From Social Science Knowledge to Public Policy Making

The 'Relational' and 'Epistemic' Work of Academic Social Scientists

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A thesis submitted for the degree of Doctor of Philosophy

July 2018

Declaration of authorship

I, John King, hereby declare that this thesis and the work presented in it is entirely my own. Where I have consulted the work of others this is always clearly stated.

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This thesis examines the relationship between social science knowledge and public policy making by focusing on the knowledge transfer work of a group of academic social scientists with experience of public policy engagement. It contributes to knowledge transfer and utilization theory by focusing on the critical role played by knowledge producers as agents who can respond creatively and strategically to the political context, thereby highlighting the agency and political dimensions underemphasized in the existing literature. It develops a typology of policy-engaged academic social scientists to link their orientation toward the public policy field with the type of knowledge transfer work they undertake. It conceptualizes the knowledge transfer activities of the academic social scientists as 'relational' and 'epistemic' knowledge transfer work to stress their agentic effort in managing the relationship with actors in the public policy field and in translating and transforming knowledge. Four types are identified based on their beliefs about the role of academics in public policy making and their orientation toward the public policy field. The analysis shows significant variation in the 'relational' and 'epistemic' work that each type undertakes and in their perceptions of the outcomes of their engagement. The thesis does not challenge findings that the utilization of social scientific knowledge in public policy making is constrained by political and organizational context but suggests that the work of academic social scientists is an important influence. Social scientists who distance themselves from the public policy field may be less able to influence whether and how their knowledge is used, whereas those who adopt an interactive approach to knowledge production are able to exert some influence through processes of coproduction and negotiation. Those who are most able to influence knowledge utilization do so by developing extensive political networks and transforming knowledge into policy proposals and implementation strategies.

Acknowledgements and dedication

This work would not have been possible without the dedication and patience of my supervisor, Professor Alice Lam, and the support and understanding of Niamh Sands.

Dedicated to Síofra Sands King, whose love keeps me going.

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Chapter One: Introduction

1.1 The social science-public knowledge gap: Models of knowledge transfer and utilization

The idea that social scientists could and should use their knowledge of society to contribute to the governance of society has a long history. The appearance of the new science of politics—the first of the social sciences—was associated with the appearance of capitalism and the formation of the modern nation state (Manicas 1987). The science of politics, which sought to understand how society worked, was also a science of government, which sought to understand how society could be controlled. The influence of its practitioners was swiftly recognized. Louis Sebastien Mercier, writing in 1797, argued that it was the scholars who were really in control:

The good books are dependent on the enlightened people in all classes of the nation; they are an ornament to truth. They are the ones that already govern Europe; they enlighten the government about its duties, its shortcoming, its true interest, about the public opinion to which it must listen and conform: these good books are patient masters, waiting for the moment when the state administrators wake up and when their passions die down. (Mercier 1797, quoted in Habermas 1991, pp. 95-96).

Over the past few decades, however, social scientists have expressed the concern that their science has little influence on public policy. During the 1970s the discovery that government officials did not pay much attention to the work of social scientists motivated researchers to develop a literature concerned with knowledge transfer between academics and public policy makers (Weiss 1995; Estabrooks et al. 2008). Work in this tradition has sought to determine whether, how, and why the products of mostly social scientific research are transferred to policy makers and utilized in the development of public policy. Its most frequent finding has been that there is a gap between the production of social scientific knowledge in universities and its adoption or use by public policy makers (Albaek 1995).

The pervasiveness of the social science—public policy 'gap' led researchers to conclude that social scientists and policy makers were divided into two communities (Caplan 1979). This finding reflected the experiences of many researchers and policy makers who perceived a chasm between their respective communities with little contact between members of each, particularly at more senior levels of government (Beyer and Trice 1982; Gibson 2003). Concerns over the existence of a gap between the production and utilization of social scientific research have been shared widely across the social science disciplines: in 1978 Susman and Evered declared a 'crisis in the field' of management research because scholars were developing sophisticated theories irrelevant to practical problems, and debates about the relevance of management research continue (e.g. Khurana 2010; Kieser and Leiner 2009); sociologists have observed a gap between sociology and society (Burawoy 2005); and economists have questioned whether their discipline has as significant an influence on public policy as some have claimed (Frey 2006).

Public policy makers also identified a gap between academic social science and public policy as matter a concern. The perception that academics and public policy makers are divided into two mutually exclusive communities has been used to justify the establishment of intermediaries and knowledge brokers designed to bridge the gap between them (Fox 2010). In the United Kingdom, a network of 'What Works' centres has been set up to synthesize social scientific research in order to answer policy makers' questions about issues including crime reduction, ageing, early intervention, educational attainment, and local economic growth (Cabinet Office 2013). Policy makers have sought to improve the supply of policy-relevant social research by sponsoring policy-focused research centres based in universities (Frontier Economics 2009). University departments are now incentivized to support researchers who have an 'impact' on public policy makers among other extra-academic audiences by the Research Excellence Framework, a funding regime which is explicit in its aim of changing the behaviour of academics (S. Smith et al. 2011).

In an effort to characterize how knowledge can flow between academic and public policy communities social scientists have developed models of the process through which academic knowledge is transferred to public policy makers and applied to public

policy. Early models represented knowledge as an object which moved through a linear series of stages: from transmission by academics, through to rational appraisal and application by public policy makers, and finally to practical implementation and impact. These 'linear-rational' models of knowledge transfer inherit a vision of the role of science in society from Vannevar Bush, who argued in his 1945 blueprint for post-war innovation policy that science should provide a "stream of new scientific knowledge to turn the wheels of private and public enterprise" (Bush 1945, in Miller and Acs 2012, p. 415). Knowledge is depicted as being created in universities and then pushed by academics to willing users in a 'science push' or 'user pull' model of knowledge transfer.

Linear-rational models have been largely superseded in the literature by models which view knowledge transfer as an interactive and nonlinear process. Interactive models of knowledge transfer recognize that cognitive and organizational limits on decision making mean that knowledge utilization cannot be fully rational (H. Simon 1997). They also recognize that the complex, contested, and problem- and event-driven nature of public policy making means that knowledge transfer between academics and public policy makers rarely occurs in a linear fashion. Instead, interactive models rest on an argument that policy makers learn from academics by participating in sustained interactive relationships through which they gradually come to recognize each other's perspectives and develop common understandings and conceptual frameworks (Huberman 1994).

The development of interactive models was underpinned by the emergence of a broader understanding of research utilization which recognized that even if research findings were not instrumentally applied during the making of decisions, they might still enhance policy makers' conceptual understandings of an issue (Weiss 1979). Successful knowledge transfer came to encompass work such as challenging existing ways of thinking, acting as a source of new ideas and motivation, helping policy makers to find common definitions or develop policy objectives, promoting informed discussion, and contributing to societal debates (Albaek 1995; Court and Young 2006; Fisher 1997). Evidence emerged that a significant proportion of policy makers did use social scientific knowledge and that social science research did influence policy (Beyer

and Trice 1982); it was just that social science research was more likely to be used in conceptual than in instrumental ways (Albaek 1995; Hemsley-Brown and Sharp 2003).

The view of knowledge transfer as an interactive and relational process has come to dominate the literature and underpin initiatives by policy makers intended to increase knowledge transfer. For instance, the Economic and Social Research Council (ESRC), a major funder of social scientific research in the UK, specifies the following 'key factors' as being 'vital' to support the transfer of social scientific knowledge to research users (ESRC 2009):

- established relationships and networks with user communities;
- involvement of research users at all stages of the research;
- well-planned user-engagement and knowledge exchange strategies;
- portfolios of research activity that build reputations with research users;
- good infrastructure and management support; and
- where appropriate, the involvement of intermediaries and knowledge brokers as translators, amplifiers, network providers.

The identification of these factors is one of the outputs of a programme established by the ESRC to evaluate and monitor the impact of social science research (see also Pettigrew 2011). Its focus on the development of 'relationships' and 'reputations', and the encouragement of user 'involvement' and 'engagement' supported by 'networks' and 'infrastructure', draws heavily on a conceptualization of knowledge transfer as an interactive and relational process (see for example Molas-Gallart et al. 2000). This conceptualization has been used to justify programmes which seek to bring social scientists and policy makers together, including the establishment of research centres funded to develop boundary-spanning networks and the secondment of social scientists to government departments.

A view of knowledge transfer as an interactive and relational process has also informed normative arguments concerning the proper role and conduct of social scientists. Arguments have been put forward in favour of an 'interactive social science' in which researchers invest time in maintaining productive linkages with potential research users, even to the extent of working to 'coproduce' knowledge with them (Caswill and Shove 2000). In the management literature, scholars have promoted 'engaged scholarship', a "collaborative form of inquiry in which academics and practitioners leverage their different perspectives and competencies to coproduce knowledge about a complex problem or phenomenon" (Van de Ven and P. Johnson 2006, p. 803). Others have promoted a 'relational scholarship' which emphasizes building on the links and interactions between research producer and user communities (Bartunek 2007). Similarly, Burawoy (2005; 2013), a sociologist, has argued in favour of a 'public sociology' which operates as a 'conversation' between social scientists and their publics.

1.2 Social science knowledge transfer: Missing agency and politics

Academic social scientists are vital participants in interactive knowledge transfer processes and their active engagement plays an important role in influencing whether or not research will be utilized (Landry, Amara and Lamari 2001a). A recognition that what knowledge producers do can influence whether or not their knowledge will be utilized has underpinned the development of a science of research 'implementation' which seeks to develop theoretically informed initiatives, programmes, or strategies which are effective at promoting the utilization of research (ICEBeRG 2006). No strategies which are universally effective across different organizational and political contexts have been identified (Contandriopoulos et al. 2010). Instead, scholars have sought to develop frameworks, models, which can act as 'field guides' to help knowledge producers identify which contextual factors are most important and then tailor their activities appropriately. The observation that knowledge transfer strategies must be tailored to the organizational and political context suggests that knowledge

transfer is a dynamic, strategic, and political process in which knowledge producers must respond as creative and reflexive agents to the situations they are confronted with.

A recognition of the organizational and political context may be particularly important for the transfer of social scientific knowledge because academic social scientists are not the only actors involved in producing knowledge about the objects of their study. When social scientists enter the field of public policy making they are exposed to a polarized and contested environment in which parties to the transfer of knowledge already possess firmly held beliefs about the nature of social objects and the causal connections between them. The analytical and reflective work of non-scientists also "produces concepts and interpretations, proposes models, clarifies causal relations and organizes experiments" with which to characterize the social world (Callon 2007, p. 333). Social science knowledge rarely possesses the same degree of verifiability as natural science, making disagreements over interpretation difficult to resolve; unlike in the natural sciences, there is no recourse to the physical world as arbiter. Even though social scientists produce theoretical models of social rules, practices, and events using methods akin to those of the natural sciences—by developing abstract categories and determining patterned relationships between them such as chains of cause and effect (Strang and J. Meyer 1993)—they cannot make the same claims to knowledge as their natural scientific peers because, unlike natural science, social science is not outside the world it describes.

The subject-object ontology of the natural sciences presupposes that the object of a scholar's research will not read what he or she is writing and behave differently as a result. However, it cannot be said that this will be the case with social scientific research, as people do interpret and respond to its findings. In social science there is a 'double hermeneutic' because researchers are interpreting the actions of subjects who are also interpreting the world and the actions of the researcher (Giddens 1984). Neither can social science escape the subjectivity of the knowledge it produces through the use of objective methods, because scientific methods and results are not independent of the theories and prior beliefs of scientists and always include evaluative judgements (Kuhn 1996).

As there can be no truly objective social knowledge, the interpretations produced by social scientists must compete for acceptance and validity with those produced by nonscientists, who have access to alternative sources of information including non governmental organizations, consultancies, and think tanks, which are often in effective competition with academic social science (Caswill and Lyall 2013). The transfer of social science knowledge to public policy makers is further complicated by the organization of knowledge producers and users into coalitions arranged on the basis of their political and ideological beliefs (Sabatier 1987). As the production of social science knowledge involves value and ideological commitments it is not possible for social scientists to adopt a 'sovereign' epistemic standpoint which is above or outside of political conflicts (Foucault 1977; Rouse 2005). Social scientists who are attempting to transfer knowledge may become associated with a particular coalition or be treated as an 'insider' or 'outsider' to government based on the content of their public claims to knowledge. As a result, the development and maintenance of interactive relationships between social scientists and public policy makers are subject to political constraints and the transfer of social scientific knowledge can never be fully separated from the substance of policy and politics (Fox 2010).

1.3 Research focus and questions

This thesis argues that academic social scientists are not powerless in the face of organizational and political constraints but can reflexively work around them by modifying their behaviour. What is missing from interactive and relational models of knowledge transfer is an account of the ways in which social scientists respond, as creative, strategic, and reflexive agents, to the political and organizational contexts they find themselves confronted with—in short, what is their knowledge transfer work? What different types of knowledge transfer work do they undertake in relation to public policy making? How do they view engagement with public policy making and how do they manage the boundary between the academic and public policy fields? And is there evidence that different types of knowledge transfer work are associated

with different outcomes? By answering these questions, the thesis contributes a vital agentic and political perspective to the literature on knowledge transfer.

The study addresses these questions by focusing on the knowledge transfer activities of a group of academic social scientists with experience of public policy engagement. It develops the concepts of 'relational' and 'epistemic' work to capture the agentic and political nature of the knowledge transfer process. The concept of relational work draws on network theories of diffusion and knowledge transfer which depict knowledge as being capable of transmission across social ties. While this literature embraces a view of human relations as conduits across which knowledge can flow unproblematically, a focus on relational work emphasizes that human relations are socially constructed, contingent on human agency, and involve distancing as well as association. Relational work is the agentic effort an actor undertakes in establishing, maintaining, differentiating, withholding, or terminating social relations (Bandelj 2012; Zelizer 2012). Human relations are not simple conduits; they are the outcome of investments made by individuals in pursuing and defending their interests, in attempting to organize others and being organized by others, in developing their career or political objectives and in distancing themselves from others whose values, political or otherwise, they disagree with. Thus the development, maintenance, or termination of a social relationship is not only an act of knowledge transfer; it is also a political act of association or dissociation.

Phelps et al. (2012) criticize research on knowledge transfer across relational networks by arguing that much of it "implicitly assumes that actors in networks are cognitively hollow, passive vessels through which information and knowledge flow unimpeded and unchanged" (p. 34). The concept of *epistemic work* draws on theories of situated knowledge and knowledge translation which argue that knowledge developed in one field must be appropriately converted, represented, or framed in order to be recognized as knowledge by members of another field (Carlile 2004; Østerlund and Carlile 2005). Epistemic work is the work an actor undertakes to articulate, represent, combine, repurpose, or transform knowledge such that knowledge produced in one field is cognizable in another.

The study develops a novel approach to studying the agentic contribution of knowledge producers to the knowledge transfer process by utilizing episodic interviews (Flick 2000) to generate narratives of knowledge transfer work and by triangulating interview accounts with biographic and bibliometric records. These methods enabled the social scientists' understandings of policy engagement to be compared with their narrative accounts and with objective records of their engagement activities and policy-relevant outputs. Responding to the considerable methodological challenge of attributing particular knowledge utilization outcomes to the work of individual actors, the study, uniquely, uses interviews with public policy makers to cross-check the self-reports of academics. Nineteen supplementary interviews were undertaken with public policy makers, enabling additional perspectives to be gained on the social scientists' knowledge transfer work.

1.4 Main findings and contributions

The analysis finds significant variation in the relational and epistemic knowledge transfer work of the academic social scientists and an association between their beliefs about the role of academics in public policy making, their motivations toward public policy engagement, and their knowledge transfer work. Four types emerge from the analysis: traditional academics, engaged academics, academic policy experts, and academic policy entrepreneurs. The *traditional academics* maintain a boundary between the academic and public policy fields, relationally distancing themselves from policy. Their engagement in public policy making is reactive and occasional and, while occasionally willing to simplify their output for a general audience, they do not translate their knowledge to meet the needs of policy makers. The *engaged academics* value the presence of a boundary protecting the academic field from the influence of politics, but seek to expand it such that policy engagement is recognized as a legitimate part of their academic role. Their approach comes closest to the normative arguments of knowledge transfer scholars for relational or 'engaged scholarship' (Van de Ven and P. E. Johnson 2006). By engaging in processes of rational dialogue and mutual

knowledge exploration the engaged academics seek to interpret and translate their knowledge for policy makers.

Unlike the traditional and engaged academics, who engage with policy episodically, the academic policy experts and academic policy entrepreneurs continuously work across the academia-public policy divide. The academic policy experts inhabit the liminal spaces between the academic and policy fields which are stabilized by hybridized research centres and disciplines. The continuous maintenance and negotiation of relationships with actors in public policy making's technical periphery enables them to recognize and respond to the information flowing through policy streams. By contributing to the definition and stabilization of 'policy facts' they can circumscribe the knowledge in use by public policy makers. The academic policy entrepreneurs are both academics and policy makers in the sense that they fuse their academic and policy maker identities to adopt a 'both/and' orientation. They see the boundary between academia and public policy as permeable and work across and through political networks to mobilize support for their ideas. They combine knowledge derived from their both the academic and policy fields to formulate policy proposals, develop arguments to justify their proposals, and steer the proposals through the public policy field.

The introduction of the relational and epistemic work perspective is a significant theoretical contribution which enables the role of knowledge producer agency to be captured and variations in knowledge transfer work to be identified and conceptualized. The thesis develops a novel methodological approach involving the triangulation of producer and user accounts of knowledge transfer to address some of the challenges in evaluating knowledge utilization outcomes. This results in the production of some unique comparative data which suggest an association between the work of academic social scientists and the utilization of their knowledge. While the engaged academics and academic policy experts were successful in transferring knowledge to technical policy makers only the academic policy entrepreneurs were perceived to transfer knowledge which resulted in more radical or significant changes in policy. While this neglects the possibility of other types having a significant indirect

effect on policy, as indirect effects could not be analysed, it reveals the importance of political participation and academic-policy knowledge combination.

The study makes a further theoretical contribution by using the relational and epistemic work perspective and the outcome data to develop a critique of existing interactive models of knowledge transfer. Three alternatives, or variations, on interactive models are put forward: an 'interactive-push' model, which reflects the observation that interaction with public policy makers does not necessarily cause academics to alter their research objectives; an interactive 'strategic-technical' model which involves transferring knowledge by placing technical bounds on policy makers without exposure to political risk; and an interactive 'strategic-political' model which integrates theories of policy entrepreneurship.

1.5 The structure of the thesis

The thesis proceeds as follows. The next chapter, Chapter Two, reviews the literature on knowledge transfer between academic social scientists and public policy makers and develops the conceptual framework. The chapter begins by examining three types of knowledge transfer theory: linear-rational theories, which treat knowledge transfer as a linear and rational process in which knowledge created in universities is first disseminated to policy makers and then rationally considered; interactive-relational theories, which view knowledge transfer as an interactive and iterative process in which relational ties between academics and public policy makers are given primacy; and contextual-structural theories, which focus on the role of political and organizational barriers and enablers of knowledge transfer. It then examines normative and empirical models of the role of academic social scientists in the public policy making process, including literature which suggests that academics hold different attitudes toward intervening in public affairs and that they adopt different modes or styles of intervention in the public policy making process. The chapter then turns to the relational and epistemic dimensions of knowledge transfer/translation, reviewing literature concerned with knowledge flow over social ties, the situated nature of knowledge, and the interdependency of relationships and beliefs in the public policy context. Finally, the chapter focuses on knowledge producer agency and develops the concepts of 'relational' and 'epistemic' work.

Chapter Three outlines the context for the study by drawing on studies of the structure and process of public policy making in the UK. The UK possesses a model of representative democracy known as the 'Westminster model' which features an institutional separation between administrative and political functions. At the heart of the system are political policy makers: elected politicians who possess the legitimacy to make policy decisions on behalf of the people and are supported by political parties and partisan advisors. Surrounding them are technical policy makers who supply and interpret data and make policy recommendations. The chapter is structured by making a distinction between 'political' policy makers and pathways and 'technical' policy makers and pathways.

Chapter Four describes and justifies the methodological approach and sets out in detail how the sample were selected, the types of data collected, and how the data were obtained and analyzed. This chapter also presents important summary tables, including a series of four tables which list the academic social scientists in the sample classified according to the four types which emerged from the analysis. These tables also present descriptive data, the bibliometric data, and a summary of the biographic data. In order to allow the reader to understand how the cases were classified the detailed typology is presented in this chapter, slightly earlier than may otherwise have been necessary.

The results of the empirical analysis are presented over the following three chapters. Chapters Five and Six present the analysis of the social scientists' relational and epistemic knowledge transfer work, their beliefs about the role of academics and academic evidence in policy making, their motivations for public policy engagement, attitudes toward the academic field, and their orientations toward the boundary between the academic and public policy fields. Chapter Five presents the analysis pertaining to the traditional and engaged academics while Chapter Six presents the analysis pertaining to the academic policy experts and policy entrepreneurs. Chapter Seven presents the outcome data and analysis in detail and argues that each type of academic social scientist is associated with a characteristic type of knowledge utilization by a characteristic set of policy actors, technical and/or political.

The final chapter, Chapter Eight, discusses the findings of the study and their implications. It examines the value of the relational and epistemic work perspective and compares the findings with existing models of knowledge transfer and policy entrepreneurship. It then examines the influence of structural and career factors on academic social scientists' knowledge transfer work, including the effect of academic disciplines, hybridized research centres, and political intermediaries in constraining and enabling opportunities for knowledge transfer and the development of contacts and political skill. It then compares the findings with the existing literature. Finally, the chapter discusses the methodological strengths and limitations of the study, focusing on the value of the novel methodological approach involving comparison of knowledge producer and user accounts, and offers some concluding comments.

Chapter Two: Literature Review and Conceptual Framework

2.1 Introduction

This chapter provides a critical review of existing models of knowledge transfer and utilization and highlights their neglect of the role of knowledge producer agency in the knowledge translation and utilization process. The discussion focuses on the relationship between the production of social science in universities and its use by public policy makers. The chapter first examines linear-rational, contextual-structural, and interactive-relational approaches to studying knowledge transfer and utilization. It then moves on to focus on the contribution of academic social scientists to knowledge transfer and utilization processes. The chapter discusses the ongoing debate concerning the role of academic social scientists in contributing to public policy making and introduces some empirical evidence concerning their orientations and extent of public engagement. The final two sections of the chapter are devoted to developing the conceptual framework for the study. In order to capture the agentic contribution of academic social scientists to the knowledge transfer process the relational and epistemic dimensions of knowledge transfer/translation are examined and the concepts of 'relational' and 'epistemic' work are developed.

The first section in the chapter opens with a brief historical overview of the development of theories of knowledge transfer and utilization. Theorizing began in earnest with the introduction of models which depicted the linear 'transfer' of knowledge from academics to policy makers through a series of stages in which knowledge was first rationally evaluated and then applied. As scholars began to recognize the limitations of this approach, they developed two approaches which remain dominant: contextual-structural approaches, which involve identifying various contextual and structural barriers and facilitators to knowledge transfer and utilization,

and interactive-relational approaches, which envisage knowledge translation and utilization as an interactive and relational process. The section concludes by pointing out that while the contextual-structural and interactive-relational approaches correctly identify the interpersonal nature of knowledge transfer and utilization, they fail to fully reflect the contribution of academic social scientists as agents in this process.

The second section of the chapter reviews literature concerned with the role of academic social scientists as participants in public policy making processes. It examines the debate which surrounds academic engagement in policy and the contradiction between normative expectations that academics will maintain the status of dispassionate observers and demands for them to intervene in public life as 'intellectuals'. The section then moves on to consider the different modes of engagement that academics might adopt as participants in an interactive process: as expert advisors, as translators between different knowledge frameworks, or as proponents of specific policy solutions or general programmes for change.

The final two sections of the chapter focus on the nature of knowledge transfer and translation and the role of knowledge producer agency which is expressed in their knowledge transfer and translation work. Recognizing that knowledge transfer/translation involves both relational and epistemic components, these sections bring a range of literature concerned with the nature of knowledge and knowledge transfer together to develop a conceptual framework which distinguishes between relational work and epistemic work. While the former involves activities such as developing, maintaining, withholding, and terminating relational ties, some parts of which have been studied by network and knowledge transfer theorists, the latter involves translating or transforming knowledge and has been studied by theorists of organizational learning adopting a situated perspective on knowledge. The first of these final two sections discusses the contribution of these theories and the second develops the concepts of relational and epistemic work.

2.2 Theories of knowledge transfer

Historically, periods during which policy makers have shown a heightened interest in the utilization of academic research have been accompanied by increased efforts by academic social scientists to produce theories and models which describe it. Backer (1991) identifies three 'waves' of research addressing the question of the application of academic knowledge to inform and improve society. Each wave witnessed significant developments in the knowledge base concerned with the utilization of scientific knowledge. The first wave began with the discovery that scientific discoveries made prior to the second World War were adopted by practitioners in distinctive ways, with similar patterns of adoption displayed by the diffusion of different technologies through different networks of relationally connected individuals. It was soon noticed, however, that social scientific knowledge did not diffuse to public policy makers in exactly the same way. A second wave of research followed the investment in social research made by the Johnson administration in the United States during the late 1960s, to inform the 'War on Poverty'. During this period linear-rational models of a scientific knowledge-to-action process were introduced into American public administration with the aim of incorporating science into the rational process that policy making was believed to be at the time (Albaek 1989; 1995).

A third wave of knowledge utilization research was spurred by the institutionalization of research functions in Bush-era federal agencies with devolved decision making powers from the 1990 onwards. During this period scholars sought to draw on theories of organizational change to develop strategies—such as increased interpersonal contact, careful planning, the use of opinion leadership, user-focused knowledge transformation, and user involvement—which academic researchers and government agencies could use to transfer knowledge and increase the likelihood of it being used to inform judgements. A recognition that political and organizational context was a strong influence on knowledge utilization led to the development of contextual and structural models which identified various facilitators and barriers to knowledge flow, an approach which remains popular within the healthcare literature. Most recently, scholars have sought to develop theoretical frameworks which can help social

scientists to identify which facilitators or barriers are most likely to apply in a given context.

A further theoretical development occurred during the same period, when academics came to view the processes through which knowledge is transferred between universities and non-academic organizations as more interactive, iterative, nonlinear, and multidirectional than traditional linear models of knowledge transfer can describe (Bradley et al. 2013). Linear-rational models were thus succeeded by relational and interactive models which blended an emphasis on local context with traditional models of dissemination (Cousins and M. Simon 1996; Lomas 2000b).

2.2.1 Linear-rational approaches

Linear-rational approaches to knowledge transfer and utilization draw on an understanding of policy making as a linear or cyclical process in which agendas are set, problems are recognized, policy solutions are developed and evaluated, candidate policies are presented for selection and legislation, and finally programmes are implemented by the bureaucratic apparatus of the state (Sabatier 2007). Linear-rational models of the policy making process remain in practical use. For example, a normative model based on this approach setting out stages in the development of policy is incorporated in the U.K. government's Green Book, a handbook for appraising policy options, as the ROAMEF—Rationale, Objectives, Appraisal, Monitoring, Evaluation and Feedback—cycle (HM Treasury 2011). Civil servants following this cycle are encouraged to source information from academic experts during the policy appraisal stage before rationally evaluating it.

Linear-rational models implicitly conceptualize knowledge as an object or possession which may be transferred between organizations. They draw on a 'science push' or 'user pull' model of innovation in which universities are depicted as producers of objective knowledge which may be disseminated to research users (Bradley et al. 2013). Once produced in a university, academic knowledge is seen as moving in a linear fashion from production to use through a series of stages. During each stage,

government policy makers or industrial firms make rational decisions based on a comprehensive understanding of the nature of the knowledge and its benefit to them. Linear-rational models thus embrace a view of policy making in which policy making is seen as "'rational' in the sense that it follows a logical and ordered sequence of policy-making phases [and] 'comprehensive' in the sense that it canvasses, assesses and compares all options, calculating all the social, political and economic costs and benefits of a public policy" (Stone et al. 2001, p. 5).

Linear-rational approaches came under significant pressure when academic social scientists in the United States, who had hoped to use their knowledge to influence public policy, discovered that government officials paid little attention to their work and that there was only weak evidence that their research had any influence on policy (Weiss 1995). They discovered that social scientific research did not translate to collective decision making contexts, such as public policy making, in the same manner as the dissemination of technologies to networks of practitioners. Furthermore, much of the knowledge produced by universities is complex, ambiguous, and difficult to codify, and linear-rational models have difficulty in accounting for the transformation and adaptation of academic knowledge which is required in order for it to be applied (Goldhor and Lund 1983).

Even in the natural science and engineering disciplines in which knowledge is highly codified, most scientific discoveries cannot be directly applied without the personal involvement of the inventor (Jensen 2001). Linear-rational models do not incorporate the feedback mechanisms between knowledge producers and users which are required in order for innovation to occur (Lundvall 1988). Models based on pushing out science to users do not incorporate the reverse flow of information which is required in order for academics to understand the needs of users. Similarly, models based solely on pull-through from users do not provide for the flow of information from academics to potential research users which is required to reduce uncertainty on the part of potential users about whether science is capable of producing knowledge they can use.

While linear-rational models can have analytic and heuristic utility, they have been subjected to sustained criticism on the basis that they do not reflect how research is actually used in practice (Stone et al. 2001; Bridgman and Davis 2003). They fail to

account for cognitive limits on rational decision making, the multiple sources of relevant knowledge, the contested and event-driven nature of politics, the multiple ways that knowledge can be used by policy makers, and the multiple pathways through which influence can be brought to bear, as policy making activities are distributed across a variety of actors and locations (Ball and Exley 2010; Watkins 1994). Furthermore, linear-rational models overlook the importance of the interactive relationships between academics and policy makers.

The presence of interactive links between academics and research users has been identified as a key contributor to the adoption of social scientific knowledge (Landry, Amara and Lamari 2001b). Interaction between policy makers and researchers is the most frequently cited factor in reviews of health care research utilization (Lavis et al. 2005). Direct contact between researchers and research users is considered to be an effective mechanism of knowledge translation because it permits knowledge to be exchanged bidirectionally and helps parties to the transaction to understand each others' perspectives and existing stocks of knowledge. Participation in joint interpretative forums in which participants are able to explore and discuss research findings can encourage the use of research knowledge (Huberman 1994; Mohrman et al. 2001; Bogenschneider and Corbett 2010).

Rational models of knowledge transfer and utilization fail to account for cognitive and organizational limits on decision making which mean that knowledge utilization is not entirely rational (H. Simon 1997). Administrators 'satisfice' by making decisions which satisfy constraints rather than produce optimal outcomes, and the political decision making process has been characterized as one of 'muddling through' in which actors make pragmatic, piecemeal adjustments to policy based on what is politically feasible (Lindblom 1959). Policy makers receive information from multiple sources, including non-governmental organisations, consultancies, and think tanks, all of which may be in effective competition with academic social science (Caswill and Lyall 2013). Relevant and legitimate information is received which is not based on scientific methods, leaving research users unable to 'rationally' sort and prioritize information based solely on measures of internal validity (Contandriopoulos et al. 2010). Furthermore, they can become swamped with information, making overload a problem

(Weiss 1999; P. Feldman et al. 2001). While the proximity produced by interpersonal interaction may raise the salience of academic knowledge, making it more accessible to policy makers and easier to absorb, linear-rational models do not account for relational factors.

2.2.2 Interactive-relational approaches

Recognizing the complexity of the knowledge transfer process, scholars have sought to develop models which focus on the importance of relational and interactive links between academics and policy makers and feature multiple connections and overlaps. Such models include the 'exchange' model developed by Klein and Gwaltney (1991), Landry et al.'s (2001b) 'interaction' model, and 'linkage and exchange' and 'flows and interfaces' models which have been used to model the transmission of research findings to healthcare policy makers (CHSRF 2000; Hanney et al. 2003). Crewe and Young (2002) offer a 'context, evidence and links' model in which 'context' encompasses the institutional, cultural, and structural dimensions of use, including local, organizational and national politics and "the priorities of street-level bureaucrats, local history, ideologies and power relations" (p. vi); 'evidence' represents the credibility of research and the way in which it is communicated; and 'links' describes how the influence and legitimacy of the research is related to the identity and roles of actors in the process and the relational connections between them.

Interactive and relational models of knowledge translation argue that knowledge translation must be understood as an interpersonal, collaborative, and political process in which relationships between knowledge producers and users play a critical role. Interactivity between academics and policy makers is a key determinant of the successful adoption of knowledge (Landry, Amara and Lamari 2001b). Relational and interactive activities which support the transfer of social scientific knowledge include the informal provision of advice to research users, participation in committees, seminars and workshops, the involvement of research users in the design and conduct of research, and the publication of articles targeted at non-academic audiences (Olmos-Peñuela et al. 2014). Mechanisms such as joint interpretive forums facilitate the

exploration of research findings and user involvement in the research design and production process makes more the adoption of research more likely (Mohrman et al. 2001; Bogenschneider and Corbett 2010).

Interactive and relational models stress the importance of 'sustained interactivity' which results from the development of mechanisms to link researchers and practitioners, and they emphasize the collaborative production, or 'co-production' of knowledge (Huberman 1994). Interaction is thought to help increase the relevance and applicability of social scientific research by enabling each side to learn from the cognitive and cultural differences between them. For example, Van de Ven and P. Johnson (2006) argue that "a collaborative form of inquiry" is required in which academics and practitioners "leverage their different perspectives and competencies to coproduce knowledge about a complex problem or phenomenon that exists under conditions of uncertainty found in the world" (p. 803). Researchers have illustrated the reflexive and iterative processes through which social scientists build up trusting relationships with practitioners, developing 'symmetrical expectations' around research objectives, agreeing methodological approaches, and sharing common interpretations of research findings (Molas-Gallart et al. 2000; Molas-Gallart and Tang 2007; Hawkins et al. 2015). Researchers may respond to interactions with policy makers by realigning their research objectives, adapting their outputs, or modifying their recommendations to make them more reflective with research user needs and capabilities (Olmos-Peñuela et al. 2013). Policy makers may respond by giving research more consideration or taking more ownership of the results (Mohrman et al. 2001; Bogenschneider and Corbett 2010; Lomas 2000a).

Relational and interactive models are more able than linear models to recognize that the production and consumption of academic social science is set within an interdependent web of interests and shifting power balances between different groups within society and that the effects of social scientific research are interwoven with those of other commentators, such as consultants and government agencies, so that they flow into and influence the work of these groups and others (Newton 2010). For instance, Jarzabkowski et al. (2010) argue that relationships between academic research and practice are best understood in the context of the networks of

relationships between scholars and practitioners which are shaped by the purposes of each actor. Sometimes the purposes will overlap, and in these cases tight connections between actors will serve their purposes best; in other cases, the diversity of purposes precludes close connections. Scholars of science and technology have similarly argued that a network of professions, practitioners, and materials is required for the theories produced by social science to be applied to practice (Callon 2007). The complexity of these shifting relationships and the locally negotiated nature of meaning and change means that interaction between academics and practitioners is seen to lie at the heart of the knowledge translation processes. Scholars have responded by arguing in favour of a more 'relational' scholarship which involves building on the links and interactions between research and practice communities (Bartunek 2007).

Interactive and relational approaches to knowledge transfer focus on the critical role played by the relational and interactive ties which link social scientists and practitioners. However, scholars have noted that academics and practitioners actually appear to be members of distinct communities with limited interaction between the two communities, which are divided by different sets of values and by reward systems that do not incentivize collaboration (Caplan 1979). These 'two communities' are described as possessing different basic assumptions and beliefs (Thomas and Tymon 1982), different systems of language (Kieser and Leiner 2009), and incompatible epistemological assumptions and frames of reference (Shrivastava and Mitroff 1984). These observations reflect the experience of many researchers and policy makers who perceive a chasm between their respective communities with little contact between members of each, particularly at more senior levels of government (Beyer and Trice 1982; Gibson 2003).

The observation that scholars and policy makers are inhabitants of disconnected communities has focused attention on the role of knowledge brokers who can connect the two communities and translate knowledge between them (M. Meyer 2010). Brokers are actors who help goods, information, opportunities, or knowledge to flow across gaps in social structure, forming intermediary links in systems of social, economic, or political relations; opportunities for brokerage emerge whenever information is poorly distributed or when social entities are close to each other but yet

isolated (Stovel et al. 2011). The role of academic knowledge brokers has developed as a significant stream of research, with a special edition of *Evidence and Policy* dedicated to the topic (Knight and Lyall 2013). Knowledge brokering has featured in *Organization Science* (Hsu and Lim 2014), *Research Policy* (Boari and Riboldazzi 2014), and a special section in *Science and Public Policy* (M. Meyer and Kearnes 2013). Osborne (2004) identifies the emergence of particular type of broker in policy networks, the 'mediator', who is an "enabler, fixer, catalyst and broker of ideas" (p. 440) who intervenes to 'get things moving'.

The emergence of intermediary actors who broker social science to public policy makers is a notable innovation in the system of public policy formation. An array of quasi-independent or politically aligned think tanks, including Policy Exchange or Demos in the UK, work to inject policy recommendations—some informed by academic social science—into government and play an important role in the formation of public policy (Stone 1996). Think tanks are increasingly influential participants in the policy making process; Ball and Exley (2010) argue that the centre of idea production for policy oriented research is moving to think tanks. Policy makers in the United Kingdom have established a series of knowledge brokering organizations which summarize and supply social scientific evidence to government and the public sector.

Interactive and relational approaches to knowledge transfer and utilization usefully focus attention on its local and interpersonal aspects. Like linear-rational approaches, however, they tend to overlook the role of producer agency in responding to local context and in developing relationships with knowledge users. They overemphasize relational structure which is seen as a determinant of knowledge transfer. In doing so they overlook the potential for academics to creatively and strategically use their agency to translate their own knowledge and, instead, are used to support the establishment of intermediary actors who may bring their own interpretations and agendas to bear.

The framing of academics and policy makers as inhabitants of two communities which are isolated from each other has been used to justify the establishment of knowledge brokers (Fox 2010). However, brokers may exploit a network for profit, exacerbating

existing inequalities and perpetuating network divisions (Stovel and L. Shaw 2012). Knowledge brokers may impose barriers between knowledge producers and users and modify knowledge as it passes between them: although they are often portrayed as 'match-makers', an examination of the practices of intermediaries has revealed that they undertake a variety of more active roles (Schlierf and M. Meyer 2013; Am 2013). M. Meyer (2010), for example, argues that knowledge brokers are active agents in the construction of 'brokered knowledge' which is not identical to academic knowledge. Knowledge brokers may also combine brokerage with "advocacy for particular agendas that they claim are derived from applying the methods of inductive reasoning" (Fox 2010, p. 490).

The polarized relational landscape depicted by two communities theories is contested by authors who point out that there is substantial diversity and heterogeneity in academic and policy making communities (e.g. Lomas 1997; Wingens 1990). Academic researchers are often seconded to work inside government, and researchers working for government or for private research organizations, consultancies, and think tanks may be viewed by their organizations as knowledge brokers who bridge academic and policy making communities, conferring access to academic insights and contacts (G. Clark and Kelly 2005). Nearly half of UK academic social scientists report that the primary purpose of their research is to acquire new knowledge directed towards an individual, group, or societal need or use and most have engaged in some form of collaborative activity with an external organization (Abreu et al. 2009).

Fox (2010) argues that because "making, communicating, and applying knowledge are political processes", knowledge transfer is better conceived as a process whereby "knowledge and policy workers engage most effectively as principals, that is, face to face as experts who have extensive firsthand knowledge of their particular fields" (p. 488). Knowledge translation does not appear to have been a noticeable problem in the careers of researchers who have gone on to work in government, most famously John Maynard Keynes. Academics who come to the attention of government ministers may accept an official appointment as a 'policy tsar', a position which confers legitimacy, direct access to ministers, and bypasses civil service recruitment and tendering processes (Levitt and Solesbury 2012). Studies of academic policy tsars and academics

acting as 'policy entrepreneurs' emphasize the agentic possibilities available to academics to put their knowledge to use (Oborn et al. 2011).

If the utilization of social scientific knowledge occurs through interactive and relational processes in which knowledge and change are negotiated locally rather than imposed from above then this points to the critical role played by human agency and skill in responding to and shaping the local contexts and interactions which either lead to, or do not lead to, successful knowledge translation. However, despite the focus on interaction and relationships, the agency of knowledge producers is excluded from the analysis. The presence or absence of interaction is treated as a contextual factor and the agency of knowledge producers in developing or rejecting relationships with policy makers or engaging as political actors themselves is overlooked. This dimension is entirely missing from linear-rational, contextual-structural, and interactive-relational approaches to knowledge translation.

These models have been successful to the extent that they broadly represent the relational nature of knowledge translation. However, they tend towards description rather than explanation, failing to explain why or how relationships develop, why structural patterns exist, and why certain types of knowledge are more easily exchanged than others. Their generality makes them difficult to apply in practice and they offer little guidance as to which factors matter most in a particular context. As a result, scholars have sought to produce more detailed descriptions and models of the contextual and structural barriers through which academic knowledge must move in order to reach the next stage of utilization and the facilitators which assist its progress (e.g. Walter et al. 2003). The thrust of this research has been to discover generally effective interventions which increase the utilization of academic research.

2.2.3 Contextual-structural approaches

Contextual and structural approaches to knowledge transfer draw on models of policy formation which recognize that there are a diverse set of actors, interests, and pathways involved in creating policy and that organizational and political context and contingency play a critical role (Albaek 1995; Cousins and M. Simon 1996). Responding to these observations they developed contextual and structural models of knowledge transfer and utilization which viewed the presence or absence of interactive ties between academics and policy makers as one factor among many influencing knowledge utilization. They sought to recognize the broad influence of organizational and political context and structure and develop models which could assist knowledge producers in understanding and responding to local context and structure.

Contextual-structural approaches encompass a significant research effort dedicated to the production of theoretical models which can predict which interventions will be most effective at increasing the utilization of academic research (e.g. Grol et al. 2013; Nilsen 2015). No universally effective knowledge translation strategies have been discovered, a finding which has been attributed to the overriding importance of organizational and political context in determining the outcome of knowledge translation efforts (Grimshaw et al. 2004). As Bate (2014) argues, 'context is everything'. Reviewing the literature on knowledge exchange in the complex, interdependent collective settings which characterise most locations for the utilization of social scientific knowledge, Contandrioupoulos et al. (2010) conclude that "research is unlikely to provide context-independent evidence for the intrinsic efficacy of knowledge exchange strategies" (p. 444)

Scholars have responded by working to identify which contextual and structural factors are most important in facilitating or hindering the translation of research into policy or practice, producing exhaustive lists of contextual and structural barriers and enablers to knowledge transfer, and developing more and more complex frameworks to relate them to various interventions which promote knowledge translation. Contandriopoulos et al. (2010) argue that researchers should work to produce "empirically informed and sound conceptual frameworks that can be used as field guides to decode the context and understand its impact on knowledge use and the design of exchange interventions" (p. 468). Similarly, Oh (1997) writes that "the theoretical and/or empirical task of explaining when and why information affects policy-making is equivalent to explaining why a certain set of factors is not appropriate or appropriate for a particular context and to identifying such a context" (p. 25). This

theoretically driven, 'evidence-based' and programmatic approach is framed as being more effective than "an expensive version of trial and error" (Eccles et al. 2005, p. 108) in which agents use 'common sense' rather than a theoretical framework to guide them in their efforts to translate knowledge (Nilsen 2015).

While extensive lists of contextual factors have been produced, attempts to model which factors are the most important in predicting knowledge translation in any particular context have not been conspicuously successful. Part of the reason for this may be that the number of potentially relevant factors produced by such models is very large: for example, Greenhalgh et al. (2004) identify 66 discrete factors organized into nine groups and Mitton et al. (2007) describe 32 different barriers and facilitators to knowledge translation. Some have argued that the failure to develop effective predictive models results from a lack of theoretical understanding. Cheater et al. (2005), for example, argue that we need to better understand the processes through which barriers are identified and interventions are tailored. Others have pointed out that different contextual models offer conflicting prescriptions dependent upon the assumptions they make about human behaviour and organizational reality (Grol et al. 2007).

A more fundamental criticism of contextual-structural models, however, results from the observation that attempting to diagnose contextual and structural factors is problematic because they represent socially constructed artefacts of organizational life rather than objective impediments (Crawford et al. 2002). While researchers and policy makers may explain the failure of knowledge translation by pointing to factors which appear to them to have objective substance, these factors can turn out to be subjective artefacts of processes in which individuals seek to make sense of their experiences (Weick 1995). As a result, the ability of any prospective model to reveal underlying contextual factors may be limited and the contribution of reflexive agency to knowledge translation processes is overlooked.

An example of this is offered by Checkland et al. (2007) who describe four cases in which the barriers to knowledge transfer which were originally reported by knowledge users, including a lack of time and the complexity of the knowledge to be transferred, masked deeper organizational and political factors which provided more complete and

complex explanations for the failure of knowledge transfer. The utilization of the knowledge required changes to be made to established routines and for the practitioners to individually or collectively transcend their existing roles and identities. However, the knowledge users made sense of the difficulties they experienced in utilizing the knowledge by blaming exogenous contextual factors rather than their own unwillingness or inability to think or act differently.

Researchers also seek to make sense of their negative experiences of knowledge transfer by identifying factors which act as barriers to implementation (Oliver et al. 2014). However, these factors can similarly turn out to be socially constructed. As with the constructions produced by research users, the nature of the factors described by researcher can have significant consequences for their choices of actions. For example, by constructing research users as lacking in time or interpretative skill, responsibility for the failure of knowledge translation is shifted from research producers to users.

As a result, some or all of the supposed contextual factors which inhibit knowledge transfer are social constructions which reduce complex patterns of behaviour to convenient but misleading labels. They are misleading because they invite solutions which differ from the solutions which are actually required. The complex organizational patterns which support or restrict knowledge translation vary considerably, even within ostensibly similar organizations, and are contingent on local circumstance, agency, interpersonal interactions, and on reactions to changes in the political environment. Furthermore, the factors which account for the success or failure of knowledge transfer may only become apparent once a deeper understanding of the context is gained or may emerge from the interactions which occur as a result of attempts to translate knowledge. The factors which are most critical in influencing knowledge translation are thus hidden, contingent, and emergent. The failure of knowledge translation initiatives can occur because the organizational change that is required for knowledge to be adopted is "dispersed, fluid, migratory, and influencebased, rather than well-defined, planned, and stable in definition and location" (Buchanan et al. 2007, p. 1081).

Stacey (2001) makes a general point about the inability of theoretical models to predict knowledge transfer and organizational change. Stacey argues that human

organizations are not systems which may be predicted and controlled. Indeed, the only thing that is predictable about human organization is that it is unpredictable. Rather than organizations being systems which are essentially predictable so long as a sufficiently sophisticated theoretical account is developed, which is the position taken by many knowledge utilization scholars, Stacey draws on theories of complex adaptive systems to argue that the complex and novel patterns of behaviour observed in organizations are emergent rather than the result of a social system. Emergent patterns develop out of the interactions of individual agents but they cannot be predicted merely from knowledge of those rules: it is the complexity of the interactions between agents which gives rise to the emergent patterns. While certain patterns may appear stable over time, the organization as a whole can be radically unstable. Small changes in the ways in which agents interact can have no effect, or they can rapidly cascade into unpredictable change. Second order agents who understand the local context can resist, modify, and contribute to change initiatives (McDermott et al. 2013). For example, in Checkland et al.'s (2007) study, an overlooked and apparently insignificant decision by a junior member of staff to utilize the novel knowledge presented to her without informing her colleagues eventually led to its wholesale adoption by her organization. The implication of such complexity and contingency is that any attempt to produce a model to predict which contextual factors will be the most important will be prone to failure.

2.3 Academic social scientists' orientations to public policy engagement

Academics have debated the appropriate relational stance to adopt toward powerful actors outside the academy for a considerable period of time. Discussions concerning the balance to be struck between obtaining freedom from external control and contributing to social and technological change stretch back to the nineteenth century at least; during which scientists campaigned for the separation and elevation of science from religion and mechanics and constructed a boundary between the "production of scientific knowledge and its consumption by non-scientists" (Gieryn 1983, p. 789).

