ENABLING CUMULATIVE KNOWLEDGE-BUILDING THROUGH TEACHING: 
A LEGITIMATION CODE THEORY ANALYSIS OF PEDAGOGIC PRACTICE IN 
LAW AND POLITICAL SCIENCE 

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Abstract

Much current research and practice in teaching and learning in higher education tends to overfocus on social aspects of education; on how rather than what students are learning. Much of this research and practice is influenced by constructivism, which has a relativist stance on knowledge, generally arguing, contra positivism, that knowledge is constructed in socio-historical contexts and largely inseparable from those who construct it and from issues of power. This leads to a confusion of knowledge with knowing, and knowledge is thus obscured as an object of study because it is only seen or understood as knowing or as a subject of learning and teaching. This 'knowledge-blindness' (Maton 2013a: 4) is problematic in higher education because knowledge and knowing are two separate parts of educational fields, and while they need to be brought together to provide a whole account of these fields, they also need to be analysed and understood separately to avoid blurring necessary boundaries and to avoid confusing knowledge itself with how it can be known. Being able to see and analyse knowledge as an object with its own properties and powers is crucial for both epistemological access and social inclusion and justice, because knowledge and knowledge practices are at the heart of academic disciplines in universities.

Social realism offers an alternative to the dilemma brought about by constructivism’s tendency towards knowledge-blindness. Social realism argues that it is possible to see and analyse both actors within social fields of practice as well as knowledge as something that is produced by these actors but also about more than just these actors and their practices; thus knowledge can be understood as emergent from these practices and fields but not reducible to them (Maton & Moore 2010). Social realism, drawing from Roy Bhaskar’s critical realist philosophy (1975, 2008), is intent on looking at the real structures and mechanisms that lie beneath appearances and practices in order to understand the ways in which these practices are shaped, and change over time. Legitimation Code Theory is a realist conceptual framework that has, as its central aim, the uncovering and analysis of organising principles that shape and change intellectual and education fields of production and reproduction of knowledge. In other words, the conceptual tools Legitimation Code Theory offers can enable an analysis of both knowledge and knowers within relational social fields of practice by enabling the analysis of the ways in which these fields, such as academic disciplines, are organised and how knowledge and knowing are understood in educational practice.

This study draws on social realism more broadly and Legitimation Code Theory specifically to develop a relatively novel conceptual and explanatory framework within which to analyse and answer its central question regarding how to enable cumulative knowledge building through
pedagogic practice. Using qualitative data from two academic disciplines, Law and Political Science, which was analysed using a set of conceptual and analytical tools drawn from Legitimation Code Theory, this study shows that the more nuanced and layered accounts of pedagogy that have been generated are able to provide valuable insights into what lecturers are doing as they teach in terms of helping students to acquire, use and produce disciplinary and 'powerful' knowledge (Young 2008b). Further, the study demonstrates that the organising principles underlying academic disciplines have a profound effect on how the role of the knower and the place or purpose of knowledge is understood in pedagogy and this affects how the pedagogy is designed and enacted. This study has argued that if we can research pedagogy rigorously using tools that allow us to see the real mechanisms and principles influencing and shaping it, and if we can reclaim the role of disciplinary knowledge as a central part of the pedagogic relationship between lecturer and students, then we can begin to see how teaching both enables and constrains cumulative learning. Further, we can change pedagogy to better enable cumulative learning and greater epistemological access to disciplinary knowledge and related practices for greater numbers of students.

The study concludes by suggesting that the conceptual tools offered by Legitimation Code Theory can provide academic lecturers with a set of tools that can begin to enable them to 'see' and understand their own teaching more clearly, as well as the possible gaps between what they are teaching and what their students are learning. This study argues that a social realist approach to the study of pedagogy such as the one used here can begin not only to enable changes in pedagogy aimed at filling these gaps but also begin to provide a more rigorous theoretical and practical approach to analysing, understanding and enacting pedagogic practice. This, in turn, can lead to more socially just and inclusive student learning and epistemic and social access to the powerful knowledge and ways of knowing in their disciplines.
# Table of Contents

**Abstract** .................................................................................................................................................. i

**Table of Contents** .................................................................................................................................. iii

**Acknowledgements** ............................................................................................................................... vi

**Illustrations** ............................................................................................................................................... vii

## CHAPTER ONE: INTRODUCTION – DESCRIBING THE FIELD SURROUNDING THE DIG SITE; BACKGROUND, RATIONALE AND FOCUS OF THE STUDY ........................................................................ 1

1. A brief background to the rationale for this study .................................................................................. 1
2. Finding a place in the field: a review of the relevant literature ............................................................. 4
   2.1 Conceptions of knowledge in current approaches to educational research and practice .............. 6
   2.2 Social realism’s theory of knowledge and knowing ........................................................................ 7
   2.3 The South African higher education context, epistemological access and social inclusion .......... 10
   2.4 Epistemological access, social inclusion and cumulative learning .............................................. 14
3. The focus of this study ............................................................................................................................ 18
   3.1 Research questions ............................................................................................................................. 19
4. The use of a structural metaphor for the thesis: the metaphor of an archaeological dig ........... 20
   4.1 The outline of the chapters: layers in the dig .................................................................................. 22

## CHAPTER TWO: A THEORETICAL FOUNDATION AND CONCEPTUAL FRAMEWORK FOR THE STUDY – LAYING THE GROUNDWORK AND SETTING OUT THE TOOLS FOR THE DIG ......................................................................................... 25

1. Introduction ........................................................................................................................................... 25
2. Finding an ‘underlabourer’: Critical Realism and depth ontology ....................................................... 26
3. Basil Bernstein, code theory, the ‘Pedagogic Device’ and the structuring of knowledge .......... 30
   3.1 Code theory ...................................................................................................................................... 30
   3.2 The Pedagogic Device ...................................................................................................................... 31
   3.3 Knowledge structures and vertical and horizontal discourses ...................................................... 35
4. Pierre Bourdieu: habitus, capital, field and practice ............................................................................ 38
5. Summary so far ........................................................................................................................................ 40
6. Legitimation Code Theory .................................................................................................................... 41
   6.1 LCT(Specialisation) .......................................................................................................................... 42
   6.1.1 Specialisation codes ....................................................................................................................... 43
   6.2 Knowledge-knower structures and ‘gazes’ ....................................................................................... 45
   6.2.1 Knowledge-knower structures .................................................................................................... 46
   6.2.2 Gazes ........................................................................................................................................... 47
   6.3 LCT(Semantics) ............................................................................................................................... 50
   6.3.1 Semantic gravity and semantic density ...................................................................................... 51
   6.3.2 Semantic waves and semantic ranges ....................................................................................... 52
7. Conclusion ............................................................................................................................................... 56

