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CHAPTER 8

Bernstein's Sociology of Knowledge and Education(al) Studies

JIM HORDERN

SUMMARY This chapter provides an overview of some key concepts in Basil Bernstein's sociology of knowledge and their development and use by other authors working in related traditions. These concepts are then used to discuss disciplinary structures and the organisation of education(al) studies, with particular reference to the UK context. Bernstein's work allows for a nuanced characterisation of education(al) studies in its varied forms, while acknowledging the influence of other disciplines, of prevalent notions of professionalism, and of conceptions of educational practice.

Introduction

This chapter outlines various 'Bernsteinian' concepts that may be useful in thinking through how elements of 'academic knowledge about education' and 'professional knowledge in education' may be brought together to constitute the discipline of 'education studies'. By 'Bernsteinian' I mean concepts developed originally by Basil Bernstein, particularly in his later work (Bernstein, 1999, 2000), and then iterated, applied and 'recontextualised' by others (i.e. Muller, 2009; Young & Muller, 2014), in particular to discuss knowledge constitution, production and differentiation in 'academic' and 'professional' disciplines. Conceptualising the notion of a 'professionally orientated' discipline may be important for a discussion of the nature of education(al) studies, given the close relationship in some countries between the study of education and the education of teachers (Furlong, 2013).

This cannot be an entirely 'purist' exercise – a good deal of Bernstein's work in this area, while insightful, is somewhat fragmented, and there is little that is focused explicitly on the problematics of

conceptualising professional or practice knowledge in a professionally (or practice-) orientated discipline. Thus, the work of Muller (2009), Barnett (2006), Young (2008), Young & Muller (2014) and others working within a broadly 'social realist' tradition is particularly important here in fleshing out an analytical approach that can cover those questions that relate to professional knowledge. There are important links too with the work of Winch (2010, 2013) on differing aspects of knowledge and expertise. I will also attempt to sketch some questions that I think arise from the work of the social realist thinkers for the conceptualisation of professional practice and its relation to professional education. While this skeletal coverage represents just a fraction of the work in this area, it is hoped that it will provide some food for thought. Having introduced these concepts in the first part of the chapter, the second part briefly conjectures on what this might illuminate about the discipline of education studies, drawing on examples from the UK context. The notion of 'discipline' is used here, rather than 'field', primarily because this chapter seeks to demonstrate the use of one set of conceptual tools to approach the social organisation of knowledge without entering into debates about definitions of, and differences that may exist between, those particular terms, important as these are.

Part 1: Bernstein and Social Realist Work on Knowledge: some key concepts

Vertical and Horizontal Discourses

The delineation between vertical discourse and horizontal discourse, within which different 'forms of knowledge' are 'realised' (Bernstein, 1999, p. 158), underpins Bernsteinian sociology of knowledge. Vertical discourses are described as 'specialised symbolic structures' which are 'systemically principled' (Bernstein, 1999, p. 161), while horizontal discourse is 'local, context-dependent', 'everyday' and 'common sense' (p. 159) knowledge. This is knowledge differentiation, rooted in Durkheim's distinction between the sacred and profane, with similar delineations also suggested by Bourdieu, Habermas and Giddens (Bernstein, 1999, p. 158). Bernstein (1999, 2000) asserts that there are substantive differences in both the social conditions of production and the epistemic structure of these two knowledge/discourse types. While vertical discourse is context-independent knowledge conserved through intricate social formations, horizontal discourse is always 'contextually specific' (Bernstein 1999, p. 161), 'consumed by that context' (Wheelahan, 2010, p. 20), and circulated and exchanged through fluid and unsystematic social processes (Bernstein, 1999, pp. 159-160). Vertical discourse consists of 'explicit' propositional knowledge, but it could also be said to consist of aspects of procedural and inferential 'know how' (Muller, 2014 drawing on Winch, 2010, 2013) which are constituent elements of disciplinary

knowledge structures. For Young (2008) and Muller (2009) this vertical 'specialised' discourse bears the 'imprint' of specific forms of 'sociality' that conserve and iterate its intrinsic value. This value lies in the capacity of this knowledge to enable abstract conceptualisation, conjecture and hypothesis-building, taking the thinker beyond her immediate experience (Young & Muller, 2013). This 'sociality' is husbanded within disciplinary communities and represented in forms of critique and scrutiny which tease out the validity of truth claims, and for Young and Muller (2007) must demonstrate a commitment both to 'truthfulness' and to the possibility of truth. Specialised 'vertical' knowledge is seen as 'systematically revisable', 'emergent', 'real', 'material and social', an approach to knowledge that is contrasted with relativism and social constructivism (Young & Muller, 2013, pp. 236-238; Moore, 2007). These forms of insight are not available, however, through horizontal discourse, a form that offers no basis for thinking beyond immediate experience (Bernstein, 1999).