The establishment of the boundary protected science, but it also forced the intellectual participants of a newly divided public sphere to adopt one of two postures: withdrawal to the ivory tower and scholarship for its own sake, or engagement to support or protest the actions of the state (Sapiro 2012).

In France the Dreyfus affair (1894-1906) provided a catalyst for the academics who chose to engage in public affairs to join with novelists, artists, and journalists in order to intervene in the name of justice and equality (Baert and Booth 2012). Derided as 'intellectuals' by their opponents, this label was later adopted and used as a rhetorical device to bring about the creation of a new 'heroic', rational, and informed category of actors, which included academics (Bauman 1987; Eyal and Buchholz 2010; Jennings 2003). The prototype for the role of an intellectual was then a generalist activist and social commentator who protested the status quo on behalf of a cause. Gramsci, for example, promoted the ideal of an 'organic' intellectual who pursued working class interests as "constructor, organizer, 'permanent persuader' and not just a simple orator" (in Crick 2006, p. 129). Sartre propounded his vision of the 'total' intellectual willing to make radical interventions in a wide range of political affairs; in his later career Sartre worked for revolutionary causes and founded a radical newspaper.

The tradition of the generalist intellectual was challenged by the fall of communism and fascism. Activist intellectuals' addiction to revolutionary causes appeared dangerous and damaged their reputations (Jennings 2003). A recognition of the contingency of knowledge on power led Foucault to argue against positioning intellectuals as outside of the situations on which they adjudicated. Instead he favoured a situated and local criticism of power on matters in which 'specific' intellectuals had expert knowledge and could offer alternatives to the status quo (Rouse 2005).

While the category of activist academic was becoming established, others were attributing to science a set of social norms which precluded interested intervention in public affairs (Merton 1979b). The norm of disinterested pursuit of knowledge, free from emotional or financial commitment, continues to hold considerable legitimating power within universities: Tuunainen (2005), for example, describes the boundary work undertaken by a head of department to enforce a separation between traditional

academic activities of teaching and research for public benefit and research for private consumption. Subsequent to Merton's articulation of the norms for science, however, empirical work has revealed the diversity of academic orientations to the maintenance of a boundary between science and society. Not all scientists adhere to the norm of disinterestedness, and a majority report that they hold emotional or financial attachments to their work (Mitroff 1974; Macfarlane and Cheng 2008). Lam (2010) found that natural scientists and engineers adopt different orientations towards the commercialization of science: while traditionally oriented scientists believe that academia and industry should be kept apart and identify with academic norms and values, entrepreneurially oriented scientists fuse academic and industrial role identities and embed commercial practices in their work routines. There is a strong association between scientists' value orientations and their willingness to engage with industry (Lam 2011).

There is a continuing debate about the appropriate stance for academic social scientists to maintain towards engagement in policy and practice, with some authors continuing to stress the need for social scientists to maintain an appropriate distance from policy makers (Goering et al. 2003). Some academic social scientists express resistance to the idea of using research outside the academy altogether (Rynes et al. 2001; Tang and Sinclair 2001). There remains a view among scientists that dissemination activities are low status occupations (The Royal Society 2006), and Fox (2010) has argued that many academics regard the application of their knowledge to policy as "a distraction from their proper work, except when applying knowledge was lucrative for them and their employers" (p. 485). Conversely, Boyer (1990) argues that in addition to traditional functions of discovery and teaching, academics should practice a more 'engaged' scholarship which involves making interdisciplinary connections, educating nonspecialists, and applying their work to practice.

Pielke (2007) argues that the depth of engagement of scientists in the policy process reflects their beliefs about the role of science in society, which mirror the theoretical distinction between linear and interactive models of knowledge transfer. Some scientists, he argues, continue to believe that science contributes to society through a linear, one-way process, while others recognize that science is informed by society just

as it informs society through an interactive and iterative process. In the former case, science is viewed as informing society by producing basic knowledge which is not shaped by the political process itself, while in the latter case science is not viewed as being outside society, and so should represent a diversity of perspectives. Because scientists who believe in a linear process do not recognize that their personal intervention will make any significant difference, Pielke argues, they are unlikely to pursue anything more than a limited interaction with public policy makers. When they do engage, it will likely be through formal relationships which span the boundary between science and policy. Conversely, scientists who believe that science and society inform each other will interact to a much greater extent with policy makers and will seek to participate in political decision-making processes.

2.3.1 Modes of public policy engagement

In addition to drawing a distinction between policy engagement and withdrawal, scholars have identified several different modes of engagement with public policy. Osborne (2004) describes four modes, or 'styles', employed by intellectuals in the course of their work with public policy. Drawing on the work of Bauman (1987), Osborne describes the intellectual work of *legislators*, dominant thinkers who set themselves apart from non-thinkers in order to assert their power to arbitrate between opinions. Legislation involves the production of policies or programmes for action with the goal of bringing about wider social and political order. However, as intellectuals are increasingly required to find roles compatible with more pluralistic world views, they have increasingly become *interpreters*. Interpretation entails the avoidance of specific recommendations; instead interpreters translate between different knowledge-systems and cultural traditions.

As modernity has progressed and governance becomes ever more complex, Osborne argues, the maintenance of centrally dispensed authoritative power is untenable. Instead, governments have developed extensive networks of control which are more efficient means of dispensing power. The new system of governance, with its fragmentation of authority and unending committee meetings, micro-analyses,

models, frameworks, and audits, leaves little room for the traditional generalist intellectual: such control networks require experts, not intellectuals. Experts are providers of specialist expertise who are autonomous from yet ancillary to the work of government. Nowotny (1991) makes a similar distinction between critics, who diagnose and prescribe solutions for the ills of society and attempt to shape the institutions and interventions designed to inoculate society against disaster, and expert advisors, who ensure that institutions are adequately managed and evaluated. In order to be influential, however, experts are required to match the timescales, agendas, and discursive styles of the policy world (Medvetz 2012a). A fourth mode of policy engagement is practised by the *mediator*, "the intellectual worker as enabler, fixer, catalyst and broker of ideas" (Osborne 2004, p. 440), who intervenes to 'get things moving'. Rather than following a 'top-down' model of leverage in which one seeks to increase the influence of one's own ideas, mediation involves seeking influence through collaboration by brokering ideas between parties to develop small innovations. This mode of intervention draws on the observation that policy networks are not static but dynamic.

Like Osborne, Pielke (2007) draws a distinction between different modes of policy engagement practised by scientists. Pielke argues that scientists' beliefs about the role of experts in a democracy will influence the way in which they engage with policy makers. One mode of engagement which involves supplying expert advice to all sides of a debate and another involves legislating specific policy programmes and 'taking sides'. Scientists who adopt the former, 'expert advisory' mode adopt an orientation towards engagement which is based on a recognition that a properly functioning democracy rests on debate between coalitions of competing interests and that experts should make their knowledge or talents available for use by each of the competing coalitions. Scientists who adopt the latter mode not only contribute facts to the debate but also specify possible solutions. The adoption of this mode rests on a recognition that policy alternatives do not come from the public or politicians "any more than you or me telling an auto mechanic what the options are for fixing a broken car" (Pielke 2007, p. 12). Policy alternatives necessarily come from experts, and the role of experts is to "clarify the implications of their knowledge for action and to provide such

implications in the form of policy alternatives to decision-makers who can then decide among different possible courses of action" (p. 12).

Academics as 'policy entrepreneurs'

Another literature conceives of scientists as 'entrepreneurs' of knowledge transfer (e.g. Ritvala and Granqvist 2009). Work in this strand conceives of academics as individuals who skilfully deploy their agency to reshape social structures, dynamically responding to the organizational and political context by working to transfer and translate knowledge into policy. Academic social scientists who find and take advantage of opportunities to introduce new knowledge to a contested external marketplace for ideas have been described as 'knowledge' or 'idea' entrepreneurs (Posner 2009; Abrahamson and Fairchild 2001). Similarly, Mars and Aguilar (2010) draw on the concept of the 'institutional entrepreneur' in describing academic entrepreneurs as agents who respond dynamically to institutional contexts, using their status within the academy to establish platforms for social and political change.

Some of the clearest and most theoretically defined accounts of producer work in knowledge transfer are located in the small literature which describes the work of academic 'policy entrepreneurs'. Oborn et al. (2011) focus on the work of Professor Sir Ara Darzi, a cancer surgeon, who shaped policy by mobilizing political support, framing problems, and bringing academic and applied research together to formulate a set of policies which he set out in a government review. Oborn et al. (2011) show that work of Darzi was more complex than simple measures of motivation or engagement could describe. He made new connections between formerly disconnected communities; he undertook a wide range of engagement strategies; he enrolled local and global actors in his project; he created a 'strategic vision' which went further than "developing policy proposals on paper" (p. 341); and he developed an ability to detect opportunities for change. Similarly, Macdonald (2013) describes the work of I. I. Rabi, a Nobel Prize-winning nuclear physicist who acted as a policy entrepreneur in promoting policies to ban the testing of nuclear weapons in the post-war period. Like Darzi, Rabi possessed extensive relationships with policy makers and the scientific

community. He drew on his connections strategically to establish a scientific advisory council attached to the White House and deployed his scholarly knowledge to rebut arguments in favour of continued nuclear testing.

The academic policy entrepreneur literature draws on the established concept of the policy entrepreneur. A review of studies of policy entrepreneurs carried out by Mintrom and Norman (2009) summarized their activities as utilizing 'social acuity', working to define problems, building teams, and 'leading by example'. For Kingdon (1995), policy entrepreneurs work to define and reframe problems, specify policy alternatives, connect potential policy solutions with problems, broker ideas among policy actors, and mobilize public opinion.

Kingdon (1995) develops an extensive theoretical account of the work of policy entrepreneurs in his 'policy windows' model of policy change. Policy entrepreneurs are defined as actors who expend effort in working to achieve policy change. In Kingdon's model, the application of knowledge in the resolution of problems can lead to policy change when political, policy, and problem streams are aligned, offering windows of opportunity. While alignments most often occur by chance, policy entrepreneurs may also play an active role in conjoining the windows. They are actors who monitor and await opportunities to apply their knowledge and skill in solving policy problems by analysing policies and developing alliances in advance. When an opportunity arises, policy entrepreneurs link policy solutions to problems and mobilize actors in support of their solutions, aligning political and policy windows which would otherwise remain unaligned.

The concept of the policy entrepreneur has been used to contribute an agentic dimension to Sabatier's (1987) theory of policy change. Sabatier argues that policy is developed through contests between opposing coalitions; significant policy changes can occur when exogenous shocks, such as a change of government, cause a rearrangement of the coalitions' relationships to power. Mintrom and Vergari (1996) point out that while Sabatier's (1987) model explains policy change over the long term, it fails to explain why shocks do not always lead to policy change and does not account for the dynamism that results from microlevel political activity. Mintrom and Vergari argue that the concept of the policy entrepreneur focuses attention on the contribution

of the microlevel activity of individuals acting as agents of policy change. Policy entrepreneurs are able, in some circumstances, to overcome adverse political contexts by reshaping the relationships between actors and by influencing their beliefs.

Although the concept of the policy entrepreneur has not been integrated with the literature on knowledge transfer it contributes an important source of dynamism and agency to theories of policy change. This review of the concept lends support to the argument that a more complete theory of the role of knowledge producer agency in knowledge transfer processes is required. There is evidence to suggest that the work of academics can play an important role in determining whether or not knowledge will be utilized by policy makers, and studies of academic policy entrepreneurs offer the most extreme examples. In these cases, the outcome of the work of an academic policy entrepreneur is visible policy change. There is, however, no reason to assume that only exceptional individuals can exert their agency in bringing academic knowledge to bear on policy, even though the effects of their work may be less immediate and obvious. While the work of other knowledge producers may be less influential, perhaps more obviously constrained by context, it is difficult to argue that their work is entirely irrelevant to an analysis of knowledge transfer processes. It is, therefore, important to develop a detailed theoretical account of the agentic contributions of academics to knowledge transfer.

2.4 Relational ties and epistemic barriers: knowledge transfer and translation

In this chapter it has been argued that existing models of knowledge transfer and utilization underplay the contribution of the agency of academics to the knowledge transfer process. It has further been argued that studies of intellectuals, scientists, and policy entrepreneurs suggest that there are variations in academics' contributions to public policy and that some have contributed directly to policy change. This section, and the following section, establish a conceptual framework with which to examine the knowledge transfer work of academic social scientists.

This section reviews two strands of literature. The first strand views knowledge as an object which can be transferred across relational ties which form networks of communication between actors. The second strand recognizes that different communities or fields develop unique knowledges and interpretations which generate epistemic differences requiring knowledge to be translated in order to pass between them. The section goes on to review literature which argues that in the public policy context, these relational and epistemic dimensions are not independent, complicating the knowledge transfer process.

One of the most enduring concepts in knowledge transfer theory is that knowledge flows between actors over channels of communication (Shannon and Weaver 1949). These communicative links between actors are depicted as relational ties which form and may be maintained between individuals, groups, and organizations (Kilduff and Brass 2010). The presence of a relational tie does not entail that actors have met in person or consciously interacted. For example, if an actor publishes an article which is read by another actor, both actors can be understood to be connected even though the knowledge flow is linear and unidirectional and the relationship is weak (Granovetter 1973). However, individuals are more likely to acquire knowledge from actors who they have strong and interactive connections with and perceive as being approachable, credible, and trustworthy (Andrews and Delahaye 2000). Informal personal ties can be more important to knowledge transfer than formal, contract-based or hierarchical ties; a study of how biotechnology firms sourced scientific knowledge revealed that informal research collaborations were more effective channels for knowledge acquisition than formal inter-organizational relationships (Liebeskind et al. 1996). In addition, formal relationships are not always as effective as informal relationships for transferring knowledge across geographic 'holes' (Bell and Zaheer 2007).

As actors can form multiple relational ties with different others, a network structure emerges from these ties which enables and constrains the flow of knowledge (Stam 2010). Network ties are necessarily selective because not every actor can be connected to every other actor. As a result, patterns of ties can be viewed as a network such that members of a network prefer to transact with members of the same network and to

preferentially create, renew, and extend relations within the limits of the network rather than with actors outside it. The clustering and centralisation of connections between actors generates a structure which affects the transfer of knowledge by generating differential constraints and opportunities for knowledge to flow. As a result, relational structures which pattern social relations, such as organizations, groups, and professional networks, set the conditions for the diffusion of knowledge (Ferlie et al. 2005).

Although some form of minimal relational tie is necessary for knowledge to flow between actors, relational ties are not, by themselves, sufficient conditions for knowledge to flow. Epistemic barriers—barriers which relate to the nature or content of knowledge and its compatibility with the existing knowledge or beliefs of an audience—may prevent knowledge from flowing even when strong relational ties are present. Much of the knowledge which actors possess is personal, tacit, and unavailable for transfer (Polanyi 1974). Complex knowledge is produced in communities which develop specialized meanings which not shared with other communities, preventing them from understanding the knowledge which is to be transferred. Finally, differences in the goals and political beliefs of actors can produce resistance to novel knowledge because it conflicts with their interests or existing beliefs. Epistemic barriers can thus arise when knowledge is inexpressible; when knowledge is expressible but is not meaningful; and when knowledge is expressible and meaningful, but which contradicts the interests and beliefs of a potential knowledge user.

Tacit knowledge is important because so much of what members of individuals know is held tacitly. However, because it is situated within individuals and their specific circumstances and practices, tacit knowledge is not directly exchangeable or transferrable. As actors live, work, and converse together in communities, they build up a stock of commonly held tacit understandings which enable them to make sense of what they know. The community develops a system of meaning which helps its members to understand their world and work (Wenger 1998). The knowledge of the community is "readily available to community members" (Brown and Duguid 1991, p. 55) because the shared meanings of the community form a tacit repertoire which

enables new knowledge to be rapidly contextualized and interpreted. The specialized knowledge of a community is thus "localized, embedded, and invested in practice" (Carlile 2002, p. 442).

While these characteristics support the sharing of knowledge within a community, they lead to the formation of epistemic barriers which make sharing knowledge between communities difficult. Communities exist in 'thought worlds' with 'intrinsically harmonious' perspectives which assign different meanings to the same symbols in use by other communities (Dougherty 1992, p. 187). Groups which have developed unique tools, practices, and symbols to manage their domain of complex interdependent knowledge develop specialized repertoires; actors who are not members of the group may not share the tacit repertoire that its members use to decode the meaning of symbols. "People engaged in different practices tend to maintain different assumptions, outlooks, and interpretations of the world, and different ways of making sense of their encounters," write Brown and Duguid (1998, p. 207). This causes members of one community to be unable to derive the meaning of the symbols used by members of another, generating epistemic barriers across which knowledge cannot easily flow.

Even when actors are able to comprehend each other's knowledge, if they have opposing interests or beliefs a political boundary is generated (Carlile 2004). The 'top-down' nature of human cognition means that the degree to which a given item of information is congruent with an individual's current beliefs influences whether it will be accepted as valid knowledge (DiMaggio 1997). Individuals subject information which contradicts their prior beliefs to greater scrutiny than confirmatory evidence, a tendency known as biased assimilation (Munro et al. 2002). As a result, the compatibility of novel knowledge with existing beliefs and interests can form a significant barrier to the flow of knowledge.

2.4.1 The interdependency of relationships and beliefs in the public policy field

Sabatier (1987) argues that relationships between actors in the public policy field are not independent of their knowledge and beliefs. Although the institutions of policy making—government departments, Parliament, political parties, intermediaries, and so on—play important roles in organizing the pathways through which academic knowledge can enter the policy making process, policy beliefs form ideological superstructures which cut across institutional boundaries, aiding or hindering the flow of knowledge (Sabatier 1987; Sabatier and Weible 2007). Coalitions form when participants within a specialized area of policy ally themselves and coordinate their activities with others who hold similar beliefs and are working to achieve similar objectives. Members of each coalition share normative and causal beliefs and engage in relationally co-ordinated activity which spans organizational boundaries.

Sabatier's (1987) conceptualization of coalition belief systems builds on Peffley & Hurwitz's (1985) hierarchy of political beliefs to argue that the shared belief systems of advocacy coalitions exhibit a tripartite hierarchical structure. At the top level are 'deep core beliefs' which involve "very general normative and ontological assumptions about human nature, the relative priority of fundamental values such as liberty and equality, the relative priority of the welfare of different groups, the proper role of government vs. markets in general, and about who should participate in governmental decision making" (Sabatier and Weible 2007, p. 194). The political ideologies which sit at the top of political schemas tend to be structured according to a basic left-right dimension, commonly described as 'liberal' versus 'conservative', which contains two interrelated aspects: advocating versus resisting social change, and rejecting versus accepting social inequality (Jost et al. 2009). Left/right ideological arrangements are deep core beliefs which are extremely difficult to alter because they are the product of extensive socialization and/or deep moral commitment.

At the next level of ideological arrangement are the 'policy core beliefs' which constitute the core organizing beliefs of advocacy coalitions. Policy core beliefs provide a coalition's basic normative and causal commitments in a specialized area,

or subsystem, of policy. They frame a coalition's understanding of a problem and the solutions which they offer. Policy core beliefs are "[f]undamental policy positions concerning the basic strategies for achieving core values within the subsystem" (Jenkins-Smith and Sabatier 2007, p. 133). They are usually formed through the application of deep core beliefs to a policy subsystem: for example, the default position of left wingers is likely to be to tackle social problems through government intervention, whereas right wingers may prefer a market-based solution. Coalition members will tend to resist information which invalidates their policy core or deep core beliefs (Jenkins-Smith and Sabatier 2007). However, less normative policy core beliefs may change over extended periods of time.

At the bottom level are secondary beliefs. Secondary beliefs are narrow and predominantly technical in scope and are more amenable to change than policy or deep core beliefs. Secondary beliefs are more likely to be empirically derived and are more open to inflows of technical knowledge. As a result they represent a key locus for the transfer of social scientific knowledge. Secondary beliefs are not deeply held, and actors are less motivated to protect them (Weible et al. 2009). An accumulation of technical information which alters secondary beliefs may gradually lead to changes in the policy core beliefs of a coalition (Weiss 1979). However, a time span of a decade or more is often required. Over shorter periods policy change is more likely to occur as a result of external events which alter the distribution of resources and actors or cause a coalition to reevaluate its views (Jenkins-Smith and Sabatier 2007).

While Sabatier's (1987) theory focuses on the role of shared belief as a relational glue binding actors from different organizations together, studies suggest that the dominant beliefs within a government department can also influence the relational ties between that department and other actors. Government departments and their agencies tend to develop settled philosophies—sets of unquestioned assumptions and ways of working—which they embrace and deploy in response to policy challenges (Judge 2005). A department's philosophy shapes its policy preferences and makes some policy goals more likely than others (Richards and M. Smith 1997). Certain customs, practices, and forms of knowledge become the norm within a department: they are internalized by senior civil servants, and as new staff join they too become socialized

into the department's way of thinking. Academic social scientists may find that there are dominant assumptions and beliefs within a department which policy makers are not interested in discussing, policies they are unwilling to change, and knowledge which is rejected because it contradicts public statements of the government's positioning (see Stevens 2010 for a first-person account of this process).

Sometimes a single ideological stance will dominate a department, but in others there may be a division between factions. For example, during the 1980s the Department of Education and Science (DES) was accused of possessing an egalitarian, anti-selection bias, whereas the trade sections of the Department of Trade and Industry were seen as supporters of free market policies while the industry sections supported government intervention (Dorey 2014). Michael Gove, Secretary of State for Education from 2010 to 2014, criticized the close ideological alignment between some academic social scientists, parts of the education profession, and his department, arguing that education policy was set by "The Blob—the network of educational gurus in and around our universities who praised each other's research, sat on committees that drafted politically correct curricula, drew gifted young teachers away from their vocation and instead directed them towards ideologically driven theory," which tended to "operate by stealth, using its influence to control the quangos and committees which shaped policy" (Gove 2013).

The beliefs which are dominant within a department can affect its relationships with external actors because they influence which actors are regarded as legitimate and which are not. Grant (2000) argues that actors who are regarded as legitimate by government and are consulted regularly become 'insiders'. Being an insider, Grant argues, offers close access to policy makers, but it also "imposes certain constraints and patterns of behaviour" (p. 20). While insiders have direct access to government, instead of questioning fundamental policy beliefs they negotiate over policy details, causing policy to change only incrementally (Dorey 2014). Academics who work directly with government are not immune to such constraints and interactions may cease if a social scientist is considered to be unreliable or controversial. Research contracts might dry up; as Stevens (2010) discovered during his secondment to the Home Office, social scientists who challenge dominant assumptions or policies may

be subject to disciplinary action. As 'outsiders' they may be excluded from the policy discussions occurring inside the core executive and have limited ability to contribute directly to policy via government departments.

2.5 Academic social scientists as knowledge transfer agents: 'Relational' and 'epistemic' work

Building on the insights of the literature on policy entrepreneurship, network flows, and the situated perspective on knowledge, the study conceptualizes the knowledge transfer/translation work of knowledge producers as 'relational' and 'epistemic' work. The *relational* dimension of knowledge transfer work focuses on the work actors undertake when they maintain relational ties, establish new ties, terminate them or distance themselves from others, recognize relational patterns—in short, when they act to shape or reshape social relations. The *epistemic* dimension of knowledge transfer work focuses on the work actors undertake to articulate, represent, combine, or transform knowledge—when they act to shape or reshape knowledge in order to overcome barriers produced by differences in knowledge or beliefs.

The literature reviewed in the preceding section suggests that knowledge transfer is reliant on *both* relational and epistemic conductivity, and studies of the public policy field reveal a complex and dynamic interdependency between the relational and epistemic dimensions. As coalitions come in and out of favour, and as departmental philosophies change over time, relational ties which previously supported knowledge transfer may no longer do so, while other ties may be stable over time but offer less favourable access. This suggests that the success of an effort to transfer knowledge might depend on the ability of knowledge producers to recognize and respond to the dynamic relational and epistemic configuration of a policy subsystem. The models of knowledge transfer and utilization reviewed at the outset of the chapter pay little attention to this work.

Interactive-relational models suggest that the presence or absence of interaction between knowledge producers and users and the amount of effort researchers put in to dissemination are important factors which influence knowledge utilization (e.g. Landry, Amara and Lamari 2001a; Landry et al. 2003). They support the hypothesis that the work of academic social scientists is an important influence on the utilization of social scientific knowledge but they fail to explain how the social scientists approach the interaction and how they choose who to interact with. Contextual-structural models account for variations in the effectiveness of knowledge transfer in terms of contextual and structural factors, potentially encompassing the actions of potential knowledge users and the political and organizational configuration. These models suggest that it is possible to diagnose the context and select an appropriate intervention in response but portray a static picture in which the political configuration is knowable in advance of making an intervention.

Rather than treating academics as actors who possess strategic agency, models of knowledge transfer and utilization treat engagement and motivation as contextual factors which are either present or absent, ignoring the dynamic and strategic nature of agency as knowledge producers respond to translation opportunities and failures by working in different ways. As the previous section highlighted, academics adopt diverse orientations to participation in public policy making and engage with public policy makers in diverse ways, suggesting that there may be variation in the way in which they deploy their agency in the service of knowledge transfer and translation. However, there has been limited empirical work to investigate how different relational orientations toward the public policy field affect the knowledge transfer work of academic social scientists. The current section builds on the insights of the literature on policy entrepreneurship, the situated perspective on knowledge, and the relational and ideological nature of policy making to develop a conceptual framework with which to examine the agentic role played by academic social scientists.

The interplay between agency and structure is a regular theme in the social sciences; as Giddens (1984) argues, individuals can always respond to the events and social structures they find themselves confronted with by attempting to exert influence through a 'dialectic of control'. Agency provides a mechanism of action as a

"temporally embedded process of social engagement, informed by the past (in its 'iterational' or habitual aspect) but also oriented toward the future (as a 'projective' capacity to imagine alternative possibilities) and toward the present (as a 'practical-evaluative' capacity to contextualize past habits and future projects within the contingencies of the moment)" (Emirbayer and Mische 1998, p. 962). As it is possible to imagine alternative possibilities and reflect on past habits, actors can act strategically to co-opt others to they extent that there are able to deploy 'social skill' (Fligstein 2001). Actors have the potential to deploy their skill strategically in translating knowledge in the face of political opposition: what Lawrence et al. (2005) refer to as having "political will and skill" (p. 182).

2.5.1 Relational work

Relational structures both constrain and enable agency and are produced by it (Emirbayer and Goodwin 1994). By establishing, maintaining, withholding, or terminating social relations, actors influence the network structures which enable knowledge to flow. For example, when academic social scientists publish an article, make a speech, attend an event, or arrange a meeting, they are forming or maintaining social relations in one part of a network and neglecting relations in another. When they seek to maintain autonomy and distance from the policy field by establishing a boundary which delimits their activities, they are withholding their capacity to form a relational connection. By doing so they shape and reshape the network structures which enable and constrain knowledge transfer.

Relational work is defined as the agentic effort an actor undertakes in establishing, maintaining, differentiating, withholding, or terminating social relations (Bandelj 2012; Zelizer 2012). Actors engage in relational work when they strategically reconfigure their social network to obtain relational power (e.g. Padgett and Ansell 1993). They engage in relational work when they mobilize others in support of an initiative or convene a new collaborative group in order to produce social change (e.g. Dorado 2005; Ganz 2000). Policy entrepreneurs conspicuously engage in relational work when they institutionalize boundary-spanning structures by establishing or co-

opting organizational structures, such as advisory committees, which offer legitimate channels to policy makers (e.g. Macdonald 2013). Actors also engage in relational work when they work to relationally distance themselves from other actors, for example by constructing a social boundary to protect their field from encroachment from other fields (e.g. Gieryn 1983). Boundary-maintaining relational work focuses on strengthening the ties within a field and neglects or weakens the ties linking it to other fields. This is valuable within a field because knowledge flows more easily across strong ties, particularly where the knowledge to be transferred is complex and difficult to codify (McEvily and Marcus 2005). However, it may also make it more difficult to transfer knowledge outside the field.

It is supposed that knowledge transfer is, on the whole, likely to be enhanced when academic social scientists undertake more active, boundary-spanning forms of relational work, such as participating in policy networks, maintaining advisory relationships with policy makers, disseminating research by holding events or sending copies of an article to policy makers, and joining or forming lobbying groups. However, the discussion on coalitions and policy insiders and outsiders suggests that more complex forms of relational work, involving strategic connecting and distancing from various actors, are likely to be involved.

2.5.2 Epistemic work

Knowledge producers can perform cognitive operations on knowledge by converting, translating, and transforming it in order to overcome epistemic differences. Carlile (2004) examines the processes which occur at an epistemic boundary when knowledge is translated between communities. Carlile describes how members from different epistemic communities worked together to identify the tacit concepts and assumptions that their knowledge depended on for its meaning. They translated knowledge across the boundary by making assessments about each other's knowledge and by justifying their knowledge to each other. This involved making explicit what was and what was not known and identifying the dependencies which the knowledge relied on for its interpretation (Carlile 2004). It was "an iterative approach where actors get better at

developing an adequate common knowledge for sharing and assessing each other's knowledge" (Carlile 2004, p. 563). Through repeated interaction, the actors learned about the differences and dependencies of each other's knowledge, helping them to translate their knowledge.

Once identified, differences in interpretation can reveal that actors have different interests. In order for knowledge to flow these must be reconciled, a political process which involves negotiation where one actor is "pushing another to reconsider its underlying assumptions" (Brown and Duguid 2001, p. 209). For Carlile (2004), negotiation occurs through an iterative process in which the knowledge of one or both actors is 'transformed'. The transformation of knowledge is a process of creating new knowledge by modifying the existing knowledge of an actor. This involves trying out alternative interpretations, making tradeoffs between the knowledge of each actor, and coming an an agreement about what the new knowledge means.

One mechanism of smoothing epistemic differences resulting from differences in actors' interests and beliefs is framing. The framing of problems is a central preoccupation for political policy makers and social movement actors who compete to influence the way individuals perceive the social world (Benford and Snow 2000). The concept of framing draws upon Goffman's (1974) description of schematic frameworks that permit people to "locate, perceive, identify, and label" (p. 21) their perceptions. Framing involves an attempt by an actor to influence the way other actors interpret information by presenting it in such a way that it is made compatible with the audience's existing beliefs, assumptions, and expectations. It is effective because the way in which information is presented, or framed, affects the way in which it is cognitively processed and affects decisions that are made on the basis of it, even in deliberative environments designed to maximize rational thinking (Tversky and Kahneman 1981). As a result, political actors exert considerable effort in framing knowledge so that it appeals to the widest possible audience.

At the extreme, framing can involve making an idea 'vehicular' (McLennan and Osborne 2003). For example, ideas such as 'the Third Way' or 'knowledge society' are vehicular to the extent that they 'move things along' by carrying many people along with them. Knowledge can be framed in such a way that it possesses one

meaning within one community and a different meaning within another while remaining useful and valid to both. The advantage of framed knowledge is thus its multiple compatibility: it can mean different things to different people and be used in different ways. This raises the question of whether knowledge has been transferred at all, because framing can obscure rather than resolve meaning. As such, framing is in opposition to the translation work described by Carlile in which actors seek to identify and make clear the dependencies which make knowledge incompatible with other actors' knowledge so that negotiation over meaning can take place. Framing discourages negotiation and promotes agreement despite incompatibility, enabling knowledge to be utilized in the production of arguments which attract widespread support in spite of their implications. Ritvala and Granqvist (2009, p. 142) describe the success of academics who mobilized support for their ideas and overcame political opposition by framing knowledge in such a way that it motivated cooperation.

Epistemic work is defined as the work an actor undertakes to articulate represent, combine, repurpose, or transform knowledge such that knowledge produced in one field is cognizable in another. It encompasses cognitive operations such as translating and transforming knowledge so that it can be passed across epistemic boundaries between communities with distinct or opposing stocks of knowledge (Carlile 2004). Academic social scientists may engage in epistemic work when they simplify knowledge for a non-specialist audience by identifying and modifying any statements which require the audience to possess tacit understandings which they are unlikely to possess; when they abstract from complex knowledge a fact which they believe to be salient in a policy debate; and when they frame academic knowledge and combine it with practical knowledge to produce a policy argument which they judge to be compatible with the assumptions and beliefs of an audience.

2.6 Conclusion

This chapter has developed a picture of knowledge transfer between academic social scientists and public policy makers as an interactive and relational process which is strongly influenced by the organizational and political context. The efforts put in by

academics and the degree of interactivity between academics and research users is a determinant of knowledge utilization (e.g. Landry, Amara and Lamari 2001b; Oliver et al. 2014). While the motivated engagement of academic social scientists as partners in an interactive process is recognized as a critical influence on knowledge transfer and utilization, their contribution as strategic agents has been underplayed. In the absence of a theory of agency in knowledge transfer, the role of an academic social scientist is reduced to that of a 'cultural dope' (Swidler 1986) who follows an implementation strategy rather than a reflexive agent who skilfully pursues her knowledge transfer goals by modifying her behaviour in response to political context. In the quest for a generalizable theory of knowledge transfer, scholars gloss over the details of how individual academics respond to the specific contexts they find themselves confronted with. This has the effect of concealing the contribution of knowledge producer agency in knowledge transfer processes.

Depictions of a knowledge transfer process in which agency does not play a central role are difficult to integrate with theories of policy entrepreneurship which suggest that the contributions of individual actors can play a highly significant role in knowledge utilization and policy change. Case studies of academic policy entrepreneurs have revealed rich data about the contribution of particular academics as agents of influence and change (e.g. Oborn et al. 2011). However, while policy entrepreneurs may be influential actors, their work may be rare and unrepresentative of the knowledge transfer work of the majority of academic social scientists.

There is an ongoing debate over the appropriate role for academic social scientists to adopt in relation to the public policy field. Scholars such as Osborne (2004) contrast the role played by academics working as heteronomous experts with others who act as autonomous legislators, translators, or mediators. The literature on the roles of academic social scientists in the public policy making process is theoretical and normative in nature, with few empirical studies of the orientations of academic social scientists to the boundary between the academic and public policy fields. As a result, the knowledge transfer work of academic social scientists engaging with public policy makers and the relationship of their work to their orientation toward the boundary between the academic and public policy fields is underexplored. Case studies of

influential academic policy entrepreneurs may not generalize to other types of academic actor.

The identification of the relational and epistemic dimensions of knowledge transfer/translation has enabled a bifurcation of knowledge transfer work into relational work and epistemic work. These aspects are likely to be interdependent, and evidence from the public policy context suggests a strong relationship between the relational and epistemic configuration of the public policy field. However, the literature suggests that they may be analytically distinguished, permitting the agentic contribution of academic social scientists to be studied in the form of relational and epistemic work. Chapter 4 describes the methods in detail.

While the study focuses on the contribution of academic work in the transfer of social scientific knowledge to public policy makers, this should not be taken as an argument that organizational and political context does not play a strong role in structuring the possibilities for academic knowledge to be utilized. On the contrary, the organization of the public policy making system and the institutions which enable academic social scientists to participate in public policy play a critical role as conduits for knowledge. The knowledge transfer work of academic social scientists must be understood against the backdrop of these institutional pathways. The following chapter draws on the literature in this area to describe the organizational and political context for the study.

Chapter Three: Study Context

3.1 Introduction

This chapter describes the context for the study by sketching out a map of the public policy making territory in the UK and the main pathways through which academic social scientists contribute to policy making. It draws on a political science literature which seeks to characterize the structure and process of public policy making in the UK. It also draws on a somewhat disparate empirical literature concerning the roles academic social scientists play in the process.

The chapter is organized by making a distinction between 'technical' and 'political' institutions of the public policy making system which provide 'technical' and 'political' pathways to policy. It argues that actors may attempt to influence public policy through technical pathways—by supplying technical evidence designed to be rationally evaluated and applied in the development of policy—and/or through political pathways—by seeking to influence the opinion of politicians and the public. Technical pathways are characterized by a formalized capacity to ingest large quantities of technical information, including that produced by academic social science, and to apply it in the development or scrutiny of public policy through formal and rationalistic processes. Technical pathways include government departments and agencies and the formal scrutiny processes of Parliament.

Political pathways are external to government and are characterized primarily by a capacity to act as an interface between government and the public and a requirement for produce policies and arguments which are attractive to a broad nonspecialist audience. Political pathways include political parties, the commentariat in the mass media, and policy intermediaries, such as think tanks and policy institutes. Although the distinction between technical and political pathways is not absolute—organizations such as think tanks play both technical and political roles—the

distinction is a useful tool which which to understand the knowledge transfer work of academic social scientists.

The UK possesses a model of representative democracy, known as the 'Westminster model', which features an institutional separation between administrative and political functions. It has a centralized administration or 'core executive', known as Whitehall, which is the seat of government. Whitehall is the location of the main technical and administrative actors and institutions charged with developing public policy, organizing the operation of government, and distributing the main financial and human resources necessary to operate public services (M. Smith 1999). The interests of the people are represented politically in Parliament by politicians whose primary role is to scrutinize and legitimize the work of the core executive (Rhodes et al. 2009). As a body Parliament rarely leads on the development of policy, but it plays an important role in reacting to policy initiatives by revising legislation and by monitoring and authorizing the activities of the executive (Norton 2013).

The core executive is run as a partnership between nonpartisan civil servants and elected Ministers. Ministers are required to respond to a flow of technical information, including from academic social scientists, which is filtered by senior civil servants. At the same time they broker policy proposals on behalf of their own political constituencies from whom they receive advice of a more political or partisan nature. Ministers then present policies for the consideration of Parliament.

Although the core executive and Parliament are the central formal locations of policy making, a considerable amount of informal policy making activity occurs outside these locations. The UK possess a pluralist democracy in which government is reliant on the activities of informal networks consisting of individuals and organized groups, including pressure groups (Hill 2013). These networks tend to be larger and less well defined than the set of actors who are formally involved in the authoring of policy and their membership can grow and shrink over time. They encompass political parties and policy intermediaries, such as think tanks, policy institutes, and pressure groups. These actors shape the ideological climate within which the core executive and Parliament operate. They develop policies and lobby on their behalf, supply research findings to

government, and attempt to move issues up the agenda so that policy makers are forced to act

3.2 Technical pathways to policy

Technical pathways to policy are centred around government departments, the primary loci of policy making in the core executive (Judge 2005; M. Smith 2003). Government departments are responsible for the technical drafting and implementation of government policy and maintain numerous direct links with outside organisations which have economic or strategic importance to government, such as those which represent an industrial sector or professional body. They also maintain links with departmental agencies, non-departmental public bodies, local government, and other public sector and professional organizations through which policy problems and proposals can rise from the 'bottom up' to influence policy. The work of government departments is scrutinized by Parliament through Departmental Select Committees. Although comprised of elected politicians, Select Committees are designed to challenge and rationally evaluate the work of departments and form another technical pathway to policy.

This section discusses the main technical pathways to policy, focusing on the role of government departments, their agencies, supranational and devolved governments, and Parliamentary committees.

3.2.1 Government departments and agencies

Although historically a Cabinet of elected Ministers was considered to be the most important venue for taking policy decisions in the UK, the increasing complexity of government means that government departments are now considered the primary loci of policy making (Judge 2005; M. Smith 2003). The majority of formal policy development happens within government departments which are primarily located in Whitehall. Government departments are "the key actors and institutions at the centre"

of the policy-making process" (Marsh et al. 2001, p. 249). They maintain numerous direct links with outside organisations which have economic or strategic importance to government—such as those which represent an industrial sector or professional body—and with individuals who possess the specialist expertise each department requires in order to effectively formulate policy.

Government departments and their agencies require objective technical information concerning the sociopolitical environment in order to work on their policy agenda. The need for technical knowledge and advice leads departments to work with academic social scientists, and engagement with a government department or one of its constituent agencies is widespread among academic social scientists in the UK. 37 per cent of academic social scientists in the UK report that they have worked with a government department (Abreu et al. 2009).

One of the most notable changes to the structure of UK government in recent years has been the establishment of a large number of executive agencies and regulatory bodies who are responsible for the implementation and administration of policy in a specific technical area. Although executive agencies have substantial freedom over how they operate and manage their budgets and staff, their objectives are set out by a parent department in framework agreements and Ministers and Departmental Select Committees have oversight of their activities. Many executive agencies possess their own policy research and analysis functions and work in partnership with their parent department to develop policy. They are able to publish reports which set out their thinking on problems and are able to exercise some upward pressure on the formation of policy in their host department. They also develop independent relationships with social scientists. 15 per cent of academic social scientists in the UK report that they have worked with a government agency (Abreu et al. 2009).

Social scientists work with government departments and their agencies through a range of mechanisms. For example, in its *Research Strategy 2014–15* (BIS 2014) the Department for Business, Industry, and Skills sets out the key mechanisms through which it works with academic researchers. According to this document, the department:

- commissions external organisations including universities to undertake research projects, and commissioned around 130 research projects in 2013;
- funds or part-funds several academic research centres, including the £2.9million Enterprise Research Centre, a partnership between 6 UK universities to develop the evidence base on SME growth;
- maintains informal contact with individual researchers and research organizations;
- hosts regular meetings with research commissioners, academics, and other experts to identify gaps in the knowledge base and develop collaborative research projects;
- invites academics in to talk at monthly lunchtime seminars;
- asks researchers to email details of their research with a view to inviting them in to talk about it; and
- works with academics through their connections to national and official statistics bodies.

Many of these mechanisms involve informal interaction, i.e., interaction which has not been formalized through the creation of a legal document to underpin the transfer of resources or to establish a legal framework under which participants collaborate. Empirical evidence concerning the quantity and quality of informal interaction between academic social scientists and public policy makers in the UK is limited. The Government Office for Science (2013) estimates that it supports the engagement of 1,500 (predominantly natural) scientists with government departments but the total figure is likely to be in excess of this as government departments maintain their own informal networks with academics. The maintenance of advisory networks including academics is an important function of civil servants working in government departments and agencies. Such networks may be formed on an ad hoc or continuing basis; for example, the Department for Communities and Local Government maintains

an informal network of academics specializing in behavioural science who communicate online (Government Office for Science 2013).

Formal mechanisms through which academic social scientists work with government departments and agencies may be broadly categorized into two types which are described in the following sections. Academic social scientists may accept a continuing official role in relation to a formal policy making institution, including undertaking permanent or temporary employment as a government official or accepting a position on a formal government advisory committee. A second mechanism is through the production of research which is commissioned by government.

Formal employment and secondment

Academic social scientists may undertake a number of continuing formal roles which support the transfer of knowledge via a technical pathway, including membership of a formal advisory committee, permanent employment, or temporary secondment. Policy making institutions maintain committees which are staffed by academic social scientists and other experts to advise them on specific aspects of policy. Such a role confers close access to civil servants working on a specific area of policy and may permit some direct influence over its more technical aspects. An academic may also be employed or seconded to a policy making institution, taking on the role and responsibilities of a civil servant and being charged with undertaking the provision of analysis or the development of policy for consumption by a department or agency.

Senior academics may be commissioned directly by a Minister to undertake a reform project which entails becoming what is colloquially known as a 'Policy Tsar', a position which confers legitimacy and direct access to Ministers and bypasses civil service recruitment and tendering processes. Levitt and Salisbury (2012) define a Policy Tsar as "an individual from outside government (though not necessarily from outside politics) who is publicly appointed by a government minister to advise on policy development or delivery on the basis of their expertise" (p. 4). Although the

actual work involved in these positions varies, Policy Tsars typically produce a report as a primary direct output which forms the basis for their role in fostering change.

Commissioned research

Government departments and agencies commission a large quantity of independent research to inform policy development and to evaluate the success of policies which have been implemented. For example, in 2013/14 the Department for Business, Innovation, and Skills directly commissioned 130 research projects and literature reviews (BIS 2014). The substantive output of a commissioned research project is usually a written report which is supplied to the funding body and made publicly available via a government website, although commissioned research may also result in the production of a database or analysis tool for use by policy makers. Academic social scientists undertake a significant proportion of this research: an analysis showed that 44 per cent of the reports published on the UK government website had academics listed as authors or co-authors (The LSE GV314 Group 2014a). Most of these were policy evaluations: the majority (71 per cent) were evaluations of current or recent government policies and programmes, while the remainder were studies of older programmes or general policy areas. The process of conducting commissioned research usually involves substantial interaction between social scientists and policy makers during the production of the research and research report, and researchers may have some input into the scope, design, and goals of the research.

For academic social scientists, undertaking commissioned research raises questions about academic autonomy. There may be tensions between the goals of the social scientists and those of the research commissioners and those affected by the research. The strongest form of policy maker control over commissioned research tends to occur during the commissioning and design stages, as this is this point in the process during which research commissioners exercise control not only over the agenda of the research but also over the specific research questions and often over the research methodology. By exercising control over research questions government can exclude certain results which might be likely to flow from research. A study conducted by the

LSE GV314 Group (2014a) found that research projects which were specified in detail by government were more than twice as likely to produce results favourable to the programme under evaluation as were more loosely specified projects in which academics were able to set the research questions.

When commissioned research is made more widely available it may attract an audience, including opposition politicians, interest groups, the media, and the public at large, who may be hostile to the policies referenced in the research. This can encourage policy makers to attempt to influence the contents of the final report. Nearly half of the academics surveyed by the LSE GV314 Group (2014a) reported that policy makers had sought changes to the outputs of commissioned research and in most cases the academics did make some changes in response, although only in one in five cases did the academics accept all the proposed changes. Policy makers may also neglect or suppress unfavourable reports, and this can make headlines in national media when revealed (Vaughan and Addley 2016).

3.2.2 Devolved and supranational government, and science policy intermediaries

The United Kingdom has devolved administrations in the form of the Scottish Parliament, Welsh Assembly, and Northern Ireland Executive. The Scottish Parliament has the competence to produce policy and legislation on a wide range of areas, including crime, economic development, education, and health, and has limited revenue-raising powers; the Welsh Assembly has only limited legislative competence and acts as an executive body which is able to modify policy developed in Westminster. The creation of the devolved administrations has established new channels of policy influence for academics, who can conduct commissioned research for and attend committees set up by the devolved administrations and can make informal contributions to devolved policy debates. Substantial numbers of researchers are employed by each administration, with over 130 specialist researchers in the Knowledge Services Department of the Welsh Government alone, the smaller of the two civil services (S. Johnson and Williams 2011).

A further set of formal policy making bodies which utilize technical information and advice supplied by social scientists operate at the supranational level. An increasing amount of policy is formulated at European level by the European Union before being integrated into the British system. At a global level, the International Monetary Fund and World Bank employ large numbers of economists and undertake economic research to inform their own policy development and that of national governments. Although the IMF and World Bank are unable to formally authorize national policy, they develop and implement policies which control the availability of funds to struggling or developing nations. As a result, in certain circumstances they are able to dictate the terms of national policy. They also strongly encourage transnational exchanges of economists and work to increase the pan-national legitimacy of economics, generating an isomorphic pressure among nations (Fourcade 2009)

Another type of organization which works to convey scientific evidence through technical processes is the science policy intermediary. Science policy intermediaries support the transfer of knowledge from scientists to decision makers and the development of scientifically informed policies and practices (M. Meyer and Kearnes 2013). Many science policy intermediaries undertake systematic reviews of the academic literature relevant to a question set by policy makers and then present the results, along with recommendations for action, in a simplified format. Science policy intermediaries which undertake research reviews for UK policy makers include the National Institute of Health and Clinical Excellence, a body which brings together healthcare researchers and practitioners to set standards for NHS practice, and 'What Works' centres, which supply scientific evidence to government concerning crime reduction, ageing, early intervention, educational attainment, and local economic growth (Cabinet Office 2013).

A note should also be made of the 'bottom up' pathway to policy through private and voluntary sector organisations which are involved in the implementation of policy. As the implementation of policy has increasingly devolved away from the public sector, the private and voluntary sectors have become more involved in policy formulation. Under programmes designed to involve the private sector in the funding and delivery of public services, such as public–private partnerships and the sponsored academy

schools programme, the non-state sector is able to exercise influence over some aspects of policy implementation and engage in an upwards negotiation with the core executive over policy details. Furthermore, private sector consultants are often brought in to the executive on a temporary basis in order to provide technical skills, manage change programmes, or to bring ideas and models from the private sector and apply them to policy formulation (Howlett and Migone 2013; Kantola and Seeck 2011). Academics may also be commissioned to undertake work for the private and voluntary sectors.