## CHAPTER THREE: RESEARCH DESIGN, ANALYTICAL TOOLS AND THE PROCESS OF WORKING WITH THE DATA - DOING THE DIG .............................................................................................. 58

1. Introduction ........................................................................................................................................... 58
2. Restating the aims of the study ............................................................................................................. 58
3. Choosing an appropriate research design .............................................................................................. 60
   3.1. Case study research design ............................................................................................................. 61
2.1 Enabling and constraining cumulative learning .......................................................... 162
2.2 Understanding and recontextualising disciplinary knowledge ..................................... 163
2.3 Creating an alternative approach to researching pedagogic practice .......................... 170
3. Implications for the intellectual field, for practice, and for further research .............. 172
   3.1 Speaking back to the literatures: this study’s contribution to the field of research .... 173
   3.2 Implications for practice and further research .......................................................... 175

REFERENCES AND SOURCES ......................................................................................... 180
1. Primary sources ........................................................................................................... 180
2. Secondary and textual sources .................................................................................. 182
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Illustrations

Tables

3.1 Documents gathered 68

Figures

Figure 2.1 Critical Realism’s depth ontology: The real, the actual and the empirical 27
Figure 2.2 The Pedagogic Device 31
Figure 2.3 Specialisation codes represented in a Cartesian plane 43
Figure 2.4 Gazes and the SR continuum 46
Figure 2.5 An example of a semantic wave for delict 51
Figure 2.6 Examples of high and low semantic flatlines A1 and A2 53
Figure 2.7 A generic example of down escalators (B) 54

Figure 3.1 Example of field notes from LOP112, Semester one: ‘a word-picture’ 80
Figure 3.2 Example of field notes from LOP112, Semester one: ‘non-linear recording of an explanation’ 81
Figure 3.3 An early question map as an example 82
Figure 3.4 Hybrid ‘map’ for organising the chapter and articulating links between the data (Political Studies) 84
Figure 3.5 Mini-map for organising the chapter and articulating links between the data (Law) 85

Figure 4.1 Law as a knowledge code represented on a Cartesian plane 104
Figure 4.2 A generic example of a semantic wave 105
Figure 4.3 Examples of high and low semantic flatlines and down escalators 106
Figure 4.4 Macro semantic wave on introduction to legal subjectivity and legal status 108
Figure 4.5 Micro semantic wave on law in the objective and subjective sense 110
Figure 4.6 Down escalators within macro-semantic wave on legal subjectivity 112
Figure 4.7 Micro-semantic wave as part of macro wave in Figure 4.4 113
Figure 4.8 Semantic flatline in the explanation of the nasciturus fiction 116
Figure 4.9 Semantic wave for the explanation of the nasciturus fiction 117

Figure 5.1 Political Studies as a knower code represented on a Cartesian plane 137
Figure 5.2 Generic example of a single semantic wave 143
Figure 5.3 Generic examples of high and low semantic flatlines 144
Figure 5.4 Semantic flatline for discussion on men, women and gender 146
Figure 5.5 Semantic wave for teaching of and discussion on Feminist theories in international relations 149
Figure 5.6 Semantic wave for discussion about Marikana strike and power, the state and authority 151
Figure 5.7 Semantic wave on types and sources of power 153
CHAPTER ONE: INTRODUCTION – DESCRIBING THE FIELD SURROUNDING THE DIG SITE; BACKGROUND, RATIONALE AND FOCUS OF THE STUDY

1. A brief background to the rationale for this study

As a researcher and a practitioner, I have both personal and professional reasons driving the study that is reported on in this dissertation. My personal reasons come from my own experiences as an educator in three different universities in South Africa over the last ten years, asking myself the same questions I hear from many lecturers I work with in my current university position as a teaching and learning consultant: Why is there such a gap between what I taught in class, and what students seemed to understand in class discussions, and what they write in their assignments, tests and essays? What is causing this gap and what can I do with my students to close it? I have seen many students and lecturers over the years frustrated and disheartened by this sense of a gap, and by their apparent lack of ability to bridge it adequately.

Either poor teaching is blamed, which in many cases has been unfair as many of the lecturers I have worked with are passionate, committed teachers, as I was, or students are blamed for being ‘underprepared’ to study at university. The lecturers are often doing the best they can with the tools they have and circumstances in which they are required to teach, which in more and more universities in South Africa and other parts of the world includes teaching increasingly large classes; having to repeat lectures to sections of the class because venues will not accommodate the whole class at one time; teaching in venues that do not encourage much interaction, such as tall, tiered rows of seating in front of a lectern or projector screen; increasing demands on teachers to do research and administration, which makes striking a balance a constant struggle; and increasingly diverse groups of students in terms, at least, of their educational and literacy backgrounds and levels of preparedness for university study.

Students do come into university from a range of home and school backgrounds, some of which have brought them closer to the kinds of literacies they will need to practice and master at university, and some of which mean a significant and daunting transition (McKenna 2004). But all students, regardless of their academic and home literacy backgrounds need to make a transition into their chosen field of study, and they need to be taught and guided in ways that enable as many as possible to make the transition successfully, rather than just those whose academic and home backgrounds have predisposed them to success.

