyalties are often separate from, and may conflict with, loyalty to the university.”

In Search for a Negotiated Order

At this point, I would like to return to Strauss’s concept of “negotiated order” (Strauss, 1963; 1978) as discussed in Chapter 3. I do this because I feel that the data show that NewSU’s approach to KT to date was short on “the negotiation of order”, and was dominated by a reliance on managerial discourse in an attempt to create a new reality. The findings demonstrate that the discourse, and management’s reliance on it, does not take sufficiently into account NewSU’s history and the tensions that are inherent in its attempt to develop from what was essentially a teaching institution in to a university, that in a generic sense:

“... is finding a new habitus, a new location in society, a new ordering of its perceived value, and a new register of meaning and understanding across its now enlarged audience.” (Barnett, 2000:13)

It should be remembered, as discussed at the start of Chapter Four, that NewSU was founded less than forty years ago in order to fulfil a specific function, largely of a teaching nature. As successive demands were placed on the university, a situation developed whereby people who came in to the university to teach, were being asked to do many more things, ranging from increased reporting requirements in relation to teaching, to the development of a research capacity, and most recently, “knowledge transfer”. The findings suggest a desire on the part of academics to take on board new demands; however at the same time there is a sense of academics being worn out, unsure of what is being asked of them, and feeling little trust in a management that, as far as KT is concerned, produces inflated claims and over-promises, without due attention of the ability and commitment of academics to deliver. I would like to stress, however, that I do not believe that managerial “ambition” presented in the findings is a matter of bad faith. Rather, that buoyed by a faith that a managerial approach will “deliver”, managers choose to ignore the past, overlook the reality of the present, and fail to build on what they have got in favour of trying to construct castles. In putting faith in managerial discourse, NewSU managers forget that:

“Older discourses and the subject positions and identities associated with them have not gone away – they linger on, not just out of nostalgia, but because specific practices continue to require them. Generic managerialism has to be enacted in the context of producing or delivering particular public goods and services. Its own ‘mission’ (the pursuit of greater efficiency) cannot effectively substitute for specific service goals and the forms of expertise needed to achieve them. As a consequence, both occupational knowledges and identities...continue to occupy discursive space within the new institutions in tension with new occupational knowledges and identities (being managers). What has been constructed is a field of tensions within which people manoeuvre, form alliances and make choices.” (Clark and Newman, 1997:102)

I would therefore argue that the university should be pulling back discursively and engaging in greater consultation to create a “negotiated social order”. This would involve loosening control of implementation, and stimulating collegial development. This may demand more time and effort than simply relying on discourse to create the

change. However it is likely that such moves would foster more active collaboration, reinforce mutual commitment, and as a consequence produce better outcomes.

Chapter Six

Conclusions, Limitations and Further Work

Limitations of the Study

While the focus for this thesis was on the translation of knowledge transfer policy from a higher education perspective, I am aware that policy does not exist in a vacuum and that there are likely to be related effects from other policy areas, notably from economic and public policy. For example, in Chapter Two I touched upon issues related to the funding of higher education in the UK, on the way that the funding for teaching has declined, and the way in which research funding has changed and continues to change. However, in order to retain a clear focus for this thesis I was unable to go into greater depth in these areas, as I wished to focus on the selected issues of translation and implementation.

I am also aware that in this thesis I investigated only one part of one division in one school in one type of university in Scotland, during a particularly painful period of change that involved redundancies, albeit voluntary. Moreover, I am conscious that in adopting a critical discourse perspective for analysis I leaned more towards exposing tensions in translation of the policy, than to finding commonality. It is therefore important to stress that I am making no claims of “representativeness” of the group of academics and managers that I interviewed, nor of the “representativeness” of the documents that I used for the purposes of analysis. I also acknowledge that different epistemological stances may reveal different findings. I offer the findings in the spirit of Guba and Lincoln’s (1994) notion of “trustworthiness”. By this I mean that I have not consciously allowed personal values or theoretical inclinations manifestly to sway the conduct of the research and the findings derived from it. While I have worked with a critical framework, and this has informed my thinking, I have made this perspective clear and explicit and do not believe that it has affected or biased my relationship with informants and/or the data they provided me with, or skewed my interpretation of events. While I also accept that my claims are limited, I would like to believe that they are ‘relatable’ (Basse, 1981) to other universities in Scotland and beyond. However I leave it to other

readers to judge how much resonance the findings hold with their own circumstances and environments.

Further Work

The CDA approach adopted in this thesis opens up new possibilities for carrying out research on change in universities, and for understanding the responses to change of those working in them. In addition to this the thesis presents potential for comparative work. First of all, I acknowledge, after Becher (1989), that management is a fragmented discipline, with no fixed paradigm. There is therefore scope for further work that involves academics that come from the ‘harder’ side of the management discipline (e.g. accounting; finance; operations), as my informants came from the softer side of management: management (public and private), strategy, hospitality and leisure.

Secondly, there is scope for comparing responses to knowledge transfer between schools in the same university, for example, between engineering and management; science and management; medicine and management; law and management. In addition to providing a comparison for this research, it will add to knowledge about interpretations of knowledge transfer from different disciplinary perspectives. It may also add to knowledge about the ‘transferability’ of different types of knowledge.

Thirdly, there is scope for comparison of responses of management academics from different institutions. As I showed in Chapter Two, universities in Scotland have different histories, traditions and cultures and the comparative youth of NewSU as an institution may prove to be a differentiating factor. For example, other universities in Scotland are older, more research-intensive, have different ‘reaches’ and serve different communities, locally, regionally and internationally.

Fourthly, there is scope for comparisons across disciplines and universities from different parts of the UK. In Chapter Two I emphasised the specific history of education in Scotland and outlined some key differences in the development of higher education policies in England and Scotland. It is possible that higher

education policy environments in Wales and Northern Ireland lead to quite different responses to KT policy.

Fifthly, while this is an example of translation of KT policy in a university in Scotland using critical discourse analysis, a similar approach may be used to examine the translation of other HE policies in universities.

And lastly is the question of the longevity of this policy. As discussed in the conclusion, the question remains as to whether this is simply a 'spun' policy that will disappear in a year or two, or one that is here to stay and *will* change the idea of the university as we know it. Areas for future work may also therefore cover the long-term effects of KT policy inside universities, and perhaps whether KT policy will lead to a 'division of labour' of traditional academic activities between HEIs themselves, or between further and higher education institutions, perhaps displacing HE teaching to the further education sector as universities shift their resources to focus on research and 'knowledge transfer'.