Within vertical discourse Bernstein identifies two types of knowledge structure. The first is 'hierarchical', characterised by 'integrating propositions' (Bernstein, 1999, p. 162) that drive the development of a coherent and relatively unified structure of knowledge that is established through hypotheses that are advanced and refuted through empirical correlates, based upon certain shared methodological and epistemological assumptions. The archetypal hierarchical knowledge structure is represented by the physical sciences (Bernstein, 1999, p. 164; Muller, 2009; Wheelahan, 2010, p. 21). The second is (slightly confusingly) the 'horizontal' or 'segmented' knowledge structure, which consists of a series of different 'languages' or theoretical perspectives which together comprise the discipline but each have a distinct perspective, methodological tradition and epistemological position (Bernstein, 1999, pp. 162-163). The 'languages' may not agree on a great deal – and this, some might argue, might pose an obstacle to attempts at 'progression' in the discipline. Bernstein suggests sociology as an archetypal horizontal or segmented knowledge structure (1999, p. 162).

Bernstein also discusses the notion of 'grammaticality', which is used to distinguish between the character of different languages within horizontal knowledge structures (1999, pp. 163-164). Languages that have an 'explicit conceptual syntax capable of "relatively" precise empirical descriptions' have 'strong grammars', whereas those which have 'weaker' relations between concepts and empirical description are 'weak grammars' (1999, pp. 163-164). Maths, economics and linguistics are all offered as examples of horizontal structures which contain languages with 'strong grammars', and 'sociology' and 'cultural studies' have language with weak grammars (1999, p. 164), although Bernstein's formulation allows for the possibility of a knowledge structure containing languages with very different grammatical strengths. The point of a strong grammar is also important – Bernstein relates more 'precise' analytical and empirical

description to theoretical disciplinary development. The strong relationship between the 'external' and 'internal', the empirical and the theoretical, leads to greater 'explanatory/descriptive powers' (1999, p. 164).

Table I attempts to summarise key features of the two discourses, and the knowledge structures in vertical discourse.

Vertical discourse		Horizontal discourse
'context independent', 'explicit', 'specialised'		'oral', 'local' , 'context dependent'
Hierarchical structures Physical sciences (physics, chemistry)	*Horizontal or 'segmented' structures* *'Strong grammar'* maths, economics, linguistics	'learning to dress' 'using a telephone' (Bernstein, 1999, p. 161) 'informal experience'; 'personal experience' (Breier, 2004)
	'Weak grammar' sociology, cultural studies	And also, perhaps, – 'local practices', organisational and workplace-specific knowledge (Hordern, 2014a)

Table I. Vertical and horizontal discourses compared.

Singulars, Regions and Generics

'Singulars',' regions' and 'generics' are the names Bernstein (2000, p. 52) offers for 'performance modes' or socio-epistemic entities that represent types of knowledge structure. The 'singular' represents an academic discipline, 'a specialised discrete discourse with its own intellectual field of texts, practices, rules of entry', and is 'protected by strong boundaries and hierarchies' (2000, p. 52). Bernstein mentions 'physics, chemistry, history, economics, psychology' (2000, p. 52) as examples of singulars, encompassing all forms of knowledge structure within vertical discourse. However, given the discussion in the previous section, it seems that singulars will be differentiated in terms of the type of vertical discourse (hierarchical/horizontal), the degree of 'grammaticality' and the social relations that characterise them. One might suggest that a hierarchical structure, such as physics, has more universal and explicit 'rules of entry' and 'practices' as a discipline than sociology, where practices may differ by 'language'/theoretical perspective, and 'rules of entry' to the discipline are less stringent.

A region, meanwhile, is 'constructed by recontextualising singulars into larger units which operate both in the intellectual field of disciplines and in the field of external practice' (Bernstein 2000, p. 52). Regions are 'the interface between singulars and the technologies they make possible' (2000, p. 52) – 'engineering, medicine, architecture' are regions, with 'contemporary regions' including 'cognitive science, management, business

studies, communication and media' (2000, p. 52). Thus regions may represent the traditional professions, newer professions, or new areas of knowledge that somehow relate to an (often 'industrial') purpose or area of practice (Beck & Young, 2005; Muller, 2009). What Muller calls a 'supervening purpose' (2009, p. 213) orientates the 'recontextualisation' of singulars towards the objectives of the occupational field or practice. The need to 'face both ways' (Barnett, 2006, p. 152), to the 'intellectual field of disciplines' and to 'external practice' (Bernstein, 2000, p. 52), suggests complex processes in which multiple stakeholders may be involved in 'selecting', 'appropriating' and 'transforming' knowledge from disciplines for the needs of the regional (i.e. professional, occupational, industrial, practice-orientated) knowledge base (Barnett, 2006; Hordern, 2014a).