This brings me to the professional reasons for doing this study, and writing this dissertation. I work, currently, in a role that requires that I support, encourage and advise academic lecturers on aspects of their teaching and their students’ learning. I aim to enable them to try different and appropriate teaching strategies, approaches and materials that will enable the greatest
number of their students to learn in desired ways and to demonstrate their knowledge ably and appropriately in academic writing. A year into this role I found myself asking questions of this work and of the lecturers who chose to work with me that neither of us had answers to. Questions such as: *Why do you think that, even though you have explained this concept in class with examples, your students are struggling to use the concept and write about these other questions you have asked them? Why do they seem to be able to either make many claims with little or no evidence, or use lots of evidence and examples with no apparent ability to generalise or abstract principles from this evidence and these examples? What is going on here and what can we do about it?* I realised that I did not have a language to speak about these things, and neither did the lecturers. We were guessing, making assumptions about the teaching we were trying to do, and especially about the students: they were not doing the right things because they could not write or read effectively, or because they did not care about the subject or because they should not actually be at university in the first place. I was not happy making these kinds of assumptions; I do not think, based on my own prior research and teaching experience, that they are well-founded assumptions for most students in higher education institutions. But I was hard-pressed to offer alternatives.

Current approaches to framing and guiding teaching and learning processes such as curriculum writing and renewal, lecturing and tutoring are largely drawn from constructivism. A particular example is ‘constructive alignment’ and ‘student-centred learning’ drawn primarily from the work of John Biggs (1996, 2012). This approach as it is used at the University of the Western Cape (UWC), where I work, advocates designing curricula focused on what students are doing in the classroom, with aligned outcomes, teaching and learning activities, assessments and evaluation tasks. UWC has also brought this process of aligning curricula and teaching in line with its Charter of Graduate Attributes (UWC 2011), which was influenced by the work of Simon Barrie and others, largely in Australia (Barrie 2007; Bath et al 2004; Treleaven & Voola 2008). In essence, Biggs’ model and the graduate attributes together suggest that all teaching and learning activities and assessments must be able to lead learners towards achieving identifiable outcomes, and activities need to focus on giving students opportunities to engage as far as possible in ‘authentic’ (Herrington & Herrington 2006; Herrington & Oliver 2000) and student-centred learning activities that enable them to construct knowledge and make meaning in ways that connect both with their prior learning as far as possible, and with the world of work and practice beyond the university where appropriate. I will explore these issues in relation to

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1 ‘Teaching and learning’ and ‘pedagogy’ are understood in this study as being the same thing – the nature and approaches lecturers take towards their own teaching and their students’ learning. The terms will thus be used interchangeably in this thesis.
literature and research in the next section, but here I want to briefly link this approach, as I have experienced it thus far, to my professional reasons for doing this study at this point in time.

I have had to make sense of constructive alignment and graduate attributes, partly because I need to show how the work in the UWC Writing Centre aligns with graduate attributes in particular, and partly because I am a member of a teaching and learning team that works to help other academics make sense of these approaches in their own curricula and teaching. For example, I have been a facilitator of workshops focused on teaching lecturers about constructive alignment and assisting them with the practice of aligning their curricula, specifying learning outcomes, and designing teaching and learning activities that ideally focus on active and meaningful student learning. What I have experienced thus far has two dimensions.

The first dimension is that the theoretical language these approaches provide me with to think about and talk about learning, teaching and assessment is quite thin. In one instance, when closely questioned by a lecturer about the merits of this approach compared to her own, self-described 'Piagetian' take on teaching and learning, I struggled to find a way to clearly articulate the principles underpinning this approach, beyond being able to say that it was student-centred, and focused on engaging students in the learning process. It may be that there were things I was missing in terms of my reading about and study of this approach, but in the time that I have been taking part in these conversations and workshops I have found the broadly constructivist approaches taken to be quite atheoretical, as they provide little by way of tools to analyse or understand how the knowledge students are learning can and does shape the teaching, or any means of seeing or understanding the principles underpinning these approaches. In short, these approaches do little to move us past making assumptions about teachers and about students and what is happening in lecture halls and learning environments in higher education.

The second dimension is that these approaches are focused on processes at a fairly surface level. It is true that aligning learning outcomes with teaching and learning and assessment, and then also with evaluation, not to mention working out how and where graduate attributes can be ‘embedded’ and taught in your curriculum, is a not a simple or easy exercise. It requires careful thought and planning to be done well. But while it covers the ‘how’ of developing and aligning the curriculum (at a superficial level) with the teaching of it, this approach says little about the ‘what’ – the knowledge – that is being taught.

My experience has been that knowledge as an object of study is sidelined or taken for granted, or at least regarded as arbitrary, in these broadly constructivist approaches to pedagogy and curriculum design. What is paramount in Biggs’ approach to constructive alignment, charters of

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I am the current coordinator of the UWC Writing Centre in addition to my academic development role.
graduate attributes, as well as in authentic and problem-based learning is the learning activities and attributes of the students; how students are learning and what they are doing in classrooms and tutorials and who they are becoming as graduates more broadly. What students are talking and learning about, and how knowledge thus in turn speaks back to and shapes the curriculum and the teaching and learning environment seems to be a much lesser concern altogether (see Maton 2013a). Further, although there may be alignment between curricula and the teaching of them at a 'big picture' level, these approaches offer no way of understanding why some students do well and others do not; why some students can make connections between prior and new knowledge, and between different kinds of knowledge and knowledge practices successfully, and why some struggle.

Based on my experience thus far I have come to the tentative conclusion that I may be able to align a curriculum beautifully on paper, but that without a way of seeing, understanding and analysing the knowledge and related practices that I am teaching, I may still be creating a constraining environment in pedagogic terms because many of my students may be unable to see and make connections between prior and new knowledge, or between abstract concepts and terms and contextual examples and applications, or even between contexts, such as courses or years of study within a degree programme. If I cannot see the knowledge itself and analyse it, how will I be able to teach it consciously and thoughtfully? This has bothered me, because my work in academic literacies and student writing, for example, has shown me that the kinds of knowledge that are being read about, learnt about, spoken about in the disciplines shape the literacies that are needed, as well as how students write, learn and speak. In teaching and learning terms, the ‘what’ is neither neutral nor arbitrary (see Bernstein 2000; Chen et al 2011).

Questions, then, about the role of knowledge in pedagogy, and how indeed we can develop a way of analysing and understanding the doing of curriculum development and pedagogy that accounts for different kinds of knowledge and different kinds of learning and teaching brought me to this study, and to the questions it has asked and attempted to answer. The questions cannot all be answered here – more research, more thinking, more work is needed – but this study is my start at developing a theoretical language that begins to understand the role that knowledge as an object as well as a subject of study plays in shaping the ways in which we teach it, and the implications for students’ ability to learn cumulatively over time in our universities.