Conclusions

The principal aim of this dissertation was to investigate how knowledge transfer policy in Scotland is understood by institutional managers and academics in a new university, and to explore issues arising from the translation and implementation of this policy in to practice. In carrying out this study I acknowledge the global pressures that are facing universities today: pressures to be economically productive on the one hand, and pressures to contribute to society in a wider sense on the other.

The 'fit' between university traditions in Scotland and KT

In the introduction to the thesis I suggested the possibility of a specifically 'local' response to knowledge transfer policy in Scotland due to the historical civic traditions of its universities. I suggested that there was evidence that academics in Scottish universities were likely to embrace knowledge transfer policy wholeheartedly if it were appropriately expressed in a way to appeal to the traditional civic orientation of universities in Scotland. From the findings I conclude that in the

case of NewSU this potential 'fit' between the economic and democratic potential of knowledge transfer and the university in Scotland is not yet fully realised because of the emphasis on the economic potential of KT. This can be attributed to a number of factors.

The first of these is the tension between the 'inclusive' definition of knowledge transfer used by the Scottish Executive that carries both economic and social potential, and the quantitative metrics designed to measure KT activity that privilege and reward economic outcomes. This raises serious questions about whether it is possible to reconcile the civic and commercial aspects of KT, and if so, how. There is a possibility that some universities will see civic knowledge transfer as a core part of their mission and continue to produce knowledge as a public good, assuming of course that government continues to provide the funding to do so. On the other hand, other universities will opt for commercial knowledge transfer and end up producing knowledge as a private good. Nedeva (2008) sees such possibilities leading to the emergence of different types of university in the future that can be put on a continuum from 'private for-profit university' (commercial KT) to 'service provider' (civic KT). The former are likely to resemble an entrepreneurial university of the types discussed by Slaughter and Leslie (1997), Clark (1993) and Marginson and Considine (2000), and the latter the ideal type of university of the immediate post-Robbins era. Of course, in reality most universities are likely to develop a mixture of the two, with different balances of commercial and civic KT, dependent on their histories, traditions and cultures. At the same time it is possible that universities in Scotland will put more emphasis on the civic side for historical and cultural reasons discussed earlier.

The second factor relates to the relative youth of the institution studied in this thesis; it is a university struggling to establish a coherent culture, simultaneously ill at ease with and relatively powerless to resist the dominant influence of managerialist ideas. The findings suggest that universities such as NewSU that are resource-dependent on government and produce fewer economically-productive public goods than research intensive universities, are likely to be very responsive to KT policy, but less well

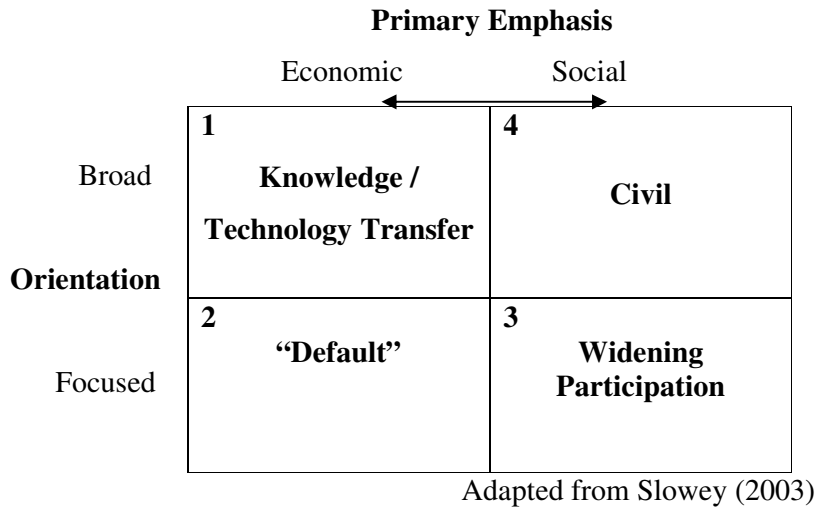
equipped to deliver commercially-useful and successful outputs. On the other hand, research intensive universities that produce many economically-productive public goods may be less responsive to KT policy steering due to the power that stems from their accumulated academic and social capital. These institutions are more likely to respond to KT pressures on their own terms, in contrast to newer universities that do not have the resources, or the academic means, to set their own agenda.

Tolerance of Different Meanings of Knowledge Transfer: A Need to Connect

In order to investigate issues related to the translation and implementation of KT policy I adopted an interpretive methodological approach, explained in Chapter Three, that drew on critical discourse analysis to uncover the meanings attached to KT Policy as it is 'translated' and enacted. The findings illustrate how managers and academics attach multiple and conflicting meanings to KT policy, with significant implications for policy implementation. The different meanings of the policy are explained in terms of competing managerial and academic discourses, some of which can be explained by the history of the institution in which the research was carried out.

The findings highlight the problematic nature of the term 'knowledge transfer' and reinforce the difficulty of 'translating' policy into practice. In order to better understand KT and how it is received in universities, I conclude in this thesis that in the expanded UK HE sector there is no single idea of a university in the sense that this was discussed in Chapter 2 with reference to the various 'ideas' of a university propounded in their times by Bentham, von Humboldt and Cardinal Newman. As the notion of a unifying 'idea' of a university comes under pressure, so the reception of KT policy needs to be understood through the study of the various (and possibly conflicting) meanings attached to the policy by managers and academics in different types of university. This leads me to suggest that what is needed is tolerance of broader definitions and meanings of knowledge transfer, far beyond the narrow economic and commercial meanings that have proved dominant in this thesis. The work of Slowey (2003) may be helpful in this regard as illustrated in Figure 4. below.

Figure 4: Typology of Perspectives on the third arm of higher education



Slowey’s model draws on two variables. One variable relates to the extent to which the emphasis is placed on the social as opposed to the economic as the key or dominant orientation for KT. The other relates to the extent to which the orientation is relatively broad and inclusive or relatively focused. This model produces four ways of framing knowledge transfer that could arguably be matched with the values and capacities of different HE institutions. Option 1 frames ‘third arm’ as “knowledge/technology transfer”. This reflects a broad but predominantly economic approach to third-arm activities. Option 2 is called the “default” approach that carries an economic focus that is effectively defined in a negative way as everything other than teaching or research. Option 3 is labelled the “widening participation” approach to KT and is more socially orientated but focused particularly on individual participation. And Option 4 is the “civil and community” approach, one that reflects a broad and socially orientated perspective emphasising the public and civic sphere.