However, it is likely that not all 'regional' knowledge is recontextualised directly from disciplines. In certain sectoral or professional fields, 'cognate' regions within those fields may be recontextualising knowledge from other regions within the field – that is, those of the built environment (architecture, surveying, construction) or the health professions (medicine, nursing, pharmacy) (Hordern, 2014e). What may be emphasised, or neglected, in the 'recontextualisation' process may depend on how the epistemic structure of the knowledge is construed, and on the social relations between the various stakeholders in the region and the wider sectoral or professional field. One can also theorise that certain regions may be particularly 'proximate' to certain singulars, drawing knowledge and practices from them (Hordern, 2014e). Thus engineering may draw on advances in the physical sciences or medicine on the physical and biological sciences, or education (if it is a region – to be discussed below) on various social sciences. The knowledge structures of the singulars will impact on the how and what of recontextualisation – multiple languages in a segmented knowledge structure may lead to some languages being selected and recontextualised to a region to the exclusion of others (Hordern, 2014a, e). Broader debates and contests in sociology and psychology, for example, may be lost in the social work or education regions if certain sociological or psychological 'languages' are preferred within those regions.

Drawing more widely on Bernstein's (1971, 2000) theoretical work we might suggest that some regions are more strongly insulated (or 'bounded') than others, capable of developing a stronger identity and capacity to 'recontextualise' knowledge on their own terms (Hordern, 2014e). Such regions may also develop greater independence in the production of knowledge for their profession or practice – thus medicine, a region with its own defined knowledge base, established professional bodies (recontextualisation agents) and disciplinary practices (Beck & Young, 2005), may start to impact on the purposes of the singulars which have traditionally provided it with a knowledge base (at least in the modern era [Foray & Hargreaves, 2003]), perhaps particularly if key stakeholders

(i.e. government) encourage such a development. Nursing, on the other hand, may be concerned to maintain connections with medicine and other health profession regions, relying as much on the recontextualisation processes of these regions as its own to build its knowledge base (McNamara & Fealy, 2014). Less strongly insulated regions may be prone to dominance by external stakeholders who seek to orientate the work of an occupation towards particular policy objectives. It could be argued that 'distance' from singulars, and reliance on other regions, could result in the neglect of the forms of inference and claim validation that are hallmarks of disciplinary development in vertical discourse (Muller, 2014 – drawing on Winch, 2010, 2013; Hordern, 2014e). Thus, it can be argued that regions must demonstrate the 'capability' to recontextualise knowledge in accordance with the underpinning structure of that knowledge (Hordern, 2014e).

Singulars	Regions	Generics
'Pure disciplines' May be 'narcissistic' and self-referential (Bernstein, 2000, p. 52) Develop specific 'rules of entry' and 'practices' which may then be recontextualised to related regions Generally strongly 'bounded'/'insulated'	'Applied' or 'professionally orientated' disciplines Have a relation to singulars, to practice and perhaps to other regions Degree of 'boundedness' variable May acquire considerable strength and defined identity or may be prone to policy objectives of stakeholders	Constructed with no connection to disciplinary sources and with little regard to the 'culture and practices' of an occupation (Bernstein, 2000, p. 53) Driven by logics that seek the maximisation of labour productivity (Taylorism, Functional Analysis) May draw extensively on 'local', 'organisational' or 'workplace' horizontal discourses

Table II. Key characteristics of singulars, regions and generics.

Generics, or 'generic modes', are 'constructed and distributed outside, and independently of, pedagogic recontextualising fields' (Bernstein, 2000, p. 53), and thus by external agents who may have little interest in disciplinary knowledge production (perhaps governments or employers). Examples of generic modes are 'the distinctive "competences" methodology' that emerged in the 1970s and 1990s through the Manpower Services Commission and the development of NVQs (National Vocational Qualifications) (Bernstein, 2000, p. 53). They are 'produced by a functional analysis of what is taken to be the underlying features

necessary to the performance of a skill, task, practice or even area of work' (2000, p. 53). Generics can thus be seen to sit directly in opposition to the disciplinary and professional cultures and practices of both singulars and regions, which may be deemed as anachronistic or irrelevant, standing in the way of the fundamentals of completing a task or undertaking an occupation efficiently and effectively.

Recontextualisation

A little more should also be said here about the notion of recontextualisation. Bernstein describes recontextualisation as involving a 'principle that selectively appropriates, relocates, refocuses and relates other discourses to constitute its own order' (2000, p. 53). It is undertaken by 'recontextualisation agents' with 'recontextualising functions' who operate within 'recontextualising fields' (2000, p. 53). These fields are located between the fields of the 'production' and 'reproduction' of discourse, within the broader structure of the 'pedagogic device' (2000, p. 37). Recontextualisation is the process by which knowledge is 'relocated' from singulars to regions, from a discipline to a professional knowledge base, and then into curricula. The identification of both 'agents' and 'principle' suggests that the level of control of the 'agents' depends on that afforded them by a macro-structure that is socio-historically and politically constituted (Hordern, 2014a, e). Thus, recontextualisation is 'social', but also 'epistemic' as the existence of definitive (hierarchical and horizontal) knowledge structures suggests that knowledge should be recontextualised in accordance with the structure of its underpinning conceptual system. Put another way, concepts gain their meaning in relation to other concepts (Winch, 2010), and to compromise the structure that holds these relations in place undermines the value of those concepts. It is only vertical discourses that provide the 'rules' that guide how disciplinary concepts can be combined with, and relate to, other disciplinary concepts (Bernstein, 1999; Young, 2008; Muller, 2009), and thus structure a recontextualisation process. Only vertical discourses show how differing forms of propositional knowledge relate to one another and provide the basis for the development of procedural and inferential know-how (Winch, 2010; Muller, 2014). In other words, the underpinning structure of knowledge suggests how knowledge should be structured in its new 'location', and intentional or unintentional 'errors of recontextualisation' (Hordern, 2014a) may result from lack of acknowledgement or lack of awareness of this structure.