3.2.3 Parliamentary committees

Parliament is the primary institution through which policies are debated in public by elected representatives in the House of Commons and by the political appointees of the House of Lords (Norton 2013). In addition to voting on legislation, Parliament has two other principal formal functions: it conducts scrutiny of proposed legislation and it evaluates the work of government. Through its less formal functions and committees Parliament engages with the issue networks and interest groups of the wider discursive policy system. Through its formal scrutiny committees Parliament offers a technical pathway through which social science may enter the policy making system.

The main mechanisms of legislative scrutiny and policy evaluation in the House of Commons are Departmental Select Committees (each of which corresponds to a particular government department), the Public Administration Committee whose remit ranges widely across the civil service and governmental administration, the Public Accounts Committee which examines government spending, and the European Scrutiny Committee which is required to assess which EU documents should be further debated by MPs. The House of Lords also possesses select committees, although these focus on broader themes rather than on the work of a particular department. The work of a Departmental Select Committee can range not only over the work of the department which they are shadowing, but can also cover anything they think is related, or should be related, to its work. Departmental Select Committees examine the formal policy proposals and Bills emanating from the department, identify emerging

areas of policy and make new policy proposals, examine the department's decisions, publications, plans, and expenditure, monitor the work of its executive agencies, non-departmental public bodies, and other associated bodies, examine the implementation of policy initiatives, and produce reports for debate in Parliament (House of Commons Liaison Committee 2003).

Parliamentary committees have considerable autonomy to bring in witnesses and documents as necessary to support an inquiry and occasionally they make field visits to conduct interviews or to obtain other evidence. The usual procedure once a topic of inquiry has been chosen is for the committee to publish a call for written evidence from individuals or organizations affected by an issue or who have expert knowledge about it, and academics are frequent contributors via this route. The committee will then invite some of the respondents to give oral evidence in person alongside others, particularly Ministers and civil servants, who will be invited even if they have not submitted written evidence.

3.3 Political pathways to policy

The supply of knowledge and advice to government is becoming increasingly externalized and politicized (Craft and Howlett 2013). There has been a move away from a model in which policy advice is centralized within the core executive and towards a system which involves multiple sources of advice and a distributed process of policy formulation. Essential aspects of public policy are developed outside the core executive in locations inhabited by actors from organized interest groups, executive agencies, legislatures, political parties, the judiciary, professionals, researchers, journalists, and members of the public (Craft and Howlett 2013). At the same time, a process of politicization is ongoing in which political appointees inhabit newly established positions which are inside the core executive but outside the traditional civil service hierarchy, threatening the traditional separation of technical and political sources and types of knowledge. Political advisers occupy roles in government departments (Eichbaum and R. Shaw 2008) and government Ministers are able to bypass the advisory functions of the civil service by sourcing information from think

tanks and policy networks (A. Rich 2005). As a result, although technical pathways remain the principal route through which academic social scientists interact with public policy makers, political pathways to policy are likely to be increasingly important.

The main political pathways are discussed in the following sections. They encompass a type of policy engagement which does not involve communicating directly with formal policy makers located in the core executive and Parliamentary scrutiny committees but instead involves working through more indirect and politicized channels: political parties, the news media, and policy intermediaries. This section examines each of these pathways in turn and discusses how, and to what extent, academic social scientists in the UK work through them.

3.3.1 Political parties

Political parties are coalitions of individuals with multiple interests which assemble in order to win government office and gain the ability to enact policies (see Kavanagh et al. 2006 ch. 18 for an overview). They interact cooperatively and competitively in a party political system. The UK has traditionally been seen as possessing a two-party, majoritarian party system in which the most popular party of the Labour Party and the Conservative Party is able to take control of government and enact the policies which its supporters favour. There is some evidence that the UK is moving towards a moderately pluralistic system in which parties such as the Liberal Democrats, the UK Independence Party, and regional parties such as the Scottish National Party are able to gain influence (Webb 2000). While the elected members of a party are in government, the political party acts as an additional organizational structure which coordinates the work of Ministers, backbench MPs, and other party members; while not in government, political parties with elected MPs can contribute to policy development through their party's formal role as the organized opposition as well as through contributions to public policy debate.

The internal policy development processes of political parties offer academic social scientists a potential pathway of policy influence. Although the detailed drafting of policies and legislation often happens elsewhere (most notably within the core executive), political parties possess mechanisms which allow them to develop policy internally, collate policy ideas from external sources such as think tanks and policy institutes, and select those that they wish to present to the public from a wide range of policy alternatives. The nature of these mechanisms and the distribution of policy influence between elected representatives and the wider party memberships differs between the parties, largely due to differences in the balance of power in the parties. All the mainstream political parties possess central research functions which are responsible for developing policy, briefing ministers and parliamentarians, conducting research, and producing publicity materials (Polsby 2001). Although party research and development departments can fall into disrepair following long periods in government when ministers are able to utilize the policy development functions of their departments, the period in opposition is a critical one for new thinking and policy development; parties in opposition often use it as an opportunity to rebuild or reconfigure their research departments and policy development processes. Both the Labour and Conservative parties have established advisory councils containing academic social scientists who advise them on principally economic matters.

When a party enters government, academics who are heavily involved in the activities of the party may enter government with them as a Special Advisor. The role of Special Advisors is to offer Ministers an alternative source of policy advice, link them with external policy networks, and to help move policy-related ideas developed by party research departments and think tanks into government. Academics who are party insiders may be appointed as a Special Advisor and undertake a partisan role associated with furthering the goals of their political party.

Special Advisors differ from traditional civil service appointments and committee positions in that they are appointed by and report directly to a Minister. They review papers that are going to the Minister, connect Ministers with research that has been conducted by or is influential within their party, bring forth policy proposals for the department to develop, engage in policy making processes within the department, and

act as liaison between the Minister, political party, and interest groups (Institute for Government 2010).

3.3.2 Mass media

The mass media, including national newspapers with a wide circulation and radio and television broadcasters, plays a central role in political life and has a significant influence on processes of policy making (Street 2010). It fulfils a number of political functions including:

- generating media events that policy makers must respond to and setting the public agenda (McCombs 2005);
- assigning symbolic capital to actors operating in different fields (Couldry 2003), such as think tanks, consultancies, and market research organisations, by conferring or withholding expert status (Arnoldi 2007);
- providing "a site or arena in which symbolic contests are carried out among competing sponsors of meaning" (Gamson and D. Meyer 1996, p. 287);
- forming a repository for the dominant interpretations of cultural meanings; and
- framing news items and political events for the public, largely using dominant interpretations, which sets the context for policy making (Entman 2009).

Academics are not infrequent contributors to the mass media and empirical evidence suggests that social scientists feature in the media more frequently than those from other disciplines. A search of the UK quality press conducted by the LSE Public Policy Group (2008; 2008a) found that more articles featured academics from humanities or social science disciplines than academics from natural science, technology, engineering, or mathematics disciplines. Half of the UK political scientists surveyed by LSE GV314 Group (2014b) had appeared in the mass media over the two years preceding the survey. Academics working in medical science, humanities, and social science disciplines were also more likely than those in other disciplines to report

frequent contact with the German media (Marcinkowski et al. 2013). The LSE GV314 Group (2014b) identified seven types of contribution: a quote or comment made to a journalist; an article describing research findings, typically based on a university press release; an article wholly written by an academic; a biographical article or news about an academic; a letter written by an academic and printed in the letters section; an interview with an academic; and other articles, including announcements.

Writing an article for publication in a national newspaper offers a direct route to a large non-academic audience: although letters and articles are edited, they are less strongly mediated than comments to a journalist. These are examples of contributions to what Jacobs and Townley (2011) describe as 'overlapping spaces of opinion': the editorials, blogs, op-ed pieces, regular columns, and political talk shows which are a 'central feature' of democracy. Jacobs and Townley (2011) found that academics, and particularly social scientists, are increasingly frequent contributors to opinion pieces in the mainstream US media: for example, academics write 13.5 per cent of opinion columns in the New York Times. They argue that this change is driven by the news media's shift away from news gathering and toward commentary and by calls for more publicly relevant scholarship (e.g. Burawoy 2005).

3.3.3 Policy intermediaries

This section examines how social scientists contribute to public policy through non-governmental intermediaries which inhabit policy networks. Like political parties, policy intermediaries are active in policy networks. However, while the purpose of a policy intermediary is to gain the power to implement its policies, the purpose of a policy intermediary is to influence civil servants, politicians, and, through journalists, the public. They seek to accomplish this by holding events, sending research and policy proposals directly to Ministers and civil servants, making public contributions through the media, and by publishing reports. They cluster around government departments and political parties in order to inject their research findings, arguments, and policy proposals into the policy making process, and they often draw upon social scientific research and academic expertise in order to do so.

Intermediaries are not passive conduits for knowledge: they work to transfer knowledge, but may also seek to exert control over potentially controversial fields, and are more or less active agents (M. Meyer and Kearnes 2013). The extra-academic nature of some intermediaries is seen as being potentially problematic because even though their work may be informed by academic research, intermediaries may be partisan, using their own research and opinions to influence government policy (Stone 2007). Policy intermediaries include pressure groups, think tanks, and policy research institutes, all of which may be more or less partisan and may exert more or less influence.

Pressure groups may be broadly divided into two types. Cause- or issue-based pressure groups advocate a particular cause, such as reform of a particular law or area of social policy; for example, Unlock Democracy (formerly Charter88) is a pressure group which promotes the cause of constitutional and electoral reform. Sectional or interest based pressure groups represent the interests of a particular section of society, such as professionals (in the case of the Royal College of Nursing) or older people (in the case of the charity Age UK). The distinction between issue and interest based pressure groups is not always clear-cut, however, as some pressure groups, such as the Countryside Alliance, perform both functions.

Think tanks and policy institutes vary from those which are similar to issue based pressure groups, in that they campaign for a particular ideological cause or perspective, to those which aim to be politically neutral and which conduct research in manner of social policy research institutes (Denham and Garnett 2005). For instance, the Institute for Fiscal Studies, whose goal is "to promote effective economic and social policies by better understanding how policies affect individuals, families, businesses and the government's finances" (IFS 2016), prizes political neutrality, employs many PhD qualified economists, counts academic economists among its visiting scholars, and is part-funded by the ESRC. Social policy research institutions located outside the university sector which primarily conduct disinterested research for paying clients have existed for some time: the National Institute of Economic and Social Research and Political and Economic Planning (now the Policy Studies Institute at the University of Westminster) were both set up in 1931 in order to undertake contract

research for government clients, but have also sought to influence policy through their own independent research programmes.

Other research organizations have overtly political agendas: the Fabian Society, which was established in 1884 in order to promote socialist ideas and advocate non-violent political change, works closely with the Labour Party and the Institute of Economic Affairs (IEA), which was established in 1955 to advocate the application of market principles to the public services and the welfare state, has always been associated with Conservatism. The establishment of the IEA was followed in the 1970s by a wave of organisations which, unlike more academically or contract research inclined think tanks, were committed to promoting a certain ideology and to actively marketing their ideas. In Britain this includes the Centre for Policy Studies, set up in 1974, the Adam Smith Institute (1977), Policy Exchange (2002), and the Centre for Social Justice (2004). Another array of think tanks including IPPR and Demos claim political neutrality but tend to be associated with the centre-left of politics.

What defines organizations as think tanks rather than pressure groups is that they develop a broad range of policy proposals rather than limiting themselves to a single issue, although some, such as the Resolution Foundation which "works to improve the living standards of those in Britain on low to middle incomes" (Resolution Foundation 2016), work to influence policy in the interests of a large subsection of the population. Think tanks also tend to play a brokerage role by connecting political parties with ideas from academia, with the think tank's own internal sources of expertise, and with policy solutions from other countries. Most think tanks carry out their own research but some act as network organizations, commissioning external research and communicating it to policy makers.

Although the number of think tanks has increased significantly since the 1970s (Denham and Garnett 2005), the influence of think tanks on policy is hard to estimate because it is difficult to establish a causal relationship between the work of think tanks and a government's policy programme. However, think tanks have been credited with influencing the thinking of senior politicians (Pautz 2013). Certainly they maintain strong links with political parties and Whitehall government: former think tank employees frequently become Special Advisers or even Secretaries of State (see Dorey

2014, pp. 53–55 for a list) and a career pathway from think tanks to a position in the core executive is well established.

3.4 Conclusion

This chapter has offered an outline of the public policy making system in the UK and the principal ways through which academic social scientists contribute to it. A key distinction has been drawn between technical and political pathways to policy. Although the distinction is not absolute—pathways such as Parliamentary committees and policy intermediaries straddle the divide—it is argued that it is useful in understanding the activities of academic social scientists as they seek to influence policy.

For example, while the technical pathways to policy offered by government departments and agencies are a popular route for academic social scientists to influence public policy, social scientists whose work is not in alignment with the philosophy of a department might find it difficult to contribute in this way. It is the task of civil servants to synthesize technical information for the consumption of Ministers, and senior civil servants have a formal role that requires them to offer Minister impartial and objective advice which is relevant to assessing policy options. As a result, civil servants in government departments can play an important gatekeeper role by shaping the information that reaches Ministers. If this route to policy influence is unavailable, how a social scientist reacts—by choosing to work through an alternative pathway, or by taking no further action—is a potential indicator of the contribution of their relational work. Academic social scientists faced with a hostile or equivocal reception by a department may turn to the political pathways provided by political parties or policy intermediaries. However, this might be a risky strategy because political parties and intermediaries do not have a stable relationship to government.

This chapter has attempted to condense the complexity and diversity of the policy making system in the UK in order to briefly situate the knowledge transfer work of

academic social scientists. The next chapter sets out the methods utilized to study knowledge transfer work. It also draws on the division between technical and policy pathways developed in this chapter to develop a method of evaluating the contribution of academic social scientists via each of the two categories of pathway.

Chapter Four: Research Methods and Data

4.1 Introduction

The study examines the knowledge transfer work of a selective sample of 46 academic social scientists with a record of engagement with public policy. It draws on interviews with the social scientists and an analysis of their bibliographic and biographic records to develop a typology of their relational and epistemic work and the outcomes of their work. Although the study focuses on the work of academic social scientists as knowledge producers, it is recognized that knowledge utilization is the result of interactive processes involving knowledge co-creation, negotiation, and contestation between producers and users. The study develops a fuller picture of these processes by drawing on interviews with 19 public policy makers. These interviews enable the outcome of the social scientists' knowledge transfer work to be evaluated from the perspective of both knowledge producer and user.

This chapter begins by justifying the methodological choices. It describes how the social scientist and public policy maker samples were developed and discusses the types of data collected and how they were obtained. The final section of the chapter explains how the data were analysed. The data showed systematic variation in the knowledge transfer work and boundary orientations of the social scientists, and a typology was developed to support the analysis by highlighting the variations. Finally, the chapter explains how the academic social scientists' knowledge transfer work was analysed using the dimensions of relational and epistemic work and how the outcomes of their work were evaluated.

In order to enable the reader to determine how the typology was developed and how the cases were classified, the typology is presented in this chapter, along with a series of tables describing the sample of academic social scientists. For ease of reference a separate table is presented for each type of social scientist with each table including descriptive, bibliometric, and summary biographic data.

4.1.1 The episodic interview method

Knowledge transfer work has been conceptualized as a complex, contingent, reflexive, and strategic response by knowledge producers to the relational and epistemic organization of the public policy field. As such, it is reliant on tacit knowledge and social and political skills which are not directly available to consciousness (Polanyi 1974). Previous approaches to analysing knowledge transfer have typically relied on quantitative survey methods or thematic analyses of semi-structured interviews to produce lists of 'barriers and facilitators' to knowledge transfer (see Oliver et al. 2014 for a review). However, a deep picture of strategic and skillful work cannot be produced by methods which reduce the complexity of human agency to lists of potentially relevant factors. Such methods are incapable of representing the richness of knowledge transfer work as the mutual engagement of knowledge producers and users, each armed with different intentions and orientations, different sets of experiences and capabilities, and compatible and incompatible knowledges.

It has been argued that studying strategic work requires the use of a research method that enables 'close-with' ethnographic access to actors (P. Johnson et al. 2010) in order to research the "contextual, detailed, 'deep' and unique characteristics" of their practice through methods such as extended participant observation (Rasche and Chia 2009 p. 729). Ethnographic case studies of policy entrepreneurs, for example, offer thick descriptions of their activities and reveal their instrumental contributions to public policy. Ethnographic access offers the possibility of getting close to participants, experiencing something close to what they experience, and understanding what they do by attempting to mirror their subjective interpretations of events. However, the ethnographic method carries practical disadvantages which make it unsuited to studying the relational and epistemic work of a diverse group of academic social scientists. It would be difficult to perform simultaneous ethnographies of the

work of dozens of different social scientists working in different contexts and organizations. Furthermore, activities such as building and maintaining social relations are extended in time, intermittent and episodic in nature, and are not the main pursuits of the individuals under study. An ethnographic study of the work of an academic economist, for example, might reveal a considerable amount of detail about how they read articles, talk to colleagues, and use a computer, and rather less data concerning how they maintain relational ties with policy makers stretching over a period of years.

Hitchings (2011) questions the assumption that practice can only be studied through ethnographic research and shows that, by being encouraged to produce an explicit account of their work and a theory of why they did it, individuals can articulate their subjective understandings of their everyday work. This study uses a similar type of interview method, the episodic interview, to access data concerning knowledge transfer work. The episodic interview method combines narrative interviewing with the semi-structured interview method and generates narrative data concerning concrete episodes of activity alongside semantic data concerning the meaning and consequences of the episodes (Flick 2000; 2008). As episodic interviews permit questions designed to elicit attitudes and beliefs to be posed within the same interview as questions designed to elicit narratives and structures of meaning, they support 'within-method' triangulation by enabling both episodic and semantic data to be analyzed together and compared.

The episodic interview method draws on psychological research which argues that individuals' experiences are stored and recalled in two forms of memory: episodic memory, which is linked to the recall of specific events and situations, and semantic memory, which is based on concepts, assumptions, and relations which have been abstracted from concrete situations (Tulving 1972). The former type of memory stores episodic knowledge organized into episodes consisting of a situation and its related context, while the latter type of memory stores semantic knowledge as a structured network of concepts and the relations between them. The distinction between episodic and semantic knowledge is important to the development of an analysis of the relational and epistemic work of knowledge producers because, while this work is

expressed in concrete episodes, it must be understood in terms of its meaningfulness to the actors undertaking it.

The episodic interview method produces narrative data concerning the episodic contents of memory, including concrete situations, contexts, and progressions of events, alongside qualitative data concerning the semantic contents of memory, including the justifications, arguments, and theories which explain the logic and meaning of actions. This means that data could be acquired which related to what interviewees did and how they made sense of it and enabled their relational and epistemic work to be studied from multiple perspectives.

4.1.2 The biographic and bibliographic methods

Analysis of an episodic interview report involves at least three moments of interpretation: the 'top-down' perception of the interviewee, a retrospective interpretation of recalled memories, and the researcher's interpretation of the interview text. The accuracy of perception and memory is a primary concern as interviewees interpret events in the light of their present understanding, and their memory traces may erode over time or be inaccurate in the first place. The episodic method invites actors to retrospectively rationalize their actions; while this can offer insights as to how they theorize and justify their actions, it also risks underplaying the complexity and uncertainty of a situation as it transpired at the time. Furthermore, the interview itself can be seen as a co-construction between interviewer and interviewee, as the interviewer intentionally or unintentionally directs the interviewee's attention towards certain interpretations of an event.

In order to mitigate these problems and obtain a broad set of objective data indicative of some types of knowledge transfer work, biographic and bibliographic data were collected for each of the social scientists. Records of some of the more formal policy engagement activities of academic social scientists are located in publicly available biographic and bibliographic documents and gathering this data enabled conclusions drawn from the interview reports to be triangulated across different research methods.

4.2 Sample selection and access

The main sample consisted of 46 academic social scientists based in the UK. The sample was purposively selected to maximize the availability of data concerning knowledge transfer work by focusing on academic social scientists with experience in public policy engagement. The sample was comprised of an initial set of 28 academic social scientists in management, economics, or social policy from three elite research universities in London and an extended sample of 18 academics from a broader range of social science disciplines and universities. Variation was sought by including academics from disciplines associated with different degrees and modes of engagement with public policy making, maximizing the range of knowledge transfer work available for study. Additional data was gathered from a supplementary sample of 19 public policy makers.

4.2.1 Academic disciplines constituting the initial sample

Academic disciplines vary in their orientations toward with the public policy field. Some disciplines, such as law, are more reliant on the external social world than others and more interpenetrated with it; academics in these disciplines tend to be less autonomous than those in other disciplines (Bourdieu 1988). Wagner and Wittrock (1991) argue that the social sciences can be divided according to their degree of autonomy and their pragmatic specialization into: comprehensive social sciences, such as sociology, which continue political and social philosophies such as idealism and critical responses to dominant discourses and maintain their autonomy from the state; formalized disciplinary discourses, such as economics, which obtained political and academic legitimacy by emulating the discoveries of the natural sciences, allowing them to contribute to public policy while maintaining their autonomy; and pragmatically specializing professions, which undertake professional training and

orient themselves toward practical application of research, sacrificing their autonomy for close engagement with the state. In order to ensure variation within the sample, academics were initially selected from three disciplines associated with different degrees of autonomy and pragmatic specialization.

Economics

Economics developed as a science of government and it has since maintained a close relationship with public policy making (Fourcade 2009). Approximately two thirds of the 2,600 researchers working for the UK central government are affiliated to the Government Economic Service (GES), which offers economic analysis, evaluation, and policy briefings to government (Juhlin et al. 2012). By adopting a common formalized discourse, academic economists are able to maintain a degree of autonomy whilst maintaining ties with professional analysts working in government and also in think tanks, policy institutes, trades unions, and firms. The historical development of economics fostered the development of a set of disciplinary norms supportive of close policy engagement and a common language shared by economists in government and in academia, which extends to the development of a common labour market between universities, supranational institutions, government departments, think tanks, and policy institutes. Academic economists can thus be expected to be more oriented toward policy engagement than other social scientists.

Management

Although the discipline of management and its institutionalization within universities in the form of the business school was founded on a conception of management scholarship as part of a professionalization project, "business schools have remained professional schools in name, even while abandoning the professionalization project in substance" (Khurana 2010, p. 371). The discipline has tended toward specialized discipline-oriented research carried out by trained psychologists, sociologists, and economists who are attracted by the opportunities and working conditions found

within business schools. Concerns about a 'knowledge transfer gap' between management scholars and practitioners have subsequently emerged (Rynes et al. 2001; Shapiro et al. 2007) and there are regular debates in the organizational literature about the lack of relevance of management research (e.g. Fincham and T. Clark 2009). A gap between many management scholars and the practical concerns of policy makers and practitioners has persisted in part due to the theoretical and methodological diversity of the discipline relative to others such as economics (Pfeffer and Fong 2005). Despite its pragmatic genesis, the management discipline as a whole can be expected to be less strongly oriented toward policy engagement than the other social science disciplines.

Social policy

Social policy is a pragmatically specialized discipline with a strong focus on public policy engagement. Although, like management, it draws on the more established academic disciplines of sociology, economics, and politics, the social policy discipline is differentiated from sociology by its "specific focus upon the development and implementation of policy measures" (Alcock 2014, p. 2), and from economics by its focus on policy affecting the social welfare of individuals rather than those which primarily affect goods, materials, and services.

The emergence of the discipline of social policy in Britain was closely connected to the Fabian movement which actively sought to utilize academic research to influence public policy. As a result, social policy is notable for a concern with public policy engagement and the prescription of policy solutions (Alcock 2014). Also connected to Fabianism was the establishment of the London School of Economics and Political Science (LSE). The development of the social policy discipline was intertwined with the establishment of the Department of Social Science and Administration at the LSE, which fused the discipline of sociology with a research unit dedicated to tackling poverty (LSE 2018). The focus of this new brand of social science was initially, as its title suggests, an administrative concern with the effects and mechanisms of policy action but the discipline later widened its focus to a more critical examination of policy

decisions, using international comparisons to examine the assumptions which lay behind policies. Although social policy is, like management, now characterized by theoretical and methodological pluralism, it continues its strong association with the practice of policy making. Social policy scholars are expected to display a strong orientation to not only policy engagement but also policy entrepreneurship and change.

4.2.2 Universities constituting the initial sample

Four universities constituted the initial sample, including the LSE, an institution which encourages public policy relevance and publicity (McLennan et al. 2005). The LSE has a historically close relationship with public policy makers which dates from its origins as a Fabian institution and continues to have a reputation for policy-relevant economics and social policy (a management department is a recent addition). The remaining institutions were Royal Holloway, University of London, a small research intensive university without a strong focus on public policy research, and two universities chosen for their research in management and economics. These included City, University of London, home to a business school with a close relationship with the City of London, and London Business School (LBS), set up in 1964 in response to a government report calling for the establishment of British business schools following the American model.

4.2.3 Academic sample selection and access

All of the universities within the initial selection maintain online repositories of the profiles of their academics. For example, the LSE Experts Directory displays profiles of LSE academics who are willing to take part in media interviews or work with private or public sector clients (LSE 2013). The profiles contain short biographical details for most academics, although the level of biographical detail varies between academics and universities.

A list of academics along with their CVs and biographical data was obtained for each university by downloading profile data from the university websites for academics affiliated to departments of economics, management, and social policy. In order to detect candidate cases from the large number of potentials, the level of policy engagement for each academic within the list was estimated using a combination of qualitative and quantitative indicators of policy engagement.

- Each academic's publicly available biographical profile was reviewed for evidence of policy engagement and scored.
- A list of 20 leading UK think tanks, public policy research charities, and policy institutes was compiled from searches of two broadsheet newspapers and a respected public policy magazine (Prospect Magazine 2014). An internet search was conducted for the name of each academic, limiting the search to the websites of the top think tanks. The number of web 'hits' was recorded.
- A search was conducted for the name of each academic, limiting the search to the websites of the UK parliament (parliament.uk) and government (gov.uk). The number of web 'hits' was recorded.
- Searches for the name of each academic was conducted on the Lexis-Nexis
 Media database of mass media publications. The number of mentions was
 recorded.

The data from the four methods were tabulated and cases were selected if they scored highly on any of the four criteria. The process generated a sample of 62 academic social scientists which was comprised of 30 management scholars, 21 economists, and 11 social policy academics. Fewer social policy academics were included in order to prevent the sample from being dominated by academics from LSE (all of the social policy academics were based at LSE and the sample contained 30 academics from LSE).

Emails were sent to each of the academics on the list supplying details of the study and requesting an interview. The responses are shown in the table below. 21 individuals did not respond to the email, seven individuals refused an interview, offering various reasons including a lack of time, and six individuals agreed to an interview but did not respond to a follow up email to arrange a date for the interview or a mutually convenient date could not be agreed. Interviews were conducted with the remaining 28 individuals and the interviews were digitally recorded and transcribed.

 Table 1 Distribution of the initial sample by discipline and response to interview request

Response	n	Economics	Management	Social Policy
No response	21	4	15	2
Refusal	7	4	2	1
Could not arrange interview	6	1	3	2
Interview conducted	28	12	10	6
Total	62	21	30	11

The response to the initial email was skewed by discipline, with academics from the management discipline were more likely to fail to respond to the initial email than academics from other disciplines. Five interviews were conducted with management academics from City, University of London (out of 16 invitations), three interviews were conducted with management academics from LBS (out of nine invitations), and two interviews were conducted with management academics from LSE (out of five invitations). This is suggestive of a general unwillingness to engage with the study from management academics. This may be because the management academics did not engage with policy to the extent estimated or that they were unwilling to take part in a study conducted by a management PhD student; alternatively, it could be symptomatic of the intramural focus described by Khurana (2010).

Extended sample

Following initial data collection, coding, and preliminary analysis, a division became apparent between the majority of social scientists, who were engaged in working with policy makers as informal consultants, evaluators, contract researchers, or expert advisors, and a smaller number who were the most highly engaged in making public policy interventions, producing and implementing policy solutions, and working extensively with both political and technical policy audiences, sometimes to the point of neglecting their academic research. Five academics were located in this emerging category. This was considered to be insufficient for theoretical saturation and in an effort to increase the population of this category the sample was widened using snowball sampling and two methods of purposive sampling.

- A snowball sample was generated by asking interviewees for the names of other academic social scientists who had been heavily engaged in public policy work.
- A sample was generated by including academic social scientists who were listed in a study of all 260 'policy tsars' who were appointed between 1997 and 2012 (Levitt and Solesbury 2012). Policy tsars are individuals appointed directly by a government Minister to advise on policy development or delivery and who therefore have substantial engagement with policy makers.
- Two academic social scientists from Royal Holloway, University of London
 who were excluded from the initial sample because, as human geographers,
 they were not in the three disciplines initially sampled, were added. These
 individuals were known by the author to have a high level of engagement with
 public policy.

These methods led to the inclusion of an additional 23 academics, who were emailed and invited to participate. All except five agreed to an interview and 18 additional interviews were conducted. The extended sample generated two more academics in

the most highly engaged category, suggesting that the additional methods were not more successful at identifying highly policy engaged academics than the methods used to generate the initial sample. 46 academic social scientists were interviewed in total.

Table 2 Distribution of the main sample by academic discipline

Academic discipline	n
Management	15
Economics	14
Social Policy	12
Other	5
Human Geography	2
Sociology	2
Politics	1
Total	46

As the table shows, the main sample primarily consists of academics from the management, economics, and social policy disciplines, which contribute 41 of the 46 interviewees. The five remaining interviewees from the extended sample comprise an 'other' group of disciplines made up of human geography, sociology, and politics.

Table 3 Distribution of the main sample by university position

Position	n
Professor	37
Professor of Practice	2
Research Fellow	1
Reader	2
Lecturer	2
Principal Research Officer	1
Research Officer	1
Total	46

The sample consisted mainly of senior, well-established academics, reflecting empirical evidence that senior academics are more likely to have the necessary knowledge and reputational capital for external engagement. Abreu and Grinevich (2013) argue that senior academics are more likely to engage in informal knowledge transfer activities because they have built up more extensive personal networks. Academics who engage with practitioners are on the whole more senior than those who do not, and they produce more publications and receive more government grants (Perkmann et al. 2013).

Table 4 Distribution of the main sample by primary university affiliation

University	n
London School of Economics and Political Science (LSE)	17
City, University of London	7
London Business School	4
University College London	4
Royal Holloway, University of London	3
Aston University	1
University of Bath	1
University of Bristol	1
University of Cambridge	1
Cardiff University	1
King's College London	1
Leeds Beckett University	1
Oxford University	1
The Open University	1
Queen Mary, University of London	1
University of York	1
Total	46

The table shows the distribution of interviewees by their primary university affiliation. The largest contributor to the sample was LSE, with eight economists, six social policy academics, two management academics, and a single sociologist. City, University of

London was the second largest contributor with five management academics and two economists. There is a 'long tail' of academics from other universities which was generated by the extended sample.

4.2.4 Public policy maker sample and access

A purposive sample of public policy makers with experience of engagement with academic social scientists was obtained initially by contacting employees of government funded science intermediaries tasked with providing evidence to government concerning health and social care, crime reduction, educational attainment, and local economic growth (see Cabinet Office 2013). A snowball sample was generated by asking initial respondents to provide further names of civil servants, political advisors, politicians, and think tank employees who they knew had engaged with academic social science.

The sample was selected in order to give coverage of a range of policy areas, including social policy, educational attainment, health and social care, and business and industry. The sample was also selected to include participants from a range of organizations, including political parties, government departments, government agencies, science intermediaries, and think tanks. A particular focus was given to public policy makers working in the area of vocational skills policy. 26 public policy makers were emailed and invited to participate, of whom 19 responded positively and were interviewed. 6 did not respond to emails and one interview could not be arranged; all of these were civil servants based in government departments, perhaps reflecting the restrictions placed on civil servants' interactions with outsiders (Civil Service Commission n.d.).

Table 5 Public policy maker sample

	Gender	Position	Organization	Policy area
P1	Male	Political Advisor	Political Party	Various
P2	Male	Director	Government Agency	Social policy (welfare)
P3	Male	Chief Executive	Science Intermediary	Education and skills
P4	Male	Senior Researcher	Science Intermediary	Education and skills
P5	Male	Manager of Dissemination	Science Intermediary	Education and skills
P6	Male	Crossbench Peer	House of Lords	Business and industry
P7	Male	Chief Executive	Government Agency	Education and skills
P8	Female	Former Minister	Political Party	Education and skills
P9	Female	Deputy Director	Science Intermediary	Health and social care
P10	Female	Director	Science Intermediary	Social policy (crime reduction)
P11	Male	Managing Director	Think Tank	Business and industry
P12	Male	Deputy Chief Executive	Think Tank	Education and skills
P13	Female	Assistant Director	Science Intermediary	Local economic growth
P14	Male	Political Advisor	Political Party	Education and skills
P15	Male	Civil Servant	Government Department	Education and skills
P16	Female	Civil Servant	Government Department	Economic policy
P17	Male	Executive Director	Think Tank	Economic policy
P18	Male	Chief Scientific Adviser	Government Department	Local economic growth
P19	Male	Civil Servant	Cabinet Office	Various

4.3 Data collection

The primary method of data collection was the semi-structured interview and interviews were conducted with both the academic social scientists and the policy makers. A subtype of the semi-structured interview method designed to produce narrative data alongside semantic data was utilized with the academic sample. Biographic and bibliographic data was also collected for the academic sample. The interviews were conducted during 2014 and 2015 and biographic and bibliographic data was retrieved up to 31 December 2015. Following collection, the data were brought into the MAXQDA software programme for coding and analysis.

4.3.1 Interview data collection

Interviews were carried out largely in person; two interviews were conducted remotely. The interviews lasted approximately 60 minutes and were recorded and transcribed. Prior to each interview with the academic sample, biographical data was collected and used to generate tailored questions about knowledge transfer activities. For example, specific questions were generated about groups the participant had joined and the activities they undertook to publicize specific research findings.

The interviews with the academic sample were conducted using the episodic interview method (Flick 2000; 2008). In an episodic interview, interviewees are repeatedly asked to present narratives of situations. A typical interview question of this type is "What was your first engagement with public policy? Can you describe how it came about and what happened?" Acquiring narrative data assists the analyst in reconstructing the logic of processes and events and the structure of an individual's experiences. Narrative-producing questions are mixed with questions designed to reveal how interviewees conceptualize the topic under discussion, for example by asking, "Can you tell me more about your relationships with policy makers?" or, "What are the most appropriate and effective channels for disseminating your research ideas? Why?"

The interviews began by asking the social scientists about their career backgrounds and core areas of expertise. The next set of questions were intended to probe the interviewees' orientation toward public policy engagement by asking whether nonacademics were involved in shaping their research and what motivated them to engage in knowledge transfer activities. Questions such as, "Should academics maintain their distance from public policy makers or work closely with them?" were used to generate data concerning the interviewees' beliefs about and motivations toward public policy engagement. Subsequent questions were designed to focus on the relational dimension of knowledge transfer work by asking about the users and audiences for their research, their relationships with them, the pathways they used to disseminate their ideas, and whether they had sought to form formal or informal networks to support dissemination. The epistemic dimension of knowledge transfer work was probed through questions about how they represented or translated academic knowledge for non-academic audiences, whether they sought to generate policy relevant ideas and, if so, which skills and processes they used. Interviewees were then asked to relate in detail specific episodes of knowledge transfer work identified from the biographic data and from responses to previous interview questions.

In order to better understand the organizational and political context for their work interviewees were asked whether they felt that their universities and disciplines supported their knowledge transfer work and what effect recent changes to the national research quality assessment mechanism had on their work. The interviewees were also asked to what extent their research had been utilized by public policy makers and whether their research results had ever been 'cherry-picked'.

The interviews with the public policy makers began by asking about their career and the role of their department or organization in relation to policy development. The interviews then moved on to ask about how the policy maker developed an evidence base for policy, focusing on the mechanisms and pathways through which they came into contact with academic research. Subsequent questions examined their relationships with academic social scientists and academic institutions, the importance of individual academics in shaping their use of research, and their outputs and relationships with other policy audiences. Where academics within the main sample

of social scientists had produced work relevant to the policy area of the policy maker, they were asked if they had experience of working with them and whether they had utilized their work.

4.3.2 Biographic and bibliographic data collection

In order to access biographical data an internet search was conducted for the *curriculum vitae* of each social scientist, which was downloaded if available. Where *curricula vitae* were not publicly available the social scientists were asked to supply a copy during the interview. Biographical profiles appearing on university websites were also downloaded for each of the social scientists. The resulting data was reviewed for the presence of any of the following activities, in relation to a government department, agency, policy institute, campaign group, or political party, and a summary table was produced.

- Membership of an advisory committee.
- Periods of formal employment or secondment.
- Affiliation to a research centre funded by or with extensive links to a government department or agency.

Three types of 'alternative bibliometrics' were collated. Alternative bibliometrics, or altmetrics, are a method of estimating the influence of academic scientists on policy and practice by measuring outputs in the grey literature, social media mentions, and citations in 'policy and guidance' documents published by governments and non-governmental organizations (Haunschild and Bornmann 2017).

The following measures were utilized.

• The number of articles authored by each academic social scientist appearing in the grey literature.

- The number of articles bylined by each social scientist in a major UK national newspaper.
- The number of submissions to a Parliamentary select committee attributed to each social scientist.

Grey literature is "that which is produced on all levels of government, academia, business and industry in electronic and print forms not controlled by commercial publishers" (Auger 1998 in Rothstein and Hopewell 2009, p. 104). A wide selection of grey literature is indexed by the Google Scholar search engine, which covers a wide range of literature not indexed by other databases (Alfonzo 2016). As the Google Scholar interface does not easily permit bibliometric analysis, the Publish or Perish software (Harzing 2007) was used to download an index of all outputs attributed to each social scientist within the sample by searching for the name of the social scientist. The resulting indices were deduplicated and manually edited to remove any outputs published by authors with similar names. Each entry on the list was manually reviewed and retrieved if necessary to ascertain its content. The number of (i) reports published by government or public sector departments or agencies and (ii) reports published by private or third sector policy intermediaries, including policy institutes, think tanks, charities, and pressure groups was recorded.

Altmetric data measuring the number of articles bylined by each academic social scientist which was published by a major UK national newspaper was obtained by searching the UK NATIONALS database of the LexisNexis Media search engine (LexisNexis 2018), which indexes up to 30 years of articles published by 16 national newspapers distributed throughout the UK. Searches of the byline field of the database were performed for the full name or title and surname of each academic social scientist and retrieved documents with fewer than 500 words were excluded. The results were then deduplicated and manually edited to remove any outputs published

^{1.} The database covers the following publications: Daily Mail and Mail on Sunday, Daily Star, Daily Star Sunday, Express Online, i - Independent Print Ltd, MailOnline, mirror.co.uk, Morning Star, telegraph.co.uk, The Business, The Daily Telegraph, The Express, The Guardian, The Independent, The Mirror and The Sunday Mirror, The Observer, The People, The Sunday Telegraph, The Sunday Times, and The Times. It does not include the Financial Times, which may be a significant channel for management and economics scholars.

by authors with similar names and the total number of articles published by each social scientist was recorded.

Parliamentary select committees publish the written or oral submissions they receive on the parliament.uk website (House of Commons 2016). Altmetric data for submissions to select committees was retrieved by searching the main Google index for the full name or title and surname of each academic social scientist and limiting the search to the parliament.uk site. The resulting links were followed and a record was made if it led to a unique record of a submission.

4.4 Data analysis

The analysis was informed by the conceptual framework developed in the second chapter and the distinction between technical and political pathways to policy made in the third chapter. The academic social scientists were expected to differ in the relational and epistemic work they undertake in transferring knowledge to policy makers; in their approach to managing the boundary between the academic and public policy fields (their boundary orientation); and in the outcomes of their work in terms of the utilization of their knowledge by public policy makers. These comprised *a priori* dimensions. The data were initially coded according to these dimensions using the MAXQDA software and further subcodes were identified.

The analysis drew on the inductive techniques of the grounded theory tradition which argues that theoretical flexibility should be maintained by avoiding excessive theorizing or hypothesizing prior to commencing a study. Grounded theory in its original form is a method whereby an explanatory framework is derived *only* by means of a 'second-order' analysis of empirically derived 'first-order' data, without imposing any initial theoretical framework, although sensitizing concepts are acceptable (Glaser and Strauss 2009). This permits the generation of new theory from data without being tied in to producing theories which fit pre-existing expectations. As Alvesson and Sköldberg (2009) argue, however, it is impossible for researchers to avoid bringing some theoretical presuppositions and tacit hypotheses with them into a research

project. Consequently, the inductive analysis began with the explicit supposition of differences between the social scientists in terms of their relational and epistemic work, motivations, and orientations toward the public policy and academic fields. The analysis sought to identify differences, inductively qualify the dimensions, and determine sub-dimensions by moving back and forth between the data, the second-order concepts which emerged from an analysis of the data, and the knowledge transfer and utilization literature.

4.4.1 Initial coding

The process began by identifying knowledge transfer activities from the episodic narratives and coding them within the overall categories of relational and epistemic work. Activities coded under the category of relational work included items relating to boundary-spanning or boundary-maintaining, such as 'establishing/co-establishing a lobbying group' and 'refusing to talk to the media'. Activities coded under the category of epistemic work included items related to knowledge acquisition and transformation, such as 'seeking information from policy makers' and 'repurposing academic output'. The semantic interview data, within which was located the rationales, strategies, and justifications offered by the social scientists, were also coded under the two categories. Semantic data coded under the category of relational work included items such as 'maintaining neutrality' and 'being aware of power relations'. Semantic data coded under the category of epistemic work included items such as 'drawing out the implications of research' and 'fitting in with user thinking'. An iterative analytical process was then undertaken in which the codes were compared with the literature, contrasted, and synthesized to develop second order codes such as 'establishing relations' (under relational work) and 'advocating policies' (under epistemic work). Within each case the semantic data was compared with the narrative data concerning episodes of knowledge transfer in order to develop an overall set of codes for the relational and epistemic work undertaken by each social scientist.

Through an iterative process of induction, coding, and comparison with the literature, a set of sub-dimensions were identified which reflected elements of difference in the

social scientists' orientations toward the boundary between the academic and public policy fields. Codes were identified and grouped under the following dimensions.

- Beliefs about the role of academics and academic evidence in public policy (initial codes included 'academic research has no influence on policy' and 'job is to disseminate not influence').
- Motivation for public policy engagement (initial codes included 'interest in process of policy making' and 'protesting the status quo').
- Attitude toward the academic field (initial codes included 'distancing from disciplinary core' and 'strong desire to progress academic career').

A spreadsheet was produced which summarized the data relating to the frequency and pathways of policy engagement for each social scientist, with the data for each individual located on a separated row in the spreadsheet. The spreadsheet columns related to the total number of government/public sector, private/third sector, and national newspaper articles produced by each academic, the total number of formal contributions to Parliamentary Select Committees, the overall frequency of policy engagement, and the principal mechanisms of policy engagement. The frequency of policy engagement activities (one-off, intermittent, or continuous) was determined by reviewing the quantitative data and interview report for each individual, and a short summary of the principal pathways through which they engaged with policy makers was prepared. The engagement frequency and mechanism summaries were added to the spreadsheet to ease comparison between the cases.

Coding example

In response to a question about how he obtained his current position on a government policy advisory committee, a Professor of economics (T1) offered the following narrative:

Some head-hunter company rang me up...I thought, "Well, okay, I might...it's sort of something that I've worked on, I might just apply." So I applied and I managed to get the job. (T1, Professor, economics)

This response was initially coded under 'joined government advisory committee'. A later question asked whether academics in general should try to influence policy or focus only on working to solve academic problems. The Professor responded to this question by offering the normative argument that 'academics should be trying to make contact with policy makers as and when.' Comparing the responses to these two questions suggested that the Professor was motivated to develop social relations with policy makers when opportunities arose to do so—when invited by 'some head-hunter'— rather than actively and strategically seeking to develop new connections. This data was then coded under 'opportunistic/reactive relational work'. Comparing the two types of data, episodic and semantic, permitted a fuller picture of the Professor's knowledge transfer work to be developed.

4.4.2 Typology development and case classification

This section develops a typology of academic social scientists, drawing on and extending the work of Lam (2010), who develops a typology to show how academics from the natural science, engineering, and medicine disciplines vary in their attachment to traditional and entrepreneurial academic norms, and Zabusky and Barley (1997), who contrast scientists' alternative orientations to the academic and industrial fields. The typology locates academic social scientists according to six dimensions: their beliefs about the role of academics and academic evidence in policy making, their mode and extent of policy engagement, their motivation for policy engagement, and their relational and epistemic work.

The interview data revealed considerable variation across these six dimensions. At an early stage in the analysis, a division began to emerge in the interview data between social scientists who expressed a strong orientation toward policy engagement, even if this came at the expense of adherence to traditional academic norms, and those who maintained a primary affiliation to their discipline and saw policy engagement as something which was good to do but not the *sine qua non* of their career. The social scientists were initially split fairly evenly between these emerging 'academically

oriented' and 'policy oriented' types. The production of research for other academics was not their primary goal of the 'policy oriented' social scientists and they did not prioritise the production of knowledge for an academic audience above the production of knowledge for a policy audience.

The analysis of the biographic and bibliographic data supported this division, revealing that academics in the first category had limited or intermittent engagements with policy while academics in the latter category were continuously or nearly continuously engaged with policy and interacted with policy makers through a variety of outputs and mechanisms. Having determined an initial difference between 'academically oriented' or 'policy oriented' social scientists, the interview coding comparison features of the MAXQDA software were used alongside manual comparisons of the data relating to frequencies and mechanisms of engagement to further subdivide these categories.

Of the 'academically oriented' social scientists, 'traditional academics' were distinguished from 'engaged academics'. While all the 'academically oriented' social scientists expressed a strong attachment to traditional academic norms and relatively infrequent or intermittent policy engagement activity, the traditional academics avoided active involvement in politics and sought to maintain a boundary around what they considered to be proper academic work, which was predominantly the production of high quality scholarly journal articles or monographs. Their relational work was thus characterized by a distancing from the policy field and limited and reactive engagement. While they were prepared to simplify their knowledge for a general audience, they did not engage in epistemic work which involved producing or translating knowledge for a specific policy purpose or audience. While not opposed to the use of academic research by public policy makers, the traditional academics did not consider it to be part of their academic role to work with policy makers or invest time in producing knowledge suitable for policy maker requirements and were reluctant to do so. They were somewhat suspicious of academics who engaged with policy to a significant extent and viewed the practice of policy making to be driven by interest groups and riven by personal interests, seeing it as antithetical to the academic ideal of disinterested truth-seeking. As a result, when they did engage with policy makers, their engagement typically followed a request from policy makers and was motivated by curiosity about the policy making process. As they viewed knowledge transfer as a hierarchical and linear process in which academic knowledge was transmitted to policy makers they did not see their participation as being critical to its success.

Like the traditional academics, the *engaged academics* saw themselves primarily as producers of authoritative knowledge for academic consumption. They were distinguished from the traditional academics by a belief that public policy engagement is part of an extended academic duty to communicate with wider society and a willingness to actively engage in developing relational ties and translating knowledge to policy makers. The bibliographic and bibliometric data revealed that they undertook more policy-related activities and developed ad hoc relational connections to policy makers, typically based around educating public policy makers and bringing new audiences into contact with their existing academic research. Their relational work was conceptualized as expanding the boundary of the academic field so that it came into contact with the public policy field. The engaged academics' epistemic work reflected an interactive and bidirectional translation process in which they engaged in processes of mutual exploration with policy makers, developing their understanding of policy makers' stocks of knowledge as they shared their own with policy makers. The engaged academics believed that it was possible to engage critically with public policy and retain their academic autonomy.