The widening access approach to “third arm” mission includes a range of activities that place a particular emphasis on widening access so that a broader and more heterogeneous group of individuals is given the opportunity to participate in higher education. It is noteworthy that NewSU⁸⁸ has vigorously embraced the policy agenda on widening access, but that it does not label (and so perhaps does not

⁸⁸ This is also true of many new universities.

understand) this activity as a knowledge transfer activity. This is a potential loss as it might provide managers with a means of ‘connecting’ with what are strong academic values and commitment to widening access in NewSU. In terms of the conceptualisation of a “civil and community” approach to third arm activities, Slowey quotes Floud (2001), the former President of Universities UK, who said:

“Universities have seen their roles primarily in terms of teaching and research – they educate and train people with the skills they need to participate fully in society and give them the skills employers need. They enable the UK to punch above its weight in terms of research, not only to support high quality teaching, but also setting up countless spin off companies in areas such as satellite technology, biotechnology and robotics. And this is largely the expectation of the rest of society. But universities are also reaching in to their communities, getting their hands dirty by combating social exclusion and improving cultural understanding in their regions.”(Floud quoted in Slowey, 2003:146)

I would argue that the sentiment expressed in this quotation is embedded in many of the academic translations of KT found in this study, in as far as it does not carry an overwhelming commercial, but rather an inclusive message, that acknowledges the range of work (including commercial work) undertaken by universities on different levels, and locates it crucially in the community, and in a spirit of service, as opposed to in pursuit of profit. Moreover, this quotation seems to reflect Shefc’s desire to inject a strong sense of the civic into understandings of knowledge transfer.

Policy as Discourse: Its Natural Limits

This study adds to knowledge about KT and also adds to knowledge about policy and its reception when it enters the university environment. Analysis of how policy is received and communicated using a CDA approach helps to make sense of what is going on in an environment characterized by messiness, dramatic change, and increasing pressures. In Taylor’s words (2004:444):

“CDA can be used to explore how language works in policy texts, and in particular how it can be used to document hybrid genres and discourses, and to highlight competing discourses and marginalized discourses.”

Furthermore, a CDA approach illuminates the university as a space through which ideas flow and is shaped by the meanings attached to them. This case of translation of KT policy has more general applicability, beyond NewSU, in terms of its

illumination of the enactment of meaning in different ways in different institutional cultures. Drawing on Czarniawska and Sevón (1996) the concept of translation is useful as it:

“ can help us to reconcile the fact that a text is at the same time object-like and yet it can be read in different ways.” (Czarniawska and Sevón, 1996:23)

This feature of policy as text comes through clearly in this thesis. Drawing on Fairclough (1993), KT policy discourse attempts to shape universities and people as enterprising individuals and institutions, but when the policy enters the HEI it is met by existing practices and cultures that attempt to make sense of the policy in their own context. In this case, policy has been translated by different levels of the organisation in what I have called “triple translation”. The macro policy discourse has obvious effects at some levels of the organisation, and these are particularly evident in managers’ ‘texts’; but noticeably less so in ‘texts’ produced by academics. This results in a weakening of the effects of the discourse as it flows through the organisation and suggests that discourse can only go so far with its persuasive powers, especially if the discourse and reality are not in some sort of harmony. From this I conclude that policy that is constructed discursively and relies too heavily on discourse to produce results has limits on what it can achieve. Gewirtz et al. (2004) call such policies ‘spun’, using the term ‘spin’ to refer to:

“the process and products of purposively managing information in order to present institutions, individuals, policies, practices and/or ideas in a favourable light and thereby mobilise support for them.”

If it transpires that KT policy is a ‘spun’ policy, constituted by spin and discourse rather than by more socially embedded practices such as negotiation over meaning, then there is a possibility that KT policy may disappear quite quickly. If, on the other hand, this turns out not to be the case, then KT may yet elevate itself from its current status as the ‘third mission’ of the university to a position of ‘first’ or ‘second mission’ that signifies attachment of greater importance. Wedgwood (2006:154) suggests that:

“At the heart of mainstreaming the third stream are individuals, the academic staff and members of support teams. It is those individuals who will deliver higher education within the framework set by institutions and governments. They are the central focus. They will be the ‘integrators’ who find their own individual ways of

accommodating the different demands being made within an academic professional context. They will develop their own expertise, knowledge, skills, networks and contacts that then become manifest in teaching, research, third stream and other professional activities...But all this will happen only if the policy context is the right one and if policy-makers make it possible”.

The Idea of the University and Managerialist Solutions

The issue of discourse previously discussed is closely linked to an increasing reliance on managerial solutions⁸⁹ to what are acknowledged to be complex problems. KT policy is an attempt to modernize the university. It can be thought of as an active agent that is trying to change the university’s role in society and the behaviour of academics who work inside it. In new universities, where the power of managers is accentuated and prolonged by the absence of academic power⁹⁰, there is an assumption that success can only be guaranteed by more and better management. The capacity of managers to change culture and capabilities, as shown in this study, is exaggerated. The managerial discourse ignores the material conditions and academic capabilities of the university and this demonstrates managerialism’s tendency to believe its own rhetoric. This raises questions about what management can and cannot realistically do and achieve in a space in which not all discourses are congruent with managerialism. I return to an earlier message of a need to step back from the discourse, and move forward to a greater engagement in negotiation. Quoting Margerison (1987):

“Differences of opinion can lead to arguments and unpleasant conflicts, or they can be sorted out through skilful management⁹¹ of conversations.”(1987:193)

The University in Ruins

In Chapter Two, I briefly discussed early ideas of the university with reference to Bentham, von Humboldt and Newman. Readings (1996) argues that today the university is in ‘ruins’, and these founding ideas carry little weight and value. He argues that ideas such as those have been superseded by a “University of Excellence”. However, while excellence was earlier defined in intellectual terms,

⁸⁹ Refer to discussion in Chapter Two

⁹⁰ Other than in form of trade union representation

⁹¹ I do have reservations about ‘managing’ conversations but feel that the message inside this quotation is one that reflects what I wish to say.

today it is defined in business terms, where “techno-bureaucrats” and accounting systems rule, and a (meaningless) “discourse of excellence” (p.12) permeates the institution. The idea of knowledge transfer is entering this “university in ruins”, and the prevailing discourse is measuring excellence in knowledge transfer very much as an accountant would, in monetary terms. Managers in today’s universities may benefit from reference to Readings as they contemplate the future of the universities they lead and manage. Readings (1996:192) said that “*thinking together is a dissensual process; it belongs to dialogism rather than dialogue*”. Good management recognises difference and the university is a place where differences are protected and indeed encouraged. Failure to engage in thinking, thinking together and not tolerating dissent may lead to policies “lost in translation”.