Barnett (2006) provides a useful analysis of how recontextualisation works to develop a knowledge base in professional and vocational occupations. He points to how the 'technological or organisational problems' (Barnett, 2006, p. 147) of an occupation provide a stimulus for the selection, appropriation and transformation of knowledge from

disciplines for the needs of the occupation. This process of 'reclassificatory recontextualisation' leads to a 'toolbox of applicable knowledge' (p. 147), that then undergoes a further process of 'pedagogic recontextualisation' (p. 147) within classrooms and workplaces. The definition of these 'problems of practice' may be highly contested, involving various agencies and actors (e.g. government, professional associations, employers and educational institutions), each with their own perspective on what constitutes a valid 'problem' (or practice purpose [Muller, 2009]) and therefore which kinds of disciplinary (or practice) knowledge should be recontextualised into the 'toolbox'. Hordern (2014b) has tried to show how this happens within early years education by drawing attention to how the weakness of professional bodies and the fragmented nature of the employment structure in England are enabling government to take the lead in defining the problems and purpose of early years practice, in contradistinction to some other European countries, with implications for knowledge selection and transformation. A similar phenomenon could be said to be occurring with school teaching in England (i.e. we might surmise this from Whitty [2014] or Hulme & Menter [2011]). While Barnett's (2006) overall formulation might be usefully reconfigured to focus more clearly on the formulation of a form of professional/vocational subject (i.e. in Winch's [2010] terms), rather than on a 'toolbox of applicable knowledge', the processes he maps are helpful for thinking about the development of a knowledge base for a professionally orientated discipline.

It is important also to mention the work of some authors who have used the concept of recontextualisation but locate it within a different tradition. For Evans et al (2010), recontextualisation occurs in 'content', 'pedagogy', 'workplaces' and by learners, thereby extending the domains and contexts in which the process takes place. For Guile (2014), recontextualisation is a 'continuous, iterative and multifaceted process' (p. 91) that can illuminate the theory–practice relationship. This work draws on theories of workplace learning (and in Guile's case, cultural historical activity theory and philosophical sources) to focus on how knowledge is transformed through the interrelation between education and work. It focuses primarily on curricula and pedagogic processes in workplaces and on (inter-) professional learning, rather than on the construction of disciplines as such. Nevertheless, there may be important insights from this work relating to how professional and workplace practices support or neglect specialised forms of knowledge, which may also have bearing on how a discipline is constituted.

How 'Practice' May Contribute to Valuable Knowledge

The Bernsteinian theory outlined above has not as yet settled on a conceptualisation of 'practice', and specifically how forms of practice contribute to valuable knowledge for an occupation or professionally

orientated discipline. Young and Muller (2014) in their recent book *Knowledge Expertise and the Professions* assert that what they term 'practice-based' theories of expertise are flawed in that (in discussing Schon) they tend towards an 'experientialism without content or history' (p. 12), venerating individual experience 'in practice' as a source of valuable knowledge. However, this does not fully explain how forms of practice may differentially influence the recontextualisation of knowledge and decisions about knowledge value. Medical practice, for example, could be described as 'knowledge-rich', in that forms of recontextualised disciplinary knowledge form the basis for judgement and action. The 'workplace curriculum' (Billett, 2006) differentially encountered by novice medical practitioners may (to a greater or lesser extent) support the development of medical expertise, and this, in turn, may be shaped by the 'expansiveness' or 'restrictiveness' of that learning environment and the 'productive systems' in which it sits (Fuller & Unwin, 2004; Felstead et al, 2009; Hordern, 2014d).

Other professions or vocational occupations may not have the institutional conditions that encourage organisational and workplace practice to support the development of expertise. Muller (2014) discusses how 'rules of thumb', or procedures developed in occupational practice, may remain 'local' as horizontal discourse, whereas in other cases these procedures and forms of knowledge may be absorbed within the established 'vertical' knowledge base, through relation to a disciplinary conceptual system and by meeting the criteria or 'rules of entry' specified within the discipline. However, in certain less developed or 'weaker' regions, we can also surmise that 'rules' are less rigorously enforced and practice-based knowledge may be more easily, and with less scrutiny, incorporated within a knowledge base. Occupational practices thus vary in their capacity to contribute to the development of individual and collective expertise, and in their capacity to contribute to a knowledge base.