2. Finding a place in the field: a review of the relevant literature

Why are questions about knowledge in education so important? In the face of so many pressures from within and outside of the academy – to renew curricula; engage in online,
authentic, active, disciplinary, interdisciplinary, multidisciplinary learning and teaching; learn and practice new teaching skills and approaches; and publish scholarly research – questions about knowledge and its role in pedagogic practice can seem a little abstract. In countries such as South Africa which are working to increase participation in higher education, particularly for previously marginalised or disadvantaged students, and are therefore having to find ways to account for the increased diversity in their universities in terms of students’ socio-economic, academic and linguistic backgrounds (CHE 2013), questions about learning and how to engage students in learning in ways that recognise their own prior and personal knowledge and account for the diversity in levels of preparedness for higher education are paramount in research and practice (Biggs & Tang 2010; Evans et al 2010; Haggis 2000; Haggis & Pouget 2002; Kift & Field 2009). However, knowledge as a focus of this learning is not absent. Increasingly calls from government leaders both in South Africa and globally for ‘knowledge workers’ or for suitably skilled graduates to participate in and grow the ‘knowledge economy’ are widespread, and universities are increasingly pressured in terms of producing these graduates (Fisher & Scott 2011; Griesel & Parker 2009). Students also need to be ‘lifelong learners’ with ‘critical’ and ‘scholarly’ attitudes towards knowledge (UWC 2011) in order to keep pace in rapidly changing local and global workforces and economies (Field 2006; Maton 2013a). Thus, questions about knowledge are indeed important. However, we need to be clear about what kinds of knowledge are referred to in these references to a ‘knowledge economy’ and ‘knowledge workers’ and we also need to know what kinds of knowledge and related knowledge practices universities are being asked to equip students with, and how these kinds of knowledge and related practices can and should be taught and learnt in order for students to become lifelong learners with the capacity to keep learning and connecting new and prior knowledge in an accumulative way as they do.

A strong focus on knowledge is at the heart of this study, and the argument it makes. What follows is a discussion of the relevant literature, which will examine current dominant conceptions of knowledge in educational research and practice; social realism’s response and its conception of knowledge; the South African context and relevant links between knowledge, epistemological access and social inclusion; and the need for cumulative knowledge building as a condition for epistemological access and social inclusion. This discussion concludes by locating gaps within research into pedagogic practices or teaching and learning, locating this study and its contribution to the field.
2.1 Conceptions of knowledge in current approaches to educational research and practice

Much current research on pedagogy, both in South Africa and globally, is focused on methods of engaging students in academic learning and on different kinds of learning tools and approaches that can be brought into the pedagogic environment in order to make students, as the focus of the learning and teaching, more engaged, more included, and more knowledgeable in the right ways. For example, ‘authentic learning’ and ‘problem-based learning’ (Herrington & Herrington 2006; Herrington & Oliver 2000; Lombardi 2007); student-centred learning more broadly, including transitions from school to university and between years at university (Baeten et al 2010; Kift & Field 2009; Nelson & Kift 2004); and using emerging technologies and ICTs in education (Bonnett et al 1999; Hannafin & Hannafin 2010; Macfarlane & Sakellariou 2002; Rowe & Struthers 2009). Current research is further focused on how different social groups of students learn or access higher education, for example mature students (Huang 2002), or ‘non-traditional’ students from previously excluded or marginalised groups (Bamber & Tett 2000; Bowl 2001). Broadly speaking, the paradigm that informs or influences much of this kind of research in higher education at present is broadly informed by constructivism, and is focused on student-centred approaches to learning and teaching. The focus is on ‘relations to’ knowledge (Bernstein 1990; Maton 2013a) of these different groups of students in terms of how higher education is accessed and also how different social groups of students learn in higher education. In other words, the focus is very much on a range of social aspects of knowledge and the way in which knowledge is used and produced by students in particular.

Constructivism, as a dominant paradigm informing a number of current approaches to designing curricula and also pedagogic practices, does not denote one set of practices or one set of beliefs. Not all constructivist approaches to education are alike in either their beliefs or their realisations in pedagogic practice or curriculum design, but what these approaches do have in common is a ‘knowledge-blindness’ (Maton 2013a: 4). Essentially this means that these approaches have no language or tools with which to see, research and analyse knowledge as both a subject and an object of study, and therefore leave it under-researched and under-conceptualised in educational research and practice (Maton 2013a). This is largely because of commitments constructivism has made regarding knowledge. In brief, because space does not allow and because a long exposition is not necessary for the purposes of this study, constructivism takes a relativist view of knowledge. This is in part at least because constructivist relativism is often defined, along with other more ‘humanist and social approaches’ in opposition to positivist absolutism. Positivism has long been denounced for its view of knowledge as ‘decontextualized, value-free, detached, and certain’ (Maton 2013a: 6). In opposition, constructivist relativism has taken the position that knowledge is ‘socially
constructed within cultural and historical conditions in ways that reflect vested social interests’ (Maton 2013a:6). Alexander (1995) has termed the result of this false dichotomy between the two positions the ‘epistemological dilemma’ – which side does one choose when neither offers a full account of either knowledge nor knowing?

Critical Realism argues that constructivist relativism, or indeed any relativist position such as this, commits an ‘epistemic fallacy’ because it confuses epistemology with ontology (Bhaskar 2008: 5), or simply put, it confuses knowledge with what it is to know. Wheelahan (2010: 9), following Basil Bernstein (1999), further posits that in practice this confusion sees constructivist approaches in education collapse the boundaries between ‘vertical’ and ‘horizontal’ discourses, in other words blurring the boundaries between ‘theoretical’ and ‘everyday’ knowledge. Michael F. Young (2008a: 89) contends that a relativist view of knowledge sees both kinds of knowledge as ‘just another set of social practices’, and as inextricably bound up with both power and also with those who construct the knowledge. This dilemma is highly problematic in education, where epistemology and ontology are indeed not one and the same thing. While they need to be brought together in teaching and learning, they need to be seen and analysed as different and distinct objects of research in order for teaching and learning to maintain the necessary boundaries between knowledge itself – the different kinds of knowledge one can have – and knowing – and the different ways of knowing.