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Appendix 1 : List of Policy Texts

Dearing Report (1997). *The National Committee of Inquiry into Higher Education: Report of the Committee*. London: HMSO Publications.

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Appendix 2: Scottish Funding Council KT Grant Allocations 2006/07

Knowledge Transfer Grant, 2006-07

Table B6, Scottish Funding Council 2006, www.sfc.ac.uk

Institution	Amount of Knowledge Transfer Grant generated by:								Cultural Engagement element	Total Knowledge Transfer Grant for 2006-07	Total Knowledge Transfer Grant for 2005-06
	Outreach	Enterprise schemes	Consultancy	Continuing professional development	External research grants and contracts	Licensing	Venturing	Transitional			
	£	£	£	£	£	£	£	£			
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Aberdeen, University of	59,840	71,194	391,990	169,979	1,018,554	14,566	44,876	-	26,000	1,797,000	1,534,000
Abertay Dundee, University of	144,944	15,316	20,710	36,818	93,594	-	2,618	-	20,000	334,000	209,000
Bell College	10,485	-	7,538	48,665	3,312	-	-	8,000	20,000	98,000	84,000
Dundee, University of	41,408	85,422	167,289	101,419	697,078	45,181	81,202	-	27,000	1,246,000	930,000
Edinburgh College of Art	-	3,974	384	6,984	19,658	-	-	19,000	20,000	70,000	67,000
Edinburgh, University of	342,813	54,242	379,431	268,903	1,634,670	84,962	102,978	-	58,000	2,926,000	2,029,000
Glasgow Caledonian University	93,921	1,901	91,890	155,475	128,812	-	-	-	22,000	494,000	381,000
Glasgow School of Art	-	10,002	10,217	78	13,553	150	-	18,000	20,000	72,000	67,000
Glasgow, University of	179,697	95,239	763,365	388,616	1,071,417	28,313	60,352	-	53,000	2,640,000	2,261,000
Heriot-Watt University	58,589	64,629	137,985	94,702	388,146	1,740	16,209	-	20,000	782,000	687,000
Napier University	208,397	10,328	82,287	149,275	100,095	658	205,961	-	20,000	777,000	508,000
Open University in Scotland	-	-	-	1,000	-	-	-	17,000	20,000	38,000	-
Paisley, University of	42,567	6,571	84,060	38,217	65,445	140	-	-	20,000	257,000	172,000
Queen Margaret University College	18,306	-	34,637	57,337	49,600	119	-	-	20,000	180,000	118,000
Robert Gordon University	119,945	44,780	3,989	295,140	75,302	207,034	810	-	20,000	767,000	756,000
Royal Scottish Academy of Music and Drama	-	-	2,636	516	847	-	-	15,000	20,000	39,000	34,000
St Andrews, University of	2,130	23,107	28,561	68,758	366,771	7,815	65,858	-	20,000	583,000	316,000
Stirling, University of	29,338	1,946	107,430	142,884	188,278	124	-	-	20,000	490,000	381,000
Strathclyde, University of	151,528	114,609	319,169	730,492	539,231	42,596	22,374	-	34,000	1,954,000	1,628,000
UHI Millennium Institute	169,787	4,127	24,434	47,794	168,857	-	-	-	20,000	435,000	339,000
Total	1,673,698	607,388	2,658,003	2,803,053	6,623,222	433,398	603,238	77,000	500,000	15,979,000	12,501,000

Appendix 3: List of interviewees

Informant	Designation	Position of Respondent in the Organisation
R1	Professor	Head of University Research and Innovation Services
R2	Professor	Head of Division of Management, Business School
R3	Senior Lecturer	Business School Associate Dean Undergraduate Programmes
R4	Professor	Head of Division of Management Research Committee
R5	Senior Lecturer	Business School Associate Dean Postgraduate Programmes
R6	Senior Lecturer	Division of Management, KT Coordinator
R7	Professor	Assistant Principal responsible for KT university-wide
R8	Professor	Business School Associate Dean, Research and KT
R9	Lecturer	Division of Management, Tourism and Leisure
R10	Senior Lecturer	Division of Management, Strategy and operations
R11	Lecturer	Division of Management, Management
R12	Professor	Division of Economics
R13	Professor	Division of Economics
R14	Lecturer	Division of Accounting (quoted once from one meeting and not key informant)

Appendix 4 : General Interview Guide

1. How do you understand knowledge transfer?
2. What do you see as the main drivers for knowledge transfer?
3. Do you see KT as a key part of NewSU's mission? More/less than other HEIs?
4. How does KT figure in the NewSU mission? How important is it / should it be?
5. Tell me a little about KT in the Business School/Division? What do you feel NewSU wishes to achieve? Where do you feel the prospects for KT success are greatest? Why?
6. Do you feel that KT in NewSU is about transferring what we have to more people? Or a question of needing to do new things, to innovate?
7. How would you judge NewSU success / performance in KT?
8. What are the main enablers for successful KT?
9. What are the main barriers to KT?
10. What do you feel are the main benefits of engaging in KT? Who benefits and how?
11. Do you feel that NewSU should be doing more KT?
12. What needs to be done for NewSU to be "better" at KT?

Appendix 5 : List of NewSU Documents

NewSu Annual Report and Accounts: 2002/03

NewSu Annual Report and Accounts: 2003/04

NewSu Annual Report and Accounts: 2004/05

NewSu Annual Report and Accounts: 2005/06

NewSU ADRKT: memorandum of March 19th 2003

NewSU Business School Board Paper: July 4th 2005 BSB/04/34/1

NewSU Business School Dean Internal memo July 7th 2005

NewSU Internal Memorandum from Trade Union Representative, October 20th 2005

NewSU Research, Knowledge Transfer and Commercial Development Strategy
(pp/impdocs/ResearchStrategy2Dec03.doc)

NewSU Senate papers 2003 S02/70/1

NewSU Senate papers 2003 S02/82/1

NewSU Strategic Plan 2003

NewSU Strategic Plan 2004

NewSU 2005 Update to the 2004 Strategic Plan: Achieving the 2010 Vision

NewSU Website Pages: www.newsu.ac.uk (various pages)

Appendix 6: One full interview transcript: Informant R8.

Q1 How do you understand knowledge transfer?

1. The definitions that the sector broadly works from are extremely wide. The Shefc definition is probably the key one from an operational point of view because that is the definition against which we would be bidding for Shefc KT grant monies and my recollection is that it is something as wide as a kind of dissemination and exploitation of the products of the HE sector. It really is an extraordinarily wide definition really and I think that definition reflects the underlying broad economic development position of the KT agenda .

Q2 Main drivers for knowledge transfer?