Part 2: Application to Education(al) Studies

Education(al) studies is a discipline with multiple potential personalities, at least in the UK. There is the study of education through the 'foundation disciplines' of philosophy, history, sociology and psychology of education (McCulloch, 2002; Furlong, 2013). There is the more all-encompassing activity of educational research, which may draw on the above disciplines or see them as potentially restrictive in their particular concerns – tensions expressed in debates about the role of the British Educational Research Association itself (McCulloch, 2002; James, 2012). There is also a 'professional' or 'occupational' discipline of education that is specifically designed to provide a knowledge base for teaching and teacher education, although this is considerably compromised currently in England (Furlong, 2013), but perhaps less so in Scotland (Hulme & Menter, 2011). There is

also perhaps a 'professionally orientated' (or practice-orientated) discipline of education, which more directly provides a knowledge base of and for educational practice, broadly defined.

To proceed now with the application of the Bernsteinian concepts, a number of questions are suggested. I will concentrate most of the discussion of the first two of these, drawing on some aspects of the situation in England and sometimes the wider UK.

- Is education studies a vertical or horizontal discourse? And, if a vertical discourse, then are the knowledge structures 'hierarchical' or 'horizontal' in nature? Is there a 'strong grammar' in the study of education? What is the relation between the 'vertical' and the 'horizontal'?
- Can education studies be considered a 'singular'? A 'region'? A 'generic'? How 'insulated' or 'bounded' is it as a discipline? What factors might determine this?
- What is the nature of 'recontextualisation' in education studies?
- To what extent is how 'educational practice' is conceived relevant to this discussion?

Verticality, Horizontality and Grammaticality in Education Studies

The 'disciplines' identified as the foundations of education studies (sociology, philosophy, history and psychology of education), in addition to other contributors (economics and geography of education) (Lawn & Furlong, 2009), could generally be considered vertical discourses with 'horizontal knowledge structures', albeit with contrasting 'grammars' and 'practices'. For Bernstein, 'economics' and 'parts of psychology' have 'strong grammars', demonstrating 'explicit conceptual syntax capable of "relatively" precise empirical descriptions' (1999, p. 164). Bernstein also suggests that structures with strong grammars often impose 'rigorous restrictions on the phenomena they address' (1999, p. 164), a type of 'boundedness' that insulates and reinforces the jurisdiction of the discipline. This is contrasted with a very horizontal knowledge structure with a mostly weak grammar such as sociology (1999, p. 164), which has a wide variety of conceptual traditions and a wide spectrum of potential phenomena. Indeed, for sociology, it is a particular form of 'imagination' or 'reflexivity' that could be considered most fundamental to its practice (Wright Mills, 1959; Lauder et al, 2009), notwithstanding (for example) the 'political arithmetic' tradition that maintains a key role in studies of social mobility (Lauder et al, 2009).

It could be suggested that the nature of the 'foundation disciplines' poses problems for any more unified conceptualisation of education(al) studies. The varying practices and 'grammaticalities' of these disciplines may not lend themselves to easy reconciliation in a coherent form. Economics and sociology, for example, are markedly different in their

methodological process and epistemological considerations (Lauder et al, 2009), and thus it may be difficult to agree on what aspects of education it may be of value to study, let alone agree on any form of worthwhile research design. Sociological 'languages' abound, and contestation of dominance is inherent to the disciplinary culture, whereas in economics a 'neo-classical' paradigm is strongly embedded. On the other hand, philosophy of education appears to have a distinct, relatively bounded identity, rooted in the 'historical tradition' and 'contemporary expression' of 'philosophical writing', and yet anxious about its influence and engagement with the wider educational research community (Oancea & Bridges, 2009, pp. 555, 564-565). Its objects of inquiry and methodologies have been systematically deliberated (Oancea & Bridges, 2009) – its 'conceptual syntax' suggests a 'strong grammar' (Bernstein, 1999), although it is forms of reasoning rather than empirical description that provide precision. History of education has tended to reflect the practices of the wider historical discipline (McCulloch, 2002; Goodman & Grosvenor, 2009), with its characteristic processes and procedures for establishing authenticity and validity. It appears to have experienced some marginalisation within the family of foundation disciplines over recent time (Thomas, 2012), but maintains a strong core internal community of researchers (Goodman & Grosvenor, 2009). Psychology of education appears to be housed primarily in psychology departments rather than education, partly due to the strength of psychology as a discipline in the UK (Crozier, 2009), and appears to demonstrate publication practices that are separate and distinct from the other foundation disciplines (Crozier, 2009; Thomas, 2012), restricting opportunities for interdisciplinary engagement. Crozier (2009) indicates that 'theoretical developments and methodological originality and refinement' (p. 588) are the core concern of psychology departments, with 'applications' (which, it may be inferred, are the domain of the psychology of education) less highly valued. The implication is that the psychology of education is, organisationally, primarily part of psychology rather than education studies, and is pressured towards meeting the 'strong grammar' expectations of the broader psychology discipline rather than seeking greater coherence with sociology, history and philosophy.