2.2 Social realism’s theory of knowledge and knowing

Social realism offers a way of seeing and analysing both knowledge and knowing together, and also distinctly. In Maton and Moore’s terms (2010: 5), social realism views knowledge-producing fields, such as education, as comprising ‘both relational structures of concepts and methods for relating these to the empirical world and actors positioned in institutions within specific social and historical contexts’ (emphasis in original). Social realists counter the claims made by constructivist relativism regarding knowledge as firstly, being inextricably bound up with knowing and knowers and unable to be understood separately, and secondly, regarding knowledge as being about power. In regard to the first set of claims, social realism draws on Critical Realism’s philosophical approach to understanding knowledge, using Critical Realism as an ‘underlabourer’ or a framework for thinking through their account of knowledge and knowing.

There are three ‘commitments’ in this critical realist approach: the first is to ontological realism, the second is to epistemological relativism and the third is to judgemental rationality (Archer et al 1998). These will be discussed in greater detail in Chapter Two, section 2, but here it needs to
be noted, briefly, that ontological realism holds that we need to recognise that knowledge is ‘about something other than itself’ (Maton & Moore 2010: 4); there is a reality that does exist beyond that which we can behold, and while we can believe in anything we want to, we cannot know in the same way. Epistemological relativism says that this knowledge that exists independently of us is not universal or True – it is socially produced over time in different socio-historical contexts and so is fallible and mediated by and through those contexts (Archer et al 1998; Maton & Moore 2010). Our knowing is also mediated by these socio-historical contexts. Finally, judgemental rationality holds that there are ‘intersubjective bases for determining the relative merits of competing knowledge claims, because some knowledges are more powerful and productive than others’ (Maton & Moore 2010: 4). Thus, knowledge is not the same as knowing and can indeed be seen in its own right as an object of study. In Roy Bhaskar’s (1998) terms there is exists an objective reality in both the social and natural world that is independent of it necessarily being known; to give an overly simple and slightly crude example, whether or not you know about gravity, it will still ensure that your feet stay on the ground.

To counter the second claim, regarding knowledge and power, Young (2008a) differentiates between ‘powerful knowledge’ and ‘knowledge of the powerful’, which are related but are not the same thing. In South Africa, given the colonial and apartheid past, it is understandable that there are concerns about what is and can be silenced by dominant knowledge systems, and by those who possess the powerful knowledge in educational settings. However, the unintended consequence of such concerns has been that powerful knowledge (as opposed to knowledge of the powerful) has come to be seen as the kind of knowledge that constructivist relativism holds itself against: the knowledge Macdonald (2000), as quoted in Taylor (2001: 2), refers to when he says:

Today's schools are about anything constructivist teacher educators say: self-actualisation, following one's joy, social adjustment, or multicultural sensitivity, but the one thing they are not about is knowledge. Oh sure, educators will occasionally allow the word to pass their lips but it is always in a compromised position, as in constructing one's own knowledge, or contextualised knowledge. Plain old knowledge, the kind written down in books, the kind for which Faust sold his soul, that is out (my emphasis).

This ‘Faustian’ knowledge in Macdonald’s quote is generally associated with society’s elite, who are well-represented in the top schools, the top universities and the top jobs, and therefore have greater access to the means of knowledge acquisition and production, and the means whereby to control what knowledge is produced and disseminated and to whom and how. Analysis of how this knowledge is ‘mediated and given legitimacy’ (Wheelahan 2010: 9) is an important
part of analysing knowledge and knowledge practices in education, but this is not the only way of thinking about knowledge. Young (2008b: 14) tells us, of ‘powerful knowledge’, that it refers to what the knowledge can do or what intellectual power it gives to those who have access to it. Powerful knowledge provides more reliable explanations and new ways of thinking about the world and acquiring it and can provide learners with a language for engaging in political, moral and other kinds of debates.

Thus knowledge is not only about power, or at least not only about power in the sense of who the powerful are that create and disseminate knowledge. Social realism, then, can offer us a ‘stronger’ theory of knowledge (Maton 2013a: 9), and also a way of looking ‘through appearances’ to see the real mechanisms and structures underneath, acknowledging, as has been seen here, that these structures are about more than just ‘the play of social interests and vested power’ (Maton & Moore 2010: 4).

Knowledge has not been understood or presented in much recent educational research on teaching and learning as an object of study, and is seldom the focus of the research itself, mentioned but not analysed sufficiently. It is seldom seen in this educational research as differentiated, and capable of shaping the ways in which it needs to be taught and learnt, and how and where it can and should be connected with students’ prior learning as well as the world of work and practice beyond higher education. Much of this research, as Maton (2013a: 4) argues, is ‘knowledge-blind’ at worst; at best it simply ignores or side-lines issues of knowledge and the roles that different kinds of knowledge play in shaping curricula and pedagogy. This has, arguably, led to a sense of current approaches underscored by constructivist paradigms as a kind of ‘one-size-fits-all’ approach to both curriculum design and pedagogy, largely because these approaches do not differentiate sufficiently between everyday knowledge and specialised knowledge, or between different kinds of specialised knowledge (Wheelahan 2010), such as, for example, Physics knowledge in the sciences, or History knowledge in the social sciences.

The lack of ability of these approaches to differentiate between types of knowledge and the ways in which these might be structured has profound effects on teaching and learning. If a particular approach to teaching is unable to see the knowledge being taught, understand the nature of that knowledge and therefore consider the ways in which it needs to be mediated and learned, it is possible that the knowledge itself will be de-centred, turning the focus of the teaching instead onto the students and their learning processes with little regard for what they are learning. This could ultimately result in students being excluded from gaining sufficient ‘powerful knowledge’ within their disciplines to enable epistemic access or access to the means of acquiring, using and producing the knowledge for themselves. To paraphrase Wheelahan (2010: 163), an over-focus on the social aspects of knowledge, for example ways of learning, or
approaches to learning, or what students think or feel about learning and knowledge, rather than on what students know and their ability to evaluate knowledge claims can ultimately ‘unframe’ the discipline, and exclude students from gaining the ‘powerful’ theoretical knowledge and the related knowledge practices needed to participate meaningfully in ‘society’s conversation about what it should be like’. This is clearly problematic in the South African higher education context in which this study is located, and where epistemological or epistemic access and social inclusion and justice are key concerns in policy and practice.