Of the 'policy oriented' social scientists, the data support a distinction between 'academic policy experts' and 'academic policy entrepreneurs'. While the bibliometric data showed that academics within both groups produced a substantial number of applied and policy relevant outputs, they maintained different stances toward the academic and public policy fields. The *academic policy experts* distanced themselves from both fields, seeing themselves neither as traditional academics nor as full time policy makers. They expressed ambivalent attitudes about the idea that they should undertake traditional academic work of producing knowledge for other academics, seeing this as incompatible with their policy advisory work, but were equally unenthusiastic about the idea that they should undertake more strategic and political

activities such as producing policy ideas and lobbying policy makers. However, they recognized that academic status was important in supporting them in their work of producing evidence for use in policy debates. Like Zabusky and Barley's (1997) liminal scientists, who saw themselves as being suspended between the academic and industrial fields rather than full members of either, the academic policy experts saw themselves as liminal participants on the margins of the academic and public policy fields. They had a 'neither/between' orientation toward the academic and public policy fields.

The academic policy experts were motivated to work closely with policy makers, either in order to influence and inform policy or to obtain research funding, and they authored or co-authored the greatest quantity of reports published by government or public sector organizations. However, they still maintained the importance of obtaining autonomy and influence over the direction of their research. Similarly, while they recognized the importance of making contributions to knowledge in an academic discipline, they also distanced themselves from traditional (pure) academic research. As a result, they sought to negotiate a position between the two fields by accommodating the competing demands of policy and academia, adapting to the diverse needs of policy and academic audiences, and managing the social boundary between the academic and political fields. The sought to maintain long term relationships with a limited group of policy makers, working to circumscribe the technical knowledge and key facts deployed in policy debates.

As opposed to the 'neither/between' orientation of the academic policy experts, the academic policy entrepreneurs maintained a 'both/and' orientation toward the academic and public policy fields. They engaged in both fields as full participants, meaning that they were willing to act as strategic and political players in a field characterized by relational and epistemic battles of ideas. The biographic and bibliometric data revealed that they made the greatest quantity of contributions through political pathways, including articles for private/third sector organizations such as think tanks, national newspapers, and Parliamentary Select Committees. They had little hesitation about working with activists and political parties when necessary and also expressed relatively little encumbrance by a need to conform to traditional

academic norms concerning the maintenance of distance from policy makers. They undertook fewer reports for government or public sector organizations than the academic policy experts and did not describe needing to move carefully to protect their relationships with policy makers.

The academic policy entrepreneurs were positive about working to change policy by mobilizing support for specific policy proposals but they also saw making a significant contribution to an academic discipline as vital. They sought to obtain respected and senior positions within both the academic and policy fields. The academic policy entrepreneurs treated the boundary between the academic and political fields as insubstantial and dissoluble, allowing them to move easily between them. The actively joined and built relational networks with policy makers and combined and transformed academic and policy knowledge by applying their own knowledge to policy.

The main findings concerning the academic social scientists' relational and epistemic work and their orientations toward the academic and public policy fields are presented in the following chapters. A series of summary tables are presented below. The first table presents the typology of the academic social scientists' relational and epistemic knowledge transfer work which was iteratively developed through the analysis and used to classify the cases. The individual cases are then listed, with one table for each of the four types. Each of the four tables presents descriptive data for each academic social scientist and bibliometric data showing the number of articles each social scientist has authored or co-authored which was published by a government or public sector organization, a private or third sector organization (such as a think tank), and a national newspaper. The number of formal submissions made to a Parliamentary Select Committee is also recorded and means are calculated. The tables also present a brief summary of the principal pathways used by each social scientist and the frequency of engagement. Finally, a separate table is presented with the distribution of the types by academic discipline.

Table 6 A typology of policy-engaged academic social scientists

	Traditional academic	Engaged academic	Academic policy expert	Academic policy entrepreneur
	Policy making is fundamentally	Policy makers lack a suitable	Academics should be a source	Academics should intervene in
	compromised by politics as the	framework with which to	of robust evidence for use in	politics and policy making
	illegitimate representation of	interpret academic knowledge	political debates	because the application of
Beliefs about	sectional demands	Academics can inform policy	Policy making is dominated by	academic knowledge to policy
the role of	Academic research has little or	by entering into dialogue with	political constraints on the use	making is contingent on the
academics	no impact on policy	policy makers in a spirit of	of academic knowledge but	activities of individuals
and academic	Engagement in politics poses a	'critical friendship'	applied knowledge can make a	Academics can influence policy
evidence in	threat to academic autonomy	Academic work should include	difference over the long term	change by directly applying
public policy	and academics who engage	critical engagement with policy	Academic work should involve	their knowledge to policy
	heavily in politics are suspect	making but academics must be	linking academic and policy	Both academia and policy
		careful to maintain their	maker concerns; autonomy	making can threaten autonomy
		autonomy	must be negotiated	
	Limited or one-off	Mainly intermittent	Continuous or nearly	Continuous or nearly
	engagement, principally	engagement through a	continuous engagement	continuous engagement
Mode and	through a formal engagement	broader range of mechanisms,	through a range of	through a range of technical
extent of	mechanism e.g. committee	principally involving the	collaborative mechanisms with	and political mechanisms
policy		repurposing of academic	technical policy makers,	including lobbying politicians
engagement		research	principally involving the	and contributing to the mass
			commissioning of research	media

	Traditional academic	Engaged academic	Academic policy expert	Academic policy entrepreneur
Motivation for public policy engagement	To indulge a casual interest in policy or politics or disseminate specific findings	To disseminate academic knowledge to a broader audience, progress an interest in the substance or process of policy making, or gain access to research data	To directly inform and influence policy by working with policy makers to investigate policy problems and solutions, or to obtain funding for further research	To substantially alter the direction of public policy
Attitude toward the academic field	Status within academia is of primary importance Strong orientation to academic peers working at the disciplinary core	Status within academia is of primary importance Some distancing from traditionally oriented academics	Status within academia is of limited importance Primary orientation is to other researchers working on applied or policy-related topics Critical stance toward traditionally oriented academics	Status within academia is necessary to accomplish personal goals Some distancing from traditionally oriented academics

	Traditional academic	Engaged academic	Academic policy expert	Academic policy entrepreneur
	Boundary maintenance and	Boundary expansion and ad	Boundary negotiation and	Boundary dissolution and
	reactive engagement	hoc bridging	relationship maintenance	boundary-spanning network
	Distancing from public policy	Active but intermittent	Continuous and strategic	construction
D.L.: I	field	engagement with technical	engagement with technical	Continuous and strategic
Relational	 Reluctant/incidental	policy makers as an extension	policy makers	political engagement
work	engagement, predominantly	of academic work	Participation enabled by the	Participation enabled by the
	reactive and casual in nature	Participation through ad hoc	maintenance of long term	construction of broad networks
		interactions	relations with narrow groups of	and an understanding of
			technical policy makers	power relations
	Knowledge simplification	Knowledge exploration	Knowledge circumscription	Knowledge application
	Transfer of academic findings	Bidirectional exchange of	Creation of 'policy messages'	Transformation of policy by
	(simple dissemination of	knowledge	to stabilize facts used in policy	combining academic and
	research) supported by the	Translation of academic	debates	policy knowledge (creation of
Epistemic	simplification of knowledge for	knowledge supported by the	Creation and modification of	new action proposals and
work	a general audience	development of an	knowledge located within	supporting arguments)
		understanding of policy	policy makers' conceptual	Transformations are supported
		makers' conceptual	frameworks	by the iterative co-production
		frameworks		of knowledge and policy

Table 7 Traditional academic sample

	Gender	Position	Academic discipline	Govt. / public sector	Private / third sector	National press	Parliamentary comm.	Frequency of policy engagement	Principal mechanism(s) of policy engagement
T1	Male	Professor	Economics	9	5	6	0	Int.	Informal contacts with the civil service through association with a research centre.
									Member of a government technical advisory committee.
T2	Male	Prof. of	Management	0	0	0	1	Int.	Occasional advisor to nonpartisan think tank.
		Practice							
T3	Male	Professor	Management	1	1	2	0	Int.	Former economist for a government agency. Former academic colleagues linked with
									the Conservative party.
T4	Male	Professor	Sociology	1	0	7	0	One off	Commissioned to author a report by a government agency.
T5	Male	Professor	Economics	6	6	3	2	One off	Member of an economic advisory committee to a political party. Authored articles commissioned by a right-leaning think tank. Authored papers for a central bank.
T6	Female	Professor	Management	0	0	0	0	One off	Former Director of a research centre part-funded by a government department.
			Mean	2.8	2.0	3.0	0.5		

Notes for Tables 7-10:

comm.: committee; Int.: Intermittent; Cont.: Continuous; Numerical figures refer to the number of publications or submissions.

Table 8 Engaged academic sample

	Gender	Position	Academic discipline	Govt. / public sector	Private / third sector	National press	Parliamentary comm.	Frequency of policy engagement	Principal mechanism(s) of policy engagement
E1	Male	Professor	Human Geography	0	10	39	2	Cont.	Multiple memberships of government advisory committees. Personal ties to senior civil servants who contact him for informal advice. Numerous contributions to policy intermediary events and reports.
E2	Male	Research Officer	Social Policy	0	2	0	0	One off	Authored articles for a nonpartisan think tank.
E3	Male	Reader	Management	0	2	0	1	Int.	Edited a major report criticizing government privacy policy. Member of government advisory committee.
E4	Male	Professor	Human Geography	5	0	2	0	Int.	Seconded to DFID, reporting to Tony Blair's office. Subsequently led an intergovernmental organisation before returning to academia.
E5	Male	Professor	Management	1	6	3	3	Int.	Occasional advisor to government agency.
E6	Female	Professor	Management	0	2	1	0	Int.	Director of a research centre with close links to practitioners.
E7	Male	Professor	Sociology	4	1	1	0	Int.	Author of report commissioned by DCMS. Director of research centre with an advisory committee consisting of policy makers and practitioners.
E8	Male	Professor	Economics	46	6	5	7	Cont.	Former World Bank employee. Developed strong informal links with HM Treasury and Bank of England; subsequently member of government advisory committee.
E9	Male	Lecturer	Politics	0	19	43	1	Cont.	Former Labour Party Special Advisor who joined academia when Labour left government; maintains substantial political connections.

	Gender	Position	Academic discipline	Govt. / public sector	Private / third sector	National press	Parliamentary comm.	Frequency of policy engagement	Principal mechanism(s) of policy engagement
E10	Female	Professor	Economics	9	0	61	0	Int.	Former research director of an intergovernmental organisation; advisor
F11		D (4	2	0	0		to French government. Regular columnist for a national newspaper.
E11	Male	Professor	Management	4	3	8	0	Int.	Former Director of a government funded research centre.
E12	Female	Professor	Management	1	7	1	0	Int.	Co-director of a research centre which undertakes work for charitable bodies.
E13	Male	Professor	Social Policy	11	16	6	4	Int.	Member of several informal advisory committees; has undertaken commissioned reports for devolved governments. Has written a number of reports for charitable and professional bodies and policy intermediaries.
E14	Female	Professor	Management	6	0	0	0	Int.	Director of university-based policy intermediary.
			Mean	6.2	5.3	12.1	1.3		

Notes:

E2 and E3 were earlier in their academic careers than the other engaged academics and had produced fewer articles overall. E8, E9, and E10 worked in policy-focused roles prior to joining academia and their greater number of policy-focused publications reflects this.

Table 9 Academic policy expert sample

	Gender	Position	Academic discipline	Govt. / public sector	Private / third sector	National press	Parliamentary comm.	Frequency of policy engagement	Principal mechanism(s) of policy engagement
X1	Male	Professor	Social Policy	37	22	4	8	Cont.	Leads a research centre which conducts a substantial proportion of its research for the Department of Health. Informal advisor to several government departments. Works with a major healthcare think tank.
X2	Male	Lecturer	Economics	2	19	0	0	Cont.	Former senior employee of a think tank which he continues to write for.
Х3	Male	Professor	Economics	5	6	2	3	Cont.	Former member of formal government advisory committees. Advisor to multiple government departments who has been invited to present to Cabinet subcommittees.
X4	Male	Professor	Social Policy	8	27	19	12	Cont.	Former civil servant who continues to have strong links to civil service. Twice commissioned by a Minister to write a formal report. Regularly writes for campaigning charities and think tanks.
X5	Male	Professor	Economics	112	2	0	0	Int.	Former World Bank economist who has research commissioned by DFID. Maintains informal links with economists from international organisations.
X6	Female	Professor	Management	2	39	5	2	Int.	Co-director of a research centre which receives funding from the Cabinet Office. Authors regular reports for the charitable sector and trade press.
X7	Male	Professor	Management	3	7	11	3	Int.	Author of report commissioned by DCMS. Former chair of a major charity.
X8	Male	Research Fellow	Economics	1	24	3	2	Cont.	Co-director of an academic research centre part-funded by government. Former senior employee of a think tank.
Х9	Male	Prof. of Practice	Management	0	1	2	0	Int.	Informal government advisor.

	Gender	Position	Academic discipline	Govt. / public sector	Private / third sector	National press	Parliamentary comm.	Frequency of policy engagement	Principal mechanism(s) of policy engagement
X10	Female	Professor	Economics	44	43	0	7	Cont.	Seconded to Department of the Environment early in her career; most current research is funded by government. Frequently undertakes commissioned research for charities and think tanks.
X11	Male	Professor	Social Policy	10	2	0	6	Cont.	Director of a research centre which undertakes work for government departments, charitable bodies, and schools.
X12	Female	Professor	Social Policy	4	8	0	0	Cont.	Director of a research centre which undertakes work for government departments, charitable bodies, and schools.
X13	Female	Pr Res. Officer	Social Policy	17	14	0	5	Cont.	Director of a research centre which undertakes work for government departments, charitable bodies, and local government.
X14	Female	Professor	Economics	17	10	2	2	Cont.	Director of a BIS funded research centre who has undertaken a number of policy evaluations commissioned by government and intergovernmental organisations.
X15	Male	Professor	Social Policy	10	9	2	0	Int.	Has undertaken a series of reports commissioned by the Department of Education. Lobbied politicians directly when research findings were rejected.
X16	Male	Professor	Social Policy	36	1	0	0	Cont.	Seconded to the Home Office as a senior researcher for most of his career; subsequently Director of research centre undertaking commissioned research.
X17	Male	Professor	Economics	23	8	3	1	Cont.	Undertook commissioned research for most of academic career; subsequently joined a government agency as Director of Research.
X18	Male	Professor	Management	30	5	1	0	Int.	Current research is co-funded by ESRC and BIS and some earlier research was commissioned by government departments and agencies; informal advisor to BIS.
X19	Male	Professor	Management	27	7	3	0	Cont.	Works with multiple government departments, formally and informally; current research co-funded by government and provides rapid response analysis.
			Mean	20.4	13.4	3.0	2.7		

 Table 10 Academic policy entrepreneur sample

	Gender	Position	Academic discipline	Gov / public sector	Priv. / third sector	Natl. press	Parl. comm.	Frequency of policy engagement	Principal mechanism(s) of policy engagement
N1	Male	Professor	Social Policy	4	15	17	1	Cont.	Former advisor to HM Treasury and a member of a formal advisory committee to the Department of Health. Active member of the Labour Party who has written for Labour think tanks and publications and centre-left think tanks.
N2	Male	Professor	Economics	22	7	12	17	Cont.	Former central bank economist in continual dialogue with HM Treasury. As an academic was appointed to a senior economic policy committee.
N3	Male	Reader	Economics	1	9	34	5	Cont.	Entered the core executive as a political appointee and appointed to a senior technical advisory position within the civil service. Member of the Liberal Democrats.
N4	Female	Professor	Social Policy	9	2	7	6	Cont.	Joined a campaign group to protest against government policy, subsequently developing a close relationship with a senior opposition politician. Following a change of government, commissioned by a Minister to write a major report. Works with the Department of Education and local government.
N5	Female	Professor	Management	10	14	112	8	Cont.	Strong informal links to core executive and public sector organisations. Extensive personal connections with government Special Advisors, think tanks, professional bodies, and journalists. Writes frequently for national newspapers and think tanks on right and left of politics. Commissioned to write a report by a Minister.
N6	Male	Professor	Social Policy	8	22	53	5	Cont.	Developed informal links with civil servants through leadership of ESRC research programme. Labour Party member and political advisor who has written for national newspapers and think tanks. Joined New Labour government.
N7	Male	Professor	Economics	6	32	7	12	Cont.	Labour Party member and Special Adviser to the New Labour government.
			Mean	8.6	14.4	34.6	7.7		

Table 11 Distribution of the academic social scientist sample by discipline

				Social	
Туре	n	Economics	Management	Policy	Other
Traditional academic	6	2	3		1
Engaged academic	14	2	6	2	4
Ac. policy expert	19	7	5	7	
Ac. policy entrepreneur	7	3	1	3	
Total	46	14	15	12	5

The traditional academics comprised the smallest group with six of the 46 interview participants. As the sample was selected for public and political engagement, this is likely to be considerably lower as a percentage than the prevalence in the population. The largest groups were the engaged academics and academic policy experts, with 14 and 19 individuals respectively; the former group included academics who primarily produced applied outputs but saw themselves wholly as academics rather than as policy analysts. Six of the 15 management academics were categorized as engaged academics, perhaps reflecting the popularity of the concept of engaged scholarship in the management discipline and a desire for 'rigour' before 'relevance' (Kieser and Leiner 2009). Seven of the 14 economists were classified as academic policy experts, possibly reflecting the specialization of the applied branch of the economics discipline in producing knowledge for use in governance. Similarly, the focus of the social policy discipline on producing knowledge for use in the development of policy may be reflected in the high proportion of social policy academics (seven of 12) categorized as academic policy experts. Seven of the social scientists were categorized as academic policy entrepreneurs. While this is a small group, its prevalence within the sample is likely to be an overestimate of their prevalence in the population given the purposive sampling strategy. Although the sample size is limited, the classification of the academic social scientists is somewhat indicative of differences in disciplinary norms for public policy engagement.

4.4.3 Analysis of knowledge utilization outcomes

Studies of knowledge transfer between academics and public policy makers distinguish between four main outcomes: a failure by public policy makers to utilize academic knowledge at all; symbolic utilization, in which academic knowledge is used to justify decisions or positions which have already been determined; conceptual utilization, in which academic knowledge influences the broad epistemic frameworks or mental models which inform policy decisions; and instrumental utilization, in which academic knowledge is directly applied during the making of specific decisions (Rich 1977; Caplan 1979; Beyer and Trice 1982). These distinctions have been used by scholars to develop scales of knowledge utilization such as Knott and Wildavsky's (1980) 'seven standards of utilization', which traces the progress of research knowledge from reception through to cognitive acquisition and processing, changes in conceptual understandings, active efforts to translate conceptual understandings to policy recommendations, adoption of recommendations, implementation, and finally practical effect.

An analysis which seeks to identify the outcomes of academic social scientists' knowledge transfer work presupposes that some form of causal connection can be identified between their work and the subsequent utilization of knowledge by public policy makers. However, the complex, contested, and congested nature of public policy making makes it difficult to measure knowledge utilization, identify causal links between knowledge acquisition and policy change, and attribute policy change to the actions of an individual (Mintrom and Norman 2009; Weible et al. 2009). While some applications of the advocacy coalition framework have sought to establish a link between the acquisition of knowledge and policy change, the link is often tenuous, in part due to the methodological challenges of measuring knowledge acquisition by policy makers (Weible et al. 2009). Knowledge produces multiple effects and policy

decisions are rarely single events but rather are accumulations of multiple choices and interactions which are affected by many other factors than academic knowledge (Rich 1997). Furthermore, there are a diversity of actors involved in the policy process who might make use of academic research in different ways; most notably, there is a split between policy makers associated with technical and political pathways.

A popular approach to evaluating the utilization of academic knowledge is to ask academics to report the utilization of their own research. Landry et al. (2001b), for example, asked social scientists to assess the utilization of their work using a scale of conceptual and instrumental use derived from the work of Knott and Wildavsky (1980). This method had the advantage of involving individuals who were close to their research output and therefore were well placed to comment on how it has been received by policy makers; academic social scientists who engage with public policy are able to gather some insight into the utilization of their knowledge. However, asking academics to judge the impact of their work has the disadvantage of relying on their subjective perceptions of the outcome of their own work, which may not be accurate; individuals tend to be biased such that they attribute the causes of outcomes to their own attributes rather than to situational factors (Kunda 1987). An alternative is to ask policy makers to evaluate their utilization of academic research (e.g. Oh 1997).

As both technical and political actors may use or fail to use knowledge, or may use it in different ways, a coding scheme was developed which categorized utilization according to the type of actor using the knowledge (technical or political) and the type of use (non-use, symbolic use, conceptual use, or instrumental use). Rather than demonstrating direct causal links between academic social scientists' knowledge transfer work and knowledge utilization outcomes, the analysis sought to highlight similarities and differences in the outcomes associated with each type of social scientist by triangulating between different research methods and data sources. The responses of the academic social scientists to interview questions asking them to judge how their work had been utilized by public policy makers and who it had been used by were coded according to this scheme. Narratives have a beginning (context), middle (process and activity), and end (conclusion or outcome); the social scientists'

narratives of the outcomes of episodes of knowledge transfer were coded according to the same scheme and compared to the semantic data.

The public policy makers were asked to describe the outcomes of the work of academic social scientists they had experience in working with. This made it possible to triangulate some of the accounts of the academic social scientists. Outcomes were identified for six of the academic social scientists, enabling the outcome codings for these social scientists to be cross-checked. This enabled between-source triangulation by comparing the coding of interview reports of the academics with those of the public policy makers. Table 1 in Chapter 7 summarizes the policy makers' assessments of the outcome of the social scientists' knowledge transfer work. The outcome codings for each of the four types was compared and contrasted across the types.

A more powerful method of inferring causal links between the actions of an individual and the outcomes of their actions involves the production of a case study enabling triangulation between multiple data sources (see Rohlfing 2012). The case study method has been used to draw causal links between the actions of social scientists and substantial policy change (Solovey 2001) and to link the actions of a medical Professor to in bringing various networks together to implement policy change (Oborn et al. 2011). Case studies enable an array of different methods, such as interviews, documentary analysis, and surveys, to be brought to bear on a limited number of individual cases, enabling the research to focus on the dynamics within the cases (Eisenhardt 1989). While the production of a case study for each of the social scientists was impractical, a case study of the work of three social scientists who produced knowledge relevant to vocational skills policy was conducted. Their interview accounts were triangulated with those of three policy makers working in the same area and with documentary evidence, including reports and academic publications.

4.5 Conclusion

This chapter has shown how the sample was developed, how the data were collected, and how the data were analysed using a mix of methods. It has shown how the typology

of academic social scientists was developed, how the cases were categorized according to this typology, and then presented a summary of the biographic and bibliometric data.

The next three chapters present the detailed findings illustrated by quotes from the interviews with the social scientists and, in the final of the three chapters, from the public policy makers. Chapters 5 and 6 focus on the relational and epistemic work of the academic social scientists and the analysis of their orientations toward the academic and public policy fields. Chapter 7 presents the results of the analysis of the outcomes of the social scientists' knowledge transfer work. It also presents a case study of the contribution of three of the academic social scientists to a change in vocational skills policy which occurred during the course of the investigation. The case study illustrates the broader findings of the study.

Chapter Five: Relational and Epistemic Work: Traditional and Engaged Academics

5.1 Introduction

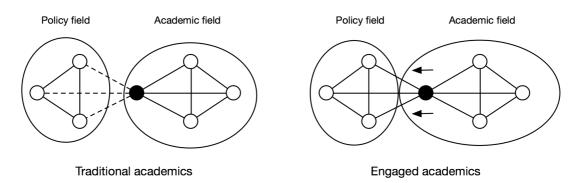
This chapter and the next draw on the the concepts of relational and epistemic work to analyse the knowledge transfer work of academic social scientists in the public policy context. The purpose is to examine knowledge transfer work in a highly politicized context by identifying and characterizing the work undertaken by each of the four types of academic social scientist. The work of each of the four types is examined separately. The analysis of each type begins by examining their motivations and attitudes toward public policy engagement before moving on to their relational and epistemic work. Each of the four types of academic social scientist is shown to display a distinctive pattern of relational and epistemic knowledge transfer work. Systematic differences between the types are discussed in the final chapter of the thesis.

The analysis draws on the interview, biographic, and bibliometric data. The analysis of the bibliometric data reveals patterns of formal connectivity between the social scientists and public policy makers and is used to augment the interview data in characterizing each type of social scientists' relational work. The analysis of epistemic work relies primarily on the interview data.

This chapter focuses on the work of the traditional academics and the engaged academics. To anticipate the analysis, these actors both relationally locate themselves within the academic field and have a strong attachment to its norms and values. The traditional academics distance themselves from the public policy field and seek to maintain a boundary between the fields with weak relational connections between themselves and public policy makers. Conversely, the engaged academics engage

closely with selected public policy makers, developing relational ties across the boundary and seeking to expand the boundary of the academic field so that there is little distance between the two fields. Figure 1 below illustrates the two types.

Figure 1 Traditional and engaged academics' relationships to the academic and public policy fields



The figure illustrates the relationships of the traditional and engaged academics to the academic and public policy fields. The filled circles represent the focal type of academic, with the small empty circles representing other actors. The lines represent relational ties, with the dotted lines representing weaker ties. The arrows represent the relational activities of the engaged academics in seeking to expand the academic field so that it comes into a close relationship with the public policy field.

5.2 Traditional academics

The traditional academics orient themselves primarily toward their discipline, and status within the discipline is of considerable importance to them. Working to increase or maintain academic status is considered a more legitimate activity than trying to influence policy or practice. For example, T4, a sociology Professor, explained that increasing the research ranking of his department relative to other sociology departments was more important than 'getting the work out there and being a media figure'.

The traditional academics see politics as antithetical to academic work and are ambivalent about the idea that they should become involved in working with policy makers. They are wary of developing close relationships with policy makers. A Professor of management (T3) said that he was 'always suspicious of government' and would 'seek not the company of princes'. Similarly, a Professor of economics (T1) described a distaste for the 'networking' and patronage he perceived to be endemic in politics. The traditional academics argued that success in the public policy field required engaging in networking and 'horse trading' and they could not 'think that way' (T6, Professor of management). Public policy making was viewed as being in opposition to the truth-seeking and puzzle-solving of academic work.

When the traditional academics do engage with public policy, the motivation for their engagement is primarily curiosity. They were interested to discover more about the workings of the public policy field and argued that there were 'lots of insights' available from their limited experiences of engagement (T1, Professor, economics). T5 (Professor, economics) reported that he participated as a member of a political party's panel of economic advisors because 'it interested me to see them working like this'. Contact with public policy makers, however, did not appear to soften the attitudes toward politicians. T5 eventually resigned from the advisory panel because he did not feel that he had anything to contribute, having developed a negative view of politicians; despite working with a number of senior opposition politicians he reported that he 'came away with a view of them which is not a great view'. Similarly, a Professor of management (T6) described how her limited engagement with policy makers confirmed her 'jaundiced' view of policy making and a Professor of economics (T1) described how his experiences working with the civil service confirmed his 'cynical' view of the policy making process.

Some of the traditional academics said that they had come under pressure from departmental colleagues and university management to achieve more research 'impact' and that they should do more to engage with public policy. They justified their lack of extensive policy engagement by arguing that the pressures of academic work prevented them from doing more. For example, T1, a Professor of economics, claimed that the pressure to produce academic work prevented him from doing as much policy

engagement as he might otherwise have done. He viewed policy work, such as the production of analyses or reports for think tanks, as a time-consuming activity which could only be undertaken during periods in which academic pressures were lessened. Another justification given for the reticence to become involved in policy making was that it was not the job of academics, as there were others more suitable for this role. T4, a Professor of economics, argued that it was the job of junior civil servants to translate between academic research and policy and they were better positioned and qualified to undertake this type of work.

5.2.1 Relational work: boundary maintenance and reactive engagement

The relational work of the traditional academics can be characterized as *boundary maintenance and reactive engagement*. The traditional academics recognize that the knowledge they produce might be valuable to policy makers and are not opposed to the idea that public policy should be informed by academic research; if policy makers are interested in their work and policy implications follow on from research then is generally welcomed. However, they position themselves as policy outsiders who engage in policy as occasional and marginal participants.

The traditional academics maintain a boundary between the academic and public policy fields partly because of the risk that engagement in policy will affect their academic work. A Professor of sociology (T4) argued that engaging in too much policy work would alter his 'relationship to research', threatening his existing relationship with his discipline and disciplinary peers. While close relationships to policy might be acceptable to academics working in other disciplines it would be frowned upon in sociology:

If you see yourself fundamentally as working in the media or policy roles, your relationship to research changes a bit, and I definitely wouldn't see myself as working in that field, I see myself as a sociologist...an economist would value getting someone on a powerful Treasury committee, it's part of what they do, and it wouldn't really be seen as compromise, it would be seen to be part of the logic

of your work...in sociology, it's kind of selling out if you do that. (T4, Professor, sociology)

Academic peers who were seen to place too much focus on non-academic work could be viewed with suspicion. A Professor of management (T6) argued that wanting to have more influence on policy was 'egotistical'; while 'certainly there are people who are compelling and there is a need for a charismatic expression of something, that's not what I can do and I am suspicious of it'. Similarly, a Professor of sociology was critical of a fellow sociologist who was seen to be a frequent participant in policy debates, arguing that 'his reputation isn't great within sociology, I would say, he's not seen as a major scholar because he's seen as a publicist' (T4). Working to influence policy was seen as doubly dangerous: in the first case because of the potential effects of contact on the academic, and in the second because it risked presenting academic knowledge as more definitive than it actually is. These statements represent a form of boundary work in which peers seen to participate in media or policy fields to too great an extent are subject to disciplinary action.

Despite their relational distancing from the public policy field, traditional academics are not completely averse to talking to policy makers. A Professor of economics (T1), for example, said that he would 'talk to anybody who was interested in hearing from me'. Traditional academics generally appear within the sample only because they had engaged with policy following an approach from a policy maker or the brokering of a connection by a university colleague. Previous studies suggest that initiation of engagement by research users is common; direct contact between academic social scientists and research users in the UK is most frequently initiated by non-academics or through a mutual meeting at an event (Abreu et al. 2009). Sometimes further policy work for the traditional academics developed out of an invitation to speak at an event, write for a policy focused publication, or to contribute to the media. A Professor of management (T2) said that such invitations would appear 'not infrequently' but his engagement with policy was 'very ad hoc' and 'very reactive'.

As a result of their occasional positive responses to invitations to contribute to public policy, the traditional academics did engage but on a one-off or intermittent basis. The occasional, limited, and reactive nature of the traditional academics' policy work is

revealed in the bibliographic data. Most of the traditional academics had written only a limited number of articles for government, public sector, private, or third sector organizations, although two of the traditional academics, T1 and T5—both Professors with disciplinary backgrounds in economics—described periods in which they had become more engaged in public policy work and had published a series of policy-focused articles. For T5 this occurred when a positive response to an invitation led to further invitations being issued as he became more visible to policy makers:

Brian introduced me...and he says, "Oh well, that's exactly what we want", so I got to know them that way...I didn't do a great deal, they had a magazine and I published something in that and then I'd do a book review for their magazine and then, it was quite a long time after, they asked me to write a paper for one of their pamphlets, which I did. At some point they said, "Would you join our Advisory Council?" I did that and I got a bit of refereeing to do for their journal and invitations to their lunches and things like that. So I had a growing connection. (T5, Professor, economics)

The greater quantity of policy-relevant publications authored by the economists in comparison to the other traditional academics might result from the widespread adoption of economic tools and models by policy makers, which has generated a demand for economic analyses of policy by government departments and think tanks. Membership of an advisory committee grants traditional academics a legitimate position on the periphery of policy making, although the committees themselves might occupy marginal positions, as the traditional academics themselves recognized (see the section on outcomes, below). T1's bibliography records nine outputs authored as a result of his participation in his capacity as an invited member of a single government committee in which he played a technical advisory role.

T1's committee membership came about as a result of his previous work with a hybridized research centre; several of the other traditional academics described maintaining connections with policy makers through academic colleagues and former colleagues. T1 described his engagement with policy as 'piggy backing on the coat tails' of colleagues. Formal structures which acted to stabilize intermittent relationships, such as think tanks and research centres, appeared to play an important role in providing opportunities to interact with and disseminate work to policy makers:

They had a readily developed dissemination programme, they had a discussion paper series, which was, you know, they had a huge mailing list already for this. They had a regular seminar thing, but they also had an international network of people working in similar areas, so that network was already there. Ed Balls and Ed Miliband and Yvette Cooper actually came and had desks at the [centre]...with the aim of trying to getting them interacting with the kind of junior academic researchers. [A colleague] really took up that more than any other of us and got a bit more heavily involved with Ed Balls and the sort of policy thing. Any involvement that I had really went through [him]. (T1, Professor, economics)

Rather than developing a personal network which included policy makers, T1 relied on the institutional channels provided by the research centre; despite working in close proximity to politicians he relied on a colleague to maintain social relations, suggesting that he was content to maintain a position on the margins of policy making. This represents the dominant mode of participation for traditional academics: intermittent and marginal participation.

5.2.2 Epistemic work: knowledge simplification

The traditional academics approached the task of sharing knowledge with policy makers as a matter of transferring research knowledge to a non-specialist audience in a hierarchical, 'top-down' fashion, through a process of *knowledge simplification*. They believed that it was possible to communicate knowledge to policy makers mainly by avoiding technical jargon and writing and speaking clearly. Simplifying and summarising academic knowledge was seen as necessary in order to present information succinctly and to assist policy makers to understand the essential points. Underpinning this approach was a belief that policy makers needed academics to interpret and make sense of complex data on their behalf. A Professor of sociology had a strong recollection of being asked to simplify, to make 'clear headlines':

[Policy makers] would say things like, "We are deluged by data now, deluged by information, we don't really want any more, we want to leave that on one side and just get to some clear headlines on this or ideas which allow us to make sense of it." (T4, Professor, sociology)

The traditional academics described simplifying and summarizing their knowledge for the benefit of policy makers but they did not involve policy makers in this process. It was considered a matter of writing in 'clearest English' (T5) which could be done for a general audience and so it was not necessary to engage in extended or iterative dialogue with policy makers; the essential meaning of what was written or said could be contained in the text, so long as it was written skillfully. Approaches to making texts intelligible through simplification varied. A Professor of economics argued that although the use of straightforward language was necessary when communicating with policy makers, it was not necessary to make more than minor attempts to adjust his ideas for a policy audience because he used the same clear style of communicating whichever audience he was addressing:

I've had a strong—hatred might not be too strong a word for it—hatred of jargon and I've always tried to write jargon free articles. You could go back and look now and I suppose I'd be horrified at some of the things I did when I was younger, but I'd rather not do that, I'd rather write in the clearest English, it's a very good language and it should be able to be used to communicate difficult ideas...The only way I would adjust would be very slightly in that they're not undergraduates, they have no specialist training, so I'd try and make this understandable to a non-academic audience but it would be a minor adjustment I think in terms of what I said. (T5, Professor, economics)

Other traditional academics responded that a deliberate process of simplification was required for policy makers to comprehend it. Indeed, one Professor reported that a chain of simplification was involved before complex academic knowledge could reach politicians:

You have to sort of simplify it for the Civil Service economists, who then, presumably, simplify it again to the politicians. Even the think tanks, they're not full time academics, and therefore there needs to be a degree of simplification. (T1, Professor, economics).

A Professor of management gave a similar account of the process of simplifying academic knowledge so that policy makers could understand it. Simplification involved using 'common sense' to represent complex academic work to a non-academic audience. No specific preparatory work was necessary, nor was it necessary to work to understand what his audience wanted. Knowledge could be delivered by

switching to an appropriate mode of discourse when speaking to an audience, based on an appraisal of the audience:

I think it's not so much a matter of understanding what they want or giving them what they want, I think it's just thinking what language do you use when you're speaking to a professional audience...I think it's just a matter of common sense. (T3, Professor, management)

When pressed about what tasks they performed to simplify knowledge for policy makers, the traditional academics struggled to describe the process in detail. One Professor argued that it was a real-time or *ad hoc* process in which different words or phrases would be used depending on the situation:

Maybe you have to try and introduce certain phrases or words into the conversation or report...you just have to think about it in the context of what you have to do, you don't think about it beforehand, you have to do it as and when. (T1, Professor, economics)

While the traditional academics recognized the need to communicate with policy makers in simple and clear ways, they did not describe undertaking a significant amount of work to establish what sense policy makers had made of their attempts to communicate. Writing clearly was viewed as desirable, but the traditional academics did not invest a great deal of effort in learning how to write for a policy audience, believing that establishing the meaning of what they wished to convey was a matter of good academic practice, common sense, or *ad hoc* changes of language. However, some traditional academics recognized that their attempts to communicate with policy makers sometimes failed. As a Professor of economics put it, his work remained too (as he phrased it) 'academicky' for non-academics despite his best attempts. He was unsure as to what else he could do to address this:

[Our book] is in its third, soon to be fourth, incarnation, but the idea was to try and produce a summary of what's going on aimed at the non-academic audience. I actually don't think we've succeeded in that, because I think it was still a bit too academicky...how you actually do that, I don't know. (T1, Professor, economics)

5.3 Engaged academics

Like the traditional academics, the engaged academics place the highest priority on contributing to their discipline; however, it is important to them to communicate their research to public policy makers. For example, while E5, a Professor of management, had undertaken 'quite a lot' of work for government, publishing in top journals was 'absolutely the *sine qua non'* of his academic career. Similarly, a management academic (T2) who had transferred from industry as a Professor of Practice argued that although there was a 'huge opportunity' for him to work as a 'bridge' and draw practical ideas out of academic research, his priority was to increase his status with his peers. He felt that he needed to 'have an article published a year in a four or three star journal' so that he could 'look them in the eyes and say, "Yes, I can do what you do."' Some of the engaged academics did, however, distance themselves from some of their more traditionally-oriented peers.

The engaged academics see policy engagement as part of a professional duty, either because it is necessary for them in order to properly conduct their research or because they see the dissemination of research to the broadest possible audience as part of their role. For example, a Professor of human geography (E1) viewed the translation of research to a policy audience as part of his 'mission' as a senior academic and said that it was his 'duty' to try to bring research to a broad public audience. For others, policy engagement is seen as necessary because their research interests encompass the substance or processes of policy making. A Professor of sociology (E7) was 'very keen to talk to people' in policy making circles 'about the kinds of things [he] was interested in' because part of his research involved examining cultural policy. Some justified the investment of a significant amounts of time in developing longer term relationships with policy makers by arguing that the relationship could help them to access difficult to obtain sources of data. For example, a Reader in management (E3) came to 'a realization that this was something that was generating research data that could lead to series of publications'.

The concept of engaged scholarship formed an important part of the engaged academics' identities as academics. For example, when asked to describe her role, a

Professor of management (E12) who was familiar with the literature on engaged scholarship identified directly with the concept and discussed it in a favourable and aspirational light. Other engaged academics identified with the concept of the 'public intellectual', emphasizing the importance of public engagement and making a contribution in the broader public sphere. For example, a Professor of human geography (E1) argued that he was on a journey from being a 'straight researcher' to a more publicly engaged role. He said that 'increasingly now what I would hope to be is a public figure, public intellectual, a policy advisor. I'm not saying I'm there yet, but that's my goal'. Although they justify public policy engagement in terms of their contribution to the academic field, engaged academics may experience a sense of reward when they that their research has had some influence on policy makers. For example, the realization that his research was of interest to policy makers was described by a Professor of economics (E8) to be 'empowering' and this created a 'stronger impetus' to continue with that line of research.

5.3.1 Relational work: boundary expansion and ad hoc bridging

Unlike traditional academics, engaged academics actively seek out opportunities to engage in public policy. They authored more policy-focused articles than the traditional academics. A close examination of the bibliographic records revealed that they produced policy-focused publications in bursts, typically at the conclusion of research projects. This reflects a mode of participation in which they engage with policy makers episodically. Like the traditional academics, engagement could occur following invitations from policy makers 'as a function of reputation in the field' (E11, Professor, management) or through the relational connections provided by intermediaries such as hybridized research centres. However, the engaged academics also sometimes attempted to stimulate debate or to 'push' knowledge to policy makers by engaging in more active 'outreach'. This formed part of a strategy to participate in or develop spaces for interactive dialogue between themselves and policy makers. For example, a Professor of human geography (E1) said that he tried to 'very quickly get

an idea out there that will generate discussion' and wanted to 'create new constituencies' by bringing policy makers into a debate centred around his research.

Engaged academics are less critical of policy makers than the traditional academics and recognize that politicians are under legitimate pressure from their constituencies. They are more willing to attribute the actions of politicians to a lack of time, the electoral cycle, or a legitimate need to manage public opinion. For example, while a Professor of economics wished that government Ministers approached problems more like academics, he recognized that this was not practical while they were in government:

They don't set themselves up to do the kind of detailed analysis and investigation that could ever allow them to get beyond that superficial level...once they get into government they are completely hemmed in by being in government. (E8, Professor, economics)

The engaged academics' attitude towards the policy field could be characterized as 'critical friendship' and some of the engaged academics explicitly described themselves as 'critical friends' or 'critical insider friends'. This seems to be a way of rationalizing involvement with policy makers while complying with the academic norms of disinterest and autonomy. The engaged academics see policy engagement as an extension of their academic work rather than as an opportunity to participate fully in policy making or to actively contribute to significant policy change. An outsider status with reference to the public policy field was held up as an advantage:

We could ask the bigger questions because we were outsiders and non-specialists compared to the insiders who say 'no, I've got to manage this thing'. (E3, Reader, management)

The relational work of engaged academics can be characterized as *boundary expansion* and ad hoc bridging. Ad hoc connections are made to selected parts of the public policy field and their work within it is treated as an extension of their academic work. This approach is illustrated by two types of engagement strategy deployed by the engaged academics: encouraging public policy makers to participate and contribute to their academic research; and stimulating debates centred around their academic research. The former type of engagement entails extending invitations to policy makers to involve them in research during the early stages of a project:

We called them, we said "We're going to do something on—Let's meet, let's meet, we'd like to involve you." (E5, Professor, management)

[We were] getting on our bike and going out and...talking to them about their interests and concerns, inviting in some cases members of them onto an advisory committee. (E7, Professor, sociology)

The purpose of this type of engagement, according to the engaged academics, was to ensure that the views of policy makers were represented in research. Formal structures such as research advisory committees or commissions were sometimes used to further this end. For example, a Professor of economics described his participation in a commission which was asked to research how economic growth could be stimulated and propose solutions. The commission held a series of 'evidence sessions' in which policy makers and practitioners were invited to put forward their ideas and concerns and respond to policy proposals:

We brought in some people more from the business and policy world to be on the commission so it was a little bit less of a purely academic focus...the idea of having these evidence sessions and getting people to put evidence together, both oral and written evidence. (E8, Professor, economics)

A Professor of sociology (E7) argued that involving policy makers in research was 'what we must do' and said that in his field academics and policy makers were 'used to working in that relationship'. The idea that academics should work with policy makers was, for him, obvious ('you'd be an idiot not to'). For a Professor of economics (E8), policy makers did not contribute 'in any direct sense' to his research, but engaging with them shaped his thinking and informed the future direction of research. He argued that academics should not be 'a prisoner to every little thing' they heard but could bring information gleaned from their interactions 'into the culture of research'. In this form of engagement, policy makers are participants in the academic domain rather than *vice versa*.

The latter type of engagement involves participating in policy debates centred around academic research outputs. For example, a Professor of management (E11) reported that he would 'get involved in policy informing discussions' when he thought that the research that he had been doing 'might steer national or international debates'. The engaged academics viewed this as trying to participate or promote 'reasoned' debate

in specific policy areas. A second Professor of management (E5) argued that his intervention at a conference with policy makers was the 'first time' a 'reasoned discussion' had taken place in a particular policy domain:

We had this little morning conference with the Financial Reporting Council...I would say this is the first time where there has been a reasoned discussion. (E5, Professor, management)

Despite their willingness to engage with the public policy field, the engaged academics believed that it was important for them not to 'step over' into a deeper relational connection to the public policy field. A Professor of human geography (E1) argued that he had to be careful not to become too close to policy makers in order to maintain his academic credentials:

You've got to be careful because if people tell you they love what you've written then you need to ask yourself 'Am I being sufficiently critical?' It actually can create a little bit of an identity crisis. It's very, very difficult to strike that balance where, on the one hand, of course it's nice to be considered influential but on the other hand if you 'go Establishment' then there is the suspicion that your academic credentials are being eroded somewhat because, in a sense, you're just telling people what they want to hear or read. (E1, Professor, human geography)

The engaged academics seek to engage with policy makers but manage the engagement by monitoring their position so that they continue to act according to academic norms and maintain sufficient critical distance from the policy field. For E10, a Professor of economics, a desired role as a 'public intellectual' entailed bringing 'ideas on to the forum' and remaining above the political fray rather than 'doing the politics'. While the expansion of the boundary of their academic role is seen as necessary to gain access to resources, or to fulfill an academic duty to the public, there are limits to the expansion; academic roles should not encompass direct lobbying or working strategically to influence policy. They do not want to 'consciously try to influence things':

I don't think I'm a proper strategic player. I have decent connections to a number of people out there in the policy world at the level of lunch and coffee and I meet with them periodically and we talk about whatever's on their mind, but I'm not a strategic policy player. I don't view myself as consciously trying to influence things. (E8, Professor, economics)

While they might have 'enormous admiration' (E1, Professor, human geography) for academics who become involved in public campaigns on policy issues, the engaged academics were unwilling to become involved 'politically', that is, in working closely with interest or campaign groups:

That's not been something I've been so drawn to, it doesn't mean I'm not interested and it doesn't mean I don't totally believe in the living wage ethos, it's just I think I've got used to, over the years—through that kind of work with Government Departments, with Civil Servants, who by their nature tend to be discreet individuals—you're there on the sidelines. I think I've probably fallen into that sort of mould almost. (E1, Professor, human geography)

5.3.2 Epistemic work: knowledge exploration

The dominant approach of the engaged academics to knowledge transfer was through an interactive process involving mutual *knowledge exploration*. At the centre of their accounts of participation in policy making were descriptions of active attempts to engage policy makers in 'broad' or 'reasoned' discussions. A Professor of economics (E8), for example, argued that his participation in policy 'is based on discussions', which could be either 'one-on-one or panel oriented or just meetings, committees, trying to think through problems'. For the engaged academics discursive encounters in which they could 'think through' or 'discuss' policy with policy makers formed the primary route through which they participated in policy. When the conditions were right, these could be 'wonderful':

I remember meeting with someone who's now very senior in the current Government. He used to have a series of breakfast meetings, he used to bring people in—they weren't necessarily people who were his supporters—and he would sit down and say, "Come on, let's talk about the economy, what's going on?" You would have a wonderful two-hour relaxed discussion with everybody around the table—I learnt just as much from the others—about what was going on and it was being soaked up. (E8, Professor, economics)

In the engaged academics' accounts of their interactions with policy makers, difficulties in knowledge sharing arose from the lack of a suitably powerful 'intellectual framework' on the part of policy makers which enabled them to easily exchange knowledge. The translation of knowledge across the academia-policy

boundary was therefore approached as an interactive dialogical process in which the engaged academic would seek to work with policy makers to arrive at a shared framework of understanding. The process involves broadening and challenging policy makers' knowledge. In the following account a Professor of economics argues that it is easier to work with the 'high tier professionally trained bureaucracy' rather than politicians who lack the 'common core of understandings' which enabled knowledge to be exchanged:

There's really very little divide to bridge once you're based on a common core of understandings about how one thinks about the world...I can think of interactions which I've had on occasions with people like elected politicians and ministers and others—it's so much harder because you don't begin from a shared understanding of how to think about the world...they can't seem even to articulate the problem let alone have a discussion. So you're trying to think 'well what is the issue here?'...and they don't have a framework that can be superimposed on a problem to think about how that problem works. (E8, Professor, economics)

According to this account, in order to share knowledge effectively it is necessary to not only to 'articulate the problem', exposing its root assumptions, causes, and premises, but also to 'superimpose' a shared intellectual framework so that the academic and policy maker could have a fruitful discussion. This is a process which, the Professor argues, is easier to conduct with civil servants trained in economics (the 'high tier professionally trained bureaucracy') than with politicians due to the lack of a pre-existing shared framework.