2. The explicit treatment of KT I think derives from the devolution and the immediate post-devolution debate, and there was an economic development framework developed, produced in the Scottish Executive under Dewar quite early on, in the first year, or the first eighteen months, and that economic development framework had explicitly enhanced the potential role of the Universities. What really sits behind that is the underlying analysis of the nature of the economic problems in the Scottish economy. What the argument seems to be as I understand it, Alec, is that globalisation, the liberalisation of markets, means that essentially, organisations have to compete internationally (by and large) and the capacity to compete, given the pace of technology innovation and change, really fundamentally depends in a sense on developing the knowledge economy, which really boils down to an economic environment in which organisations have easy access to basic research results, and strategic research results, and applied research results, in a way that allows them to very rapidly develop and innovate new products and processes and so on. The underlying analysis of the problems of the Scottish economy (in a sense this comes from an applied economics' background) is that for historical reasons the economic base of the Scottish economy is relatively low value-added; it's a relatively low wage economy; it's a relatively low productivity economy; it has got a declining number of Head Office functions; a declining proportion of high level organisational functions, so even in key high innovation sectors like electronics, biotechnology and so on you actually find that quite a lot of the screwdriver jobs tend to be here in Scotland, rather than the R & D capacity and so on, partly because many of the organisations up here are internationally owned, and headquartered R & D capacity sits elsewhere. So we've got this analysis of the economy which is rather poorly performing, for structural reasons it has a low absorption capacity for innovation development, it's relatively non-entrepreneurial, and that might be for cultural reasons, due to the kind of broader attitude, the value set of the Scottish people, so there are certain arguments that there are fundamental disadvantages in the Scottish economy. It didn't exhibit the characteristics of the knowledge economy, where organisations are meshing, endlessly engaging, commutating with the knowledge creators and innovators. In fact the terminology 'transfer' is really just, its about information flows basically. It's not as though information flows between knowledge creation, principally in the University, and research centres/sectors and organisations that were perceived as being quite seriously deficient in the Scottish economy, the Scottish

economy has a declining amount of R & D spend, privately-financed R & D spend, for the whole of the last decade. The rest of the advanced capitalist countries were enhancing innovation in development and the investment in research & development per worker was growing steadily, most certainly in the G7 countries. In the Scottish regional economy it was going in the opposite direction modestly, so the analysis from Donald Dewar when the devolution debate came through was that for historical, structural reasons, we have a very poorly equipped economy. We didn't have an industry base that actually pulled on the knowledge base in the University and the research sector, so we had low levels of innovation, low levels of technical change, development, so starting from that strategy document, Shefc and the SE network were challenged to devise mechanisms that would at least in part begin to address this fundamental problem of low levels of innovation, the whole relatively low levels of technical change and development which reduced competitiveness and held down average wages and so on. What they came up with was a whole series of instruments that have been put in place, one very central arm of that is to try, and in a sense, if Scottish industry won't draw knowledge and innovation from the university sector, partly because of its innate inherent characteristics, is there any way in which the Universities could be more proactive, in a sense go out more aggressively, in to Scottish industry. And the idea was to try and achieve a number of objectives, trying to actually enhance the innovative capacity of Scottish industry. They were trying to alter organisational culture in a way that made that organisational culture more research-responsive or research-focussed, in a sense raise an awareness and understanding and a capacity for more rapid innovation and technical development. They were also trying to sell Scotland more effectively as a potential, an attractive, home for high value-added, high innovation inward investment. You could come in and engage with a very well developed university and research sector, and there was also what we would recognise as an entrepreneurship / education drive. How do you change the cultural/attitudinal set in Scotland that will make people more willing to risk take and innovate ? And so it is worth looking at what I've just said there. You can understand how they got to that position. What they are basically saying is that if you look at the really successful innovative clusters, you can go the extremes of silicon valley, greater Tokyo, what you have there is a very large number of high-technology, innovative companies that are endlessly pulling research work out of the universities and the research centres by co-funding, by partnerships. They are coming to the universities and banging on the doors looking for innovative solutions, either from basic research, or from more strategic research, that would actually allow them to enhance competitiveness. No-one was banging on the doors in Scotland and that was the argument. Too few were banging on the doors, so could the universities go out and bang on their door?

3. Demand versus supply driven? YES, and you know how difficult it is to create markets in a supply-driven way ! It's very difficult to do as the universities first of all are not skilled at it. That's not historically what universities have done. Universities have a much wider mission. You will find of course very entrepreneurial individuals in very small clusters in a place like NewSU, but they are relatively few and far between and they are not in any way the cultural norm. There are other universities, research-intensive universities like Edinburgh and Glasgow that will certainly be better at it, but certainly universities were not culturally or

organisationally equipped to play that role. To go out, and it's like a cold calling problem, how do you actually GET to the organisations that could actually benefit from the transfer of knowledge from universities to organisations that are clearly there? So what the SE strategy, and what the Scottish Executive strategy has really been, through Shefc, is to put in place instruments, financial incentives that have attempted to change the behaviour of the university sector in a way that forces them to more pro-actively engage externally and if there are initiatives coming from outside, that they are indeed fully supported and developed. There is an incentive system. There is a high level of awareness, there are a number of strands to it. One is to force mission change, you know, and if we are moving in to the NewSU context, you can certainly see that happening. The NewSU so-called 2010 Vision reflects this argument that one of our absolutely fundamental roles is to pro-actively engage with, and transfer knowledge to, the regional and national economy. They were also looking to try and get universities to try and change their recognition and reward system, so that staff were beginning to appreciate that engaging in highly applied research and knowledge transfer activities would be recognised and rewarded either in a promotion structure or in the rewards system. If you look at the job descriptions for most of the promoted posts in NewSU you will find KT EXPLICITLY embedded. It is now there, it's now the third leg. The teaching, the research (basic research, although NewSU doesn't do much basic research) and KT are the three legs of the strategy. I think that you could argue that promotions, elevations to professorships, readerships, people getting on, are quite influenced, some argue overly influenced by that element of someone's CV that relates to KT, that relates to external engagement, and external, commercial development work for example. That can set up resentments. There can be a lack of clarity in the eyes of staff about whether they are doing their core task within this institution. Shefc funded teaching, you can excel at that, you can have a very heavy focus in your professional life on that, and there is less chance of that being rewarded and recognised through promotion and other incentives. Relatively recent additions to our mission in KT include that there is a job to be done in terms of changing staff attitudes and perceptions about the legitimacy and the personal value of engaging in these kinds of activity. To me the intrinsic difficulty for the university, if you are looking at how this is managerially handled, the problem is that we are trying to drive from the supply side that which is actually much more effectively done from the demand side. Universities are not historically designed to do this kind of thing, so what the Scottish Executive and Shefc are trying to do is quite fundamental in terms of getting the university sector to become much more externally facing/focussed, to be aware of the business agendas, and being engaged in, locked in, to business networks in ways that might allow them to actually initiate rather than simply react to that request for KT development.