2.3 The South African higher education context, epistemological access and social inclusion

It is important to engage students in their own learning, to help them to see themselves as capable of producing or making knowledge, rather than just as passive ‘consumers’ of knowledge (Boughey 2012), unable to make connections between what they learn in their lectures and the world beyond the university or between their prior learning and knowledge. Academic skills are also necessary: in order to be successful students, certain kinds of academic skills or practices must be mastered, for example writing a clear, persuasive argument in Philosophy, critiquing a fictional text in English Literature, or writing an objective, detailed scientific report in Chemistry. But these skills are not generic, and are not learned in a vacuum, separate from the knowledge that students need to work with, think about, read and write about, such as texts written by Plato, the novel by Harper Lee, or the magnesium experiment (see Boughey 2005; Lillis 2001; Street 1995). In other words, the ‘generic’ skills of critical thinking, textual analysis and expositional writing are not exactly the same across the university because what is being written about – the knowledge – is different in each case, as are the purposes of the writing. An over-focus in teaching on student-centred engagement, learning and teaching methods or even the acquisition of academic ‘skills’ at the expense of focusing on the knowledge that is the subject of that learning and the object that shapes both the learning and the ‘skills’ that need to be acquired means that, rather than students gaining epistemological access (Morrow 1993) to ‘powerful’ knowledge (Young 2008b: 14) within their disciplines, students can actually end up being excluded from this powerful knowledge and the related ways of knowing (Wheelahan 2010). This is especially so for students whose home and prior educational discourses are quite distant or very different from the discourses within the university (McKenna 2004, 2010), making the gap that they need to bridge between these discourses in order to gain epistemological access in the disciplines that much wider.

Epistemological access (Morrow 1993) is often contrasted with ‘formal access’ (which is a necessary precondition), and essentially, unlike formal access which means admitting students to a university and allowing them to register and study there, it entails giving students the
means with which to succeed at university. Epistemological access involves ‘bridging the gaps between the respective worlds students and lecturers draw on…making overt the “rules and conventions” that determine what can count as knowledge’ (Boughey 2005: 240). Epistemology is defined in its simplest terms as the study of knowledge. So, if one is talking about one’s curriculum and pedagogy as needing to enable or create epistemological access for students, then it should be understood that this indeed means what Boughey suggests it does: ‘access to the knowledge and procedures and processes for knowing, writing, speaking and growing that knowledge’ (Stanford Encyclopedia of Philosophy, n.d). But this term has come to mean a range of things around the world and in South Africa particularly, where the education system at all levels is still struggling with uneven access to resources, uneven teacher training and education and great diversity in the linguistic and socioeconomic backgrounds of students (CHE 2013; Lotz-Sistika 2009).

South Africa is still struggling with a complex and multi-layered legacy of uneven access to resources, for example education and socioeconomic benefits. Many students entering South African universities have come out of a school system that is largely under-resourced and thus many students struggle to make the transition to higher education, and further struggle to succeed (Scott, Yeld & Hendry 2007). In a recent study by the Council on Higher Education (CHE), the researchers report that roughly 35% of the current intake of students into tertiary institutions will graduate within five years, and when one accounts for students returning to their studies after dropping out or taking longer than five years to complete their studies, it is projected that about 55% of the intake will never graduate. ‘Only one in four students’ registered in contact (rather than distance) universities graduate within the ‘regulation time’ of three years (CHE 2013: 15). These alarming statistics make questions about learning, social inclusion, social justice and epistemological access even more important to ask and answer.

Against this backdrop of a diverse student body in terms of their ‘educational, linguistic and socioeconomic’ backgrounds (CHE 2013: 19), epistemological access has come to mean, broadly, making success a possibility for these students. At UWC, like many other South African universities, the term and what it denotes has been strongly, but not only, tied to foundation and extended curriculum programmes that build an extra year of study into undergraduate degrees in many faculties, and aim to expose students, in different ways, to learning in higher education, and learning how to learn (Essack & Quayle 2007; Zaaliman, van der Flier & Thijs 2000). Some of these foundation-year or extended curriculum programmes are ‘embedded’, meaning that the knowledge and skills and ways of learning that students are exposed to are closely linked to or clearly part of the disciplines students are studying in (Carelse 2011; Herbert et al 2011). In other cases they are more general, focused on building general academic skills such as critical
thinking and essay writing without necessarily providing authentic connections to different kinds of relevant disciplinary knowledge and ways of knowing in which students are meant to use these skills or further their studies (Luckett & Hunma 2013). What is increasingly common in the research is an understanding that epistemological access is indeed about more than just learning certain academic skills or practices; what is less common is a deeper sense of what it means for the disciplines themselves, and the disciplinary specialists within them, to provide students with epistemic access to the knowledge and ways of knowing that students need in order to succeed in higher education and in the world of work and practice. A great deal of the research focuses on curriculum design to enable epistemological access (for example, Warren 2002; Young & Gamble 2006); less focuses on the actual classroom practices of pedagogy to enable the same, understood not just as ‘accessing learning’ broadly, but as accessing and understanding the disciplinary knowledge itself as well as the ‘rules and conventions’ that govern what counts as knowledge.

Social inclusion is also an increasingly prevalent area of focus in teaching and learning research in higher education, and a very important one that is related to the focus of this study. Social inclusion can be understood in a range of ways, for example inclusion within (or exclusion from) certain social groups in political terms, related to issues of race, sex, gender or culture. Social inclusion focused on in some higher education research and practice concerns the ways in which students from different racial and cultural backgrounds are included in higher education, and also made to feel valued and recognised by the ways in which teaching and learning processes include their prior knowledge or take account of the diversity of their personal backgrounds (Bozalek 2011; Rohleder et al 2008). Another related area of research and practice involves a relatively new notion of ‘pedagogies of discomfort’ and ‘hope’ to help students reflect critically on their own conceptions of themselves in relation to other students, and their ideas about other students, and begin to engage constructively with issues of difference, inclusion and exclusion (Bohler 2004; Boler & Zembylas 2003; Leibowitz et al 2010).