The engaged academics offered descriptions of their attempts to develop shared frameworks of understanding, a form of work which involves exposing policy makers' current state of knowledge, beliefs, and assumptions. The engaged academics expressed a willingness to work to understand the knowledge dependencies their audience possessed; an important differentiator between the traditional and engaged academics was the amount of effort invested in this activity. For example, a Professor of human geography described the extensive preparatory work he undertakes prior to attending a meeting with policy makers:

I always speak to the clerk or somebody who's organizing the meeting beforehand and to say 'what level of basic or advanced understanding should I assume', so I think there's a certain preparatory work that you could and should do. Another

thing I might do is, particularly where I've written for more accessible journals or policy journals, I might send in advance an article and say 'look, this might help as a backgrounder'. I approach it just like [civil servants] do when they're briefing ministers, ambassadors, preparatory work, background material, homework if you like. (E1, Professor, human geography)

In this account the Professor describes taking some time to gather knowledge about a policy audience prior to meeting with them and subsequently supplying additional background information where necessary, prior to the meeting, in order to decrease the knowledge gap between them. This activity goes further than the *ad hoc* simplification described by traditional academics; the Professor is undertaking deliberate activity to estimate the degree to which his audience will be able to follow what he is saying and then using this knowledge to modify his output.

The engaged academics see knowledge transfer to policy makers as an interactive process to the extent that it involves both parties exploring and revealing what they know, with the aim of reaching a common framework within which decisions can be made. Part of this process involves surfacing and exploring policy makers' current knowledge and taking a critical approach to any assumptions that are revealed. The engaged academics see this as a process in which they work collaboratively with policy makers to explore the full complexity of research evidence, policy arguments, beliefs, or solutions and to examine the antecedent conditions, premises, and/or consequences so that policy can be made more rationally. This involves broadening and challenging policy makers' understandings of a topic:

We said, "Look, if you're gonna have a proper discussion then you should be aware that these things are not quite as clear cut and quite as straightforward as you claim." (E3, Professor, management)

Although I'm quite amenable to helping people get where they want to in terms of a particular line of argument, my instinct as an academic is to always say 'it's more complicated than that'...You've got to understand we're trained to think critically and that does mean being 360-ish in terms of thinking about the topic in hand. (E1, Professor, human geography)

A Professor described how he would strategically refocus and broaden the topic under discussion by adapting to the knowledge demands of policy makers before offering them alternatives:

What I always say to them is, "Look, let me tell you, if you want to focus on this I'll tell you this," and then what I usually always do, particularly if they allow me to in terms of time, is to say, "But there are alternatives." What I try to do is say, "Look, this is where you want to get to and I can tell you certain things that might be useful, but let me tell you, if I was your critic, these are the other things you might be interested in." (E1, Professor, human geography)

While the engaged academics were willing to accommodate some of the knowledge demands of policy makers, they were less willing to put forward policy suggestions, even when asked to do so. They argued that this would involve taking on a different role or participating in a different way. A Professor of management argued that the nature of her work would change if she put forward solutions rather than 'framing' or 'shedding insight on' issues:

So one of my challenges in this role is then people say, "So what shall we do about it?" and I think, "I don't know" [sighs], I don't know, I'm onto the next problem trying to solve that one...that's when it becomes more consulting as opposed to the framing of an issue, shedding insight on an issue, creating a motivation to try and address an issue. (E6, Professor, management)

5.4 Conclusion

This chapter has presented an analysis of the relational and epistemic knowledge transfer work of traditional academics and engaged academics. Both types have been shown to strongly identify with traditional academic norms and focus primarily on producing work for an academic audience. However, the analysis has highlighted that they differ in their approach to policy engagement and in their relational and epistemic work.

The traditional academics see themselves as core disciplinary academics and believe that it is important to maintain distance from the public policy field. They are guided by the demands of their discipline and their own sense of what is important and interesting rather than the concerns of policy makers. They avoid and reject political involvement and view politics in strongly negative terms as a corrupt and potentially corrupting activity. Their attitude toward the academia-public policy boundary and the

public policy field is similar to that of the 'Type I' academics identified by Lam (2010) toward the boundary between academic science and industry; Type I academics believe in the separation of the industrial and academic fields and that the commercialization of academic research is harmful to science, while traditional academics believe in the separation of the policy and academic fields and that the politicization of academic research is harmful.

The traditional academics are not entirely averse to the use of academic knowledge in public policy making but they are relatively uninterested in developing relational ties with policy makers. As a result, the relational aspect of their knowledge transfer work involves maintaining a boundary between the academic and policy fields, with an occasional, reactive, and incidental engagement. Their involvement with policy making occurs principally as a result of one-off invitations or through peripheral structures, such as committees, which have been established in order to permit academics to make formal technical contributions to policy. Their relational work thus involves distancing and separation. The traditional academics recognize that academic research must usually be simplified in order for non-specialists to understand it, and are generally willing to take some steps to do this and represent their work in language more suitable for a general audience. However, they make few attempts to gather knowledge about policy makers' specific situations or requirements which would enable them to tailor their representations.

The engaged academics, like the traditional academics, identify strongly with traditional academic norms and values. Unlike the traditional academics, however, the engaged academics see working to transfer knowledge to public policy makers as part of a broad duty on the part of academics to educate society about their work. Public policy engagement is considered to be an important and legitimate part of an academic's role and an 'opportunity' or a 'privilege'. This orientation represents working to expand the boundary of the academic field such that it comes into contact with, or even overlaps, the public policy field. The engaged academics see themselves as boundary-spanning academics and identify strongly with the concept of engaged scholarship. They seek to develop relational connections with policy makers as and

when necessary to communicate their research. As a result, their relational work involves boundary maintenance and ad hoc bridging between the fields.

Engaged academics take the translation of complex specialist knowledge seriously and recognize the importance of understanding where policy makers are coming from—that is, undertaking epistemic work to explore an issue with policy makers, developing an understanding of their existing conceptual frameworks, and broadening or challenging their conceptual frameworks as appropriate. They seek to engage with public policy makers as equals in a mutual process of rational exchange. This is, however, time consuming work and requires sustained interaction. As a result, their relational work tends to be somewhat intermittent and primarily involves developing relationships with a limited number of policy makers who are interested in their work; typically, these are technical rather than political actors.

Chapter Six: Relational and Epistemic Work: Academic Policy Experts and Policy Entrepreneurs

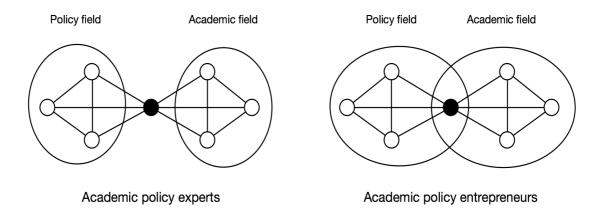
6.1 Introduction

This chapter focuses on the relational and epistemic knowledge transfer work of the academic policy experts and academic policy entrepreneurs. The analysis begins by examining their motivations and attitudes toward public policy engagement before moving on to examine their relational and epistemic work.

These actors maintain relationships to the academic and public policy fields which differ substantially from those of the social scientists discussed in the previous chapter. Contributing to public policy plays an important role in the development of their intellectual identities and they do not prioritize making contributions to the academic field over making contributions to the public policy field. They differ from each other, however, in the relationships they maintain with each of the fields as well as in their approach to translating knowledge between them.

Figure 2 below anticipates the analysis by illustrating the difference between the two types' relationships to the academic and public policy fields. The academic policy experts distance themselves from both of the fields, operating in what Eyal (2010) has termed the 'space between fields' and constantly negotiating their positions with respect to each of the fields. The academic policy entrepreneurs, on the other hand, adopt a 'both/and' orientation in which they operate both as disciplinary academics and as public policy makers.

Figure 2 Academic policy experts and policy entrepreneurs' relationships to the academic and public policy fields



The figure above illustrates the relationships of the academic policy experts and academic policy entrepreneurs to the academic and public policy fields. The filled circles represent the focal type of academic, with the small empty circles representing other actors. The lines represent relational ties.

6.2 Academic policy experts

Academic policy experts are interested in tackling issues of direct relevance to public policy and applied, policy-relevant research constitutes a substantial proportion of their output. They work primarily through technical pathways and 'don't really work with politicians' (X10, Professor, economics). While engaged academics seek to draw on their academic interests to inform policy makers, academic policy experts prioritise the production and accumulation of evidence which has policy relevance. Rather than locating themselves at the core of an academic discipline, the policy experts see themselves as inhabitants of positions which lie at the 'intersection between policy, practice, and evidence' (X11, Professor, social policy). The benefit of such a position is that it enables them to access and contribute to disciplinary knowledge production while at the same time contributing to public policy.

The bibliometric data reveal that the academic policy experts author a substantial quantity of articles for government, public sector, private, or third sector organizations. A close inspection of this data revealed that these records represent research projects,

literature reviews, or opinion pieces requested or commissioned by these organizations which are typically produced during periods in which the academic policy experts were employed by or seconded to government departments, research institutes, and hybrid research centres.

The academic policy experts participate in policy making in one or more of two modes: a 'contract-led' mode in which they are commissioned to produce applied research; and a 'user-inspired basic' mode in which they collaborate with policy makers in developing a research agenda but undertake and report research autonomously. In the contract-led mode, 'you're not doing it because you are interested in it or because you've got a sabbatical or you get a research assistant or an ESRC grant or something like that, you're doing it because somebody says they want to know X, Y, and Z' (X17, Professor, management). In the user-inspired basic mode, the direction of research was negotiated between academic policy experts and policy makers. However, working in this mode was viewed by the policy experts as somewhat precarious and they described being pulled toward core disciplinary research or toward contract-led research.

For many of the academic policy experts obtaining funding for research was an important motivator and constraint. Two of the female Professors (X6 and X13) described how family commitments had limited their career choices to part time or temporary jobs involving contract research; as a result, their research work for government departments was undertaken largely out of necessity rather than choice. Other academic policy experts argued that a lack of traditional academic research work at their department had pushed them into contract research. The need to undertake contract research may be a necessity for social scientists located within less prestigious university departments which cannot compete on the basis of core disciplinary research. This was evident from the interviews with academic policy experts who worked in less research-intensive universities. These institutions sought to attract funding from policy makers for applied research, but also saw this as a way of obtaining a 'distinctive positioning':

We were very much a second-rate institution and there was no way we were going to compete with the Russell Group universities and so on, so we were trying to carve out from an institutional point of view some distinctive positioning...they

were quite keen to develop a relationship in particular with the City Council but also with public bodies more generally. (X17, Professor, economics)

Although funding is an important motivator of many of the academic policy experts' engagement with public policy, they also described obtaining a sense of reward from the production of work that was valuable to public policy makers. They argued that they were motivated to address topics which 'make a difference in the real world' (X14, Professor, economics) and were of interest to the public and policy makers—the 'big issues' in a policy area. Ideally these were also of academic interest so that the academic policy experts could 'do both' (X14) and 'get the best of both worlds' (X18, Professor, management). X14, who directed an ESRC funded research centre, argued that the members of the centre shared an attitude which she described as a 'philosophy...to do work that is academically very good, which is publishable in the right places, but is also policy relevant...that is very much an explicit objective of everyone who works here'. An important goal was thus to produce work that was socially useful in a more immediate way than traditional academic research. The reward lay in feeling that research is considered to be useful by 'the local community and maybe...the national community' (X17, Professor, economics). Their motivations included a need for a personal connection with the effects of research and a need for a more immediate sense of social usefulness.

Tied to this was a need to disseminate research because 'there's no point in doing applied research if you don't try and communicate the results' (X3, Professor, economics). Contributing to policy debates and getting research findings 'in front of people' is an important part of the work of academic policy experts, and they actively want to participate in dissemination activities. They accept that their research may fail to produce any change in public policy. Having 'impact' is understood as having research read by policy makers even if it fails to alter their decisions:

I was very happy to be engaged in those pieces of work and I could see an almost immediate impact. It might be an impact where people say, "I've seen the results, I'm not going to take any notice of them at all," but at least people listen to the evidence first of all and then make their decision. (X1, Professor, social policy)

Unlike the traditional and engaged academics, who place great emphasis on the importance of producing academic journal articles and books aimed at academic

audiences, the policy experts adopt a more critical stance toward the production of research for academic audiences. A Professor of social policy (X11) said that he was 'not interested in being an academic who just publishes journal articles'. To a Professor of management (X6), writing for academics was something of a 'luxury'. While it was 'incredibly valuable that people do do research that improves our wider understanding', X4, a Professor of social policy, reported that he had 'always wanted to see the possibility of a connection between what I do and real-world problems'. The traditional academic work that X1 (Professor, social policy) had undertaken earlier in his career was considered 'intellectually very engaging' but left him with a sense that he was not 'connecting enough'.

Academic policy experts can be critical of disciplinary peers who espouse engagement but still maintain a hierarchical separation between themselves and policy makers and produce research which is irrelevant to policy. A Professor of management reported an incident in which she had 'a bit of fun' proving to colleagues who claimed that their work had practice implications that in fact there were none. In the following extract she emphasizes her otherness from her disciplinary colleagues and positions herself as a well-connected arbiter who has access to both academic and practical worlds:

I had a bit of fun once with the editorial team at the journal because a group of Americans wanted to do a special issue with extremely theoretical papers...I agreed that we should publish them but—just for fun—I said, "Why don't we get a practice response to these?" And they all said, "Yes!" because of course, practice response, dead right on, do the theory, have a practice response. And of course they couldn't think of anyone to do it, they did in the end pick on a couple of stooges who produced nothing. And then somebody on the team said, "But what if there aren't any practice implications?" Which of course there weren't, which was my whole point. (X6, Professor, management)

6.2.1 Relational work: boundary negotiation and relationship maintenance

The policy experts emphasize that they are 'not traditional' academics (X11, Professor, social policy). Neither, however, do they see themselves as members of the public policy field:

I wanted to work on public policy issues, didn't see myself as an academic, but on the other hand didn't see myself as quite having the capacity to be the pure democratic civil servant working on whatever the Government of the day wants done. (X4, Professor, social policy)

Their position can be characterized as being liminal, on the edge of both fields (Zabusky and Barley 1997). Their reference groups are other policy experts and analysts who are in the same position. Although they relationally locate themselves neither as core members of the academic field nor as core members of the policy field, neither are they independent of the fields: they are dependent for contract research and for attention on a relatively small group of technical policy makers, and they are dependent for legitimacy on their academic discipline. As a result, their relational work can be characterized as *boundary negotiation and relationship maintenance*.

The academic policy experts recognize that it is important to make contributions to their discipline and maintain a legitimate academic status in order to maintain independence from policy makers; without an academic position they risked loss of autonomy. Rather than occupying a secure position in the centre of an academic discipline, the policy experts viewed their relationship to academia as 'jumping through the hoops' (X10, Professor, economics). Maintaining a place on the edge of academia was seen as something of a game:

I played it both ways. I did enough so that they could give [a Professorship] to me, and then got enough support that they had to give it to me, but I didn't do any articles in their five journals. (X10, Professor, economics)

At the same time, the 'main challenge' for academic policy experts is 'how you get the entry [to the public policy field] and when you get the entry and whether you then maintain it' (X10). Opportunities for 'entry' to the policy field were viewed as valuable and rare, leading to a need to maintain the limited number of relationships which they had been able to establish. The academic policy experts expressed an attachment to the 'strong relationships' they had built up with policy makers, which were considered a sign that 'genuine engagement' was taking place (X6, Professor, management). What was most valuable was 'social capital in the field' which was looked after 'very, very carefully' (X6).

The academic policy experts approached public policy engagement as a continuous project which required a sustained investment in the maintenance of relationships with a limited number of public policy makers. They argued that this was a difficult pursuit which traditional academics would find 'too stressful and too boring' (X10, Professor, economics). It is seen as necessary to make regular contributions to the policy field by publishing policy-relevant articles, attending policy network events, and so on, in order to maintain relationships. For X10, 'if you're not seen and you're not taking part and you're not discussing it with them then you're not going to be part of the next debate after the next debate.' It was important for the academic policy experts to be seen as legitimate participants in the public policy field. They expressed dissatisfaction when relationships with technical policy makers broke down, describing their frustration when civil servants they had grown used to working with moved on to another department. This was 'the only annoying thing' because 'you want people to be there for a long time' (X14, Professor, economics).

The academic policy experts expressed a willingness to comply with requests from public policy makers for advice on a topic, a response to an event or a policy proposal, or detailed briefings on a topic. A Professor of economics (X3) said that he had been 'called on' by several government departments to 'give seminars, to be part of expert panels to assess things...give talks to the Government Economics Service, give a Masters level course for government economists'. The use of the phrase 'called on' suggests a somewhat different relationship to the public policy field than that of the engaged academics. The language used by the academic policy experts suggests a greater subordination of academic goals to the needs of a 'client':

That's how they used us...they wanted a 'go to' research centre where they could lift the phone...They would come to me and say, "Look, here are some questions were are worrying about, can you provide any evidence?" We have what we call a rapid response request whereby people throw questions at us: with government, we'll get to them a two or three page report within two weeks providing evidence. (X19, Professor, management)

Some of the academic policy experts 'felt a lot of constraints' (X6, Professor, management) on their ability to choose which work to undertake and how it was presented, needed to ensure that it met an gap or requirement for knowledge expressed

by policy makers. They recognized that the nature of their policy engagement was to a considerable extent determined by policy makers, who exercised considerable control over what evidence to accept and on which timescale. In order to support the maintenance of their relationships with policy makers, the policy experts were willing to adapt in order to supply what policy makers 'want to know' and not what academics 'want to tell them'. By supplying information which was of immediate utility they could acquire legitimacy and over time they could then gradually influence policy:

The main thing I learnt [is] you have to concentrate on what he wants to know, not what you want to tell him because there's no point in giving them stuff which they're not ready for and they can't see any reason for. You have to assume, like me dad told me, that it's a drip, drip, drip and after 30 years you might have done something. (X10, Professor, economics)

The basic stance of the academic policy experts was to adapt to policy makers by focusing on topics which are of interest to policy makers rather than scholars. A Professor of management (X6) said that she was 'trying to do things a bit differently and start with the policy issue and work backwards, rather than starting with the research and then saying, "Here's my five illuminations for the world." This involved a 'process of growing up' as she learned to work with policy makers:

You start off with your research and what you're interested in and what you're dying to tell the world, and you discover what they want to hear and what goes down well and what they're most interested in. So you just start adapting. I mean I think I'm an extremely adapted creature. I don't think you get anywhere in the policy world unless you learn to start doing that. (X6, Professor, management)

By being willing to adapt to meet policy maker needs, the academic policy experts allowed policy makers to steer the direction of their research and the topic of their interactions. This brings into direct view questions of autonomy and identity. While the policy experts were conscious that they had to 'compromise' in order to influence policy, they viewed this as a strategic act in the long term pursuit of policy influence. In their view there exists a dialectic of control—which some of the academic policy experts referred to as 'playing the game'—in which they are able to exert influence over the long term on the demands of policy makers and over which knowledge is accepted as legitimate. This enables them to rationalize their involvement with policy making as something other than supplicatory and deny that their stance towards policy

making compromised their autonomy. In their view, there is space for negotiation over the questions to be answered, the interpretation of research findings, the assumptions held by policy makers, and the frameworks within which policy decisions were made. The aim is to keep the relationship going so that influence can be obtained over time. If you 'played the game properly' you would be 'invited back again' (X9, Professor of Practice, management). A Professor of economics gave an account which demonstrates the conflicts academic policy experts were exposed to:

For 80 per cent of the project they wanted the numbers to be higher. Then the Prime Minister was going to give a speech and he said, "God we've been in power rather a long while, it should be lower!" You know, that's the sort of thing which happened, so there's a fluff, but there's an underlying [relationship]. (X10 Professor, economics)

For X10, having 'some effect' on policy makers required maintaining an 'underlying' understanding with them over a longer period of time so that they would accept her way of working and thinking. To achieve this she had to keep 'certain things' about the policy makers 'in mind'. Academics, according to X10, have to accept some constraints in order to maintain their relationships with policy makers. There is a need to be sensitive and attuned to policy makers' positions. The threat to academic autonomy is 'fluff'—a mild rather than significant danger—which must be negotiated in order to keep the 'underlying' relationship going. The implication is that there is a challenge to the objectivity of the academic which must be navigated while nurturing the relationship. In X10's view, the benefit of successfully performing this balancing act is that over time it might become possible to make policy makers understand the assumptions and beliefs underpinning a policy position.

The academic policy experts are only willing to go so far in terms of the adjustments they were willing to make and maintain strong boundaries when it comes to the misuse of their work. Deliberate misrepresentation of work was seen as unacceptable and there was an understanding that the 'client' also had to behave responsibly in not deliberately misusing research. If not, X19 (Professor, management) would be 'down on them like a ton of bricks'. The academic policy experts also expressed unease about participating in policy making by 'campaigning' or 'lobbying', which were considered inappropriate or risky activities. They rarely authored articles for the press, suggesting

a hesitancy to utilize political pathways. In the following account, for example, a Professor of social policy argues that he would be unwilling to undertake some of the 'lobbying' activities he has seen his academic colleagues perform in which they strategically develop and maintain social relations with policy makers for purposes that go further than the basic dissemination of research. The Professor argues that he doesn't have the skill or network to lobby policy makers and is not motivated to do so because of the risks to his government-funded research centre to engage in this type of work:

I'm glad people do do that, I don't have the skill to do that, I don't have the network to do that and I don't have the enthusiasm to do that, so I'm happy for others to do it but I'm happy to sort of get as far as we can with our evidence and then stop at that point and other people will use it. If we think they're misusing it then we might want to comment on it in a blog or somewhere else, of course, but I think we would lose more than we would gain by engaging in that sort of next level up of engagement. (X1, Professor, social policy)

6.2.2 Epistemic work: knowledge circumscription

The academic policy experts worked 'backwards' from policy makers' frameworks of understanding, engaging in activities which may be characterized as *knowledge circumscription*. Knowledge circumscription involves constraining the knowledge of policy makers and restricting the space within which policy decisions are made by stabilizing facts to be used in public policy debates. The purpose of this work was to influence 'the environment, the view of the environment, or the understanding of the environment within which policy makers think they're making decisions' (X4, Professor, social policy). It involves trying to ensure that the knowledge put to use by policy makers in the construction of policies is accurate and appropriately utilized. For example, in the following interview extract, a Professor of social policy criticizes the disparity between public perceptions of expenditure and the actual figure. An important part of his work was correcting this misperception:

I'm trying to get them to make choices within a framework that reflects what we know, rather than what people's rather incorrect perceptions are. The median belief

for how much of the social security budget is spent on benefits for unemployed people is 40%. In actual fact 3% of the social security budget is spent on benefits for the unemployed and that misperception colours policy making and decisions in a way that I think is extremely damaging. (X4, Professor, social policy)

In identifying an erroneous belief which played an important role in shaping public debate and communicating his knowledge to challenge the belief X4 was attempting to influence the framework of understanding within which policy makers make decisions. Making a statement of the *actual proportion* of the budget is an activity intended to respond to and alter policy makers' current knowledge by replacing an incorrect belief. Through the identification and replacement of incorrect beliefs which colour policy making, the policy experts seek to circumscribe policy makers' knowledge. They seek to reveal policy makers' erroneous assumptions and beliefs and subject them to scrutiny:

Quite a lot of the theory that they use is untested, quite a lot of it could do with being tested, and the tests of it are likely to be more credible if they are involved in articulating the theory and then testing the theory...I think we can work with them in formalizing those theories and subjecting them to test. (X16, Professor, social policy)

Note how the starting point is policy maker's understanding and policy beliefs rather than the knowledge of the academic; the policy expert works interactively to help the policy maker think through their ideas in a more structured manner. A Professor of economics (X10) described the importance of making policy makers 'understand why they're working in that way':

If you can keep certain things in mind and make them understand why they're working in that way rather than in that way and what the costs of these things are then you have some effect. (X10, Professor, economics)

X10 is applying academic knowledge to make policy makers understand what the likely outcomes of a proposal are and to reveal the assumptions behind policy makers' preferences. Policy experts accomplish this work by 'bringing out the implications' (X5, Professor, economics) of academic research for a given policy stance, that is, by applying academic knowledge to a policy problem. In this mode of working the policy experts are not simply transferring or interpreting knowledge; they are highlighting the specific policy beliefs, problems, or solutions the knowledge is relevant to and then

applying it, a process also described as 'talking to' the evidence (X19, Professor, management). This involves crafting a 'broad policy message' (X5, Professor, economics) designed to respond to specific knowledge deficits or inaccurate beliefs. A significant challenge for policy experts is therefore in choosing 'the stuff which is going to have some sort of impact' (X2, Lecturer, economics). Understanding how academic knowledge would be put to use is vital part of this work:

You can write a lot about [policy] but that isn't necessarily going to help you have influence or impact...unless you have a pretty good sense of how they're going to use it and can set up your information in a way that's helpful for those people to use. (X8, Research Fellow, economics)

The work of creating 'policy messages' by applying academic knowledge to policy is viewed as something akin to a craft activity. The policy experts believe that they can be most effective if they are able to create policy messages that are remarkable, in the sense that policy makers will remark upon them, use them, and pass them on. For example, a Professor of management described being pleased to hear a fact derived from her own research being repeated back to her, even though it was not attributed to her. She labelled it a 'research nugget':

I've been at things to hear [a specific fact derived from my research] coming back. I can think of three or four meetings, all the people who have heard that, it's all coming back to me...I mean that was the intention of doing it...Research nuggets are what we are about. (X6, Professor, management)

Similarly, a Professor of economics described an incident in which he had undertaken research with the intention of creating a policy message:

The thing that hit people's attention, the journalists' attention, was the simple statistic that there's more land for golf courses than there is for houses². It wasn't chance that I found that statistic, because clearly having green belt means it's actually a subsidy for golf courses 'cos there's no competition for the land...I thought here is a media friendly but relevant fact. (X3, Professor, economics)

A similar strategy embraced by some of the policy experts was the use of visual methods to make research findings more easily graspable and transportable, a

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^{2.} The Professor chose to present a statistic which he believed would be attention-grabbing because it challenged the preconceptions of an audience: the fact that more land in the English county of Surrey is dedicated to golf courses than to houses demonstrates strikingly that housing is not as great a proportion of land use in Surrey as a policy audience might presume.

technique which was described by a policy maker as producing a 'killer slide'. This approach involves translating academic knowledge into visual objects which, like research 'nuggets', produce a response from a policy audience and which can be easily shared. The key is a 'good visual presentation of the findings' (X5) or a 'very powerful graph' (X8).

Because the academic policy experts are somewhat dependent on their relations with policy makers a key challenge lies in producing policy messages which are influential without being overly critical. As a Professor of economics (X10) put it, 'you're trying to be as positive and critical...but they see analysis as criticism and so playing that game is difficult.' Similarly, for a Professor of social policy (E11), 'you can go too far if you're too much challenging their agenda.' Policy makers were seen as sensitive to anything which might be portrayed as critical of the direction of policy. E11 argued that because policy makers can be sensitive to criticism he had to be 'careful' when publicizing findings which overtly contradicted policy makers, particularly if government funding was involved. However, neither is it the case that academic policy experts can never be critical:

It's not a simple bipolar, 0/1, can you be critical, can you not be critical, it's a contested terrain. Some conditions lead you to be able to be critical and some of the conditions don't. (X17, Professor, economics)

The academic policy experts seek to balance two competing objectives: to maintain the relationships with policy makers which enable them to legitimately participate in policy making, and to report the truth and criticize power where appropriate. As a result, they sometimes have to 'compromise and attack and fudge' (X6, Professor, management) by 'putting findings or conclusions in a certain way that makes them acceptable rather than rejected.' In order to maintain their relationships with policy makers while also maintaining their objective stance, the policy experts sometimes moderate the language they used or to withhold certain interpretations. This was seen as a skillful activity requiring an understanding of the conditions and local political context.

6.3 Academic policy entrepreneurs

The academic policy entrepreneurs see no inherent problem in the idea that academics should engage with public policy making through both political and technical pathways. Unlike the academic policy experts, who are careful to manage their relationships so that they are not seen to engage in the substance of politics, the academic policy entrepreneurs are willing to work with partisan actors such as political parties and campaign groups in order to turn their ideas into political currency. Engagement with the substance of politics and the policy networks which cluster around policy issues is a fundamental part of their intellectual identity. They do not agree that academics should be disinterested observers.

The political activism of policy entrepreneurs could precipitate disapproval from academic peers who believe that strong boundaries between academia and policy should be maintained and that academics should not develop close relationships with politicians. However, the academic policy entrepreneurs do not agree that political activism compromises their academic integrity and believe that it is up to individual academics to maintain their objectivity. They recognize that other academics may take a different view:

I think some people think you'll get sucked in, it's don't touch politicians with or don't touch the civil service with a barge pole, they're the enemy—there's a view out there that you sully yourself as an academic by getting involved in the machine. My view is that you have to do that. (N1, Professor, social policy)

The academic policy entrepreneurs see little contradiction between their academic work and their political involvement. They find the rejection of policy engagement puzzling, particularly for academics who work in applied fields. N5, a Professor of management, couldn't understand 'why they're in that field if all they want to do is publish academic articles.' A Professor of economics contrasted his own attitude to political involvement with that of his peers:

I personally think that I was more interested in [politics] than most academics. Particularly amongst my peers...they are not intensely political. They are not working to or directly with the politicians. I think I wanted it in that form more...Most of my peers are interested in having conversations with people and

discussing ideas and maybe sitting on these more formal [committee] roles but, generally speaking, relatively few were wanting to be that heavily involved. The TV academic side of the line was where I was interested, and wanting to cross it. (N7, Professor, economics)

As a 'TV academic' and a member of the Labour Party, N7 was happy to offer media commentary on policy and to work closely with politicians and not just with civil servants or other technical policy makers. He drew a distinction between his political work, which involved developing policy for the Labour Party, and the policy engagement of his academic peers, who were interested only in 'having conversations' with policy makers or in participating in committees reporting to the civil service. By referring to himself as a 'TV' academic N7 is drawing attention to his identity as an academic of a different kind.

The academic policy entrepreneurs arrive at the stance that they should engage in political activism through different routes. For some, affiliation to a political party played an important role in the construction of their identities as activist intellectuals. A Professor of social policy described how early experiences of participating on Labour Party policy development committees alongside senior academics demonstrated to him that it was possible to combine academic and political work:

The stuff that Abel-Smith and Townsend and Titmuss were producing seemed to me to be exactly the kind of stuff I wanted to do...these two people seemed to me to be doing such interesting work, what I wanted to do, so I at that point decided that really, eventually, possibly I want to work on social policy as an academic. (N1, Professor, social policy)

N1's interview responses suggest that witnessing at first hand the effectiveness of Abel-Smith, Townsend, and Titmuss³ at influencing policy was a formative experience. It generated a realization that it was legitimate to be both an academic and

3. These individuals were senior academics at the LSE who were also members of the Labour Party.

department; for much of this time period the Labour Party was the party of government and policy made by the party could more directly enter public policy.

They were based in the LSE's Social Administration department, which according to the Professor, was 'largely responsible for most of the social policy initiatives which the Labour Party drew up in the period from the mid-50s to about '75, over a twenty-five year period when virtually all the ideas that the Labour Party produced on social policy came from this department one way or another'. The research carried out by the department was developed into policy ideas and subsequently inserted into Labour Party policy via party committees and sub-committees which were staffed by members of the

an active member of a political party and that this was an effective way to transfer research into policy.

The political activism of other academic policy entrepreneurs developed out of a sense of frustration at unjust or unreasonable policies. These academics described being initially reluctant to engage politically; events such as the rejection of research findings or the introduction of poorly designed policies motivated them to become politically engaged. They believed that the dangers presented when policy makers ignored research evidence on a particular matter were severe and they felt that they were in a position to take action to defend against a threat. For example, a Professor of social policy (N4) joined a lobbying group when a policy proposal emerged from government which was 'the worst piece of policy making I'd ever seen...that struck me as terrifyingly dangerous'. N4 felt motivated to act because otherwise significant harm to society might result, because the threat lay in her area of expertise, and because there were 'an awful lot of people...who were afraid to speak out and...I had the freedom to say what everyone else was thinking, and so I should'.

The academic policy entrepreneurs see policy change as something that they can personally contribute to through an active participation in the political field. They seek to produce changes in official government policy or legislation through the introduction of alternative policy proposals or by proposing novel approaches to policy which are applicable to a broad range of policy areas. They are motivated to apply their knowledge in the service of policy change; what matters is getting policy ideas into active circulation, through the media or through policy networks. They 'care about the ideas...slamming [them] down and getting [them] out there' (N3, Reader, economic history) or in taking 'big, fairly chunky, research issues and agendas and evidence and trying to take [them] into the policy space' (N7, Professor, social policy). They derive reward from seeing their ideas take root within the policy field. These could be specific policy proposals or broader political philosophies or approaches.

6.3.1 Relational work: boundary dissolution and boundary-spanning network construction

While the academic policy experts locate themselves in the marginal spaces between academia and policy, the academic policy entrepreneurs are full participants in both fields: they are policy makers *and* academics. While policy entrepreneurs recognize that others may draw a boundary between academia and politics, they are unhesitant about crossing it, although they recognize that it is important not to spend too long away from either field. As a Professor of social policy described, it was important not to be seen to be disconnected:

I didn't want to burn the bridge to the academic world completely...I thought I would be relatively unusual as an academic in that I would go in to the heart of government for a while but with the clear intention of coming back to academic work. (N7, Professor, economics)

They view the development of personal connections with other policy makers as part of their broad intellectual endeavour. They express sympathy for politicians, recognizing that the constraints on them make it difficult for them to engage with academics; it is therefore up to academics to make politicians with 'incredibly harassed and overburdened lives' take note of their ideas (N5, Professor, management). Academics should not expect to influence policy unless they are willing to make extended attempts to 'get people to listen' (N5) by actively developing networks which span the boundary of the academic and public policy fields, including with policy intermediaries, civil servants, political parties, and lobbying groups. The relational knowledge transfer work of the academic policy entrepreneurs can be characterized as boundary dissolution and boundary-spanning network construction.

The academic policy entrepreneurs believe that the complexity and diversity of the policy making process means that, although any particular attempt to translate knowledge across political barriers might be unsuccessful, making multiple attempts and using multiple channels increases the probability of success. This behaviour is driven by an understanding of the institutional landscape of policy making and a recognition of the need to inform a broad climate of opinion by working with multiple

actors. The academic policy entrepreneurs sought to build multiple connections with policy makers:

You just have to be prepared to go down all of these other routes, not just one, as many as you can keep going at the same time, and try and keep doors open with people in Conservative think tanks, don't only talk to people on the left. (N1, Professor, social policy)

The analysis of the bibliometric data supports this conclusion, showing that the academic policy entrepreneurs authored more articles for government/public sector and private/third sector organizations than other types; most published a substantial quantity of articles in national newspapers. This represents an output of a strategy of 'mobilizing all the pathways' (N1, Professor, social policy): using multiple pathways to policy, both technical and political, authoring reports for government and for policy institutes, and writing opinion pieces for the media.

The academic policy entrepreneurs adopted a strategic and political approach to knowledge transfer. N3, a Reader in economics, argued that there were 'two ways of influencing people': to make something a 'really big story' in the press which 'nobody could ignore' and to work through policy networks and think tanks to 'place it somewhere where policy makers and opinion formers will see it'. Similarly, a Professor of economics explained how he would work strategically to overcome political barriers to a new policy idea:

I would talk to my various contacts, which might mean [Ministers] first of all. I would also talk to [practitioners] and I've got various contacts. And then I would write a think tank pamphlet...and I would talk to certain senior people in the civil service who I know, permanent secretaries and so on. I think I could probably do that, and I think they would listen. (N6, Professor, economics)

The policy entrepreneurs differ from the policy experts in that they attach greater importance to working through political pathways, including think tanks and campaign groups, recognizing them as influential participants in the policy making process. While the engaged academics and policy experts tended to work with a limited set of policy makers, the policy entrepreneurs work with a broad range:

What haven't I written for? I haven't gone extreme left but I've written for everything from sort of IPPR to IEA and everything in the middle. (N5, Professor, management)

Intermediaries such as think tanks and campaign groups are viewed by the academic policy entrepreneurs as important actors who could act as conduits to influential policy makers such as politicians and civil servants. Some academic policy entrepreneurs participated in the work of pressure groups by arranging or attending events, producing pamphlets, lobbying politicians, or writing for the media in support of the group's activities. Others made significant contributions to the work of think tanks. The academic policy entrepreneurs' strategy of working with multiple intermediaries was informed by their recognition that the combined weight of opinion across a network could play an important role in overcoming political barriers. A Professor of social policy described an episode in which he realized that breadth of support was important:

I remember talking to Ed Miliband...he'd been quite keen on the idea. I said, "Why did it catch your eye?" and he said, "Well it was probably the fact that two think tanks came out with basically the same idea at the same time." ...It wasn't just a solitary crank idea, there was a whole wider support group. (N6, Professor, economics)

The data suggest that the networks developed by the academic policy entrepreneurs enable them to access political policy makers and to learn strategies to influence them. By participating in political networks they develop an understanding of the pathways of influence which were available to them and how to use them: where power lies, which individuals and organizations they can work with most effectively, and what ideological positions various policy actors adopt. They also recognize that the policy making system is dynamic, offering up opportunities to 'do something':

You had to try and discover where the pressure points were and an awareness that there was only a limited amount that you could ever do from outside, but you could change people's minds...You have to assume a lag so that at any given moment people's positions are entrenched, their interests are entrenched, there are moments when things shift and you actually have a chance to do something and you just kind of have to wait for those and grab them. (N5, Professor, management)

The academic policy entrepreneurs develop close relationships with politicians and political advisers who they recognize as key policy influencers. They developed these

relationships through two mechanisms: mutual affliation to a political party, or acting as an expert advisor to a politician or political advisor who was a member of their personal or professional network. A Professor of economics said that his membership of the Labour Party meant that he was 'a trusted figure to talk to and run things past—issues and debates that they were having. They know that I'm not going to blab to the papers (N7)'. For other policy entrepreneurs, trust developed over time through an advisory relationship:

I got to know [a future Minister] through briefing him on things. He'd occasionally phone me up to discuss something he was planning to say and whether it was sensible or not, and so I met up with him regularly throughout. (N4, Professor, social policy)

Unlike the traditional academics (such as T5) who were uncomfortable in playing a 'policy auditing' role, the policy entrepreneurs did not view this form of engagement as problematic. Some policy entrepreneurs used membership of a political party to participate in the development of party policy through mechanisms which offered privileged access to party members, such as policy development committees, by directly lobbying senior party figures, or by joining internal party discussion and pressure groups. For example, a Professor of social policy who had developed a close relationship with a senior Minister simply sent his ideas to him directly:

I did have a go at my ten ideas for Ed Miliband...I wasn't invited, I just started to do it. I know them well enough that I could just put it to them. (N7, Professor, social policy)

Establishing activism networks

Some of the academic policy entrepreneurs played a role in establishing discussion and pressure groups which contributed to the development of policy within a political party. For example, N6 (Professor, social policy) set out to challenge some of the core policy beliefs of the Labour Party by establishing a discussion group:

I joined the Fabian Society and...started something called the Socialist Philosophy Group, as a Fabian animal. The aim of the Socialist Philosophy Group was to respond to the challenge of Margaret Thatcher, in some sense the left had lost its way, not helped by the collapse of the Soviet Union and so on, although that came a little bit later. (N6, Professor, social policy)

The Fabian Society founded the LSE and had a strong influence on the development of the Labour Party. By describing himself as a 'Fabian animal', N6 is calling attention to the work he was conducting, alongside other members of the Fabian Society, to revise the core beliefs of the party. The context for this work is that it aligned with and contributed to the 'Third Way' agenda of the Prime Minister Tony Blair. As a result, N6 found himself near the philosophical core of Labour Party policy development. For another Professor of social policy, political activism played an important role in making her politically 'visible':

[I] set up a one day conference which was free to anyone and it got a massive turnout and you know, it got me into a lobbying group...that was what got me, it was I suppose anger at their incompetence that got me involved...It got my name known and so I got asked to do briefings and Parliamentary groups and so on...It made me more visible to the political world. (N4, Professor, social policy)

N4 is calling attention to the increased visibility which resulted from her engagement in lobbying and political activism. Although prior to this she had 'mixed a lot with practitioners and senior managers and politicians', the inhabitants of the 'political world'—policy makers and journalists—did not recognize her as an active participant. By holding an event which was open to the public and working with a lobbying group to protest against the introduction of a policy she advertised herself as a participant in this world. The lobbying group had the necessary resources and political and journalistic contacts to increase her political visibility as a supporter of their cause.

The context for the new policy was an important factor affecting the Professor's political visibility and her subsequent engagement with policy making processes. There had been a number of incidents involving children known to social services which had been widely reported and there was a significant public interest in child protection. The policy she was protesting against was a government response to these incidents and she was one of only a few senior figures in the field who was willing to openly criticize the policy, making her valuable to journalists who were reporting on the policy proposal. Subsequent to her work with the lobbying group, she was invited to appear on a national radio programme which attracted a large audience among

policy makers. She credited this appearance with raising her political profile further. Following this appearance she was invited to speak to policy makers from the governing and opposition parties and civil servants. She received quite different responses from each side:

I had a meeting at 10 Downing Street with Blair's, one of his advisers and I had meetings at the, what was called the Department for Children, Schools and Family. But I never felt any of them were genuine curiosity...The opposition parties at the time were listening to me because I was saying the kind of things they were thinking, so I fitted their agenda and therefore they listened with more attention. (N4, Professor, social policy)

The Professor argued that the government political advisors and civil servants had 'a fixed agenda already' and she did not think that she 'made any impact on it'. Moreover, she did not think that 'they were wanting me to'. However, her contacts with opposition parties turned out to be important in that they formed the basis for her later contributions to policy making; following a general election, the opposition parties she had been briefing entered government and she was invited to produce a review which was informed by her research.

6.3.2 Epistemic work: knowledge application

The policy entrepreneurs differ from the other types of academics in the emphasis they placed on applying their own knowledge instrumentally to the production of concrete policy solutions and the development of arguments in support of their solutions. This activity may be characterized as *knowledge application*. Although the other types of social scientists sometimes express preferences for certain policy options, or produce action proposals in the course of their work, the policy entrepreneurs embrace the production of policy solutions and supporting arguments as a fundamental part of their identities as policy-engaged academics. They approach this work as an interactive process of policy co-production in which they work closely with policy makers to assess the feasibility and marketability of policy solutions and policy arguments.

Whilst I was doing the research, doing the numbers, simultaneously I was actively, in my own head, saying, "Well what would I do about it, what do I think the policy

prescription is, what's the response that should happen here?"...I was having both the discussion with think tanks, and the media, and what have you, which was both, "Here's the problem!" and "Here's what I think should be done about it." Right from the beginning. (N7, Professor, economics)

The policy entrepreneurs draw a distinction between putting forward vague 'policy implications' at the end of an academic presentation and producing detailed, specific, and usable policy proposals. The latter form of work is viewed as being serious and credible: a distinct form of policy work which required specific knowledge and expertise to perform. They emphasize the importance of putting forward concrete and actionable proposals which lay out in detail the specific steps policy makers should take. For example, a Professor of management (N5) who had been asked by a Secretary of State to conduct a major review of a policy area and to produce a series of recommendations—the majority of which, in her view, were implemented—maintained that it was the 'specific and actionable' nature of her proposals that contributed to the success of the project. The suggestions became more detailed 'in the process of implementation', but even prior to this they were 'specific and actionable'.

Several policy makers argued that attempts by academics to put forward policy solutions in the absence of understanding which problems policy makers were seeking to address and working out the details of how the solution would be implemented would likely result in the failure of the idea to translate. For example, a civil servant (P2) argued that 'senior political figures' were not very interested in hearing about new problems; rather, they were looking for well-developed solutions to problems they were already concerned about which could be implemented in a relatively short period of time. Overcoming political barriers, in his view, meant more than putting forward proposals: it meant 'showing' policy makers that 'you can solve their problem'.

6.3.2.1 Co-producing policy arguments

Part of the work of policy entrepreneurs involves the co-production of arguments to justify proposed policy solutions. The policy entrepreneurs deploy their arguments in

a 'battle of ideas' in which they attempt to convince other actors of the merits of their solutions:

It was a battle of ideas that we had, trying to convince people of something like the graduate tax, or changing the way we financed higher education. Working on that with [a colleague] was great fun, trying to solve the problems that people kept producing and trying to find arguments that would convince a largely unconvinced public, that was just great fun. (N1, Professor, social policy)

Academic policy entrepreneurs' epistemic work involves responding creatively to resistance from actors who are unconvinced of the merits of their policy solutions. A fundamental component of this work involves crafting arguments to justify a policy solution which respond to the possible counter-arguments of a resistant audience. This might also involve showing clearly that other proposals will not meet their stated policy objectives; for example, a Professor of social policy (N4) said that much of her work involves 'trying to analyse the problem for them so that they can see their solution is very crude'. In order to accomplish this, the policy entrepreneurs need develop an understanding of the policy makers' frameworks of policy objectives and beliefs and deploy arguments which make sense within these frameworks. A civil servant described this work as 'fitting an account' within what the 'government is trying to achieve':

You need to know what it is the government is trying to achieve and then fit an account within that. If you can't do that you come across as very naïve, you're talking at cross purposes with the government in the narrower sense, like who is trying to do what. It's obviously much easier to do that if you are yourself—if you have a set of instincts which are broadly aligned with that of the administration. (P2, civil servant)

The civil servant argued that in order to be effective, academics must develop an understanding of the interests of policy actors and put forward a policy solution and supporting argument to justify how the policy solution meets their objectives. It must be framed so that it appeals to politicians. An example of this work is offered by a Professor of Social Policy who worked as an advisor to the New Labour government:

One of the agendas I was pushing early on was to shift the tax reliefs on pensions and savings to be more progressive. As it stood, higher rate taxpayers get more tax advantages from pensions and ISAs than people who don't pay tax. So I was trying to push the idea that tax relief on pensions should be at the very least capped to

basic rate or, more interestingly, that we would move to some kind of matching system so you matched the first £1000 a year of contributions a person makes at a higher rate than subsequent contributions. (N7, Professor, social policy)

In this extract N7 begins by describing the general approach or rationale for his proposed policy solution (shifting the tax reliefs on pensions and savings to be more progressive, i.e., should redistribute wealth). His 'progressive' agenda was designed to fit within the 'progressive' agenda of the government at the time. N7 goes on to point out a specific problem with current policy (higher rate taxpayers, who are likely to be relatively well off, get more tax advantages from pensions and ISAs than people who don't pay tax and are likely to be relatively poor), and offers two policy alternatives: his preferred policy solution (some kind of matching system) and a less preferred solution which was superior to the *status quo* (tax relief on pensions capped to the basic rate). N7 was not simply suggesting a policy which he justified on technical grounds; he was fitting his proposal within a framework of political beliefs by couching the argument in the language of 'progressive' politics. This points to the need for policy entrepreneurs to deploy justifications which draw on broader political arguments. A civil servant was clear about how this process worked within government:

Talking about 'public services' is a loaded political term. This government would talk about it more as providing the infrastructure for business investment, empowering local areas to make the decisions that they need to make to support growth...That framing about 'public services' is very much a capital P political framing and that is very much a framing of the left. That kind of analysis wouldn't get much traction. (P16, civil servant)

6.3.2.2 Co-producing policies

The policy entrepreneurs approached the task of producing detailed, specific, and 'actionable' policy solutions by engaging in an interactive process of policy development through which weaknesses in policy proposals and arguments were identified jointly with policy makers. This is an iterative process designed to result in the production of robust policy solutions and arguments; a process described by a Professor of social policy as 'getting the bugs sorted out' (N1).