Q3. Do you see KT as a key part of NewSU's mission? More/less than other HEIs?

4. The NewSU Response? It's really difficult to get a fix, because the Scottish Executive and Shefc REQUIRE, or strongly expect institutions to be addressing this agenda, so they will certainly make every attempt to appear that they are addressing it. Exactly HOW DEEP the institutional commitment goes to, that is variable. My sense in NewSU is that the commitment, certainly at Executive level, is actually

high. I think that NewSU, as a post-1992 institution has been struggling to find a distinct place for themselves in the Scottish Higher Education spectrum. I think that the current Principal and the predecessor envisaged that this could be a very important, defining route for this Institution, partly because it cut very much with the high level of vocationality that was claimed to characterise our activities as an institution. If you look at the rhetoric of the Executive and if you are drawing on documents, you could certainly dig out the NewSU plans and planning statements, you will find a very high level of explicit commitment to this. The reality is that the main financial instrument for promoting this kind of work has been the Shefc KT Grant. The Shefc KTG came from a merger of two sources of funds, one was the Shefc budget line for the promotion of CPD, and the other one was the commercial development budget line of Shefc. They have bundled them together, significantly enlarged the global sum, and then Shefc in a sense splits that funding. One part (significant) is formula driven, and then the other element of KT funds is project-based, competitively determined, so there are a number of initiatives from which individual universities, or groups within universities, can bid. The bulk of money goes out on a formula basis. R1 can give you details, but the KT in NewSU has been quite modest because the main drivers have been the quality and the level of research measured in a kind of RAE sense, and because, as with most post-1992 universities, although in regional terms we have been one of the most successful of the post 1992's in terms of our research performance, it is still modest amounts of money. My recollection is that since I've been involved in this area, it has been about £150,000 per year. It has gone up significantly, but the university has used that KT money in a somewhat different way over the last 18 months through what they now call the NewSU Futures project. SPARKLE, much of the money for that, some of it came from the Court Fund, a non-Shefc discretionary money that the Court technically holds responsibility for, plus I think that they embedded the KT Grant. And then you know that the NewSU Futures initiatives are explicitly designed to support, typically they are called Centres, multidisciplinary, very applied in nature, and they must have EXPLICIT KT targets. And so the NewSU Futures is, you could argue, our principle device for addressing this KT agenda at the university level. In the last RAE in 2001, when the university received the main university research quality grant, which is the block of money that follows our performance, that doesn't go down to the units of assessment in the subjects, it goes to the University, and it is up to the university to determine how it will disburse the money. What the Executive did at that moment when it received the main university research quality grant, is that they top-sliced it by 40%, a gigantic top-slice, to put it in to the what they called the Strategic Research Investment Reserve (SRIR). The SRIR was a pot of money that could be bid for on criteria that once again fully embedded, and gave significant prominence to the KT agenda. The expectations of the centres, the Sustainability Centre, the Lord Cullen Centre (Governance), plus another five Centres, there are eight in all financed through that SRIR with a basic research, strategic research remit, and with KT targets, and so they were expected to both raise income, but also to get involved in partnerships, doing market research, engage with organisations, do CPD activity and other things. So these have been the main instruments in NewSU. If you look at NewSU there have been three main instruments: the modest KT Grant (formula driven); NewSU Futures (financed from first KT Grant but also the Court Fund), and the SRIR which was financed by top-slicing the RAE research income in 2001.

You have those initiatives running and on top of that in each of the Schools there is a general requirement imposed on the Schools through the planning process. Each of the Schools has got to produce a plan and these plans contain medium term and annualised targets which explicitly identify CPD, commercialisation, spin-off companies. The Schools in a general sense, that's one of my roles, to try and promote KT-type activity within the business school. All the other Associate Deans in my role have a similar task.

5. TARGETS? The university tends to use very crude categorisation, based on TRO, so much of the KT activities, some are in R and some in O. And what you tend to get is that the university tends to set performance growth targets, they maybe set an expectation of 8% growth on the target for "O", say, for the next year, or the R line, and the same is for teaching targets. So it's far from scientific. YES it comes down to pounds and money !! Because there is quite a lot bundled in to the O category, there is quite a lot bundled in to the R category, they haven't defined the objectives for CPD per se. but there is no scientific basis for this. It is to drive behaviour by altering targets.
6. YOUR ROLE? Can you please expand on this? Is it in response to the context we've discussed? These posts, Associate Deans of Research and Knowledge Transfer, were created two and a half years ago as we never had posts in the university that had an explicit KT responsibility in a sense elevated in to the title of the post. When you look at the role description, it's quite general: to support and promote. There is no really well-developed understanding within the university. To some extent the Associate Deans that were put in to these posts were told in a way to invent the job for themselves. There was an expectation that they would try and find ways of working with their colleagues. What that really amounts to in almost in all cases is supply side, capacity-building; capability-building. As you know there is the Centre for Tourism; there is the Scottish Centre for Retailing; there is the Governance Centre; there's the Family Business Research Centre; there are a number of clusters that are actively engaged in activities that would be characterised as KT by and large, and I have had not a particularly well-defined role in supporting these organisations in a sense, at least in trying to articulate their needs and expectations back at School level. That's not been particularly successful, partly because of the rather poorly defined organisational status of these Centres. They kind of float out there somewhere, and you know that there is a review of the structure of the Business School at the moment, and it's no secret that one of the principal reforms that I am sure that absolutely, categorically, will be adopted, even if many others are contested, will be that the Centres have got to be pulled more effectively in to the mainstream of the Schools' activity. So one of the roles has been, insofar as I have been able, is to support these organisations to articulate their needs at School management level and at university level. The other in a sense support/development role has really been on the supply side. It's attitude shifting, it's organising of workshops, seminars, and training events, that alter staff perceptions or raise understanding of what KT issues are, and what their capabilities might be, and what are, for example, the techniques of engagement or selling, or what are the means by which we could engage effectively. And again, it's an uphill task. You probably, if you look at that, Alec, these are staff development seminars that I am running. There are ten of them, and that's the level of demand from various academics that have

been nominated. And quite a lot of these as you can see are actually, that's an overview, how to win consultancy contracts, how to win new orders. You can take that if you want.