So do the ongoing contrasts in structure, purposes, practices and grammaticality across these foundation disciplines inhibit any form of coherence in education studies, whatever the benefits of the diverse disciplinary perspectives this engenders? If disciplines need to demonstrate their 'singularity' and develop distinct identities and 'boundedness' to gain recognition in the academy (Bernstein, 2000; Foray & Hargreaves, 2003; Muller, 2009), then what hope is there if the foundation disciplines 'face' either inwards towards themselves or outwards towards their broader disciplinary roots, rather than towards the other foundation disciplines with the aim of greater reconciliation? Can education studies grow in

strength if there is not a more concerted effort towards coherence? Studies of the foundation disciplines indicate that in some cases there may be not only detachment from others within this foundational group, but also the risk of an increasingly arm's-length relationship with the broader disciplinary structures from which they emerged – thus, sociology of education is thought to have taken on a life of its own (Lauder et al, 2009). Advocates of the disciplines argue for the advantages that their various perspectives bring to bear (McCulloch, 2002), but the resultant lack of 'boundedness' that would stem from a more unified 'education' disciplinary community and identity built around a degree of agreement on shared concerns could make it easier for government and other interested parties to dismiss the discipline as fragmented and incoherent. Thomas (2012) does detect, however, the emergence of a potential 'core discourse' (p. 378) and 'integrated conversation' (p. 380) that revolves around four journals, three that might be described as 'generalist' and one (*British Journal of Sociology of Education*) disciplinary, and this may extend to other prominent journals too (i.e. *Journal of Education Policy*, for example [Thomas, 2012, p. 367]). However, the 'disciplinarity' of this discourse remains unclear – is it predominantly informed by a particularly 'permeable' set of disciplinary 'languages' (i.e. primarily from sociology) that have resonated more widely? Why do philosophical and historical traditions, however vibrant in their own way, remain comparatively marginalised from this 'core discourse' (Thomas, 2012)?

However, it is policy-related, practice-related, economic and some comparative forms of educational research that have in recent time shown as much growth as, if not greater growth than, the foundation disciplines (Lawn & Furlong 2009). In some cases, this research may draw on the foundation disciplines, although economics research clearly has its own disciplinary referents. Policy studies in education often draw on sociological theory and practice, as is suggested by analysis of publications (Thomas, 2012), and comparative methodology draws on sociological and historical traditions, in addition to economics and politics (Crossley & Watson, 2009). Certainly, there seem to be few restrictions on the phenomena deemed acceptable as subjects of research study by prominent journals in these areas (e.g. see aims and scope of *Journal of Education Policy* and *Compare*), suggesting a weak grammar and the importance of certain forms of 'imagination' and 'reflexivity', although one should also mention here the significance of quantitative studies, particularly in comparative research. Thomas (2012) has also suggested that studies of curriculum and pedagogy are only marginally integrated with the concerns of the foundation disciplines, as demonstrated by the relative isolation of the *Journal of Curriculum Studies* from generalist and disciplinary journals 'in terms of citation behaviour', 'topics', 'leading lights' and 'authorship' (p. 379).

It is important to emphasise that there are considerable pressures for forms of 'stronger' grammar and greater 'verticality' in educational research stemming from government and policy actors with interests in education who are looking for 'answers' to educational problems that establish a degree of certainty and 'move the debate forward'. In the UK educational research funding is increasingly directed towards forms of research that demonstrate these particular grammars (Lawn & Furlong, 2009, pp. 548-549; James, 2012), while policymakers, and some educationalists (e.g. Hargreaves 1999), maintain that much educational knowledge is irrelevant or impenetrable (James, 2012; Furlong, 2013). However, this 'stronger' form of grammar often tends to value 'routinized method' and 'atheoretical empiricism' (Furlong & Lawn, 2011, cited in Thomas, 2012) based on a 'naïve technocratic positivism' (Oancea & Bridges, 2009, p. 564), over and above any internal theoretical coherence. Thus the grammar, while appearing 'strong', may do little to advance theoretical understanding at the general level – it may not contribute to the establishment of a 'discipline'. It may become progressively more difficult to relate these pieces of research to one another, and build a coherent body of knowledge that can be drawn upon to aid future analysis. The non-academic research infrastructure, already responsible for a significant percentage of research activity (Lawn & Furlong, 2007), may be better placed to illustrate (or manufacture) forms of this (apparently strong) grammaticality (James, 2012), with consequences for the role of the disciplines and academic research in education.