The academic policy entrepreneurs justified their engagement in policy co-production by arguing that policy proposals developed only from first principles or from empirical research would often fail when they met the 'real world'. The complex and interrelated nature of policy and its implementation meant that unexpected and unpredictable outcomes can result from the implementation of apparently logical and rational policy ideas. A Professor of social policy described how her approach to policy co-production was influenced by the failure of several previous policy initiatives, which she attributed to a failure to attend to the details of implementation:

This was a sensible solution to that specific problem, but when you put it into the real world it meets up with all these other things and it changes so what was intelligent when it left your head could be a disaster two years later... You can have recommendations till the cows come home [but then] you have to look at the reality of the workload, the priorities, what the organization allows you to do, and when you explore that you realise that it's seen as the least important thing to do and so with a heavy [workload] you hardly ever do it. (N4, Professor, social policy)

Policy co-production is distinct from knowledge co-production, as it involves the collaborative application, rather than production, of knowledge. Engagement in policy co-production enabled the policy entrepreneurs to gather knowledge of the local details of implementation which might affect the acceptability or success of a policy proposal. It involves presenting draft policy solutions and arguments and gathering feedback through informal discussion processes, through formal consultation, or by 'floating' ideas and arguments in the public domain by publishing articles for think tanks and other outlets. Informal policy co-production enables problems to be identified before the proposed solution reaches a level of public or political exposure such that a decision to reject or accept the proposal become a political necessary; once a proposal is in the public domain policy makers may be required to take a position on it before the proposal had been refined. The process of informal discussion typically drew on the policy entrepreneurs' network of social relations:

You get to know people who are working on the range of stuff and you say, "Look, can I come and talk about this?" It's your job to retain your independence, take their advice, see where you agree, where you think they've got a point. If you think they have got a point it's sensible to take care of it and try and resolve it before it gets shot down when the party comes to power or the Minister in government says this is a load of bull for the following five reasons. All of that just seems to me to

be a necessary part of refining your model, whatever that model is. (N1, Professor, social policy)

When problems were identified N1 attempted to resolve them by refining his policy 'model'—proposal, theory of action, and/or policy argument—before it was 'shot down' by politicians. A similar process of seeking informal feedback was described by a Professor of management who had been asked to undertake a formal policy review. She gathered knowledge about how policies could be made to work:

Ask people. Just ask people. Ask civil servants, ask people who've been civil servants, ask people who'd been special advisers, ask, just ask...Some people that I would talk to semi-officially and some people that, because this was my own hinterland, I would say, "If I suggest that, what else would you need for it to work?" (N5, Professor, management)

The Professor said that she had built up knowledge about policy problems and solutions by talking to policy makers and practitioners informally over a period of many years, a process which she described as understanding her 'hinterland'. The academic policy entrepreneurs also engage in formal policy co-production processes which feature consultative meetings or panels. For example, a Professor of social policy asked to undertake a formal government review undertook a consultative process in which she first produced an interim report to use as a basis for discussion. By this point she had developed a critique of current policy, some proposed solutions, and a supportive argument. She described the process of developing the details of policy implementation as 'filling a space' with 'practical elements':

I had the framework of having an initial report that sort of sketched the analysis and a second report that sketched the line of solutions for discussion, and then a final report that set out the recommendations...The interim report was a helpful bit there for sketching a line of travel which then through discussion with lots of very intelligent people fleshed it out a lot. I did learn a lot from people and the practical elements of it often came from other people. The space was sketched by me but how to fill it was helped by other people...I had a whole series of meetings with people for them to feel in dialogue with me, so it wasn't me on the outside looking at things, it was me talking to people and saying, "This is what I'm tentatively thinking", and getting feedback. I attempted not to be the sort of wise man coming in and scrutinizing others, but more of a colleague talking through. (N4, Professor, social policy)

A third type of policy co-production is more distributed and open to a wider network of policy actors. It involves publishing proposed policy solutions in books, pamphlets, or newspaper articles designed to draw the attention of a broad audience. In this type of policy co-production, the policy entrepreneurs publish policy solutions and arguments in texts which were accessible to policy makers—such as think tank reports or books aimed at a general audience—with the hope of provoking feedback. A Professor of social policy described this is 'lobbing' ideas 'out there':

There's also quite a different [way to influence policy], which is just a set of ideas which you generate—you can't tell whether they're going to have any influence at all and you don't particularly drive them through any organisation—you just sort of lob them out there. (N1, Professor, social policy)

This activity is a type of distributed co-production not unlike the production of academic ideas, in which a dialogue takes place between academics through the medium of academic books and journal articles, but on a much shorter timescale.

6.4 Conclusion

This chapter has presented an analysis of the relational and epistemic knowledge transfer work of two types of academic social scientist, academic policy experts and academic policy entrepreneurs. Although both types have been shown to place great value on their work with public policy makers they also differ substantially in their relational and epistemic work. They differ in their relationships with the academic and public policy fields, their approach to working through political pathways, and in the types of outputs they develop.

The academic policy experts distance themselves from both the academic and to public policy fields without gaining full autonomy from either. They remain dependent on the academic field for symbolic capital and dependent on the policy field for financial capital. Despite their dual dependence, they view their position as legitimate rather than subordinate and are hostile to the boundary work of traditional academics. Frequent changes in the composition of policy networks make their position somewhat tenuous and obtaining secure employment can be a significant challenge. As a result,

they expend substantial effort on negotiating a position between the two fields and managing the boundary between them. The academic policy experts must play two 'games' at once: playing the academic game by publishing sufficient rigorous research to maintain legitimacy while simultaneously playing the policy game to gain attention and funding for research.

Academic policy experts' relational work involves negotiating the boundary between the fields and establishing and maintaining long term relationships with technical policy makers who are able to support the conduct of their research and are interested in the knowledge that results. The extended nature of these relationships supports the processes of mutual adaptation and knowledge co-production which enable academic policy experts to acquire knowledge about the policy field and adapt their output in response. Their epistemic work involves circumscribing the knowledge of policy makers by specifying facts to be utilized in policy debates. Recognizing their somewhat precarious positions between two fields, they tend to avoid taking actions which might prejudice their relationships with policy makers, such as publicly criticizing policy makers or lobbying for specific solutions.

The academic policy entrepreneurs, on the other hand, adopt a 'both/and' position toward participation in the academic and public policy fields; they are simultaneously academics and policy makers. Their policy work is viewed by more traditional academics as risky and academic policy entrepreneurs can be wary of the forces pulling them toward the centre of each field. They believe, however, that they are able to maintain their reputation and symbolic capital within the academic field while making authoritative contributions to public policy. As a result, they dissolve the boundary between academic social science and public policy making and work across both fields, contributing knowledge according to the standards of each. For the academic policy entrepreneurs, maintaining a disinterested and objective stance is primarily a matter of ethics rather than organizational attachment and they believe that it is possible to have a significant involvement with policy making—even partisan politics—while adhering to these norms.

The academic policy entrepreneurs are deeply embedded in the public policy field and committed to working with policy makers. They participate fully in the debates and

policy development processes which take place in policy networks and they work strategically within policy networks to influence public policy. Their relational work involves dissolving the boundary between the fields and actively constructing personal networks which span the boundary. They develop and maintain connections with technical and political policy makers and, on occasion, establish new informal groups. Like Mintrom and Norman's (2009) policy entrepreneurs, they seek to contribute to policy change by utilizing their 'social acuity' to recognize power relationships and target their activities accordingly. Their epistemic work involves acquiring knowledge of the political and practical context for the development and implementation of policy and combining this with the knowledge produced through their membership of an academic discipline. This enables them to apply their own knowledge in developing policy proposals and arguments to justify it to political audiences and work alongside other policy makers to co-produce policy.

Chapter Seven: Relational and Epistemic Work: Knowledge Utilization Outcomes

7.1 Introduction

This chapter draws on the published outputs of the academic social scientists, their interview data, and the interviews with the public policy makers to examine the knowledge utilization outcomes associated with each type of social scientist. As discussed in the methods chapter, the complexity of the policy making process and the diversity of actors involved means that it is difficult to attribute an outcome to the work of any particular actor. The purpose of the analysis in this chapter is not to claim that the knowledge transfer work of a social scientist has directly led to a particular outcome. Rather, the analysis seeks to identify commonalities in the perceived outcomes reported by each type of social scientist. Where it has been possible to identify particular types of academic social scientist from the interviews with the policy makers, this data is presented, but otherwise the interviews with the policy makers are used to inform the analysis and offer an additional perspective. A table identifying the six academics whose interview reports of knowledge utilization could be cross-checked against the interview reports of five of the policy makers is presented below.

Table 12 Comparison of knowledge utilization outcomes reported by policy makers with outcomes reported by academics

Policy maker	Social scientist described	Academic type	Policy area	Outcome(s) claimed by the academic	Outcome(s) attributed by the policy maker to the academic
P7	X18	Engaged academic	Vocational skills	Conceptual utilization by technical policy makers	Conceptual utilization by technical policy makers. Some concerns over relevance: "We are giving money to organizations who wanted to do x, we asked them to do y, and now they are just trying to figure out how they can do x and make it look like they've figured out how to do y."
P13	X17	Academic policy expert	Vocational skills	Instrumental and conceptual utilization by technical policy makers	Instrumental and conceptual utilization by technical policy makers. "[X17] had a lot of respectthe staff here would be more informed on an issue, it would inform our discussions about whether we would need to do further research or perhaps any policy ideas we would want to put down."
P14	N5	Academic policy entrepreneur	Vocational skills	Instrumental and conceptual utilization by political policy makers	Instrumental and conceptual utilization by political policy makers. "The initial policy development stage was pre-election mostly. It didn't really involve that many academics, it was Policy Exchange and in opposition within the policy group. There were some academics involved[N5] was influential."

Policy maker	Social scientist described	Academic type	Policy area	Outcome(s) claimed by the academic	Outcome(s) attributed by the policy maker to the academic
P18	Х3	Academic policy expert	Land use planning	Instrumental and conceptual utilization by technical policy makers	Instrumental and conceptual utilization by technical policy makers. "[X3] will have allies amongcivil servantsThanks to the work of [X3], when I first worked on planning the gulf between their thinking and economists was much wider than it is today."
	N3	Academic policy entrepreneur	Land use planning	Conceptual utilization by technical and political policy makers	Conceptual utilization by technical and political policy makers and instrumental utilization by technical policy makers. "[N3] forced people in positions of power to justify what they were doing, whether it was right or wrongsome of our Ministers liked what [N3] was saying, some hated it, but there was sufficient interest in the idea that Treasury proposed and announced in one of the budgets that there was a Treasury budget commitment to carry out a feasibility studyand there was a group established to do that."
P19	E3	Engaged academic	Digital	Instrumental and conceptual utilization by technical and political policy makers	Conceptual utilization by technical and political policy makers. Argued that although E3 was involved in the production of a report which influenced the policy debate, its findings were rejected and not directly applied in rejecting the policy proposal.

The chapter proceeds as follows. The analysis of the utilization outcomes associated with each of the four types is presented with a section for each type. Each section begins by presenting a table summarizing the outcomes associated with each academic derived from the analysis of the interview and bibliographic data. An analysis of the outcomes of their policy engagement is then presented.

Running through the chapter is a case study of the development of vocational skills policy in the United Kingdom. During the course of the study, vocational skills policy shifted slightly toward a demand-side led position from a supply-side led position. The case study contrasts the roles played by three of the academic social scientists who contributed to this shift: E13, an engaged academic, X17, an academic policy expert, and N5, an academic policy entrepreneur. In the conclusion to the chapter the outcomes are compared across the types and some opposing evidence considered.

7.2 Traditional academics

This section presents the analysis of the knowledge utilization outcomes of the relational and epistemic work of the traditional academics. The analysis draws primarily on the interview reports of the traditional academics and the public policy makers.

Table 13 Traditional academics' perceived outcomes of knowledge transfer work

	Discipline	Perceived outcomes of policy engagement
Т1	Economics	Knowledge was utilized in the production of reports for a government advisory body but 'that's not influencing policy, that's just influencing the content of a report'. Argued that academic knowledge is 'only used to justify a policy stance that's already been taken'.
T2	Management	Contributions appeared in campaign group and Parliamentary reports but he 'did not know' whether his knowledge had been utilized in the production of policy; perceived other academics as having more influence.

	Discipline	Perceived outcomes of policy engagement
Т3	Management	Policy influence 'if any, was very indirect'; civil servants reported that his work 'was really interesting' and that they would 'like to get our bosses along to this', but nothing further transpired.
T4	Sociology	Believed evidence was only 'used to back up what [policy makers] always thought'. Had 'no overtures from government Ministers or anything like that'.
T5	Economics	Knowledge utilized in reports by a Parliamentary enquiry, a think tank, and the Bank of England; was told that 'there's quite a lot of sympathy for that sort of view but politics means it will never happen'.
Т6	Management	Involved in 'discussions' with policy makers but believed that she had no influence because 'the reality of a policy that gets made is often a triumph of back office dealing'.

7.2.1 Limited or symbolic knowledge utilization

The traditional academics believed that their knowledge had not been applied by public policy makers in the production of policy in any significant way; in some cases, they identified symbolic uses of research, in which their research had been used to justify an existing decision but had not been utilized in the decision making process. They attributed this to political barriers which prevented the uptake of their research. They argued that they were marginal actors in a policy making process which was overwhelmingly driven by the activities of interest groups and by the internal machinations of political parties. According to this view, 'policy making is really conducted by the Spads [special advisors] and Ministers' (T1, Professor, economics) and academic knowledge is overlooked, ignored, or used symbolically, rather than influencing decisions about which policies to implement.

From the perspective of the traditional academics, academic evidence often exists concerning what it is that policy makers should do but, despite the attempts of academics to communicate evidence to policy makers, political barriers prevent the

evidence from being utilized appropriately. Where significant changes in policy do occur this is accounted for by the activities of political constituencies:

The evidence has been so clear on so many issues that government policies face up with. It's quite clear that the political parties and the bureaucratic apparatus are avoiding it, burying it...It's in response to political demands and those sorts of constituencies that the larger changes of policy orientation have come from, rather than big pieces of academic research. (T4, Professor, sociology)

As an economist you're frustrated because you see what the thing to do is, but unfortunately policy is decided by politicians who have very different objectives...We know with most European economies they need to free up their labour markets and increase productivity, do this, that, and the other thing, and it's very easy, everybody knows what they have to do. Politically, however, getting from there to where they ought to be is next to impossible because the politician could never say these things, would never get elected, would not survive if they snap it past the populous. (T3, Professor, economics)

When traditional academics came into contact with politicians they were often disappointed by the quality of their engagements. T5, for example, was a member of the economic advisory committee of a political party and regularly interacted with Shadow Chancellors:

Each [Shadow Chancellor], exception of [one] I think, would say "[the government] have just done this and we need to react", but you know this is the antithesis of what I thought we were going to be talking about. I thought we were going to say, "Look, the world has gone through a bit of a change here and the politics seems to have gone through a bit of a change, what are the big issues that we should be re-thinking? Now if we think about policy running, two, three, five, whatever years ahead, what kind of policies should we have?" No, there was nothing, ever, ever remotely like that, it was all "I've got a speech to make on this day and I'm going to say this, what's wrong with that?" (T5, Professor, economic history)

T5 hopes for a discussion about the fundamentals of policy but finds that these are not available for debate. His experience of this engagement was that policies were developed elsewhere and presented nearly fully-formed to an academic panel which is invited to comment only on the technical details. This is 'hugely disappointing' because he wants to discuss which policies would be appropriate in the long term but is unable to do so.

Where traditional academics did think that they had an impact was in altering secondary details of policy, correcting technical errors in government reports, and in preventing egregious misstatements by politicians:

I did manage to get [a report] changed to say, we shouldn't be saying this because I don't think it's true. But that's not influencing policy, that's just influencing the content of a report. (T1, Professor, economics)

When knowledge transferred by the traditional academics was used it was sometimes used symbolically, that is, to support a belief that policy makers already held or a policy that had already been decided upon, even where research did not support the belief or policy. The traditional academics were often unable to determine how their research had been used, leaving them unable to object to the symbolic utilization of an incorrect interpretation of their knowledge. In the following example, a Professor of economics happened on the symbolic use of his research only through accepting an invitation to participate on a government committee:

It's one thing to publish something but you've no idea how or where it's being used...they were using this piece as evidence to say that we have got lots of wage mobility, and its the wrong piece of work to do that. People definitely use work to suit their ends: 'flexible labour markets' is good. I don't understand what the term flexible labour market means at all because it's used to justify a particular set of policies, it's used as a blanket term to suit whatever the author wants it to mean. (T1, Professor, economics)

The interviews with policy makers suggested that it was not uncommon for academics to feel concerned that their contribution would not be sufficiently valued or they might not have an immediate and obvious impact on policy:

Clearly [the rejection of academic advice] is an issue for some academics...I got in to long conversations about their fears that they would do some piece of work and it would be ignored or watered down or compromised. They obviously found that very uncomfortable. (P16, civil servant)

P15, the Chief Scientific Adviser to a government department, argued that many academics were 'naive' about how the policy making process worked in expecting it to be an 'entirely rational and logical process'. They could be 'a bit quicker to understand political relevance and what is going on' but this did not mean that they could not play a useful role in policy making in undertaking 'that techy bit of maths

you need...let them carry on doing that'. However, they could not play a more central role in policy making unless they could 'talk about evidence convincingly'. In the absence of being able to do so they might be used as part of a 'due diligence' process, to give 'political cover' and to be able to say that there had been 'proper preparation' of policy but would not fully participate in policy development. P8, a former Minister argued that academics who maintained a position on the margins of politics and did not share her 'passion for changing the lives of children' would simply not be listened to:

Too many researchers just do the research and put it on the shelf...the mission statement of a lot of educational researchers wasn't our mission statement. (P8, former Minister of State)

7.3 Engaged academics

This section presents the analysis of the knowledge utilization outcomes of the relational and epistemic work of the engaged academics. The analysis draws primarily on the interview reports of the engaged academics and the public policy makers. The first part of the case study on vocational skills policy is presented at the end of the section; this part focuses on the role of E13.

Table 14 Engaged academics' perceived outcomes of policy engagement

	Discipline	Perceived outcomes of policy engagement
E1	Human Geography	Knowledge has had a significant impact on the thinking of senior civil servants in government departments; was told that his work 'was really important' in influencing the way in which policy was conceptualized.
E2	Social Policy	Participated in discussions which aided in the development of a plan 'pushed by the French Government' at European level.

	Discipline	Perceived outcomes of policy engagement
E3	Management	Produced a report which influenced the conclusions of a Parliamentary committee; he 'did a comparison between our conclusions and the [committee] conclusions and found a very high agreement'. A proposed policy was cancelled following the criticism in the report.
E4	Human Geography	Developed a theoretical framework which was utilized by civil servants in a government department to conceptualized how they approached the development of partnerships with private and third sector organizations; 'we developed itto structure those partnerships'.
E5	Management	Produced work which challenged the conceptual background for policy developed by a government agency; however, the knowledge did not reach the agency until after a consultation had closed, meaning that it could not be directly applied.
E6	Management	Influenced the way in which policy makers and practitioners talked about a topic by presenting frameworks which they find useful: 'I have changed the language that people useit may be me presenting a framework and people suddenly say "oh wow!"'
E7	Sociology	Influenced 'aspects of the Arts Council England thinking' through 'interesting and productive dialogue' but did not claim to have 'changed the policies' directly.
E8	Economics	Has had 'productive interactions' with policy makers in which he has introduced them to an 'intellectual framework' which justifies particular conceptualizations of policy problems and solutions. Has produced with colleagues some policy solutions but 'most of the ideas have yet to hit the political radar in the way we had hoped'.
E9	Politics	As a former Special Adviser was directly involved in policy development; as an academic no longer has direct influence but 'I get called in occasionally to see politicians and talk to them about ideas that they've been developing'.

	Discipline	Perceived outcomes of policy engagement
E10	Economics	Challenged the policies of a central bank and generated a considerable amount of press coverage and policy debate, although did not identify any specific policy changes which resulted. Now argues that she was 'excessively naïve' and 'exposed'.
E11	Management	Some conceptual impacts on policy makers who reported that they valued the ability to 'bounce some ideas off and get some feedback'.
E12	Management	Has produced work which is 'valuable' to policy makers and practitioners but which 'is never going to change anything tomorrow' because its impact is gradual and conceptual.
E13	Social Policy	Substantial influence on the development of skills policy by technical policy makers in the Scottish Government. Contributed to a conceptual shift among policy networks towards demand-led skills policy.
E14	Management	Has contributed work which has contributed to policy discussions, but no specific policy outcomes were identified.

7.3.1 Conceptual knowledge utilization by technical policy makers

Although the engaged academics reported that they had had little evidence that political policy makers had paid attention to their work, they expressed confidence that technical policy makers had given serious attention to at least some of their work. For example, a Professor of economics (E8) argued that the technical policy makers he worked with had 'acknowledged the importance' of what he was 'highlighting'. The engaged academics believed that they had some influence on policy by changing the way in which technical policy makers conceptualized policy-relevant issues, that is, through the conceptual utilization of their knowledge. For example, a Professor of human geography described an episode in which he had been informed by a senior

civil servant that an article he had written for a policy journal had had a significant conceptual influence:

Occasionally people have said to me kindly 'that piece was really important'. I remember [a senior civil servant] ringing me up and saying, "You've written the most brilliant critique but also provocative piece that has made us think about how we frame our policy." (E1, Professor, human geography)

Although there was little evidence from the accounts of the engaged academics that they were able to directly overcome political barriers, nor that they deliberately sought to do so, they did argue that their work made it easier for others to do so by contributing new perspectives and arguments to policy debates. A Professor of sociology (E7) said that the value of his work lay in the 'new sorts of perspectives' and 'new sorts of arguments' that it made available to policy makers and which could be deployed in policy debates. Like other engaged academics, he believed that he had influenced the way in which policy makers conceptualized cultural governance. However, while most of the technical policy makers considered the conceptual or enlightenment function of research to be important and 'helpful to provide insight' (P15), the time-pressed nature of their work meant that they were often looking for knowledge which was more obviously immediately relevant:

How is it used? How is it presented? What relevance does it have? What can you do with it? Even if it is philosophically enlightening and an important thought point, if you can't engage with it and grasp it and use it it is a lot harder to gain currency and credibility. (P15, civil servant)

From the perspective of the technical policy makers, what was most valuable was for academics to offer broad introductions to an area, offer quick responses to specific policy questions, or point out how a specific item of academic knowledge was relevant to policy. According to a civil servant (P9) this is the 'translation bit' which involves academics connecting 'with the reality that policy officials are in' and demonstrating why their knowledge 'is useful'. Often, this work involved providing a rough answer to a policy question or a broad summary of an area from a policy-oriented perspective. As a civil servant (P16) put it, "My best case scenario is that they go, "Having read all the evidence, here is a starter for 10." He would only routinely engage with academics who were willing to discuss a broad topic rather than focus on the details of one or two

items of research. The difference, for another civil servant, was between knowing a 'little bit really well' or knowing a whole 'area':

There are some people you talk to who know their little bit really well and that is all right, but often that little bit is not very helpful for a policy maker because it is too small. But there are some people who know their area really well and if that happens to coincide with a chunk of your area that is incredibly useful. (P15, civil servant)

A lack of time means that technical policy makers are frequently asked to rapidly supply approximate answers to specific policy questions which extant academic research cannot answer precisely. Where the engaged academics appeared to be most successful in transferring knowledge was when they supplied technical policy makers with a broad factual overview of a policy area, conceptualized within a clear interpretative framework, which could be drawn on to provide approximate or probable answers to specific policy questions without recourse to further research. Where they sought to transfer knowledge which offered a more radical challenge to policy they found that technical policy makers might be unwilling or unable to engage in mutual knowledge exploration or recognise and discuss the assumptions which underpinned their policy beliefs. For example, in the following extract a Professor of management describes what happened when he tried to question civil servants about some of the fundamental assumptions he believed to underpin their current policy position:

You ask them questions and they simply won't answer, they will change the topic. I've actually raised things and the civil servants have said, "I'm sorry that issue is not available for discussion," thats a phrase they use quite often, not available for discussion, and they are really quite ruthless about this. They really won't talk about it. (E13, Professor, management)

E13 felt that he was unable to have more than a marginal influence on the framework of beliefs within which policy is made because technical policy makers were unwilling to collaborate in the exchange. Instead, they changed the topic and denied further discussion.

The engaged academics did not describe any episodes in which they believed they had successfully influenced political policy makers. For a Professor of economics with

extensive experience of working with policy makers, the primary cause of this was a lack of time on the part of politicians. In his view, although the same problem could occur with very senior technical policy makers, it was politicians who were most pressed for time:

Politicians have a certain amount of time they can spend on anything before they're wheeled off to their next meeting and they've got to refocus on something completely different...If it's a complex problem that needs proper understanding you're likely to need serious amounts of time to work it through, think about the logic, think about where it is, and those things are close to impossible to have with serving, very senior officials, and that wouldn't just be politicians. But sometimes you can get proper face time with a senior public official who really does want to have that kind of length of detailed conversation. (E8, Professor, economics)

As the engaged academics sought to share knowledge by developing shared interpretative frameworks and challenging overly simplistic conceptualizations of policy issues, having sufficient time to interact with policy makers to fully explore a topic was important. However, in their accounts, sufficient time was only likely to be available when working with technical policy makers who were already interested in a topic; as a Professor of management (E5) reported, in the absence of a pre-existing interest there was only a small chance of influencing policy, because 'government have got to have a problem and you have got to have a solution when they have a problem.' A former Cabinet Minister confirmed this view when she reported that she rarely had long term relationships with academic researchers and only drew on research to solve specific problems:

I'm not sure that I did have a good relationship with researchers. Not that I had a bad relationship, I don't think I had a relationship. We met researchers...but we never really cemented that partnership and understood what we wanted from each other. Very often we met over one piece of research...We called on research when we thought we needed it. (P8, former Minister of State)

Rather than giving academic researchers the 'serious amounts of time' the Professor of economics believed was needed to develop the shared framework needed to support the conceptual use of research, the former Minister only met researchers over single research projects or reports commissioned by or accessed by her department. There was little evidence from the interviews with political policy makers to show that they often made themselves available for the type of extended dialogical processes which

were the preferred knowledge sharing approach of the engaged academics. Even in situations which might permit the engaged academics to mutually explore the fundamental beliefs and assumptions of political policy makers, such as when politicians are in opposition and therefore have more time to engage in discussions centred around academic contributions to policy, the engaged academics felt that they were unable to overcome political barriers. An example of this was offered by a Professor of social policy who attempted to contribute to Labour Party policy as an invited expert rather than as a party member:

I've wasted a lot of time over the past five years trying to get the Labour Party to have a think...I gave evidence to the Husbands Review which was their 14-19 review on skills. That was really quite depressing...it was all quite low-level stuff. There was no attempt on the part of the Labour Party to rethink the fundamentals...there is a deep resistance...an ideological one. (E13, Professor, social policy)

The review E13 is describing appeared to be operating on a technical and administrative level, developing the fine details of policy within pre-existing parameters, rather than influencing the broad direction of policy which, in the view of E13, was predetermined by ideological commitments. If the discussion the academic was seeking in which the Labour Party 'rethinks the fundamentals' of policy was occurring at all, it did not appear to be happening within a forum he had access to.

Vocational skills policy case study part 1: The role of E13, an engaged academic

The institutional landscape of policy making on vocational skills in the UK encompasses contract research agencies, academic research centres, charities, policy think tanks, government departments, and government agencies, which constitute a diverse but densely linked research network. The Department for Education (DfE) and the Department for Business, Innovation and Skills (BIS) are the two main government departments which share responsibility for developing and implementing policy with relevance to vocational skills and for funding the provision of education and training through their executive agencies (Stasz 2015). A substantial amount of analysis

relevant to vocational skills policy is conducted or funded by BIS; in 2013/14 it commissioned 130 research projects and literature reviews {BIS:2014uo}.

As Sung and Ashton (2014) and Wolf (2010) argue, the policy framework has been strongly influenced by the human capital theory developed by Becker (2009), which focuses on the economic returns to investment in education. Becker's human capital theory attracted substantial empirical support and offered policymakers tools with which to respond to the challenges of international competition. Supply side theories based on human capital theory provided policymakers with a ready explanation for the high levels of unemployment during the period: the inability or unwillingness of individuals to respond to changed economic circumstances by learning new skills (Sung and Ashton 2014). Policy makers were thus concerned to develop policies designed to increase the supply of skills.

The widespread adoption of skills policies based on human capital theory increased the supply of highly educated workers in both early industrializing societies, such as the UK, and in more recent developers, such as China. The rise of information technologies and multinational corporations (MNCs) increased the demand for highly skilled workers, but in the UK many firms still retain traditional low skill mass production systems with nearly a fifth of jobs requiring less than a month to learn (Felstead et al. 2007). As a result, the UK labour market is characterized by an hourglass shape with demand for high- and low-skilled workers but a dropping out of the middle, a phenomenon that has been called the 'low skill equilibrium' (Finegold and Soskice 1988).

At the core of the debate about skills policy are two competing sets of policy core beliefs which determine whether policymakers should focus their attention primarily on pursuing market-based reforms to the supply side of the skills equation: a supply-side position which focuses on improving the supply of skills by fostering a more effective marketplace for skills, driven by individual demand; or a demand-side position which focuses attention on interventions which change how businesses

operate in order to influence the demand for and utilization of skills. The two alternative prescriptions derive from competing diagnoses of the problems faced by the UK vocational education and training system and generate competing policy solutions for the 'low skill equilibrium' problem. During the course of this study, vocational skills policy saw a shift from a supply-side position to a demand-side position.

E13, a Professor of management and engaged academic, is one of the foremost critics of skills policies that focus on supply and is a proponent of policy interventions which alter the incentives for employers to demand higher skill levels. His career has been spent researching industrial relations, vocational education, and skills, mostly in ESRC funded research centres which maintain relational connections to technical policy makers in government departments, agencies, and committees but which emphasize academic rigour. E13 developed an interest in the policy formation process and sought to take part in as many policy advisory committees as possible in order to engage in exploratory discussions about policy and to act as a participant observer; he saw his role as both researching the use of vocational skills in industry and vocational skills policy. His engagement with think tanks was, however, limited because, he argued, he was too distant from London to be able to fully participate in events and meetings which might be only marginally influential. He did not write pamphlets for think tanks but sought to influence the thinking of the think tanks and charities that he felt had most policy influence.

A review of E13's work conducted for the ESRC concluded that he had been influential in shifting the conceptual debate around skills towards the demand-side position. However, he reported that he had encountered significant resistance to his analysis from both political and technical policy makers:

David Miliband, he was junior minister in DfES I think, I remember saying to him, "David, sooner or later the government is going to have to do something about employers in relation to skills," and I remember him saying very firmly, "Oh, there is nothing we can do about employers!"

The policy civil servants, all they can do is learn the script from whatever has been written down before. [They] are basically supply side people...none of them have been very keen to talk about demand...You ask them questions and they simply won't answer, they will change the topic. I've actually raised things and the civil servants have said, "I'm sorry that issue is not available for discussion," that's a phrase they use quite often, "not available for discussion," and they are really quite ruthless about this. They really won't talk about it.

E13 argued that as a result of this resistance few, if any, of his arguments had directly been taken up within English skills policy. He and other interviewees working on vocational skills policy argued that this was because the dominant belief among policy makers was that firms must be treated as black boxes and government must not intervene. This assumption is theoretically founded in the claim made by neoclassical economists that firms respond rationally to market forces and so interference with their operation is likely to reduce market efficiency and so restrict economic growth. The assumption has become embedded in political thought to the extent that policy makers could contemplate any intervention that would interfere with the internal operation of the black box. As a result, a barrier emerged preventing the take-up of knowledge which contradicts this belief.

When the Coalition government came in to power, E13 was invited to talk to the incoming Ministers in BIS. His connection to these political actors was maintained and controlled by technical policy makers, the civil servants:

[T]he ministerial team...were actually amazingly keen to talk to academics although it wore off quickly, I think because the civil servants decided it was too dangerous and put a stop to it.

E13 saw his role as offering an academic critique of existing policy rather than as a direct contributor to future policy. He did not produce specific policy recommendations with details of how they may be implemented. When invited to write a policy paper for a government agency, E13 used the bulk of the document to criticize current policy, with details of recommended policies and their

implementation given a relatively small amount of space. E13 made policy suggestions verbally to individuals he considers to be influential in the hope that they might take his ideas further. He blamed the difficulties he felt he was having in translating ideas to policy on the adverse conditions for policy debate within BIS. He felt that in BIS, ideas which did not conform to the current departmental philosophy could not even be considered. When frustrated that his ideas failed to find purchase he accepted a role as a policy critic rather than policy maker:

My experience in England is that it doesn't matter what the packaging is, most of my ideas are completely unsaleable because they go beyond the traditional supply side model...with BIS I have likened it in some of things I have written to being to some extent like a religious belief. To a certain extent you end up being the blasphemer. You come over and basically tell them that their faith is not well founded and they get very upset about that. The thing I've learnt—I think several other academics would agree with me—our job is to tell people very uncomfortable things in as nice a way as possible.

The outcome of E13's knowledge transfer work has been conceptual impact on some technical policy makers. E13 could not find sufficient political support for his ideas because they contradicted the departmental philosophy and he had limited access to political policy makers; he tended to rely on the contacts he had established with civil servants as a result of his work in ESRC-funded research centres, but these did not support the transfer of knowledge which offered a radical critique of the status quo. Nonetheless, E13 was able to use his knowledge to shift the policy debate towards a recognition that more had to be done to stimulate employer demand for and utilization of skills.

7.4 Academic policy experts

This section presents the analysis of the knowledge utilization outcomes of the relational and epistemic work of the academic policy experts. The analysis draws

primarily on the interview reports of the academic policy experts and the public policy makers. The second part of the case study on vocational skills policy is presented at the end of the section; this part focuses on the role of X17.

Table 15 Policy experts' perceived outcomes of policy engagement

	Discipline	Perceived outcomes of policy engagement
X1	Social Policy	Evaluation work had an 'almost immediate impact' in contributing to policy decisions concerning funding for individual programmes. Typically the policy decisions were made by technical policy makers rather than politicians.
X2	Economics	Contributions to think tank publications which had 'direct policy implications' concerning secondary aspects of policy. However, he did not 'have the courage' to publicly challenge the politically salient policy solution of devolved policy making, despite his research contradicting it.
Х3	Economics	A significant impact on how technical policy makers conceptualized and developed policy through the introduction of economic tools to land use planning. However, some of his output was 'suppressed' at a political level when it contradicted government policy, meaning that he had limited impact on the overall direction of policy.
X4	Social Policy	Success in altering the frameworks of knowledge within which some policy decisions are made; his research was used directly to inform the decision making process and to get policy makers to 'focus on what the real issues are'
X5	Economics	Has made 'contributions to the debate'; technical policy makers in international institutions have accepted some of his ideas; confident that he has had an impact on technical aspects of policy.
X6	Management	Influenced the development of two government White Papers, conceptually through the accumulation of evidence to inform the conceptual frameworks of policy makers and instrumentally through the use of specific findings to justify the need for policy change and inform the choice of policy solutions.

	Discipline	Perceived outcomes of policy engagement
X7	Management	Produced a report which was utilized instrumentally to oppose a proposed government policy and maintain the <i>status quo</i> .
X8	Economics	Work of his research centre led to a 'change in mind-set' of technical policy makers within a government department; has had 'direct and indirect' impact on policy development.
X9	Management	Has 'contributed to conversations' in government and produced research which 'has been very useful' to technical policy makers.
X10	Economics	Conceptual and instrumental impacts on technical policy makers: 'I've helped people think around most policies and made quite a lot of minor modifications'.
X11	Social Policy	Evaluations commissioned by civil servants have 'fed into the policy development process'. Outputs which were critical of government policy were rejected by Ministers and Special Advisers, but conceptual impacts through practitioners and policy networks.
X12	Social Policy	Evaluation outputs were utilized instrumentally by technical policy makers to compare and recommend policy interventions.
X13	Social Policy	Evaluation outputs were utilized instrumentally by technical policy makers to compare and recommend policy interventions.
X14	Economics	Not yet able to identify any impact from research: 'I haven't been thinking of influencing so-and-so by a particular time'. Intends to influence policy over the longer term: 'we will be able to provide helpful answers to big problems'.
X15	Social Policy	Major research finding used to challenge current policy direction; initially resisted by policy makers in the Department for Education, it eventually influenced policy through policy networks and 'upwards' through practitioners.

	Discipline	Perceived outcomes of policy engagement
X16	Social Policy	Significant conceptual impact on policy development through the introduction of a new approach to crime reduction in the Home Office; multiple instrumental impacts on programme selection through evaluation research.
X17	Economics	Changes to regional development policy and instrumental influence on the policies and programmes adopted by local authorities. Contributed to a conceptual shift among policy networks towards demand-led skills policy.
X18	Management	Survey results utilized instrumentally by civil servants in the development of industrial policy. Contributed to a conceptual shift among policy networks towards demand-led skills policy.
X19	Management	Research utilized instrumentally and conceptually in the development of policy interventions aimed at small businesses. A 'source of robust evidence and a lot of the rationale' for an Act of Parliament.

7.4.1 Instrumental and conceptual knowledge utilization by technical policy makers

The policy experts were confident that they had been able to successfully transfer their knowledge directly to technical policy makers but believed they had had less success in overcoming political barriers or influencing political policy makers. Rather than directly resulting in substantial changes to public policy, they perceived that their knowledge had been utilized to develop secondary, less politically salient, elements of policy and had contributed to the development of frameworks of knowledge which formed the conceptual background for policy development.

The policy experts believed that the effect of academic knowledge on policy was only visible over the longer term, and so significant policy change was a matter of 'accumulating of a very overwhelming balance of evidence' (X3, Professor, economics). Having an 'impact' on policy thus meant that academic knowledge had

been listened to and accepted by policy makers even if it did not lead directly to an immediate change in policy. The willingness of the policy experts to maintain long term relationships with policy makers appeared enable them to develop a better understanding of how to accomplish this task.

For the policy experts, successful knowledge transfer meant that 'people listen to the evidence first of all and then make their decision' (X1, Professor, social policy). They recognized that policy making processes occurred on short timescales and there was a limited window of time during which academics could directly intervene. However, the policy experts did not 'buy the argument that if you don't immediately influence government then it's a waste of time, because they tend to ask the same questions and the same questions continue to be relevant' (X14, Professor, economics). In the opinion of many of the technical policy makers, this approach formed an important model for academic policy influence because the work of academics who were 'clear in their advice', who 'made an effort to get round and meet all the key officials', and who gradually built up an evidence base would 'seep in to thinking, gradually reshape the policy' (P18).

However little direct evidence there is that they take notice of really clear thinking and evidence bases directly, they do take note of it underneath. The civil servants take notice and you gain some traction. (X10, Professor, economics)

While the policy experts were confident that they could influence policy over the longer term, particularly in relation to more minor or secondary elements of policy which were substantially determined by the work of technical policy makers, they could struggle to influence political policy makers. Many of the policy experts described frustrating episodes in which they were unsuccessful in attempts to encourage political actors to listen to them. Frustration was most frequently expressed in relation to interactions with politicians; in particular, interactions with serving Ministers were not regarded by the policy experts as ideal opportunities for exchanges of knowledge because Ministers lacked the time to engage in an exploration of policy assumptions or an interactive determination of policy proposals:

Have you ever tried to have a seminar with Ministers? I have now, but Ministers are impossible people to get more than 20 minutes with, they don't have time to think basically. I mean I've just given a seminar briefing to the Cabinet sub-

committee on Local Economic Growth. That lasted for four minutes and then ten minutes of one of them rambling on irrelevantly, and then a couple of more junior people asking sensible questions and making sensible points. So it was such an unsatisfactory process. (Professor, economics)

Similarly, although the work of a Professor of management (X18) 'was definitely feeding in' to a Labour Party manifesto, 'when you looked at what they actually came out with in the manifesto...apart from two citations to evidence, I could find little in terms of policy recommendations'. His work 'was having influence through the process...but in term of policies it seemed to fade away'. The policy experts even described some cases in which knowledge which had been successfully translated to technical policy makers was suppressed politically:

The report was going to be published and we were informally told that, because at a political level it had been decided that the results might be used by those who are critical of government policy, it was basically suppressed. (X3, Professor, economics)

Although X3 was confident that he had been able to contribute to the broad framework of understanding of the technical policy makers within a government department, his knowledge was rejected politically, by the Ministers running the department. In his account the technical policy makers were depicted as rational allies who supported his research and accepted its implications and the politicians were viewed as thinking only of the effects of the release of unfavourable information on their public image. For their part, the politicians argued that the fast-paced nature of the policy making process combined with the lack of long term, trust-based relationships with researchers made it difficult to use academic knowledge:

It's not that you deliberately sit there and say, "I'm gonna ignore that evidence cos I care about the electorate more." It's that at the point at which you make the decision there is not a good enough working relationship with researchers for you to sort it out amongst you and come to some sort of common sense answer. (P8, former Minister of State)

Vocational skills policy case study part 2: The role of X17, an academic policy expert

X17, a Professor of economics, embraced a view of vocational skills policy in which both supply and demand are recognized as important factors. He adopted a pragmatic stance toward policy, arguing that radical changes of policy were mostly unachievable. Instead, substantial improvements could be achieved through relatively small but precisely targeted policy changes. From this perspective practical knowledge about the limits of what can be achieved are as important as fundamental theories and empirical observations:

Given all that's been done on apprenticeships, how do we build a better apprenticeship programme for the future?... That's a job of policy analysis and of getting an in-depth understanding of what's working, what's not working, the interrelationships between different marketplaces and so on, not having the most recent sophisticated regression program with a new dataset.

In the early part of his career X17 was involved in establishing a university-based applied research centre which conducted work for local and central government and government agencies such as the TECs. This involved adopting an entrepreneurial orientation to obtaining research funding and required him to be attentive to the demands of partner organizations and the staff he was managing. Through this work he developed a sensitivity to institutional and individual characteristics and positions which was to be useful in his later work as an intermediary between academic and applied social scientists and technical policy makers, which gave him experience of what was involved in moving research in to policy through the technical pathway. His approach to knowledge transfer involved persuading policy makers individually or in small groups rather than campaigning publicly around an issue and was aware of the need to be careful how criticisms were phrased. For him it was critical to maintain personal relationships even if this sometimes meant withholding criticisms:

Do you get policy changed mainly by getting the headline in the Daily Express or the Guardian or whatever? Not necessarily...the way to do it is much more gently, you do it directly, but you do it in a way which is not, as sometimes these things are in academia, deliberately meant to antagonize people or deliberately to say, "Well you're bloody wrong! It's crap!" You'd get absolutely nowhere.

X17 focused on the importance of paying attention to the individual characteristics and positions of policy makers. He expressed a nuanced view of the processes and personalities within government, arguing that paying attention to relationships with technical policy makers was critical to the success of knowledge transfer. In his later career he was employed by a government agency and so was able to obtain privileged access to policy makers within government and to the conversations and debates which take place inside government. This conferred an awareness of the stances of individuals and an ability to influence them one by one. He argued that the internal dynamics of the civil service made a considerable difference to the outcome of attempts to transfer knowledge.

The relationship and personal dynamics and views about trust and integrity and respect—all of those things vary over time and between groups, and they matter enormously, it seems to me...I don't think that is entirely a question of civil service culture, or Ministerial culture, or departmental culture, though all those things matter. In part it is a matter of who is in the post and their own agenda.

X17's insider status was important in enabling him to transfer knowledge through technical pathways. He contrasted his status with the outsider status of academics who had 'rather more freedom...but on the other hand rather less access, rather less need for government to listen'. However, while insider status conferred access to senior civil servants it also entailed accepting limits on what he could publicly write. X17's relationship with policy makers in BIS was sometimes strained and he was subjected to disciplinary action: 'One day I had a huge row with the Head of Analytical Services in BIS...and they said, "You can't publish this. It runs counter to our research discourse."'

X17 was attempting to push a resistant government department to reformulate its vocational skills policy to take greater account of the demand for skills. However, the department remained attached to a supply-side dominated approach which was strongly pushed by the then Prime Minister, Gordon Brown. X17 became increasingly frustrated and vocal about the need for a different approach. In order to encourage government to change policy, he published a report which drew attention to the failure of current policy. This drew further criticism from the Head of Analytical Services:

[T]he same guy rang me up and said, "Have you seen the headlines in the Times this morning?" And I said, "No!"—I had of course—well he said, "Government failing to meet skills ambition." I said, "Ooh, that's unfortunate, isn't it. The bottom line is this. I didn't write that headline. What the Times Higher says is what the Times Higher says." Of course, we'd written the article, we'd briefed the journalist.

The change of government in 2010 offered an opportunity for BIS to shift its policy stance towards that recommended by X17. A conceptual shift toward demand-side intervention was signified in Skills for Sustainable Growth (BIS 2010), in which BIS stated that it would not "tell employers what they should do, but instead support them in implementing proposals they make to raise their game on skills" (p. 13). However, X17's move to a more campaigning role was to have significant consequences in the longer term. His agency's remit was changed by BIS so that it was no longer able to criticize current policy; instead it was charged with managing the delivery of a series of programmes designed to encourage employer demand for vocational skills. Small policy adjustments had been made, including the launch of several pilot programmes to encourage changes to employer behaviour, but more significant policy change did not occur.

7.5 Academic policy entrepreneurs

This section presents the analysis of the knowledge utilization outcomes of the relational and epistemic work of the academic policy experts. The analysis draws primarily on the interview reports of the academic policy experts and the public policy makers. The second part of the case study on vocational skills policy is presented at the end of the section; this part focuses on the role of N5.

Table 16 Academic policy entrepreneurs' perceived outcomes of policy engagement

	Discipline	Perceived outcomes of policy engagement
N1	Social Policy	Implementation of significant reforms to higher education and health services policy and funding arrangements; prevention of unwanted reforms to schools policy.
N2	Economics	Implementation of significant changes to monetary policy in the UK and Hong Kong and a broader conceptual impact: 'I played a direct and fairly major role in several of the more important institutional changes and the way the monetary system has worked' [and] 'some of the things one has written have played a role in changing the conceptual background that people have about monetary economics as a whole.'
N3	Economics	Implementation of policy proposals in the budget: 'one of my earlier ideashas been in George Osborne's budget three years in a rowand I can clearly prove that this was my idea'. Policy proposals inserted into major Government reports; changes to school quality assessment regime.
N4	Social Policy	Implementation of substantial changes to social work inspection regime; 'radical reform' of a third of local authority social work departments and significant changes to others.
N5	Management	Implementation of substantial changes to further education policy and funding arrangements; introduction of levy on firms to fund apprenticeships.

	Discipline	Perceived outcomes of policy engagement
N6	Social Policy	Implementation of substantial changes to schools and early years funding arrangements; introduction of 'quasi-market' reforms and competition to public services; changes in the policy beliefs of the Labour Party concerning the arrangement and funding of public services.
N7	Economics	Implementation of a series of substantial changes to tax and benefits policy: 'I laid down what I thought were ten biggish chunky ideasnine of them happened in some form or another'.

7.5.1 Instrumental and conceptual knowledge utilization by technical and political policy makers

The academic policy entrepreneurs believed that they had, in collaboration with others, contributed directly and instrumentally to significant changes in public policy, and they gave detailed accounts of their involvement. Their accounts mentioned by name individual policy makers and academics who had assisted them in producing policy proposals and arguments, translating them into formal government policies, and sometimes in implementing them in practice. While they believed they had played important roles in the implementation of policy change, the policy entrepreneurs also called attention to the role of chance or happenstance in the successful implementation of policy proposals, arguing that they could not have been successful in the absence of a conducive political environment or without the support of a network of political contacts which was developed through broader policy networks or through membership of a political party.