7. I've been much more systematic, but up to now staff engagement with staff development activities of this form (workshops, seminars) have been in a sense entirely determined by the interests of the member of staff, so they put their hand up and they attend or not, and it's typically run by R1's office. I had long discussions with R1 last year, saying well, there are two problems here. One is the relatively low level of engagement across the university with these kind of things. I did some work on a sample of staff and said why don't you go to these things? And there were some entirely obvious reasons: sometimes they were badly timed (so you got timetable clashes and so on), for some there is a fundamental lack of interest, for some there is a lack of perceived relevance of these activities to their own agenda and so on; and the other common one was that they are highly generic in nature. You're trying to run something that means something to a vision scientist, a biologist, a HRM&D specialist, a tourist specialist. So you're going to get a level of generality which reduces the value, the return that the individual member of staff can get from participation. So I spoke to R1, he was very supportive, and I said what I want to do is to first of all get away from the completely voluntaristic nature. I want to speak to Divisional Heads; you probably at some point filled out a form at some point for R2, saying what you think would be of value for you to participate in next year. So all the heads more explicitly identified staff development needs and interests, and so if you like everyone in the Business School is involved in staff development every year on both the research front and the KT front, and quality teaching enhancement front. And the Associate Dean of quality is doing the same kind of thing. Now the topics to some extent were to increase relevance of them. I've agreed with R1 that if his people are delivering them, or people that he nominates, it will be at a time and place of our choosing and it will be with a business and management focus. If John doesn't think that he can get someone that can impart that business and management focus, then we will try and use our own contacts and own resources, so we're trying to increase the relevance of it, increase the uptake, the basic return, value we might get from this, but it's still essentially trying to increase peoples' awareness of the issues and the agenda, and try to alter their behaviour, to make them realise that there are rewards and incentives for engaging in this sort of activity and increase their ability to undertake this kind of activity if they want to do so....(These were constraints)
8. At the beginning I made the point that the idea of getting universities to go out and charge doors, metaphorically, assumes that the universities understand why they would wish to do that; that they would have the interest in doing so; and the capability of doing it. Those things certainly can't be taken for granted, and to some extent, developing a capacity in, and performance in, KT activity really means that you've got to raise peoples' awareness, you've got to change their ideas about what they wish to get involved in, you've got to incentivise them and you've got to give them the ability to do so. So even if you've got pretty good researchers, teachers, it's alien country to go out and develop a CPD product for an organisation. We can't automatically assume that staff can do that kind of stuff, or to bid for contract

research. Again, they might be very good researchers, but they're used to working away and developing journal articles. There's a different language, there's a different way of presenting yourself, there's a different agenda that your research proposal must address, there's a different way of presenting your results, there are ethical and action research type issues that can creep in to different methodologies that you end up being involved with. So undoubtedly, if the university sector is to even begin to deliver to the hopes and expectations of the Executive and Shefc medium to long-term then there is a need for a real cultural, and a real shift in the cultures of the organisations, and there's a need to build capacity in these areas. It might be through recruitment, but you obviously need to enhance the capabilities of those who are currently here.

Q9. What are the main barriers to KT?

9. WHAT CONSTRAINTS ARE THERE? (Capacity, Cultural?). Culture can be so all-encompassing, but sitting within that you can affect, you can disrupt, the internal dynamics of groups, particularly if you start, if your reward and incentive systems really begin to focus in on this type of activity to the implied detriment of other core activity. You can probably, the best way of handling that kind of thing is to some extent, to extract the KT type of activities out into Centres so that to some extent they are NOT core, so that kind of income generation, and the legitimate retention of certain fees with members of staff and so on, if you don't do that then it certainly won't happen. Why would people be going out there and delivering CPD programmes at the weekend if you're not actually getting some personal return, and reinforcing to them that this activity is legitimate and central to the university mission.
10. There is a fundamental resistance to what some members of staff see as a redefinition, a reworking of the fundamental roles and responsibilities of the university. In all of the rhetoric in this debate there is always an acknowledgement that the universities, aside from our ability to contribute to the development of the Scottish economy, our economic well-being, that the universities are essentially there to create knowledge for its own sake, and to disseminate that knowledge, embed that knowledge and understanding in its students, and therefore their own personal development and enhancement, to culturally enrich. You probably see it in people of my vintage, academics of the sixties, seventies, that have a somewhat suspicious, a typical social democratic position, that universities are being turned in to an arm of government policy, and the dangers that that is actually or is perceived to hold for the loss of independence or the loss of capacity to really critically engage with society. We become a guardian. Historically people have seen the universities as a bastion of truth and knowledge, as a guardian of principles of behaviour, so there is that broad debate. Certainly, a lot of my senior research colleagues, they don't want anything to do with this. Sorry, I am interested in knowledge creation, and I didn't come in to the university in order to go out and try and do applied research, to improve the ways in which people improve packets of crisps. I would not characterise that as a majority position but it's probably a significant minority, suspicious of the role that the universities are increasingly being asked to play.

11. Your understanding of Research and KT? The definition of basic research is typically simply the pursuit of knowledge simply for its own sake. No-one has any idea where the knowledge that has been gained in basic research will be ever be relevant, or commercially exploitable, or to what use it might be put. It's simply thought of as blue sky research, for its own sake. Then there's strategic research which is still absolutely about knowledge creation but it is knowledge creation in a particularly broadly defined area that has an expectation that it will help to address a real world problem or issue. And then there is applied research; action research where you are actually getting right down to working. In a sense, that's less knowledge creation, and more the application of existing knowledge to the addressing of a particular organisational or societal problem. So you've got that spectrum. Now KT is not so much really information flows. In some cases, such as in biological sciences, in the last decade you can almost go from pure research. Some companies are finding innovative applications for new products straight from basic research results. They are SEEING the connections, even though the researchers themselves did not necessarily see how that information may be used, for example genetic, the genetic model has had all sorts of extraordinary direct applications. In Scotland there is an explicit attempt to encourage universities to research strategic areas. That is again picking winners here, trying to identify areas where the Scottish economy MAY have some potential competitive advantage Trying to get universities to undertake strategic research in the hope that that research will be applicable in a way that will enhance the competitiveness of the economy. The transfer of knowledge is typically less common. To go from basic research right in to innovation and new technical developments. Strategic research and applied research are essentially along knowledge transfer lines. It isn't as if it comes at the end of a sequence. What they are saying is that universities will be able to transfer knowledge. The Shefc definition refers to the dissemination and exploitation of the outcomes of the university, it's about disseminating, LETTING industry know, LETTING potential users know the results. We can do this in all sorts of ways, from academic papers, publications, universities can try and exploit some of it themselves by setting up spin-off companies and other bodies. Typically, we are not involved in that, in the business side, but on the technology side if you actually discover something that really you immediately see has a commercial capability, then you can spin a company off.
12. TELL ME MORE ABOUT DIFFERENCES in KT take-up in the Business School versus in more technology-related areas. It typically does not involve hard physical products. It's much more about process in a sense, and typically human processes, or organisational processes within the organisation. So to me trying to distinguish knowledge transfer from what we are doing on the MBA, in taught postgraduate programmes is much less clear cut in our area, in our subset of disciplines, than it is, for example, in biology, where literally you can have spin-off companies, you can have direct commercialisation of products. We're not involved in spin-offs at all, we're not involved in most forms of commercialisation. We don't have patents. In a sense, if you ask someone to list the principle throngs of KT, then business and management would be a relatively small subset of those, principally in the form of CPD and applied research, and contract research, and certainly I would argue that still our principle contribution to the regional economy is through our post-graduate