While discussion of knowledge structures may help illuminate tensions in education(al) disciplines and research, it is also worth briefly considering how we might relate vertical and horizontal discourses to teaching, as this may have implications for how certain forms of education(al) studies are conceptualised. Subject teachers in UK schools at the secondary level (ages 11-18) could be considered to draw on two vertical discourses – first, on that of the subject they teach (maths, English, history or chemistry, for example), but also on that of the discipline of education (or pedagogy) (Hordern, 2015). These vertical discourses may consist of rather different hierarchical or horizontal knowledge structures, and different strengths of grammaticality. Indeed, there may be something of a resistance to the educational, pedagogical discourse if it exhibits rather different practices and grammatical expectations than the subject discourse. If teaching is conceived of primarily as a 'craft', it may be that the subject teacher is encouraged to rely on only one vertical discourse, that of their subject, with 'local' and 'functional' horizontal discourses filling the vacuum left by the absent pedagogical/educational discourse (Hordern, 2015). On the other hand, primary generalists, teaching children from ages 5 to 11, may draw to a greater extent on one educational/pedagogical vertical discourse (Hordern, 2015) rather than on a particular subject discourse, and that pedagogical discourse may, to a

greater or lesser extent, correspond to the pedagogical discourse used by secondary-level practitioners.

Education Studies as a Singular, Region and Generic

Given the discussion above, it is possible to conjecture that education studies has the potential to become a more coherent 'singular' if it moves forward from being comprised of different singulars (or fragments of singulars sometimes semi-detached from parent singulars and semi-detached from each other) towards greater intellectual 'integration'. If this integration was deemed desirable, considerable efforts would be needed! Aspects of historical, philosophical, psychological, sociological, economic and geographical traditions could be 'recontextualised' to form a new singular. However, the self-referential nature of a 'singular' pure discipline suggests that these developments are most likely to succeed if internally driven and organic (Muller, 2009). An 'artificially constructed' singular is likely to fail as it would lack the form of emergence that has characterised the development of disciplinary forms of knowledge (Muller, 2009). To impose a 'pure' and 'coherent' education studies discipline would seem inadvisable without a critical mass of adherents to the cause with an agreed set of practices and methodologies. Could that 'core discourse' (Thomas, 2012, p. 378) provide a starting point for a disciplinary identity? And what of the richness of the current foundation disciplines that might be lost in the process? Perhaps forms of 'interdisciplinarity' provide a more promising conceptualisation (McCulloch, 2012, and 2017, in this volume)?

If conceptualising education studies as a pure and unified singular seems problematic, what of the region? There are at least two potential models here. The first 'region' has education studies as a professional discipline, of a similar genus to that of medicine and engineering, and therefore the 'supervening purpose' (Muller, 2009, p. 213) of the region is the provision of knowledge for educators, and perhaps specifically schoolteachers. This model therefore sees education studies and teacher education as inextricable, with knowledge selected, appropriated and transformed from disciplinary sources with the 'problems' and 'contexts' of teaching in mind. In a classical 'professional region', similar to that of medicine, the key 'recontextualisation agents' would be professional bodies or even 'royal colleges', responsible for stipulating the curricula offered to novice professionals and the processes by which these professionals are accredited, and consisting of stakeholders with mutual and co-dependent roles in professional formation (Beck & Young, 2005; Hordern, 2014d, e). Thus, a college of medical practitioners brings together institutions, employers and senior practitioners to specify the knowledge requirements of the profession. A form of 'professional logic' is preserved in the ideal 'classical' professional region, ensuring that forms of knowledge are

recontextualised to provide a disciplinary knowledge base in accordance with the perceived needs of the profession, notwithstanding pressures from 'bureaucratic' and 'market' logics for accountability and efficiency (Freidson, 2001; Beck & Young, 2005).

For teacher education in England, however, the conditions for this 'classical' professional region seem remote, given the lack of a professional body performing the functions identified above and the fragmentation of the provision of schooling, with academicisation and the rise of new forms of 'branded' or 'organisational' professionalisms (Hordern, 2014c; Whitty, 2014). Recontextualisation of knowledge for teacher education is heavily influenced by government prescription in England, although system fragmentation may see more local forms of teacher education curricula emerging (Whitty, 2014). The use of a set of standards or competences to shape a teacher education curriculum suggests increasing aspects of 'genericism' (Bernstein, 2000; Beck, 2009). Meanwhile, the growth of these 'local professionalisms' at the expense of a 'national' professionalism (Whitty, 2014) suggests the potential for increasing inclusion of forms of horizontal discourse representing local, organisational and workplace knowledges that have no explicit link to disciplinary knowledge (Beech & Bagley, 2013; Hordern, 2015). In contrast, the differing institutional relations and policy context in Scotland may underpin a more classically 'professional region' (Hulme & Menter, 2011; Hordern 2014c).