Common to the accounts of the academic policy entrepreneurs were narratives in which academic research was applied to policy problems to produce 'raw' policy ideas which subsequently became policy after making their way through networks of policy makers and undergoing a series of modifications and alterations, some of which the policy entrepreneurs saw as desirable and others less so. For example, a Professor of social policy (N1) said that 'from out of [initial ideas in a book chapter] we produced

what came to be, I suppose, pretty much the way we now finance higher education—but I wouldn't have done it quite the way the government have done it.' The academic policy entrepreneurs were heavily involved in the process of applying their knowledge to the production of policy proposals and in piloting their proposals through the networks of technical and political policy makers. The following extract, in which N1 describes how his one of his ideas became policy, offers a sense of this process and his involvement in it. In what N1 labels a 'network approach', a novel policy solution was introduced by working informally through 'key people' until the solution had gathered sufficient support and was implemented by Ministers:

That happened by [an academic colleague] and I working the ideas out. [He] went and saw the Treasury people and they argued through what the problems would be if we tried to do this, getting it to the point where we thought we'd got the bugs sorted out and the idea of the Student Loans Company getting the money going to the local authorities, getting the bridging loan done off the public funds, and all the stuff that we talked about in more detail. That came through [my colleague] doing the hard slog of seeing MPs, giving the evidence as we both did to the House of Commons Select Committee, and working not on our own but to key people we thought we might influence in government—so that's a kind of network approach. (N1, Professor, social policy)

Some of the academic policy entrepreneurs were directly involved in the development of policy as political appointees working inside government. The positions enabled them to act as a policy maker rather than as an academic and work to directly implement their own ideas into policy. For example, when a Professor of economics who was a member of the Labour Party was invited in to government he was able to introduce a range of policy solutions co-produced with colleagues:

I was getting known by the figures who were at the top of the Labour Party in '95. Gordon Brown asked me through his people to write down my thoughts of what key policy engine ideas would constitute...So I laid down what I thought were ten biggish chunky ideas...nine of them happened in some form or another. (N7, Professor, economics)

Other than through membership of a political party, the academic policy entrepreneurs could come to the attention of political policy makers through their reputation with technical policy makers and their activities within a policy network. Three of the academic policy entrepreneurs were invited by a Minister to produce a report

containing specific policy recommendations. Such an invitation involves being appointed to a formal position within the civil service, conferring access to resources and generating substantial publicity, which makes it more difficult for policy makers to refuse to implement the subsequent policy recommendations. A Professor of management (N5) described what happened when she was near completion of her report: 'I came in, I told him what I was doing and he thought it sounded sensible so he said, "Okay, right, we're going to do it all". In N5's case, 'almost all' of her recommendations 'did get done and actually we changed a lot'. The policy recommendations made by a Professor of social policy (N4) asked to produce a major report for a Minister were also implemented into policy, but 'took an amazingly long time' because she was 'trying to achieve a total culture change which is a matter of years rather than months'.

As well as being involved in the development and/or implementation of specific and detailed policy solutions, one of the academic policy entrepreneurs (N6, Professor, social policy) described how his work had influenced change in a party's core policy beliefs, the "fundamental policy positions concerning the basic strategies for achieving core values within the [policy] subsystem" (Jenkins-Smith and Sabatier 2007, p. 133). He was a participant in discussion groups and pressure groups which sought to influence the Labour Party's core philosophical positions. As a result he found himself near located the philosophical core of Labour Party policy development. His knowledge transfer work included the production of arguments intended to legitimize different methods of achieving the political goals of the party and the development of the arguments into specific policy proposals. He 'discussed an idea that eventually became the Pupil Premium, and another idea that became the Child Trust Fund'. He was subsequently asked by Tony Blair to work for him at the centre of government, where he was worked to implement the policy prescriptions developed from his political theorising.

The analysis presented so far might suggest a relatively linear trajectory in which the academic policy entrepreneur develops their reputation within a political party or policy network before being invited to apply their knowledge to the development and implementation of policy change. However, the accounts of the academic policy

entrepreneurs suggest a far more contingent reality in which happenstance and changes in the political opportunity structure plays a significant role. This is illustrated in the account of a Professor of management:

I just felt like I was getting absolutely nowhere, lots of people I knew inside government would agree, absolutely totally nowhere, nobody in politics could or would take any notice because it was a mess. So I basically wrote one last thing and thought, "Okay that's it, I'm giving up. "And then there was an election and there was no reason for me to think that it was going to make any difference—because this was a cross-party, across the piste kind of a mess, this was something that had been getting worse and worse in my view since the 1980s, didn't matter who was in power. [Laughter] I wasn't the only person who thought this. And then suddenly I got this phone call…but it could equally well have been a different Minister with different Special Advisers and my view in 2009 would have been the correct one. (N5, Professor, management)

N5 had attempted to influence skills policy for many years by writing articles aimed at general and at policy audiences and by speaking to partisan and nonpartisan actors, without obvious success. However, when a new government was formed an opportunity arose to contribute to policy by making use of networks she had developed with influential party political actors. Her approach was based on a recognition that key individuals play pivotal roles in the policy making system and that many of these actors are aligned with political parties; consequently her knowledge transfer strategy entailed developing relationships with key actors and attempting to influence the thinking of the political parties through policy intermediaries. However, the account reveals how close this could have come to a failure of academic-practitioner knowledge transfer.

A similar account is offered by N4 (Professor, social policy), who put her success in influencing policy down to having developed 'an analysis which may not have been visible', that is, having an account of why current policy was not effective. Further than this, however, there was a 'huge serendipity' to her success:

I knew the person hoping to be the Children's Minister and his policy adviser because I'd been briefing them and I got on well with them. When they were preparing for the general election the adviser said, "We haven't got anything on [N5's area of expertise] and we should have," so they thought I'd be a good person. So they phoned me up and asked and then they didn't get elected, it was a coalition government. Because at that point the coalition government was trying to look

slightly nice the DfE decided that their first policy announcement should be that I would do this review...It was very much a chance combination of things—it's only in the first years of a government that you can do a radical review because I was reviewing the incompetence of the Labour Party. (N4, Professor, social policy)

While the academic policy entrepreneurs were successful to the extent that they had been able to make instrument contributions to policy, their accounts suggested that their contributions were highly contingent on a favourable political opportunity structure.

Vocational skills policy case study part 3: The role of N5, an academic policy entrepreneur

As an academic invited in to work with the Coalition government, N5 (Professor, management) played an important role in translating into policy the proposal that vocational education and training (VET) should continue to be subsidized by government but that it should be delivered through a market-based system which is responsive to the demands of individuals. A substantial number of the proposals she supported were enacted by government.

N5's early career was spent working for a policy intermediary in America. This formed an important source of knowledge about the practical constraints of policy making. During this time she realized that it was primarily the research projects commissioned by powerful Congressional Committees which were able to influence government policy. As a result, N5 learned that a situated understanding of the relational structure of political power was vital in order to translate research in to policy.

Although the system of policy making is different in the UK, N5 believed that some of what she had learned regarding identifying the location of power could be transferred over to the UK context. On her return to the UK she obtained an academic position and undertook a series of research contracts for which she was required to find her own source of funding. She worked her way up into a traditional position, eventually

becoming Head of Department. During this time she participated in a wide range of research with her colleagues and developed non-academic post-compulsory education as her specialist area of expertise. As she increased her knowledge in this area she increasingly came to the realization that government policy in this area was problematic.

At this point, the sensitivity to the relational structure of power that N5 had gained from working at an intermediary became important in informing her choice of pathway. She chose to contribute to a wide range of think tanks—on the left and the right of politics—in the hope of translating her ideas across to policymakers. She wrote a pamphlet for a right-leaning think tank containing a series of detailed policy recommendations which became a template for the policies subsequently adopted by government. The think tank was ideologically aligned with the position adopted by N5, who argued in favour of policies derived from neoclassical economic principles. The pamphlet contained substantial detail concerning the financial implications of her policy recommendations and how they could be implemented. However, it was to be the last think tank contribution N5 expected to make, having by that point nearly abandoned her attempts to influence policy.

It was at this point that a policy window opened. A new Coalition government was elected containing Conservative ministers who were intellectually aligned with the ideas of the right-leaning think tank N5 had contributed to. Problems with the existing vocational education system came to the attention of the new government ministers. N5 was invited to enter government to produce a report with recommendations for policy change.

N5's expertise, her development of a detailed analysis of the policy landscape for vocational skills and policy recommendations, her contributions to think tanks which were ideologically aligned with an incoming government, the personal connections she developed with political advisors, and the change of government meant that a supportive context and effective pathway for the instrumental utilization of her

knowledge was available. As a result, many of her policy recommendations were translated in to public policy.

7.6 Conclusion

The analysis has revealed substantial variation in the perceived knowledge utilization outcomes associated with each type of academic social scientists. The traditional academics could identify only limited or symbolic uses of their knowledge. They believed that their knowledge had not resulted in any identifiable changes in policy and felt frustrated that they had not been listened to by policy makers. The engaged academics, on the other hand, believed that they had been listened to by public policy makers and that by offering critiques, frameworks, and broad perspectives they had influenced how technical policy makers conceptualized policy. They 'influenced thinking' (E7) through something which appeared to resemble the 'generative dialogues' described by Beech et al. (2010). However, they struggled to trace any specific changes to policy which resulted from the instrumental application of their research. The academic policy experts and academic policy entrepreneurs were able to identify instrumental applications of their research to policy and changes in the way technical policy makers conceptualized policy. The knowledge of the academic policy experts was used by technical policy makers to evaluate and recommend specific policy interventions and to influence the frameworks within which policy decisions were made. However, while the academic policy experts perceived that their knowledge was used to inform the technical details of policy, the academic policy entrepreneurs identified more radical and substantial changes to policy resulting from their policy engagement. This typically occurred when a change of government presented an opportunity for influence to be brought to bear through political channels.

While a clear pattern emerges from the outcomes analysis, there are outliers. T5, a Professor of economics, was invited by a leading think tank to publish an analysis of the banking system which is likely to have had some conceptual influence; he reported that 'there's quite a lot of sympathy for that sort of view', suggesting that his argument

had been understood 'but politics means it will never happen'. He contributed to the work a Parliamentary Select Committee which ultimately did not apply his evidence instrumentally in the development of policy proposals. It is possible to speculate that T5 might not have distanced himself from the public policy field to the extent that he did if his ideas had received a more favourable reception.

Traditional academics believe that academic social science in general has little direct impact on public policy, which is overwhelmingly driven and controlled by political interests. This is borne out by their experiences of public policy engagement, in which they perceive they have little influence. Even when they recognize that their knowledge has been utilized, they believe it is used symbolically to justify a set of policies which had already been chosen or a policy choice which the research does not fully support. This appears to reinforce a view of policy making as an intramural activity. This suggests that their negative perception of policy influence may be self-reinforcing in that it leads to a greater relational distancing from the policy field.

At the other extreme, the academic policy entrepreneurs were centrally involved in the development of public policy and were able to identify and describe in detail episodes of the conceptual and instrumental utilization of their knowledge by technical and political policy makers. The analysis suggests that the 'self-application' of academic policy entrepreneurs' own knowledge to the development of policy proposals plays a particularly important role. What was transferred was 'transformed' knowledge in the form of policy proposals and justifying arguments rather than research findings. It is possible, however, that academic policy entrepreneurship is not always directly associated with significant policy change, with academic policy entrepreneurs playing more of a supportive role in a broader movement. N3, for example, claimed to have been the driving force behind a series of policy changes. Triangulation with the interview report of P18, a senior civil servant within the same government department, suggested that N3 had less political influence than he claimed. N3's knowledge was utilized conceptually by politicians, forcing them 'to justify what they were doing', but was utilized instrumentally only by technical policy makers; an instrumental link between his knowledge and change in politicians' policy stances could not be identified.

Most of the social scientists, along with the technical policy makers, perceived that research was used conceptually. This finding supports previous studies which have found that around half of academic social scientists report the conceptual utilization of their research by policy makers (e.g. Landry, Amara and Lamari 2001b). Evidence that any of the types other than the academic policy entrepreneurs gained sufficient 'political visibility' to influence politicians directly was limited. While the engaged academics believed that they had influenced technical policy makers, however, they had limited interactions with political policy makers and were generally unable to identify policy changes resulting from their knowledge transfer work. However, the production of knowledge which can instrumentally be applied to policy was not their primary objective. Similarly, although the academic policy experts did seek to influence public policy, they sought to do so gradually over time by influencing the framework within which political debates are held. As a result, it is possible that the knowledge of the engaged academics and academic policy experts had significant indirect influence on political actors but the methods used were insufficiently sensitive to detect this.

The next chapter develops some of these points. It brings the preceding chapters together to summarize the overall findings and highlight the implications for knowledge transfer theory. It further discusses the association between the academic policy entrepreneurs and significant policy change and suggests some explanations for this finding. It also discusses the influence of organizational and structural factors which have been hinted at in the analysis so far. Finally, it makes some further points in regard to the evaluation of knowledge utilization outcomes.

Chapter Eight: Discussion and Conclusion

8.1 Introduction

This chapter develops the main theoretical and practical contributions of the study. It:

- highlights the critical role of knowledge producer agency in knowledge transfer;
- argues that the relational and epistemic work perspective on knowledge transfer enables variations in knowledge transfer work to be identified and conceptualized;
- discusses the association between the type of academic social scientist, their relational and epistemic work, and their knowledge utilization outcomes;
- critiques the interactive model of knowledge transfer and introduces variations on this model which reflect different types of knowledge transfer; and
- emphasizes the value of the novel methodological approach which enables triangulation between producer and user accounts of knowledge transfer.

The chapter begins by drawing together a summary of the findings for each of the four types of academic social scientists, comparing them, and discussing their significance. It then utilizes the findings on relational and epistemic work to examine how well existing models of knowledge transfer describe the knowledge transfer work and utilization outcomes associated with each of the types. The limitations of the models in describing the knowledge transfer work of academic policy experts and academic policy entrepreneurs and outcomes of their work are explored and variations on the

models are proposed. Next, a synthesis is presented in order to develop a general model of academic policy engagement.

The chapter then turns to the influence of organizational and structural factors on knowledge transfer work. The purpose of this discussion is to highlight the important role of organizations and institutions in structuring the opportunities for academic social scientists to participate in the policy making process and in generating experiences which inform their later knowledge transfer work. This section is also intended as somewhat of a corrective for the strongly agentic focus of the thesis.

The chapter concludes by reviewing the main contributions of the study and the strengths and limitations of the methodological approach. The benefits of the use of interviews with knowledge users, the episodic interview method, and the use of alternative bibliometrics are highlighted. The difficulties of empirically measuring and attributing knowledge utilization outcomes are reiterated. The chapter, and the thesis, concludes with a discussion of the implications of the study for public policy makers and for academic social scientists wishing to reflect on their role in public policy making.

8.2 Main findings

To recap, the study sought to address the following questions: What different types of knowledge transfer work do academic social scientists undertake in relation to public policy making? How do they view engagement with public policy making and how do they manage the boundary between the academic and public policy fields? Is there evidence that different types of knowledge transfer work are associated with different outcomes? In order to answer these questions the study developed a typology which enabled the identification and comparison of four types of academic social scientist. The types display significant variation in their orientation to the public policy field, their knowledge transfer work, and the perceived outcomes of their work.

The traditional academics are distinguished from other types by their relational distancing from the public policy field and an unwillingness to actively translate their

knowledge for a policy audience. They appear within the sample because, despite their boundary work, when invited by public policy makers to participate in policy making processes they sometimes agree. They perceive that they have limited influence on policy; a perception which only seems to reinforce their attitudes toward the public policy field.

Unlike the traditional academics, the engaged academics make active attempts to expand the relational boundary of their field by developing and maintaining relationships with public policy makers. They do so in an ad hoc and intermittent fashion, typically when they want to stimulate debate around their research findings or when they need access to data. Having developed a relational bridge to policy makers, the engaged academics seek to engage in interactive and dialogical knowledge transfer processes in which they seek to mutually explore their knowledge and that of the policy makers they work with. This helps them to influence policy makers' conceptual understanding of a topic. However, the ad hoc nature of their relational bridging means that they tend to work only with a limited set of more technically oriented policy makers.

The academic policy experts and academic policy entrepreneurs maintain close and continuous relationships with members of the public policy field but situate themselves differently in relation to the academic field. They occupy liminal positions with respect to academia and tend to be dependent on the maintenance of a limited number of important relationships with public policy makers. By relationally distancing themselves from activities at the core of each field they seek to acquire independence, but they remain dependent on both. They are willing to adapt so that they produce knowledge to meet the needs of technical policy makers, working over the long term to circumscribe the knowledge of policy makers and delimit their space for decisions. By doing so they produce knowledge which can be instrumentally applied to policy, but they are restricted in their ability to contribute through the political channels which might lead to more substantial policy change.

The academic policy entrepreneurs are most active in contributing to public policy. They move easily between the academic and public policy fields, participating as core contributors in both. They develop expansive personal networks which encompass

social relations with both technical and political policy makers. By engaging with a broad range of policy makers they develop a knowledge of the power relations and ideological superstructures which influence policy development. They use their academic and policy knowledge and networks to assist them in the development, refinement, and communication of policy proposals and justificatory arguments. Their ability to connect rigorously developed policy proposals with influential political actors means that academic policy entrepreneurs are associated with episodes of more substantial policy change and reform.

The concepts of relational and epistemic work and the development of the typology have proved to be useful tools in enabling variations in academic social scientists' knowledge transfer work to be identified. As well as demonstrating the political and agentic nature of knowledge transfer, the analysis emphasizes the interdependence of relational and epistemic work. The relational proximity of the academic policy experts and policy entrepreneurs to the public policy field enables them to better understand how to frame and transform their knowledge so that it is more likely to be utilized. In the case of the academic policy experts, who are dependent on the maintenance of their relationships with technical policy makers, relational proximity enables them to better understand how they can frame their criticisms so that they do not result in the termination of their relationships. Their work involves the *simultaneous* negotiation of relationships and knowledge. Knowledge co-construction, on this evidence, involves not only the production of knowledge but also the maintenance of relationships. The capability of the academic policy entrepreneurs to construct and articulate policy proposals is dependent on knowledge gained through close relationships with a wide range of public policy makers.

The analysis also emphasizes the somewhat paradoxical relationship between academic autonomy and public policy influence. The findings which identify the symbolic utilization of traditional academics' knowledge suggest that social scientists who distance themselves from the public policy field may subsequently find that they are less able to influence whether and how their knowledge is used or even to identify whether it has been used at all. Conversely, while the academic policy entrepreneurs have a greater capacity to influence policy in the direction they desire, they are also at

risk of association with a particular coalition and of subsequent exclusion from government. The broader significance of these findings is that if autonomy and influence are not independent then efforts to promote greater academic 'impact' on policy may have consequences for academic autonomy.

While the four types are conceptually distinct, in practice some social scientists will display elements of multiple types. The mutual exploration of knowledge which is characteristic of the engaged academics was embraced widely, particularly by the academic policy experts and policy entrepreneurs. On this evidence, the academic ideal of deliberation though rational dialogue is applied widely to policy engagement even if in practice organizational factors exert significant constraint on actors' ability to meet the ideal.

The analysis also suggests that movement between the types is not uncommon over the course of a career and that contextual factors also play a role in enabling and constraining movement between the types. One of the most consequential movements is from academic policy expert to academic policy entrepreneur; the analysis suggests that many of the academic policy entrepreneurs were policy experts prior to becoming policy entrepreneurs. Policy entrepreneurship is associated with knowledgeability, seniority, and political connections, and it takes time to develop all three. Policy entrepreneurship also entails having a detailed knowledge of a policy subsystem which may be built up through time spent working as a policy expert. While the academic policy entrepreneurs have a more secure relationship with the academic field than the academic policy experts, the movement from expert to entrepreneur suggests that academic policy entrepreneurs might experience some time in the 'wilderness', distant from the academic field, as they build up sufficient policy knowledge to intervene in public policy. The interview data support this assertion; many of the academic policy entrepreneurs described periods of semi-crisis during the mid-point of their careers during which they lacked a secure position within academia but were unwilling or unable to sacrifice their public policy work in the hope of academic seniority.

The movement to policy entrepreneurship also appears to be highly dependent on factors external to the social scientist, including the availability of political opportunity and local organizational context. For example, the analysis suggests that N6's

Party saw him move from being an engaged academic to academic policy expert. Following criticism from disciplinary colleagues he briefly moved to a university outside London which impeded his ability to contribute to public policy, causing him to return to being an engaged academic. When the New Labour government came to power he was invited into government and rapidly became the academic policy entrepreneur which, the interview record suggests, had been a long-term desire.

The context-dependence of policy entrepreneurship helps to explain why this type of academic social scientist is associated with significant policy change. Given the plentiful evidence for the strong influence of political context and contingency on the conditions for the uptake of academic research by policy makers, the argument that individual social scientists can heroically change the direction of policy by dint only of their individual efforts seems unjustified. These findings suggest that policy entrepreneurship is more akin to a social role; i.e., it is not so much that a person is always an entrepreneur, lying in wait for an opportunity to strike, as suggested by the literature on policy entrepreneurship (see the discussion below). The evidence from this study is that academic policy entrepreneurship may be emergent from the confluence of a certain set of motivations, skills, and knowledge on the part of the academic and a structural configuration that enables them to fulfill this role.

8.3 Comparison of findings with existing models of knowledge transfer

This section locates the analysis of knowledge transfer work in the context of the existing literature. Its primary objective is to utilize the findings on relational and epistemic work to explore the capacity of existing models of knowledge transfer to account for the work of each of the types of social scientist and the associated knowledge utilization outcomes. The section begins by focusing on the knowledge transfer work of traditional academics and argues that some aspects of their work are described by 'linear pull' models. However, traditional academics are weakly motivated to respond to knowledge user needs while the effectiveness of a linear pull

approach is dependent on knowledge producers altering their production to meet the expressed needs of knowledge users. The limited effectiveness of traditional academics in transferring knowledge to policy makers lends support to criticisms of linear models which argue that they fail to recognize that interaction is necessary for knowledge to be shared.

The analysis shows that engaged academics, academic policy experts, and academic policy entrepreneurs all adopt 'interactive' approaches to knowledge transfer to the extent that interpersonal interaction with public policy makers plays a central role in their efforts to transfer knowledge. However, the relational and epistemic work approach enables substantive differences in these actors' interactive knowledge transfer work to be identified. An important contribution of the thesis is thus to separate out three variations on interactive knowledge transfer models. While interaction enables the engaged academics to represent their knowledge effectively to policy makers, they do not modify their research objectives in response to signals from policy makers, meaning that their knowledge transfer work may be better describe by an 'interactive-push' model.

Existing interactive models of knowledge transfer also fail to account for differences between the work of academic policy experts and policy entrepreneurs. Models of knowledge transfer which focus on interaction and rational dialogue fail to account for how academic policy experts respond to the political context by following an interactive 'strategic-technical' model of knowledge transfer, in which they seek to place technical bounds on policy makers without exposing themselves to excessive risk. Theories derived from studies of policy entrepreneurship offer better accounts of the work of academic policy entrepreneurs than existing models of interactive knowledge transfer, suggesting the need to integrate agency and politics into the interactive model through an interactive 'strategic-political' model.

8.3.1 Traditional academics and the 'linear pull' model

The data show that traditional academics are supportive of the idea that their knowledge should influence policy but do not see it as their responsibility to interact with policy makers. The traditional academics argued that it was the role of policy makers to discover and integrate academic research in the production of public policy and they tended to be dismissive of other academics' active participation in policy making, labelling it 'networking' or 'careerism'. The data suggest that the traditional academics embrace a pull model of knowledge transfer, in which policy makers are the active agents in the knowledge transfer process. For example, T5 (Professor, economics) argued that academics did not need to interact extensively with policy makers because it is the job of technical policy makers to acquire and utilize academic research.

The traditional academics offer two justifications for their stance. Firstly, they argue that policy making involves politics and power which are conceptualized as negative and constraining or as systemic biases against truth (see Bachrach and Baratz 1962; Lukes 2005). Politics is seen as negative, dysfunctional, and polluting, and so academics should avoid involvement. Secondly, they justify their approach on the basis of competency: academics are uniquely qualified to produce knowledge while public policy makers are uniquely qualified to apply it. The analysis thus suggests that traditional academics undertake boundary work with the objective of protecting their academic status and autonomy (Gieryn 1983). By maintaining a boundary between the academic and public policy fields the traditional academics are able to assign responsibility for the application of their knowledge to policy makers, who can be criticized for their inability or unwillingness to apply it. As Gieryn (1983) argues, "when the goal is protection of autonomy over professional activities, boundary work exempts members from responsibility for consequences of their work by putting the blame on scapegoats from outside" (p. 792). This stance enables the traditional academics to maintain a boundary around their academic work while legitimately complaining if their knowledge is overlooked or misused.

The boundary-maintaining work of traditional academics does not entirely prevent policy engagement, however, because policy actors seek to 'pull' in academic knowledge by involving or co-opting traditional academics. The public policy makers undertake this activity according to their own needs and interests which traditional academics are sometimes persuaded to go along with, often in order to better understand the field of power. The interviews with policy makers reveal that it would be unusual for an academic to refuse to talk to them if invited to do so. In such cases, engagement is reliant on the operation of user-pull processes in which engagement takes place at the request of policy makers, with knowledge flowing along channels developed and maintained by policy actors such as formal advisory committees or informal brokerage processes.

While in some aspects the knowledge transfer work of traditional academics can be described by a pull model of knowledge transfer, in other aspects the model fails to describe what is happening. The traditional academics do not actively seek to engage with public policy makers and, as a result, when their knowledge is accessed by policy makers it is through 'pull mechanisms' such as informal invitations from policy makers and from policy advisory committees designed to acquire academic knowledge. However, a central tenet of pull models is that user-pull processes involve signalling mechanisms designed to increase the production of knowledge to meet the demands of knowledge users (Lundvall 1988). The evidence from the interviews with public policy makers, however, suggests that this was not occurring. Traditional academics, while allowing their knowledge to be acquired by policy makers, do not pay attention to signals from policy makers that different types of knowledge are required.

Not only do traditional academics fail to pay attention to the knowledge requirements of public policy makers, the market for policy knowledge is both competitive and oversupplied with potentially useful information. To this extent it is quite unlike markets for other types of scientific knowledge. Public policy makers are exposed to many sources of information, including their own experiences, their constituents, political parties, and policy institutes and think tanks, which are in effective competition with academic social science (Caswill and Lyall 2013). This may explain the outcome data which suggest limited utilization of the traditional academics'

knowledge. In a situation of information surplus and diversity, knowledge which is not actively pushed to users may struggle to rise above the noise generated by competing sources of knowledge and not reach policy makers at all.

Cognitive biases which influence the acquisition and processing of knowledge may explain the data showing symbolic utilization of the knowledge of the traditional academics. Self-serving biases such as self-protection and self-enhancement mean that evidence which contradicts current beliefs tends to be subjected to greater scrutiny than confirmatory evidence (Kunda 1987). Individuals search their memory for anecdotal evidence in support of their intuitive judgements and stop once they have found the first piece because "they have a 'makes-sense epistemology' (Perkins et al. 1983) in which the goal of thinking is not to reach the most accurate conclusion but to find the first conclusion that hangs together well and that fits with one's important prior beliefs" (Haidt 2001, p. 821). When policy makers 'pull' knowledge they are likely to focus on knowledge which supports their preconceived ideas and dismiss knowledge which does not. For instance, policy makers may criticize academic research which contradicts their preconceptions on methodological grounds even if they have recently embraced the findings of non-conflicting research which uses identical methods (Lomas 1997).

The analysis supports the conclusion that if academics engage with policy makers reactively and policy makers engage in search processes which result in the acquisition of knowledge which largely supports their pre-existing beliefs and purposes, then the output of traditional academics is more likely to be used symbolically, failing to reach those whose beliefs it might challenge. This outcome was most frequently reported by the traditional academics. As the traditional academics give the symbolic use of academic knowledge as a justification for the maintenance of relational boundaries, when they engage with policy makers and observe the subsequent symbolic use of their research this will only confirm their expectation. The possibility exists that there might be a circular relationship in which academic social scientists' distancing from public policy makers makes symbolic utilization more likely which in turn encourages further distancing.

8.3.2 Engaged academics and an 'interactivepush' model of knowledge transfer

Unlike the traditional academics, the engaged academics embrace the idea that the knowledge they produce should contribute to public policy and they take active steps to make it available. They seek to develop and maintain relational ties with public policy makers which support the transfer of their knowledge, preferring to work through interactive mechanisms such as joint interpretive forums which facilitate face to face contact between academics and policy makers (Mohrman et al. 2001; Bogenschneider and Corbett 2010), or through informal personal ties which enable them to identify deficits in public policy makers' understanding of a topic. They are willing to represent their knowledge in ways which aid policy makers in interpreting it.

The analysis suggests that the engaged academics are successful in influencing policy makers' conceptual understandings of a topic, a finding which is in line with literature which argues that sustained interactivity is an effective mechanism of knowledge transfer because it enables the coordination of conceptual frameworks between researchers and research users (e.g. Huberman 1994). However, while interactive approaches to knowledge transfer appear to account well for the effectiveness of the engaged academics' relational and epistemic work, in other aspects the actions and outcomes of engaged academics' work do not conform to an interactive model. Furthermore, interactive models do not adequately account for the influence of politics and ideological resistance. This section will examine the strengths and weaknesses of relational and interactive models of knowledge transfer at describing the work of the engaged academics.

The analysis supports the relevance of models of engaged or relational scholarship for the work of engaged academics, whose knowledge transfer work, the data suggest, is most effective when they work closely with policy makers who are respectful of their knowledge and interested in acquiring it. The engaged academics, in turn, recognize public policy makers as legitimate actors in a process based on mutual learning and exchange. For example, the engaged academics described themselves as 'critical friends' to policy makers (E3, Professor, management) or as playing a 'consultative role' (E1, Professor, human geography). The analysis is thus supportive of Beech et al.'s (2010) argument that the suspension of hierarchy between academic and practitioners enables them to co-construct knowledge through a dialogical approach in which they learn from each other in 'generative encounters'.

The literature on knowledge transfer and networks suggests that the development of relations of equal status between academics and policy makers plays an important role in supporting the transfer of knowledge. Knowledge transfer is more likely to occur between actors who occupy positions within a network which are structurally equivalent to each other (Galaskiewicz and Burt 1991) and individuals are more willing to receive knowledge from actors with similar status (Black et al. 2004). Fox (2010) argues that "knowledge and policy workers engage most effectively as principals, that is, face to face as experts who have extensive firsthand knowledge of their particular fields" (p. 488). Others advocate a 'relational scholarship' based on 'positive, mutual relationships' in order to support the integration of knowledge across the theory/practice divide (Bartunek 2007).

The analysis of the engaged academics' knowledge transfer work suggests that mutual recognition is an important link between sustained interactivity and the conceptual utilization of research. Mutual recognition supported engaged academics in developing an understanding of policy makers' conceptual frameworks, that is, understanding how policy makers conceive of a topic and establishing the current state of policy makers' knowledge. This supported their knowledge transfer work by enabling them to tailor the selection and representation of knowledge, for example by explaining basic concepts where this was necessary to bring policy makers' conceptual frameworks into alignment with their own. The public policy makers experienced this as a willingness on the part of the engaged academics to take a 'broad' approach, focusing on topics of relevance to the policy maker rather than seeking to transfer a simplified version of the academic's latest research.

The analysis of the work of the engaged academics is similar in parts to Carlile's (2004) analysis of the knowledge transfer work of technical actors from different occupational groups collaborating in the development of a product. Carlile develops a

tripartite model in which knowledge is transferred across syntactic, semantic, and pragmatic barriers. The workers in Carlile's study overcame semantic barriers to knowledge transfer by engaging in a process of mutual knowledge exploration in which they investigated and exposed each other's conceptual frameworks—their assumptions and knowledge dependencies—and identified and resolved incompatibilities between them. Interactive models of knowledge transfer, theories of engaged and relational scholarship, and Carlile's (2004) model offer accounts of knowledge transfer work in apolitical conditions, that is, when actors are collaborating in an open process of mutual enquiry and exchange. These models can be fruitfully applied to the work of engaged academics who, the analysis shows, are not dependent on public policy makers for status or funding nor are they actively seeking policy change. They are able to engage with policy makers as principals representing each field with little at stake from their interaction other than mutual learning.

While the argument so far suggests that interactive models are adequate to explain knowledge transfer between engaged academics and public policy makers, in other respects the activities of the engaged academics do not follow a fully interactive model of knowledge transfer. Lundvall (1988) argues that in order for knowledge users to acquire the knowledge they need from knowledge producers there must exist reverse flows of knowledge from users to producers which signal knowledge producers to increase the production of knowledge to plug knowledge gaps. Interactive models of innovation therefore incorporate feedback mechanisms which cause knowledge producers to adjust their research objectives in order to supply knowledge which is suitable for the needs of knowledge users. Thus interactive models do not solely rely on interpersonal contact and the iterative development of mutual understanding to support knowledge transfer; they also suggest that modification of the goals of knowledge producers is required. This is represented in Carlile's (2004) model as the 'transformation' of existing knowledge and in the 'mode 2' model of knowledge production as the external accountability of knowledge producers (Gibbons 1994).

As a result, while some aspects of the engaged academics' relational and epistemic work and the outcomes of their work can be adequately described by interactive models, their stance towards the production of knowledge is better described by

traditional linear push models which do not incorporate feedback effects on knowledge production. The engaged academics' knowledge transfer work is interactive to the extent that feedback is used to modify the representation of knowledge but not used to influence its production, thus leading to an 'interactive-push' model of knowledge transfer.

Carlile's (2004) study also shows, but does not detail, how knowledge transfer is complicated by issues of power and politics which arise from the relationships between the actors, their interests, and their objectives for the interaction. These issues are largely overlooked in traditional interactive models of knowledge transfer. As Vince (2001) points out, when differences of opinion are aired it can produce defensiveness, the muting of voices, and the distortion of opinions. Issues caused by the uneven distribution of power or the embedding of power in everyday language and widely shared interpretations are skipped over. Interactive models of knowledge transfer assume that academics and policy makers willingly collaborate and that a level playing field can be created in which each actor has equal legitimacy; power and politics can be made to go away if only actors can find a way to engage in productive dialogue. The data suggest that the knowledge transfer work of engaged academics is largely predicated on these assumptions. However, as the following sections discuss, the analysis of the work of academic policy experts and academic policy entrepreneurs suggests that issues of local organizational politics or the politics of belief and ideology can play a strong role in structuring interactions between academics and policy makers and need to be accounted for in models of knowledge transfer.

Furthermore, the time-pressed nature of governance does not create easy conditions for the creation of sustained interactivity. Policy makers tend to focus on short-term policy outcomes rather than long term solutions (Dror 1968). The public may demand an immediate response to events, leading policy makers to make decisions without engaging in a full exploration of research (Percy-Smith et al. 2002). Thus, while the analysis suggests that the ad hoc bridging work of engaged academics results in the development of sustained interactive relationships involving productive dialogue, these relationships tend to be with a limited subset of technical policy makers or with specialist policy intermediaries able to engage in extended dialogical processes.

There were some examples in the data of politicians being open to engaging in extended processes of mutual knowledge exploration with engaged academics but these were rare. Although politicians are often seen to engage in a form of debate with their political opponents this is not the type of mutual knowledge exploration and negotiation identified by Carlile (2004), who described a process of exploration and negotiation between two specialisms within the same organization brought into contact by the need to work collaboratively to develop a project. When politicians engage in policy development they tend to do so within their own organizations, the political parties, and the engaged academics (who still believe in the maintenance of a boundary separating the academic and political fields) did not engage as members of political parties. The conditions which support mutual knowledge exploration and negotiation do not appear to apply in these politicized contexts.

Even when sustained interactivity with policy makers had been attained, it did not always appear to be conducive to the processes of open knowledge exploration and negotiation described by Carlile (2004) and Argyris and Schön (1996). The engaged academics observed that certain topics and criticisms were off-limits in their discussions with technical policy makers and how policy engagement was, in the words of E13 (Professor, management), 'a game with some rules'. Here, power and politics enter into the process of interaction, restricting the possibilities for mutual knowledge exploration and negotiation. Even if technical policy makers are available to interact with they were not always open to radical challenge. This appeared to be particularly the case where a conceptual framework or departmental philosophy was well established among technical policy makers, who either saw little point in exploring the assumptions behind it or took attempts to explore their assumptions as criticism. As knowledge comes closer to action, the role of power and politics may come more to the fore. This may be why evidence that the knowledge of the engaged academics had been instrumentally applied to policy was lacking.

8.3.3 Academic policy experts and an interactive 'strategic-technical' model of knowledge transfer

Interactive models of knowledge exchange view the development of relationships between academics and policy makers as critical factors, treating them as positive enablers of knowledge transfer. However, the analysis of the work of academic policy experts reveals that relationships between academics and policy makers can also be constraining. The data show that these relationships are not necessarily heterarchically structured; the relatively weak embeddedness of academic policy experts in academia and/or their desire for policy influence means that are dependent to an extent on policy makers for funding or ratification of their knowledge. This brings into view issues of power and the influence of power relations on knowledge transfer.

The data show that academic policy experts engage in knowledge transfer work which involves adapting to the demands of policy makers. They justify adaptation by arguing that it is necessary in order to be able to make a practical and instrumental contribution to policy and regard it as a strategic and pragmatic response to a complex and contested policy field. For example, X10, a Professor of economics, argued that, 'you've got to fit into how they're thinking and if you're not fitting into it then they won't take very much notice of you.' The data show that academic policy experts try to 'fit into' the thinking of policy makers by producing or modifying knowledge which could be used as currency in policy debate. Their aim is not to bring individual policy makers' conceptual frameworks into alignment with their own but rather to produce facts which anchor policy debate. As a result, the work of the academic policy experts conforms more closely to interactive models of innovation featuring feedback loops between knowledge producers and users which influence the production of knowledge (e.g. Lundvall 1988).

The knowledge produced by the academic policy experts is useful to policy makers because it can be deployed to justify or to object to an action proposal. As a result the transfer of this knowledge necessarily has a political dimension. Policy makers may seek to prevent certain knowledge claims from being surfaced and exclude them from the decision-making agenda (Bachrach and Baratz 1962). Policy makers may also seek to undermine the legitimacy of sources of knowledge, and this presents a risk to the academic policy experts. The data show that the academic policy experts refrained from activities which could be construed to be political, such as directly proposing,

supporting or criticizing policies. They focused on the production of technical knowledge rather than broad analyses or critiques. This may be because, in order to maintain their legitimacy within the public policy field, they have to conform to a set of norms and practices concerning the conduct of their research and the presentation and transmission of their findings.

The analysis chimes with the findings of Stevens (2010), who conducted an authoethnographic study of his work on secondment to the Home Office. Stevens described how civil servants working on criminal justice policies would systematically select research which suited the 'totemically tough' policy narrative they wished to construct and ignored academic criminologists' focus on social inequality. Caveats inserted by Stevens over what evidence demonstrated were removed from documents supplied to superiors or published on government websites. Stevens argues that civil servants filter evidence in such a way because it helps them to build the support and connections with senior colleagues they require to progress their careers. The goal of the civil servants was to produce 'policy stories'—compelling arguments in favour of a particular solution—rather than to explore all aspects of a problem, surface their assumptions, and so on. Evidence, Stevens argues, is "used as a tool for persuasion" (p. 242).

In his work at the Home Office, Stevens tentatively sought to broaden the policy discussion and encourage civil servants to surface and question their assumptions about policy. On the terms of the analysis presented here Stevens would likely be classified as an engaged academic. The following extract is illustrative of his knowledge transfer work and the outcome:

I made my only attempt to start off one of the email discussions that occasionally broke out among colleagues. I sent an email, attaching a paper that Wilkinson uses to back his assertions [on the causal impact of inequality] and asking colleagues what policy proposals would make an appropriate response to this evidence. The result was a tumbleweed-blowing silence. Just as this electronic silence began, the civil servant who worked opposite me sat down at his desk. He asked if the previous evening's seminar had been any good. When I told him that Wilkinson had argued that inequality causes virtually all social problems, he answered 'didn't we already know that?' I replied, 'if we know it already, why aren't we doing anything about it?' The response was, again, silence. (Stevens 2010, p. 248)

The extract suggests that the kind of open and productive dialogue promoted by proponents of models of interactivity or engaged or relational scholarship is not always on offer. The attempt by Stevens to encourage the civil servants to expose their knowledge was simply ignored. Although the article does not go on to discuss the consequences for Stevens, the reaction from policy makers suggests that further attempts might have resulted in his exclusion. The analysis shows that rather than seeking, as Stevens (2010) did, to directly expose and challenge the assumptions of policy makers, the work of academic policy experts involves defining and stabilizing the meaning of 'policy facts', important boundary objects which are shared between the academic and public policy fields. Their work, the data suggests, involves producing or altering objects which are easily taken up and redistributed by policy audiences, often by using visual methods such as charts. By stabilizing the meaning of policy facts the academic policy experts are able to transfer knowledge despite political barriers. These facts carry meaning for policy makers and manipulating them requires the academic policy experts to maintain their legitimate position on the periphery of policy. Rather than being based on a free and open dialogue, the data suggest that the work of academic policy experts is imbued with local political and strategic considerations.

Several studies have explored the role of politics in knowledge transfer. Ferguson and Taminiau (2014) examine processes of 'mutual learning' in inter-organizational online communities, finding evidence of political activity to suppress claims to knowledge which challenged a dominant group's preferred interpretations. In this study politics is located in the actions of certain members of a community in actively preventing certain knowledge claims from being surfaced and discussed. Scholars have responded to such findings by arguing that politics should be minimized or brought out into the open. For Argyris and Schön (1996), political barriers to knowledge transfer may be overcome by encouraging actors to expose their knowledge to each other in a process of open dialogue in which each deploys rational argument to reach a negotiated conclusion. Power should be shared so that "the major function of the group is to maximize the contributions of each member" and explore the "widest possible range of relevant views" (Argyris and Schön 1996, p. 119). Coopey and Burgoyne (2000) adopt a similar approach, drawing on Habermas's notion of an ideal speech situation in which

consensus is reached through rational argument rather than by force of interest to argue that political activity can facilitate organizational learning if it is sufficiently 'free and open'. A free and open politics, they argue, can provide psychic security, a learning space in which individuals may speak freely and by speaking out increase their understanding of the situation. Similarly, in their discussion of how power and politics influenced decision making processes at NASA, Milliken et al. (2009) suggest that the suppression of knowledge could be avoided in future through the implementation of a "structured debate" process or through a process of open negotiation between two sides based on an "integration of opposing plans...based on the common underlying assumptions and values of both perspectives" (p. 262).

The analysis presented here both casts doubt on the efficacy of such solutions and exposes the work that actors engage in when faced with political barriers to knowledge transfer. Rather than exposing 'underlying assumptions' and engaging in 'free and open' dialogue, academic policy experts focus on making small instrumental contributions which, over time, limit the possible interpretations and conclusions available to policy makers. They adopt an interactive 'strategic-technical' model of knowledge transfer which, while perhaps less ambitious in its aims over the short term, also presents a lesser risk of exclusion and the accompanying forfeiture of insider status which supports effective knowledge transfer over the longer term.

8.3.4 Academic policy entrepreneurs and an interactive 'strategic-political' model of knowledge transfer

The analysis shows that academic policy entrepreneurs are highly motivated to change public policy and that they work strategically and politically to apply their knowledge to the development of policy. The academic policy entrepreneurs report substantial success in transferring knowledge to policy makers which is used instrumentally and conceptually by policy makers, and they claim significant contributions to policy change. Why do academic policy entrepreneurs appear to be associated with the instrumental application of academic knowledge to policy, when the other types of

social scientists are not? Furthermore, is this not to attribute causal efficacy to the relational and epistemic work of academic policy entrepreneurs, which is problematic if knowledge transfer is also seen as being strongly constrained by political and organizational context? Finally, how can their interactive, strategic, and political work be integrated with models of knowledge transfer?

This section will examine these arguments by drawing on Mintrom and Norman's (2009) and Kingdon's (1995) accounts of policy entrepreneurs, actors who—like the academic policy entrepreneurs—are distinguished by their desire to significantly alter policy and their instrumental role in policy change. According to Mintrom and Norman (2009), policy entrepreneurs exhibit four distinctive characteristics. Although not every policy entrepreneur exhibits each characteristic to the same degree, policy entrepreneurs can be distinguished by their 'social acuity', their work in defining policy problems, their team building activities, and their leadership in reducing the risks of policy implementation. For Kingdon (1995), policy entrepreneurs must, through their expertise or position, have some claim to a hearing; they must have political connections or negotiation skill; and they must be persistent.

In the 'enlightenment' model of knowledge production and transfer, the accumulation of theoretical knowledge is seen as a good in itself which will lead to social improvement as it seeps into society over time (Weiss 1979); thus the persistent work of even the least engaged academics might see their work eventually influence policy. However, persistent engagement with policy is most visible in the work of academic policy experts and academic policy entrepreneurs: the former in patiently working to define and shape the frameworks in which policy makers are able to make decisions, and the latter in persistently seeking opportunities to influence policy change. The data show that the academic policy entrepreneurs repeatedly tried to influence policy and were often frustrated in their attempts. N5 (Professor, management), for example, claimed that she was only successful in having an instrumental influence on vocational skills policy after years of trying.

Kingdon describes policy entrepreneurs as lying in wait for an opportunity to contribute to policy, having developed a set of proposals in advance:

They push for their proposals all the time; long before a window opens, they try coupling after coupling that fails; and by dumb luck, they happen to come along when a window is open. (Kingdon 1995, p. 183)

The analysis does not entirely support this assertion. Certainly, the ability of the academic policy entrepreneurs to make instrumental contributions to policy was highly contingent. For N5 'it could equally well have been a different Minister with different special advisers and my view in 2009 [that she was having no influence] would have been the correct one.' However, the analysis suggests that it is the activity of coconstructing policy which is fundamental to academic policy entrepreneurship. It is not so much that the policy entrepreneurs necessarily lay in wait, proposals in hand; rather, opportunities for entrepreneurship arise through the process of policy development, and policies arise through entrepreneurship. A persistent engagement with public policy meant that opportunities were more likely to arise for those academics to be entrepreneurial.

Social networks and social acuity

For Kingdon (1995), policy entrepreneurs play a critical role in policy making because they take advantage of windows of opportunity to couple policy solutions with the current political agenda. Sometimes the conditions are right for knowledge to be transferred to policy makers, and sometimes they are not, but policy entrepreneurs wait for an opportunity to arise and then act. As a result, policy entrepreneurs are key actors in the policy process; in their absence policy solutions might not be linked with opportunities.

For Mintrom and Norman (2009) the characteristics of policy entrepreneurs which enable them to take advantage of opportunities to influence policy are network or team building activities and social acuity. Policy entrepreneurs may work within a small team of change-makers, make extensive use of social networks, work with advocacy coalitions, and seek to gather support from a broad range of sources. This, coupled with an ability to understand policy makers' ideas, motives, and concerns, enables policy entrepreneurs to take advantage of opportunities to act. More broadly, the ability

of actors to gather support from others for their ideas and goals by undertaking communicative and strategic activities relies on their social skill and ability to take the perspective of others (Fligstein 2001).

The analysis of the 'network construction' work of the academic policy entrepreneurs shows that they engage in a variety of relational activities, including working across broad networks of policy actors and 'team building' by establishing lobbying or discussion groups. The bibliometric data show that academic policy entrepreneurs frequently write for think tanks and policy institutes, an indicator of policy network participation, and the interview data show that the academic policy entrepreneurs attach importance to working with think tanks and campaign groups. The data suggest that the participation of academic policy entrepreneurs in policy networks and political parties meant that opportunities arose for them to couple policy solutions with political opportunities to make instrumental contributions to policy, often associated with a change of government.

The analysis suggests that, in order to support their knowledge transfer work, academic policy entrepreneurs develop a picture of the relational structure of the policy making system, its opportunities for influence, and its 'resistances', or actors who would block or inhibit knowledge transfer. They pay attention to power relations and patterns of influence: N5 (Professor, management) described this as having 'an awareness that you had to try and discover where the pressure points were.' Academic policy entrepreneurs are interested in the motivations and concerns of policy makers and their ideological alignments.