Social inclusion in this research tends to have a student-centred approach focused on ways of learning or knowing rather than on different kinds of academic or personal knowledge and the ways in which these shape or influence knowing and practice. Social inclusion as it is understood and used in this study has more of a focus on knowledge and knowledge practices, and understands access to ‘powerful knowledge’ (Young 2008b: 14) and related ways of knowing as a precondition for social inclusion, whether it be in disciplinary contexts within universities, or within professional contexts outside of universities, or even within wider social or societal groups and communities. This powerful knowledge is not one hegemonic thing but is different in different disciplinary, professional and societal contexts, and following social
realism this study understands social inclusion primarily as having access to the means of acquiring, using and also producing this knowledge (Young 2008b) because this is what gives us, and students, the means of joining a wide range of conversations within academic disciplines, within professional contexts and also within society about what these different contexts are like and could or should be like (see Wheelahan 2010). Epistemological access and social inclusion, therefore, are integrally connected within this study’s understanding of these concepts and what they mean within this research, and related research.

Another way in which the term social inclusion is often used in higher education is in relation to widening participation. In post-apartheid South Africa, successive ministers for education since 1994 have focused on broadening access to and widening participation in higher education for many students who were previously unable to attend higher education institutions (HEIs). Resultant policies governing higher education have guided universities in increasing representation in HEIs of groups that were previously poorly represented or denied access (see DHET 2012). In terms of the curriculum writ large, there have also been shifts, as calls from government and from the workplace in general have required HEIs to produce graduates that are ready for the world of work, have appropriate skills, knowledge and literacies and can therefore contribute meaningfully to the ‘knowledge economy’ or the ‘knowledge-driven economy’ (see, for example, Ambrosi 2006; Brown et al 2002; Griesel & Parker 2009; Shore 2010, Warren 2002). This global phenomenon references the needs for graduates who are ‘employable’ and ‘skilled’, and in South Africa’s case certainly, graduates who can contribute to developing and growing the country’s economy and its ability to compete globally for resources and capital (Griesel & Parker 2009). This phenomenon also requires that graduates have certain ‘attributes’ such as critical citizenship, and a lifelong approach to learning (see UWC’s Charter of Graduate Attributes, 2011 as an example). In order to be lifelong learners, critical citizens, and continuously relevantly skilled and knowledgeable workers or practitioners, graduates will need to be able to take knowledge and learning from one context into another, reapply and recontextualise previously learned knowledge, and connect it meaningfully with new knowledge and learning. In other words, they will need to be ‘cumulative’ learners (Maton

3 In 2010, looking across the universities in the Western and Eastern Cape (Stellenbosch, UCT, UWC and Rhodes) in terms of enrolments by race group, for example, there was an average of 34.5% representation of black African students, 39.25% White students, 21% Coloured students and 5% Indian students (Data provided by the Centre for Higher Education Transformation (CHET); http://www.chet.org.za/data). By way of comparison to population size according to 2011 census data, in these two provinces combined the total black African population is 7 572 778 people; the total Coloured population is 3 382 254 people; the total White population is 1 225 503 people; and the total Indian population is 88 690 people (Stats SA 2012).
2009; 2013b). If this, then, is a central aim of higher education, the curriculum and attendant forms of pedagogy must enable cumulative learning over time.

2.4 Epistemological access, social inclusion and cumulative learning

There is a growing body of work praising the way in which constructivism and related authentic approaches to learning are making it more possible for students to ‘recognise’ themselves in the curriculum (Wheelahan 2010: 163) and for these same students to connect their formal learning with their everyday, experiential or prior knowledge in ways that validate the latter. However, there is less by way of evidence that these approaches are working in terms of creating a cohort of students who have access to powerful knowledge and ways of knowing such that they can make transitions successfully into professional fields of practice or the workplace, and continue to be lifelong learners equipped with the ability to connect their current learning with new, future learning in meaningful ways. Maton (2013a), Wheelahan (2009, 2010) and Case (2011) for example, argue that what may result from making learning more experiential or problem-based rather than more organised around a particular knowledge structure, or set of curriculum logics based on what is being learnt, can be an ‘unframing’ of the discipline, and a resultant obscuring of epistemic and also ontological access to the discourse of that discipline. A university course that is driven less by principled or structured pedagogic knowledge as a foundation and rather, comprises a series of experientially-based tasks that only draw on relevant sections of knowledge and related skills or practices as and when they are necessary may in fact be making it less easy for students to locate their own knowledge and skills within a wider body of knowledge, skills and dispositions beyond the curriculum, or acquire the tools and procedures used by the disciplines for selecting, talking and writing about the knowledge, and then taking those tools and the knowledge with them into other contexts (Case 2011; Maton 2013a; Wheelahan 2009). Case (2011) makes this kind of argument with regard to Engineering education in South Africa, Maton (2013a) in relation to instructional design and school English in Australia, and Wheelahan (2007, 2009) makes this argument in relation to vocational education and training in Australia.

One of the results of several of these broadly constructivist approaches to teaching and learning can be blurring of the boundaries between specialised educational knowledge and everyday knowledge such that students cannot see the boundaries clearly and are thus more likely to be unable to adequately learn and follow the tacit rules and conventions that dictate what counts as knowledge and knowing in different disciplines (Muller 2000; Wheelahan 2009; Young & Muller 2010). For example, if students are asked to use both tacit, everyday, personal knowledge as well as theoretical knowledge in responding to assignments – answering a
question using both theory/content knowledge and also one’s own opinions or feelings about the topic, for example (see Chen et al 2011) – without being given clear criteria for judging the different merits of these different kinds of knowledge or seeing the differences between them, these boundaries become blurred and it becomes difficult to see these knowledges as different, and for different purposes within learning and teaching. Further, it can become difficult for students to make connections between different knowledges meaningfully if they are unable to see the boundaries; connections are made both within and across boundaries, between everyday and theoretical knowledge; between new and prior knowledge; between different courses within a degree programme and so on. Thus, this blurring associated with certain approaches to pedagogy and learning can encourage students to segment or portion off rather than build knowledge critically and relationally over time, thus constraining them from acquiring, using and producing powerful knowledge appropriately in different contexts within the university, such as within a degree programme across disciplines (for example connecting related concepts learned in Sociology and Political Science) or between connected courses within a disciplinary programme, (for example drawing links between Introduction to Politics in first year and Foreign Relations in second year). Further, they may be constrained from connecting their university-based knowledge and related practices and skills, such as textual analysis and research writing with the knowledge drawn on and practices used in the workplace, even though they may indeed be related.