While the 'classical' or 'professional region' may prove unachievable due to governmental or systemic influences undermining professional autonomy, it is also possible to conceptualise education studies as orientated towards, and seeking to illuminate, a broad conception of 'educational practice', encompassing informal, vocational, higher, early childhood and workplace education and learning as much as 'schooling', as suggested above. The 'technological and organisational problems' (Barnett, 2006, p. 147) of educational practice could be defined by a wider range of 'practitioners', while debates on the purpose of education could assume a central role in defining where knowledge would need to be recontextualised from to sustain this debate. In such a conception, 'education studies' is inextricable from educational activities or 'education in practice', and clarity might be needed over who is a practitioner and what constitutes the practice of education (Noddings, 2003). However, the wide range of practice contexts that education studies would be seeking to illuminate is likely to suggest a relatively unbounded 'region' with difficulties in establishing greater 'grammaticality' in the 'languages' within the knowledge structure. The wide variety of objects of study is likely to lead to knowledge being appropriated and transformed from various singulars, and possibly other regions underpinned by knowledge recontextualised from social science. While this 'practice-orientated' discipline might arouse curiosity among some students, it is possible to see it dismissed by government and professional groups as irrelevant, and by

disciplinary communities as insufficiently intellectually rigorous. Such a region would be challenged to demonstrate its *raison d'être* and to clearly communicate its jurisdiction and object of study. One possible way out of this may be to develop a conception of partially 'bounded' specialised practice underpinned by recontextualised disciplinary knowledge (Hordern, 2015), in which becoming an 'educator', broadly defined, or 'educationally literate', is the objective.

Lastly, detachment from disciplinary thought and practice and a focus on reductive models of skills and competence leads to the model of education studies as a 'generic', where the objective is 'trainability' (Bernstein, 2000, p. 53) and where professional logic is replaced by that of the market and/or bureaucracy (Freidson, 2001; Beck & Young, 2005). Generics place full control in the hands of stakeholders such as governments and employers rather than educational institutions, enabling the evacuation of any form of disciplinary-based knowledge from qualifications (Beck & Young, 2005), and also from what is considered valid research. Various 'techniques' and atheoretical research inquiry derived from practice or from enterprising 'edu-preneurs' may become the substance of education studies, a model that may appeal to certain ambitious educational organisations. What Beck and Young (2005) describe as a belief in the 'inevitable obsolescence of accumulated knowledge' (p. 191) takes hold, leaving students and researchers in education studies ambivalent towards knowledge claims and unaware of disciplinary practices that establish their validity. The generic model can be seen as where education studies merges with instrumental and 'competence-based' (of the Anglo-Australian rather than the continental European variety [Wheelahan, 2010; Winch, 2010]) or 'standards-based' forms of teacher education. Beach and Bagley's (2013) warnings about reforms to teacher education in Sweden and England, with the increasing growth of horizontal discourse, thus provide a scenario for the development of a 'generic' education studies. Similarly, the drive towards forms of research with superficially strong grammars that are not located within disciplinary forms or practices can be seen as a facet of genericism.

Some Potential Scenarios for the Organisation of Education Studies

In the light of the discussion above, some possible suggestions for how education studies might be organised are very briefly summarised below. There is no suggestion here that this is an exhaustive list. It is possible, and may even be likely, that more than one model exists at any one time in a particular national context. It is also possible that certain forms of singular and region may be co-dependent, relying on mutual contribution to meet the varying demands on education studies.

1. Education studies as *a set of fragments of singulars* based around the 'foundation disciplines'. These fragments may have differing

relations with the singulars of which they are a part, and varying degrees of common ground. This suggests different horizontal knowledge structures, practices, grammaticality and foci of inquiry, but a potentially rich variety of perspectives.

2. Education studies *as a singular*. Education is seen as a 'pure' discipline within the social sciences. It suggests a horizontal knowledge structure that could have a strong grammar (i.e. like psychology) or a weaker grammar (i.e. like sociology). This does not appear to have emerged in the UK.
3. Education studies as a *professionally orientated region*. The purpose of education studies is providing a knowledge base for the profession of teaching. Knowledge may be recontextualised from various disciplines and 'reclassified' taking account of the 'problems' or 'contexts' of the profession. The region may develop forms of knowledge production modelled on the practices of related singulars, but this could be complicated by the multiple singulars involved.
4. Education studies as a *practice-orientated region*. The purpose of the region is to provide knowledge for and about educational practice, which may be broadly or more specifically defined. How practice is defined is likely to have an impact on which disciplinary sources are recontextualised, and on whether a form of knowledge production emerges within the region.
5. Education studies as a *generic*. Education studies is defined narrowly in terms of observable behaviours, 'skills', 'standards', techniques or competencies, and local practices. There is no necessary connection with disciplinary knowledge and 'local' or organisationally specific horizontal discourses are increasingly seen as valid knowledge for research and practice. This arrangement may suit those governments or employers that seek de-professionalisation of teaching (or a remodelled craft or technical model of the teacher), and to take control of what is considered valid educational research.

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