A central aim of work in the contextual-structural tradition on knowledge transfer is the development of models of the knowledge transfer process which enable the process of knowledge transfer to be understood, the organizational and political context to be diagnosed, and implementation strategies to be developed and applied (Nilsen 2015). The idea is that the models can then be applied to help academics determine how best transfer knowledge to policy makers or practitioners. However, the data suggest that academic policy entrepreneurs and, to a lesser extent, academic policy experts, understand their knowledge transfer work as a dynamic response to contingent environment which cannot easily be captured or aided by such theoretical models. X15

(Professor, social policy) argued that 'you couldn't go on a course and learn how to do it...there are resistances in the system that the courses don't recognize. It's not as if it is a neutral world that one is working with.' The picture of the policy making system developed by the academic policy entrepreneurs is a tacit and dynamic one in which individual actors and their policy preferences are key and cannot be determined in advance. Abstract theoretical models of the knowledge transfer process may be of less utility than practical experience.

Transforming knowledge: making it acceptable and implementable

The data suggest that a fundamental component of the work of the academic policy entrepreneurs involves transforming knowledge and policy ideas so that they are made more acceptable and implementable for policy makers. This involves framing problems, justifying solutions, and reducing the risk of implementing a policy solution. Characteristic of the work of policy entrepreneurs, according to Mintrom and Norman's (2009) definition, is that they define and frame policy problems. Policy entrepreneurs define and frame problems in such a way that their audience perceives them as salient to their own interests and sees solutions proposed by the policy entrepreneur as appropriate to their understanding of the problem. Although the data show that the academic policy entrepreneurs frame policy problems, this in itself hardly sets them apart from other academic social scientists: the analysis suggests that defining and framing policy problems is also part of the work of the academic policy experts and, while the traditional and engaged entrepreneurs did not set out to define policy problems, their work involves the definition and framing of academic problems which sometimes were relevant to policy. However, the problem framing work of the academic policy entrepreneurs was linked to the justification of particular solutions through the production of policy arguments. This supports Lindblom and Wood house's (1993) position that the presentation of appealing arguments is key to convincing policy makers.

Mintrom and Norman (2009) also argue that policy entrepreneurs 'lead by example'. They do this by creating 'working models' of a policy or demonstrating the 'workability' of a proposal. The effect of 'leading by example' is a reduction in the perception of risk that policy makers attach to a given policy proposal, making it easier for them to accept the proposal. The data show that although many of the academic policy entrepreneurs were involved in the implementation of policy, usually this did not occur until after their policy solutions had been accepted. This may be because policy making in the UK is subject to a higher degree of centralization than in the US and there are fewer opportunities for local policy pilots. However, the data show that the academic policy entrepreneurs worked to make their policy proposals robust to the challenges of implementation by working alongside practitioners and gathering an understanding of the practical context for policy implementation. They undertook some of the work that policy makers would have to do in order to transform academic knowledge into detailed policy actions: the 'how' of policy as well as the 'what' and the 'why'.

On this analysis, the work of the academic policy entrepreneurs represents an interactive 'strategic-political' model of knowledge transfer. Such a model takes much from models of policy entrepreneurship. While the concept of academic entrepreneurs as critical actors in networks of innovation is well established (Rothaermel et al. 2007), models of policy entrepreneurship have not previously been integrated with theories of knowledge transfer. Modelling their work as a particular type of interactive knowledge transfer—one which is, like the academic policy entrepreneurs, strategic, but is also expressly political—enables it to be situated alongside other types of interactive knowledge transfer and permits the political and agentic dimensions of knowledge transfer to be highlighted.

8.4 The influence of organizational and structural factors

While the analysis up until this point has focused on the role of individual agency, the findings do not contradict previous studies that show that organizational and political

factors are a strong influence on knowledge transfer between academic social scientists and public policy makers. This section argues that institutions and organizations influence knowledge transfer by structuring the opportunities for academic social scientists to engage in knowledge transfer, shaping the career experiences which influence their motivations and attitudes, and informing their understanding of the structure and processes of the policy making system. The section examines the influence of three types of institution which, the analysis suggests, significantly shape knowledge transfer work: academic disciplines, universities, and political intermediaries, principally political parties and think tanks.

8.4.1 Academic disciplines

Academic scientists are strongly oriented to the work of their disciplinary peers (Merton 1979a; Whitley 2000) and the analysis suggests that disciplinary norms and the activities of disciplinary peers can have a strong influence on academic social scientists' knowledge transfer work, both through the development of institutionalized connectivity and by influencing the legitimacy of different forms of engagement. The influence of academic disciplines is most apparent in the contrast between the knowledge transfer work of the academic economists and social policy academics and the knowledge transfer work of academic working in other disciplines. Although the sample is insufficiently large to enable broad generalization about the influence of disciplines, the evidence based on this study and elsewhere (Fourcade 2001; Khurana 2010; Wagner and Wittrock 1991) suggest that the nature of the disciplines and their historical relationships with public policy influence the policy engagement propensity and knowledge transfer work of academics. For example, policy experts and policy entrepreneurs were more likely to be found in economics and social policy than in the management discipline.

The sample is insufficiently large to enable conclusions to be drawn which can be generalized to the academic population as a whole. However, the findings are in line with other work which has argued that the social science disciplines have developed characteristic patterns of engagement and distancing from the state (Wagner and

Wittrock 1991; Bourdieu 1988). Although economics has developed a number of highly theoretical subfields, the disciplines of economics and social policy have been shaped by their relationship with the public policy field. Fourcade (2009) shows how American economists developed as 'merchant professionals' supplying technical expertise to a state which lacked a technocratic elite, giving the economics profession a stable institutional base in universities overseen by a small cadre of top professors. Policy makers in turn contributed to the structuring of the economics profession by fostering specialization in order to generate relevant expertise which could be purchased by specific sectors of government. Thus as economists sought to influence government, government in turn was shaping the roles and orientations of professional economists. By the turn of the twentieth century the proper role of an economist was considered to be that of a "professional expert who advises government in technical and scientific matters and takes social values and political preferences as given" (Nelson 1987, p. 53). The data suggest that the role of academic policy expert has some legitimacy within the economics discipline, and the formal and quantitative nature of economics may be conducive to the role of the academic policy expert which involves circumscribing the knowledge of policy makers by establishing the 'policy facts' around which policy must be made.

The activist role played by academic policy entrepreneurs may be more problematic for the economics discipline. The emerging discipline held a normative debate over the appropriate mode of policy engagement more than a century ago following which the initial support of economists for direct intervention in public affairs was dropped in order to strengthen the discipline against politically motivated attacks. The American Economic Association excised contentious viewpoints from its official documents in 1887 and, following a series of attacks on academic freedom from the 1890s to the 1910s, economists retreated from an advocacy position to one of scientific professionalism and claimed objectivity (Fourcade 2009). There are signs of an appetite for public engagement within the economics discipline (e.g. Thoma 2013; McKenzie and Ozler 2011). However, the analysis here suggests that normative and institutional support for policy entrepreneurship originates in part from an overlap between an economics discipline historically supportive of the supply of policy expertise, but not advocacy, and a social policy discipline with a history of advocacy

and policy entrepreneurship. Most of the academic policy entrepreneurs in the study have economics training, but they shifted away from the theoretical core of economics, moving either to social policy departments or taking up roles in applied research centres in which they were able to apply their economics training to social policy. For example, N6 (Professor, economics) described a strong normative pressure from disciplinary colleagues following the publication of a book which contained policy analysis and proposals as well as an economic analysis. It is not possible to determine whether and how much this influenced his subsequent decision to move to a social policy department in another university.

The analysis suggests that the academic social scientists' knowledge transfer work is influenced by an orientation to the views of their disciplinary peers, although this is not a static influence because, as in N6's case, they sometimes moved to departments with a disciplinary orientation which was more supportive of their policy engagement activities. Peer role models were particularly important for a number of the social scientists. Studies of academic commercialization in the life sciences and medical schools have shown that scientists who observe peers engaging in entrepreneurial activities are more likely to do so themselves (Haeussler and Colyvas 2011; Bercovitz and M. Feldman 2008). The data suggest a similar association between the academic social scientists' observations of peers engaging in policy entrepreneurship and their knowledge transfer work and motivations. The academic policy entrepreneurs reported that they were influenced by early career experiences in which they had witnessed senior colleagues working with policy makers. For example, N5 (Professor, management) reported that having the major first part of her career in an environment in which academics were in and out of government had a substantial impact on her subsequent work, which spanned the boundary of the academic and public policy fields.

The analysis suggests that socialization within an academic culture influences social scientists' knowledge transfer work through two primary mechanisms. Firstly, it offers models for the role of policy-engaged academic and demonstrates the legitimacy of this role. Secondly, it introduces academics to the practices and behaviours of knowledge transfer. Some of the academic social scientists who saw the way in which

leading disciplinary peers engaged with policy learned to imitate their work; for example, N1 (Professor, social policy) discovered through observation of others an effective model of knowledge production in a university and the subsequent transfer of knowledge though the policy development processes of the Labour Party. A study of the work of natural scientists who are leaders within their discipline has similarly found that they can institutionalize a culture by imprinting their entrepreneurial behaviours on others (Göktepe-Hultén 2008).

8.4.2 University organization and location

The analysis suggests that the internal organization and geographic location of universities is an important enabling and constraining factor on academic social scientists' knowledge transfer work. Research has shown that geographic proximity influences the utilization of academic knowledge in the production of innovation (Gittelman 2007). Location is likely to play an important role in the transfer of social science knowledge to public policy makers because a great deal of policy making in the UK takes place in and around the functions of Whitehall in central London. The data show that policy makers can express an unwillingness to travel far to acquire academic knowledge; a policy maker who had moved out of Whitehall to an office just ten minutes away reported that it was 'far enough away that people won't drop by—it's a major, major issue' (P2).

The academic policy entrepreneurs argued that being located in a university which was close to the locus of policy making in Whitehall was an important factor in facilitating their policy influence. The LSE's location close to Whitehall was considered to be important because busy politicians and civil servants would be unwilling to travel any further. 'Being at the LSE,' reported N6, means that 'you are right in the centre, civil servants can come to your seminars, people like David Willetts came and gave us talks, the more intellectual side of the Conservative Party.' Conversely, an academic policy expert (E13) reported that he was could not participate in the policy debates which would give him greater access to policy makers because he was not located in London and 'policy in England means London.' N7 reported how his political access dropped

off rapidly once he moved out of London for family reasons; where political policy makers would previously have consulted him on a topic, they no longer did. The analysis suggests that the fast-paced nature of policy making in London and the need for academics to be seen as regular participants in policy debates means that location is a strong enabling and constraining factor on academic policy entrepreneurship.

Another influence on academic knowledge transfer work emerging from the analysis is the presence within universities of research centres dedicated to supporting applied and co-produced policy research. The analysis has already argued that academic policy experts occupy a liminal position between the academic and public policy fields and suggested that working in this mode could be precarious. The academic policy experts described being dependent on external funding and they experienced a centrifugal pull toward core disciplinary research which meant that genuinely co-produced research could be marginalized. The analysis suggests that hybridized research centres within universities play an important role in stabilizing the boundary between the university and government departments and therefore supporting the work of academic policy experts. It is supportive of previous work which has examined the role of hybridized research centres in the context of managing the boundary between natural science and industrial innovation (Bozeman and Gaughan 2007; Geiger 1990).

Hybrid organizational forms enable more stable institutional arrangements than can be managed by traditional research project teams, providing co-ordination over a broader range of tasks and more diverse participants (Turpin and Fernández-Esquinas 2011). Hybridized university research centres support enduring relational linkages between academics and research users, promising to improve the flow of knowledge and stabilize the interface between academic disciplines and wider society. They are considered to be "critically important collaborative vehicles" (Boardman and Gray 2010, p. 456) which form distinctive features of systems of innovation because they act as bridging structures which connect universities to other organizations. Academic affiliation with a hybridized research centre is positively correlated with industry engagement (Bozeman and Gaughan 2007).

Research which has focused on the role of university-based social science research centres is limited. Pautz (2012) argues that LSE's Centre for Economic Performance

and Centre for the Analysis of Social Exclusion have played important roles in contributing to policy development. Osborne (2004) suggests that research centres are increasingly becoming enrolled as 'think-tank-like institutions' by external actors such as government, research councils and other think-tanks. The analysis presented here suggests that hybridized research centres might play a similar role in managing and stabilizing the boundary between the social science disciplines and the state as they do in the managing and stabilizing the boundary between the natural science disciplines and industry. They do not, however, eliminate the tensions which are present. Parker and Crona (2012) examine the tensions resulting from boundary negotiations within university research centres, arguing that university-based centres work in a hybrid space between science and policy where different activities and goals mingle. They suggest that 'adaptive boundary management' is required to reconcile incompatible stakeholder demands. The analysis here supports these findings; the data shows that they management of the tensions inherent in the boundary between social science and public policy was an important part of the work of academic policy experts. The data suggest that hybridized research centres support this work by providing financial stability and developing local norms and practices for policy engagement. This chimes with a study of natural scientists which showed that local group norms and culture were the most important factors associated with commercial engagement (Louis et al. 1989). By providing stable structures which support the development of long term relationships with research users, hybridized research centres provide more opportunities for research users to influence academics.

Many of the social scientists were affiliated to or had been affiliated to a research centre in receipt of long term funding from research councils. They described how research council funding supports the institutionalized networking activities undertaken by research centres, such as events programmes and dissemination activities, which assisted them in maintaining relationships with policy makers based around working in a co-production mode. An independent source of funds was viewed by many of the academic policy experts as a critical enabler of their knowledge transfer work which enabled them to work under different 'rules of engagement' (X15, Professor, social policy), easing boundary management by freeing them from the constraints of working within a supplier—client relationship. When research council

funding ends, policy-relevant work could be 'pushed to the margins' by departments interested only in core disciplinary research, leading social scientists such as E13 (Professor, social policy) to move into a mode of knowledge transfer which is better described by the engaged academic model than the policy expert model.

While the analysis suggests that hybridized research centres can support the work of the academic policy experts and policy entrepreneurs, other types of academic were affiliated to research centres. The data suggest that while adopting the language of 'relevance' and 'impact', some academics working in hybridized research centres focused on furthering disciplinary research interests rather than seeking to produce knowledge to directly influence policy. For example, E11, an engaged academic, viewed research council funding not as a way to build bridges between the demands of academics and policy makers but rather as an opportunity to increase his academic status and address his own research questions.

Although long term research council funding through a hybridized research centre might offer social scientists the autonomy necessary to support the development of collaborative and interactive relationships with policy makers, the analysis suggests that it does not guarantee that they will always respond to signals from policy makers to produce knowledge that will be of instrumental use, nor will they automatically learn to translate knowledge across the divide. Research council funded centres may still fail to produce knowledge that is useful to government. An academic policy expert with experience working as a research commissioner inside a government agency argued more traditionally oriented academics could use the funding available for hybridized research centres to further their own interests, meaning that a five year ESRC programme might result in little more than 'a couple of sides of policy advice to government on what to do about X, Y, and Z' (X17, Professor, economics).

8.4.3 Political intermediaries

The analysis suggests that political intermediaries—organizations such as political parties and think tanks which mediate the interface between academic social science

and public policy makers, especially politicians—can have a substantial influence on the knowledge transfer work of social scientists and the potential for their work to lead to knowledge utilization. Existing research concerning the relationship between political parties and academic social scientists in the UK is sparse, but a frequent finding is that academics are generally more attracted to left-wing political parties than the population at large (Gross 2013; Gross and Fosse 2012; François et al. 2016). The study data offer some support for this finding; many of the academic policy experts and academic policy entrepreneurs disclosed that they were members of the Labour Party, the major left-wing party in the UK, although the data relevant to this point were not systematically acquired. Policy intermediaries—including think tanks, policy institutes, and the policy influencing apparatus of some charities—have emerged relatively recently as intermediaries between the production of knowledge in universities and its application in the field of public policy making (Medvetz 2008; Medvetz 2012b).

The analysis shows that political intermediaries influence the knowledge transfer work of academic social scientist both by offering a conduit or target for transfer activities and by providing the opportunity for experiences which shape social scientists' understanding of the policy making process and knowledge of its structures and power relations. An organizational affiliation or work experience with a political intermediary can enable academics to develop the necessary skills and contacts which facilitate relational and epistemic work. The analysis suggests that political intermediaries play a particularly important role in supporting and enabling the work of academic policy entrepreneurs, who are most open to the use of political pathways to policy. However, they also exerted an influence on the work of some of the academic policy experts.

Political intermediaries as conduits

The analysis suggests that political intermediaries enable certain forms of knowledge transfer work by supporting the development of relational ties between academics and policy makers, acting as a conduit for research evidence and policy proposals.

Affiliation to a political party generated opportunities for the social scientists to develop network ties with both technical and political policy makers. For X17 (Professor, economics), an academic policy expert, membership of his local Labour Party played a key role in opening up access to policy making networks initially at a local level and later at a national level. According to X17, the primary value of the political party was as an information network to support the supply of information and policy options to technical policy makers. Through his party membership he accessed information about what was happening in local and central government, gained access to sources of research funding, and developed opportunities to transfer knowledge through commissioned research.

Affiliation to a political party also supported knowledge transfer by providing a mechanism through which the academic policy entrepreneurs could inform the development of policy at an early stage through the internal processes of the party. Some of the academic policy entrepreneurs affiliated to a party sought to influence public policy by shaping the core policy stance of their party. N6 (Professor, social policy), in particular, claimed an important contributory role in shaping the 'New Labour' agenda. One of the arguments made by advocacy coalition theorists is that scientific knowledge influences the beliefs of policy actors only at the secondary level rather than by influencing policy core beliefs (Sabatier and Zafonte 2001). The interview data on N6 somewhat contradicts this argument, leaving open the possibility that academic policy entrepreneurs who are deeply embedded in political parties might be able to use their knowledge to influence more than their secondary policy beliefs. It is possible that N6's role as a senior academic and as an influential figure inside the Labour Party may have enabled him to use academic research to influence the core beliefs of the party or add weight to a coalition of actors within the party arguing for 'Third Way' policies. However, the study data did not permit N6's claims to be crosschecked with another source. As a result this observation must be tentative.

The analysis suggests that obtaining senior status within a political party might enable academics to engage in activities which would otherwise be difficult to undertake, such as directly lobbying senior politicians in support of a policy or engaging them in exploratory discussions. Party affiliation may play an important role in the

development of trust-based relational ties between academic social scientists and political actors because it acts as a signal that their political values and goals are compatible; a perception of shared goals increases actors' willingness to share their knowledge (Chow and Chan 2008). The interviews with political policy makers suggested that knowing that an academic shared their political objectives made them more willing to trust them and supported the development of long term interactive relationships. For example, P8, a former Minister, argued that although she wouldn't have deliberately ignored the research of an academic with a different political affiliation, neither would she have been willing to expend time in 'talking around a problem', i.e., engaging in mutual knowledge exploration.

Many of the social scientists recognized other types of political intermediary, such as think tanks, as organizations which played important roles in the policy making process. The analysis suggests, however, that they differed in how influential they considered them to be. The engaged academics and academic policy experts tended to talk of think tanks and policy institutes as another audience for their output while the academic policy entrepreneurs were more likely to consider them as pathways through which they could reach politicians. N5, a Professor of management, argued that other social scientists underestimated the value of think tanks as pathways. This was because, in her view, they saw that they were staffed by 'clever and inexperienced 22 year olds' and therefore discounted their value. N5, on the other hand, could see that 'very, very busy politicians and very, very busy policy advisors essentially got their ideas via think tanks'. The influence that think tanks had on politicians meant that, for the academic policy entrepreneurs, investing time on working with them was worthwhile. Treating policy intermediaries as conduits, rather than audiences in themselves, entailed writing articles for them rather than acting as an expert consultant to them or simply speaking at their seminars which, the bibliometric and biographic data show, the academic policy experts were more likely to do.

Political intermediaries as sites of learning

Differences in the way the social scientists treated different actors in the policy making process point to an important role played by policy intermediaries as sites of learning about the structure and process of policy making. N5, whose early career was spent working for a policy intermediary, argued that it was this immersion in the policy field that gave her experiences which were vital to her later knowledge transfer work. It taught her that understanding the relations between policy actors, their roles and experience, and the details of policy implementation were all important. It also gave her a sensitivity to the importance of individuals and interpersonal relations, including the importance of locating powerful actors, understanding the relations between them and the opportunities to influence them. The analysis suggested that different social scientists came to different conclusions concerning the location of the 'power levers', and that experience working with a political intermediary could play an important role in sensitizing them to the nature and location of political barriers and opportunities.

An active participation in party political activities early in the career of several of the academic policy entrepreneurs played a formative role in helping them to develop an understanding of policy making and policy implementation processes which they drew on in their later work. For example, N1's (Professor, social policy) work in local politics and in the Labour Party head office at the start of his career helped him to understand 'the process of resource allocation and politics, of policy making at the local level, and how these two things relate together.' The analysis supports the argument that practical experience of how policy is made and applied—its local and political context and the personalities of the individuals involved—plays an important role in enabling the knowledge transfer work of academic policy entrepreneurs.

The academic policy experts who had worked for policy intermediaries also claimed to have learned from their experiences, but they did not make the same claims concerning the benefits of their experience for learning relational skill and relational acuity, i.e., their ability to understand power relations. They did, however, gain a sensitivity to epistemic differences and the need for knowledge translation. The academic policy experts claimed that practical experience of working for a political

intermediary played an important role in developing their understanding of how policy makers acquired knowledge. 'Realising that busy politicians only read the front page and only read the bullet points was very important,' argued X4 (Professor, social policy).

Practical experience may aid the process of perspective taking, a cognitive process in which one imagines oneself in another's position in order to understand their preferences and values (S. Parker and Axtell 2001; A. Grant 2007). For example, X8, an academic policy expert and former researcher for a think tank, described attending an event at LSE which was labelled a 'policy seminar'. Despite this the discussion was highly technical and academic and did not involve any more than a superficial engagement with the needs and views of the policy makers. The analysis suggests that his experience working for a policy intermediary enabled him to take the perspective of the attendees from think tanks and government departments and recognize that the seminar was not as policy-oriented as it claimed.

Political risks

The analysis suggests that political intermediaries play important roles in shaping the knowledge transfer work of academic social scientists. They act as conduits for the transfer of knowledge to policy makers, and they shape opportunities for academics to learn about the policy making process. The relationship between academic social scientists and political intermediaries has not previously been subject to extensive research and this study has enabled an exploration of the mechanisms through which political parties shape knowledge transfer work. The analysis has also suggested that ideological alignment may play an important role in shaping knowledge transfer.

The analysis shows that working with political intermediaries can play an important role in facilitating certain types of knowledge transfer work but also carries risks. As significant activity within a political party involves the development of informal, trust-based ties involving friendship and collegiality, it might lead an academic to become 'captured' by a particular ideological arrangement. For example, N1, a Professor of

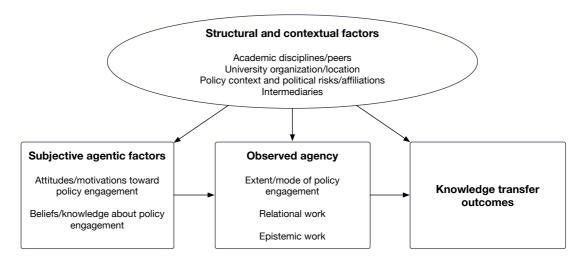
social policy who worked as a researcher for the Labour Party before moving to academia saw this as a 'dangerous' way to start because it meant that he could have been 'captured by the party'. The problem was that researchers might then be unwilling to publicly argue that their 'friends and colleagues are just wrong.' He argued that academics had to be willing to do this and, indeed, that social policy academics also had to be willing to argue that colleagues within their discipline were wrong.

Political affiliations, real or imagined, may also constrain knowledge transfer work. Some of the academic policy entrepreneurs who were openly affiliated with a political party found that their opportunities to transfer knowledge were limited when their party was not in power. Association with a particular political view or policy proposal caused some of the social scientists to be excluded by certain audiences or even, in one case, threatened. Two of the academic policy entrepreneurs described being excluded from working with government because they were closely associated with a political party which was not in power: for N1 the danger of being closely attached to one particular party was that 'you're then totally dismissed by the next lot,' while N6 discovered that civil servants stopped contacting him when the Coalition government came in because he was 'too left wing'. An academic policy expert, X3, described how, early in his academic career, he was threatened with the dumping of manure on his front path due to his public criticisms of agricultural policy. Following this incident he became, in his words, 'risk-averse'. He continued to make contributions to the development of economic theory relevant to land use planning, participated on government committees, and contributed to government reports, but he did not lobby for policy change or write newspaper articles.

8.5 Theoretical contribution and synthesis

This section synthesizes the contributions of the study by developing a general model of academic policy engagement. It locates the four types emerging from the analysis in relation to each other and their proximity to the academic and public policy fields. It then highlights how the study contributes to interactive knowledge transfer theory.

Figure 3 A general model of academic-policy engagement



The model depicted in Figure 3 above represents a synthesis of the empirical and theoretical contributions of the study. The general model shows knowledge transfer as the outcome of a complex series of interactions between subjective agentic factors, the observed agency of the social scientists, and structural and contextual factors. Academics' attitudes and motivations toward public policy engagement and their beliefs and knowledge about the process play a vital role in influencing their behaviours—their mode and extent of policy engagement and their patterns of relational and epistemic knowledge transfer work—which in turn influence knowledge transfer outcomes. The model also shows, however, the vital influence of structural and contextual factors, which play a role at three levels: they influence academics' attitudes and motivations toward engagement and their beliefs and knowledge about the process; they enable and constrain opportunities for academics to engage in knowledge transfer work; and they can both strongly inhibit and directly generate knowledge transfer. As the empirical analysis revealed, policy makers can use or misuse academic knowledge even in the absence of knowledge transfer work by an academic, and the structural configuration of the political sphere can make knowledge transfer all but impossible, even with the greatest effort on the part of an academic.

A strength of the general model is that it permits existing models of knowledge transfer to be recognized as specific configurations of agency and context rather than as general models of knowledge transfer—a point which reflects the earlier

discussion of knowledge transfer models. For example, accounts of interactive knowledge transfer emphasizing co-construction can be represented within the general model of academic policy engagement as configurations which are dependent on *both* a policy/political context which is supportive of policy maker co-operation *and* an attitudinal stance on the part of academics which supports this mode of working. Likewise, academic policy entrepreneurship can be represented within the general model as the outcome of knowledge transfer work which is reliant on certain motivations toward and knowledge about the policy process and which is shaped *both* by career experiences which offer opportunities to learn about the policy making process (policy structures influencing the subjective agency of the academic) *and* by a political context, or policy window, which enables knowledge transfer and utilization.

The model illustrates the principal contribution of the thesis: to advance understanding of interactive knowledge transfer by theorizing how agency and politics enter into the equation. (It also illustrates a possible weakness: a model centred around knowledge producer 'work' and which locates the role of policy makers within contextual and structural factors can be accused of overemphasizing the importance of producer work and deemphasizing the critical role of policy makers. The general model presented here is, however, a model of knowledge transfer presented from the perspective of the knowledge producer rather than a model of policy change presented from a user/outcome perspective). In contrast to Carlile's (2004) model which depicts politics as a boundary to be crossed once syntactic and semantic boundaries have been surmounted, the general model shows how politics infuses the knowledge transfer process, influencing actors' motivations, their capacities and intentions, and enabling or constraining any form of knowledge transfer, including the simple transmission of information. It draws on an understanding of power and politics as being always present rather than as additional barriers appearing at the end of an otherwise apolitical process.

The focus on the knowledge transfer work of social scientists, rather than on the entrepreneurial and innovative physical scientists who dominate the literature, thus sheds new light on the role of politics in interactive processes of knowledge transfer.

Specifically, it highlights how political factors can shape all aspects of the knowledge transfer process, including the motivation of scientists to participate. While the institutional differences between knowledge transfer in the social and physical sciences are significant, meaning that these results cannot simply be read across to investigations of knowledge transfer from the physical sciences to industry, they should at least attune scholars to the importance of considering the political dimension.

The development of the typology enabled the fine-grained variation between different types of interactive knowledge transfer resulting from the interaction between actors and contexts to be revealed and linked to different patterns of affiliation, identification, and boundary work. Figure 4 below illustrates this by plotting the four types of policy-engaged social scientist according to their proximity to the academic and policy fields. The relational and epistemic work of each of the types is also shown, enabling the change in knowledge transfer work between each of the types to be visualized.

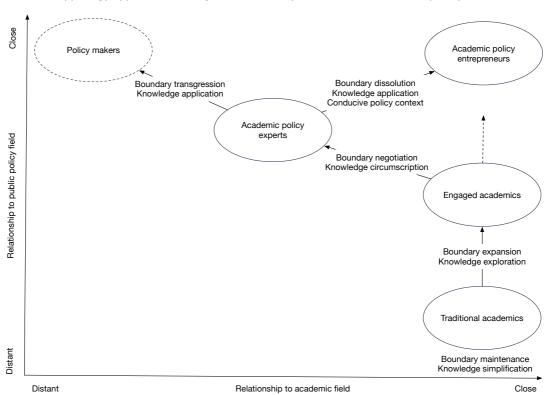


Figure 4 Typology types according to relationship to the academic and policy fields

The diagram illustrates how the engaged academics maintain a close relationship with the academic field while expanding its boundary so that they are able to legitimately participate on the periphery of the public policy field (see Lave and Wenger 1991; Wenger 1998). The analysis shows that the movement from engaged academic to academic policy entrepreneur is complex, however, and that the types cannot be straightforwardly located on a continuum. The dotted line between engaged academic and academic policy entrepreneur shows the weak evidence for a direct movement between the two types and highlights the tensions and risks of policy engagement above a certain threshold level. In order to engage more extensively with policy and come into a closer relationship with the policy field, the engaged academics are increasingly required to negotiate the boundary between the two fields and become academic policy experts. If they are successful in doing so while maintaining their academic status, and if the policy context is conducive, they may progress to policy entrepreneurship.

The diagram also offers a more speculative pathway away from academia in which social scientists become public policy makers, leaving their academic discipline behind. The academic sample necessarily did not include any such individuals, but a significant proportion of public policy maker sample had (albeit brief) academic careers prior to becoming public policy makers. This pathway involves boundary transgression, in which social scientists cross over rather than dissolving the boundary between the fields.

8.6 Conclusion

The focus of the study on the knowledge transfer work of academic social scientists has clarified the limits of interactive models of knowledge transfer which fail to fully account for the role of agency and politics in knowledge transfer. While the data support the argument that interpersonal interaction between academics and policy makers plays an important role in knowledge transfer, they also suggest that current models of interactive knowledge transfer are inadequate to account for its political and strategic elements. Interactive models develop a picture of knowledge transfer which is essentially apolitical, involving academics and knowledge users working together

in harmony to develop common interpretations of research findings (Hawkins et al. 2015). The study data reveal a more complex picture.

The analysis of the work of academic policy experts and academic policy entrepreneurs demonstrates that knowledge transfer between academic social scientists and public policy makers does not always revolve around the development of mutual understanding. It may also involve social scientists seeking to actively steer policy makers into choosing certain courses of action. It may be imbued with local politics, such as when academic policy experts seek to criticize policy makers while maintaining an ongoing, often commercial, relationship, or politics writ large, such as when academic policy entrepreneurs seek to apply their theoretical knowledge in the development of action proposals and their practical knowledge in lobbying on behalf of them. The data also show that opportunities for knowledge transfer may occur in situations which are not really conducive to exploratory dialogue: through forums, such as Parliamentary select committees and brief meetings with Ministers, which do not easily support mutual learning; and through mechanisms, such as think tank reports and press articles, which are not interactive. Knowledge transfer work has been shown to be often highly political and strategic.

An important contribution of the thesis is therefore in demonstrating the importance of distinguishing between different types of interactive knowledge transfer work—all of which have interactive components but are quite different in nature—and examining which theoretical models better account for the different types of work. Models of interactive knowledge transfer tend to elide different types of interaction which are undertaken for different purposes, overlooking the difference between interactivity which arises through the process of undertaking commissioned research, interactivity which arises out of mutual interest in an area of enquiry, and interactivity which is driven by a mutual interest in solving a policy problem. Interactive knowledge transfer can thus take place in situations which are characterized by political contestation and constraints on actors' willingness and ability to engage as equals in a process of mutual exchange. This points toward the need for greater integration between theories which focus on linear or interactive knowledge transfer, theories of organizational politics which focus on the local constraints on interaction, and theories of policy change

which focus on entrepreneurial agency and the ideological and interest-based structure of policy making.

The use of a relational and epistemic work perspective to analyse narrative and semantic data from episodic interviews has been productive in enabling different types of interactive knowledge transfer work to be theorized and revealed in more detail. The analysis has highlighted the role of producer agency in responding to different political contexts; the role of the producer has been conceptualized as variably dynamic, with actors such as academic policy entrepreneurs more willing or able to adapt and respond to opportunities to influence policy than traditional academics, who adopt a more passive role. Variations in knowledge transfer work were linked to the motivations and boundary orientations of the academics and, in the subsequent discussion, to institutional and organizational enablers and constraints. The separation of knowledge transfer work into two components reflects the division in the literature between the importance of social networks and relational ties and the importance of knowledge conversion and translation between epistemically distinct communities. Analysing the work of knowledge producers according to these two dimensions has been helpful in distinguishing between different aspects of their work and enabling the four types to be differentiated. It has been helpful in analyzing the work of the policy entrepreneurs, responding to Mintrom and Norman's (2009) call for a greater focus on the strategies used by policy entrepreneurs and the way in which they respond to their contexts.

The analysis should not be taken as the suggestion that each of the four types of academic social scientist *only* undertake knowledge transfer work of the type associated with them. Academic policy entrepreneurs will also engage in exploratory dialogue with policy makers; engaged academics and academic policy experts may, on occasion, and usually tentatively, make policy proposals. However, the typology and the distinction between different types of knowledge transfer work has proved useful in characterizing in an idealized fashion the differences between the types. Future work could explore the relational/epistemic distinction further; as almost all actions can have epistemic and relational effects, it would be helpful to further theorize the relations

between the two. The relational and epistemic work perspective could also be applied to other types and sites of knowledge transfer.

The four types of policy-engaged academic social scientist were each associated with different forms of knowledge transfer work and different knowledge utilization outcomes. The discussion has highlighted the way in which institutional and organizational factors enable and constrain knowledge transfer work and can produce formative experiences which social scientists draw on in their later knowledge transfer work. This points toward the observation that each of the four types of academic social scientist play different roles in and can make different contributions to the knowledge-to-policy process. While the work of the academic policy entrepreneurs may be the most visibly influential, the case study on vocational skills policy shows how each of the types contribute in different ways: by establishing broad conceptual understandings of a topic, stabilizing key facts utilized in policy debate, and finally by actively applying knowledge in the production and popularization of policy proposals (while traditional academics were not represented in the case study, it is not difficult to imagine that they played a role in developing the academic knowledge base upon which the work of the other types was based).

8.6.1 Methodological strengths and limitations

The temporally and spatially distributed nature of knowledge transfer work and the complexity of the knowledge utilization process means they are difficult to study empirically, and the measurement of knowledge utilization and its attribution to the actions of an individual are particularly persistent challenges in the field of knowledge transfer utilization. While the preeminent methodological approach to tackling these challenges has been to conduct in-depth case studies, this approach would not permit the identification of differences and similarities across a large number of cases. This study developed a novel methodological approach to address these challenges by using interviews with public policy makers to provide an additional perspective on knowledge transfer work and to triangulate the claims of some of the academic social scientists. This section discusses the challenges of studying knowledge transfer work

and outcomes, the methodological strengths of the study in addressing these, and the limitations of the methods used.

One challenge in a retrospective study of behaviour is that social scientists' perceptions of their knowledge transfer work may not match those of others. This was demonstrated in the account supplied by X8 in which he recognized that other academics had a different view concerning the work they were undertaken during what was termed a 'policy seminar' but, to X8, was really an academic seminar. While the seminar offered the possibility of interaction, as academics and policy makers were in the same room, X8 argued that any actual transfer of knowledge was limited by the behaviour of the academics.

The within-method triangulation which is afforded by the use of an episodic interview method proved effective in enabling some of the claims of the academic social scientists concerning their knowledge transfer work to be assessed against their narrative accounts of episodes in which they interacted with policy makers. The analysis suggested that while different types of social scientist might describe their knowledge transfer work using similar language, there were qualitative differences which were observable from the detailed descriptions they supplied of episodes of knowledge transfer work. The narrative accounts obtained through the use of the episodic interview method were valuable in differentiating between the types. Future work could build on this by developing the use of narrative methods in knowledge transfer research.

The use of 'altmetrics' or alternative bibliometrics—in this study, the measurement of the quantity of policy-relevant publications and national newspaper articles authored by each academic—is an emerging method of assessing the 'impact' of academics outside of academia which proved a useful method of triangulation. The collection of bibliometric and bibliographic data enabled the interview data on knowledge transfer work to be triangulated against an objective measure of behaviour. The value of this was demonstrated by the occasional occurrence of mismatches in which the objective data did not support the claims made by the academic. For example, while X3 claimed to have engaged in knowledge transfer work associated with an academic policy entrepreneur, arguing that he had engaged in a substantial amount of work to put policy

arguments in front of the public, the analysis of his bibliographic data revealed a pattern of contributions which was more in line with the academic policy experts and a close examination of his bibliography suggested an ad hoc rather than strategic approach to writing for national newspapers. The study adds to the literature by demonstrating the usefulness of methods using altmetrics as a source of triangulation data for knowledge transfer studies.

The most significant empirical concern is the accuracy of the social scientists' interview self-reports of the utilization of their knowledge by public policy makers. In the absence of the high degree of triangulation between sources and methods permitted by a series of in-depth case studies, any argument that different types of academic social scientist are associated with different knowledge utilization outcomes must be treated with some caution and the analysis set out in the section on utilization outcomes should be treated as indicative. However, unlike in previous studies which have relied only on academic self-reports, this study was able to triangulate some of the academics' interview reports with reports from policy makers who were able to comment on their work and its outcomes. This was possible in six cases, enabling the academic reports to be corroborated and generating additional perspectives which informed and sharpened the analysis. In one case the policy maker (P19) contradicted the self-report of the academic (E3), arguing that the knowledge of the academic was not applied to policy in the instrumental way the academic had argued. This controversy was supported by a comparison of the narrative and semantic data from E3's interview report, which also suggested a contradiction and enabled E3 to be classified with confidence as an engaged academic.

The use of between-source triangulation to corroborate the academic self-reports of the outcome of their knowledge transfer work with the reports of the public policy makers proved an effective method. However, due to the limited size of the public policy maker sample and the sampling method used, the self-reports of most of the academic social scientists could not be corroborated. This is largely a weakness of the sampling strategy rather than a problem inherent to the method. The difficulty in sampling public policy makers who could corroborate the interview reports of the academics stemmed from the decision not to ask the academic social scientists to

identify public policy makers as referees, out of a concern that this would bias the results. It was assumed that the social scientists would be likely to supply names of policy makers who they had a strong connection with—while their influence on other policy makers and ultimately on policy change might be more limited. However, the result of the sampling strategy chosen was that public policy makers could not be systematically linked with academic social scientists.

Having demonstrated the utility of this method, future research could expand the approach by ensuring a more systematic approach to identifying public policy makers who could corroborate the self-reports of academic social scientists. The use of an approach featuring multiple case-within-case studies should be strongly considered. For example, three policy subsystems could be chosen and policy change in each system tracked. Academics working within each of the subsystems could be identified and their work analysed by treating each academic as a separate case. The main technical and political policy makers in the subsystems could be identified and they could be systematically questioned about the contribution of each of the academics.

This given, however, there are some reasons not to reject the conclusions regarding the outcomes of knowledge transfer work. The role of knowledgeable policy entrepreneurs in policy change is well established (e.g. Mintrom 2013; Mintrom and Norman 2009; Macnaughton et al. 2013). There seems no reason to reject the argument that academic policy entrepreneurs are more likely to be associated than other types with the instrumental application of knowledge to policy. The limitations of linear models of knowledge transfer are also well established; it is plausible that, as it is largely 'pulled' through by policy makers rather than accessed through interaction, the utilization of the knowledge of traditional academics may be subject to cognitive biases due to motivated information processing (De Dreu et al. 2008) which lead to be symbolic utilization.

8.6.2 Implications for policy and practice

This section discusses the implications of the study for policy makers and practitioners. It will be obvious that writing such a section immediately brings into view many of the central issues of the study: namely, what the practice of academics writing policy implications actually entails as a form of knowledge transfer. Several of the more deeply policy-engaged academics interviewed for the study were dismissive of this practice and argued that academics who have limited experience of policy making typically constructed policy implications with little real relevance for policy makers. On the other hand, some of the policy makers argued that such constructions could—despite their shortcomings—provoke useful and interesting debates. Correspondingly, this section (somewhat reflexively) first discusses what 'implications for policy and practice' represent and then goes on to outline some potential considerations for policy makers and practitioners.

It is worth noting that the 'policy makers' and 'practitioners' at which academics target their policy implications at are often constructed and imaginary groups. The writing of usable 'implications' *for* a group presupposes some knowledge of who that group comprises and what their objectives, intentions, and interests are, i.e., how the research will usefully influence their future conduct and so which parts should be focused on and amplified. In the absence of such knowledge, academics are left to define, accurately or not, or more often to leave ambiguous, who their implications are aimed at and what their intentions are. In the case of many more traditional academics—including, like many aspiring students who have still to earn their place in academia, the present author—it seems plain from the analysis herein that such interpretations are often of limited validity.

As academics gain more experience in working with policy makers they may become more circumspect with the policy implications they are willing to publicly commit to, recognizing that the writing of implications is itself a political act. Engaged academics might be willing to raise questions and gentle challenges to policy makers and practitioners, while academic policy experts, with a greater understanding of the challenges facing policy makers, might make surgical corrections to secondary aspects of policy. It may only be the academics with the least experience of policy making and practice, and those with the most, who are willing to write bold policy implications: the former because they do not fully understand the limits of their policy knowledge,

and the latter because they have a sufficient understanding of the audience they write for to be confident in what they are doing.

Given the above, it is important to be clear in who the following implications are aimed at. The policy makers and practitioners who, it is presumed, will be most interested in the study will be those concerned with developing policies and practices related to knowledge transfer between the social sciences and public policy: those working in government departments and agencies charged with university and science policy, or the think tanks advising them, or opposition policy makers. As discussed in Chapter 2, in many countries the thrust of science policy in recent years has been to try to increase the flow of information between universities and government, presuming that the current relationship is in some way problematic, limited, or has unfulfilled potential. The activities of universities and the academics working within them are seen as significant contributors to this. As a result, the policy thrust in the UK has been to motivate individual academics and their university employers to invest in knowledge transfer activities by funding university departments partially on the basis of their ability to demonstrate the extra-academic impact of their research.

The results of this study broadly support such a policy direction. The analysis has strongly emphasized both the contribution of the agency of social scientists and the importance of university support in transferring knowledge to policy makers. However, the study also raises questions around academic identity and autonomy. These questions are hardly new: as pointed out in the introduction, debates concerning the relationship of the academic field to the field of power are long-running. More recently, S. Smith et al. (2011) discuss the 'rebalancing' of academic autonomy following the introduction of the REF in the UK and argue that "in broadening the researcher's repertoire of possible roles and audiences [it] could enhance rather than constrain autonomy for individual researchers and research units, at the expense, however, of greater heteronomy of the academic field or disciplinary sub-fields" (p. 1370). While overall, they suggest, recent policy moves might well lead academic disciplines to become more closely aligned to the interests of policy makers, they may also increase the legitimacy of academic work which is not aimed at furthering the core knowledge of the discipline.

The present study does not focus on the influence of the policy changes on the autonomy of academic fields. It does, however, offer insight into 'micro-level' questions of individual autonomy, particularly where it comes to the work of the academic policy experts. Their relational and epistemic work involved the continuous negotiation of positions between the academic and policy fields and the negotiation and stabilization of facts to be deployed in policy debates. The analysis showed that these actors occupied positions which could be tenuous and liminal; policy initiatives which can increase the legitimacy of their work are likely to be welcome. Furthermore, as a career path between academic policy expert and academic policy entrepreneur emerged from the analysis, initiatives which support the work of academic policy experts might also increase the future supply of academic policy entrepreneurs.

The study focuses attention on the political and strategic nature of knowledge transfer and reveals the careful management of relationships and public statements by most of the social scientists. This suggests the policy makers should reflect not only on the threat of the incursion of the field of power into the academy but also consider the implications of encouraging the incursion of the academy into the field of power. What are the consequences for policy of encouraging academics to contribute to policy and practice and rewarding them for doing so? Given that the study challenges the notion that there can be truly open and apolitical dialogues between social scientists and policy makers, increasing the interaction between the fields is also a political act.

This concern is highlighted by the analysis of the work of the academic policy entrepreneurs who, in most cases, develop strong relational connections with political parties and partisan think tanks. These connections can be particularly effective in enabling the social scientists to contribute knowledge to powerful audiences at an appropriate juncture. Should, then, policy makers further encourage the development of relationships with partisan audiences or even encourage partisanship among academics? The current policy stance, which rewards social or political 'impact', may have this consequence. Is this what is wanted or required?

8.6.3 Final comments

This thesis has highlighted the agency and political dimensions of knowledge transfer by developing a typology of policy-engaged academic social scientists which links their knowledge transfer work with their orientations toward the boundary between the academic and public policy fields. It has suggested that the agency of social scientists is an important factor in influencing how knowledge is utilized by public policy makers, and that their work is enabled and constrained by various organizational and political factors.

Over recent years a number of normative positions have been taken by both academics and public policy makers concerning the proper role for academics to play in translating their research into policy or practice. In the UK, policy makers have encouraged academics to play a more instrumental and active role in translating their research (Watermeyer 2014). Sociologists and management scholars have been more specific, recommending that others practise particular forms of engaged or relational scholarship (e.g. Van de Ven and P. Johnson 2006; Bartunek 2007; Boyer 1990).

The analysis here leads to the rejection of arguments in favour of encouraging a single modality of engaged or relational scholarship. The logic of the rejection rests on two pillars. The first is that the different types of knowledge transfer work practised by academic social scientists reflect fundamental differences in their motivations and orientations to the boundary between the academic and policy fields and so suggesting that there is "one approach that...moves the discussion forward in a productive way" (Van de Ven and P. Johnson 2006, p. 802) is problematic. The second derives from the discussion concerning the influence of organizational, political, and institutional factors on the social scientists' knowledge transfer work. It suggests that academic social scientists are not entirely free to choose how to transfer their knowledge. Their agency and activities are both enabled and constrained by external forces, creating opportunities for policy entrepreneurship, political risks for engagement, and, sometimes, strong constraints on what can be said and the knowledge that can be transferred. As a result, it is possible to argue that each of the four types of academic social scientist identified play roles within the knowledge-to-policy system which are incommensurable.

If this is the case, then the implication of the argument is that any attempt to recommend a single mode of engagement to academic social scientists to likely to be mistaken. Conceiving of knowledge producers as dynamic agents within the knowledge-to-policy process suggests that their influence might be increased by encouraging greater reflexivity rather than greater use of 'evidence-based' implementation strategies or intermediaries who, the analysis suggests, are far from passive conduits for knowledge. Instead, this analysis could be used to help academic social scientists reflect on the strengths and limitations of each of their approaches to public policy engagement and the effectiveness of their knowledge transfer work, relative to others adopting a similar approach. For example, traditional academics could be encouraged to identify when their knowledge has been inappropriately utilized by public policy makers—for example, by using the altmetric method of performing a citation analysis of policy-relevant documents—and reflect on to what extent they are responsible for its use; engaged academics could be encouraged to examine the limits of rational dialogue; academic policy experts could reflect on their strategic nature of their work; and academic policy entrepreneurs might consider the risks of political engagement.

The analysis also points to a paradox at the heart of academic policy engagement. Although academics are often encouraged to have 'more impact' and discouraged from inhabiting an 'ivory tower', obtaining influence on policy in the short to medium term is not without associated costs and risks. The data shows that academics engaged in policy making and political activities are involved in negotiations over both the meaning of their work for policy makers and their participation in the policy and political fields. As a result, boundary-spanning knowledge transfer work cannot be considered to stand apart from politics, but rather is imbued with issues of power, politics, legitimacy, and identity. The analysis has highlighted the different approaches to managing the trade-off between academic autonomy and political legitimacy that social scientists adopt and has developed a general theoretical model which can encompass multiple modes of academic engagement.

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