taught portfolio. If you look at this, because we are a very large organisation, with a very high volume of postgraduate teaching, literally thousands of organisations have benefited from the academic insights and understanding within the school. Mainly through these programmes, the bulk of where NewSU, or where the business school within NewSU, is developing KT is through increasing the focus on CPD. Much of it derives from our portfolio of postgraduate modules. You can to some extent cut and paste. You can tailor CPD products from our portfolio of those activities, and there is always an expectation that we might be able to more effectively use the virtual learning environment, using Blackboard to maybe alter the modes of delivery in a way that might enhance the relevance of what we could offer to organisations. But when you speak to members of the business community, what they want from business schools, they tend to focus on increasing the currency and relevance of our existing educational products rather than on new stuff. There is a lot of low-level training, a lot of private sector competitors. If you're looking in organisational terms for relatively long and medium-term training and development, then it's a highly competitive market. There is a fair question whether we should be getting involved in that, what we are bringing to that process, and the opportunity cost of engaging in that. Executive development, higher training and development, is something that is very attractive but again very hard to do. It's a competitive market. Guys like NewSUCM get heavily involved in executive training, for example in Scotmid, you have organisational linkages. The same applies to the Tourism Centre and the Risk area, but it's largely individuals (MC, MB, and Zurich insurance) and so on there are examples of it around the school, but again it's competitive. We don't have a wide enough or strong enough research base to carry that through. My own view is that our research and development strategy is absolutely critical in the long run to being able to enhance our performance. You have to have good knowledge to transfer.

Q8. What are the main enablers for successful KT?

13. ENABLERS? It's worryingly individualistic. This really applies not just to this institution, but I am on a one year development programme for directors of research with BAM and ABS. Some sessions are excellent. It brought me in to contact every other month for a year with research and commercialisation directors from 24 other universities, and it is pretty much the same story. It's typically individuals that have undoubtedly some common characteristics. They are dynamic, energetic, they are outward-going. Typically, they are very solid academically in their subject, but it is attitudinal/motivational more than anything else. It's again entrepreneurship. You can't create people like them. You can try and support them, facilitate, encourage them by helping. They tend to emerge. They are entrepreneurial...
14. There is a slight paradox in the first place as to why entrepreneurial people are in universities in the first place. It's not, it's a quite highly structured environment, and so when you do get these individuals they tend to end up, you nearly always have to pull them out of the main organisational structures in order to try and facilitate that entrepreneurial drive. Again it seems to hold for most of the research directors I've spoken to. The critical thing for an organisation once these individuals are in place is to try and deal almost with a succession planning issue. What you don't want is for all of your Centres to be vulnerable to the good job offer. All the individuals I have just mentioned are highly marketable individuals. What you can't have is the whole

Centre disappearing if that individual walks away. Now sometimes it's difficult to legislate against but what you need to do is to ensure that there's a cluster of academics working in there that have a reasonably deep understanding of what the Centre's about, and, of course, have got the networks..

Q10. What do you feel are the main benefits of engaging in KT? Who benefits and how?

15. BENEFITS? At high policy level, IF it was successful, if it was executed in a way that did lead to more entrepreneurial and innovative organisations in Scotland, then that would lead to a higher GNP, higher material living standards and that would lead to higher levels of social well-being, you could argue. So there are broad social and economic welfare issues. That's the highest order argument, that you are really there to try and enhance the well-being of Scotland as an economy and as a society and you could argue that there's no greater goal than that. The other benefits would be subsumed within that. There is a fundamental argument that using universities in that role will alter their culture in a way that could be potentially damaging or potentially highly fruitful. It depends on where you are coming from on the political spectrum. If you're a Labour Moderniser or you're in the Conservative party, you would be broadly supporting that increased commercial understanding and relevance. If you were somewhat more suspicious of that market-driven agenda, you could argue that there is a significant cost here because you are going to end up compromising the independence. You could end up with a degree of corporate interpenetration that characterises a lot of American universities. It's deeply arguable, it's about what universities are for. That's a big argument that is unresolved. There is a benefit and disadvantage on how you are looking at it.
16. In terms of individual members, in terms of universities, the KT agenda has undoubtedly allowed personal development scope for certain kinds of characters, the kind of entrepreneurial individuals that I have mentioned. One argument in our business area, the business area, a very strong one, is that there should be a significant backwash in to the currency and relevance of teaching. If people are out there working with organisations (it's the usual argument), if you've been in higher education too long, you begin to lose, in our area of management touch. You should be out there working, finding out what's happening in the real world occasionally, so the KT agenda, that would be significantly promoted. That statement would hold for any applied subject, so if it were a scientist, a biologist, for some of them, the relevance and currency of teaching could be positively affected.
17. Given the importance of our postgraduate taught portfolio, trying to keep the MBA, MSc in HRM, relevant, how does NewSU DO that if it doesn't have its people engaging? It's highly complementary to maintaining your academic credentials, the currency of your academic knowledge, so this is probably the strongest factor. The opportunity cost for an institution like ours would be there is a tension between pursuing the KT agenda, and the kind of activities that that involves, and pursuing the maximising of RAE scores. The rhetoric on the RAE panels is that the RAE would take cognisance of good applied research, take cognisance of non-journal outputs, for example a very substantial report that has significant policy impacts.

Most people would argue that after the most recent RAE exercise in 2001 it didn't happen, or it didn't happen in a way to convince staff that if you're looking for a Chair, you're looking for 4 articles in 5 or 5* journals. And if someone says do something that is relevant then they will say that the opportunity cost is too high. That whole question of recognition and rewards has to resolve that.

END OF INTERVIEW TRANSCRIPT