Cumulative learning and the transfer of knowledge from the context in which it is learned to other contexts is a central concern of education, and the lack of transfer-ability by students is something long lamented in higher education in particular, whether it is between different parts of a module, different courses within a degree programme or between university and the workplace (see Christie & Macken-Horarik 2007; Field 2006; Maton 2013a). That is, what is desired is cumulative learning, but what is often achieved is segmented learning (Maton 2009, 2013b). Cumulative learning is understood in LCT terms quite specifically as building knowledge both within and across contexts such as a course or a disciplinary field. It could also be described as being relational or connected in the sense that students should seek and find links between concepts and their application, and between different concepts and different types of application where relevant, as well as between concepts used across disciplinary contexts. Making those links should be made possible through curriculum design as well as pedagogic approaches and action. Segmented learning, on the other hand is understood as occurring when knowledge becomes too tied to the context in which it has been originally learnt, and cannot be successfully abstracted and taken into other contexts and accumulated. Alternatively it can be too abstract and therefore difficult for students to apply in different concepts or to a range of problems or cases. Case (2011), as one example, raises this issue in her
critique of problem-based learning in Engineering education. This issue has also been raised by others such as Wheelahan (2007, 2009) in discussing the Vocational Education and Training curriculum in Australia.

What seems to have happened in light of the larger shifts in education towards catering for the demands of the knowledge economy and the workplace is that knowledge has become a means to an end rather than retaining value as an end in itself at the centre of the curriculum. In the wake of the turn to constructivism and a focus on student-centred learning linked to widening participation, social inclusion and epistemological access (Morrow 1993) in higher education, knowledge has increasingly been reduced to the level of knowing in the sense that, in order to be both meaningful and useful, knowledge has to be known and learned through a constructive process that happens through experiential, authentic or situated learning (Jonassen 1998; Jonassen & Land 1999). Thus students can draw on their tacit, everyday knowledge and on their experiences outside of the academy to construct formal knowledge in their disciplines, and this kind of pedagogy increasingly blurs the boundaries between these two different kinds of knowledge and the different roles they have to play both inside of the university and in the world beyond it.

This may look and feel and sound like greater social inclusion and social justice, but, as Wheelahan (2010) argues, boundaries are necessary and can be enabling if they can be recognised and also navigated knowingly. ‘To cross the line without knowing it is to be at the mercy of the power inscribed in the line’ (Muller 2000: 71). The question, then, is not about doing away with the boundaries (Young & Muller 2010) but rather it is about teaching students how to recognise and navigate the boundaries knowingly. It is also about how to teach in universities to enable the greatest number of students, regardless of their background, to learn in ways that enable them to build knowledge cumulatively, and to make meaningful and disciplinarily-relevant connections between different kinds of knowledge, prior, current and future.

Different knowledges are structured differently, and are acquired differently (Bernstein 1990, 1999, 2000; Maton & Moore 2010; Maton 2013a), and the implications of the ways in which knowledges are structured and acquired for curriculum development and for pedagogic practice are therefore worthy of careful exploration and consideration. In order to become part of a disciplinary community, and learn to think and know and act like a practitioner or knower in that field or community, students need more than just knowledge and related skills. Becoming part of a disciplinary community, such as Law or Political Science, and learning to think, speak, act and write in ways that are recognised and valued by other members of the community, like lawyers for example, requires an ability to interrogate the way that knowledge
is cumulatively acquired, used and eventually produced within the discipline (Maton & Moore 2010). In other words, students need to know what they are learning about as well as why the knowledge is important, how the different pieces fit together to make a coherent whole, and where the smaller pieces of the puzzle fit within the bigger intellectual field of discipline, inside of and beyond the university. Thus, questions about knowledge, as an objective object, as a structuring structure and as an end as well as a means, are important, and need to be asked and answered in higher education research about pedagogy and curriculum. Notably, questions about how students are learning cannot be asked separately from what they are learning, and the roles and purposes that the knowledge within the curriculum is playing within the academy, and within the wider intellectual fields of knowledge outside of it.

Given the pressing demands placed on higher education to deliver to the workplace writ large graduates with knowledge, skills and attributes, and given that current constructivist approaches to both curriculum design and pedagogy are unable to provide theoretical or explanatory accounts of knowledge that enable us to think about how different kinds of knowledge need to be drawn into the curriculum, and recontextualised into pedagogic discourse and practice, there is a great need for more social realist research into pedagogy in higher education. There is a large amount of research proliferating at present on alternative approaches to developing curricula and related processes such as assessment, using approaches that can and do account for the differentiation of knowledge between everyday and theoretical (Wheelahan 2010), and also within theoretical or formal knowledge between different knowledge ‘structures’ or forms of coherence and development (Kilpert & Shay 2012; Luckett 2009; Muller 2009; Shay 2008; Wolff & Luckett 2012). Much of this research draws on social realism, and also on Bernsteinian theory and tools and more recently, Legitimation Code Theory. However, much of the current research on pedagogy focuses more on school level rather than higher education (Christie & Macken-Horarik 2007; Macnaught et al 2013; Matruglio, Maton & Marton 2013). In terms of Legitimation Code Theory research, pedagogic practice is still an under-researched area, and there is much to be done. In particular, we are only beginning to understand, using Legitimation Code Theory, how cumulative knowledge can be enabled and constrained through pedagogy, and this is a crucial area for both research and practice.

We need well-founded empirical research on what is happening in higher education lecture halls and tutorials that can help us to recognise gaps and locate struggles, analyse and understand why these may be there, and find approaches that have a ‘stronger theory of knowledge’ (Maton 2013a: 6). This research and the explanatory power it gives us can move us beyond assumptions, guesswork and frustration, and beyond relativism, to a place where
knowledge is centred in both the curriculum and attendant pedagogic practice, and where this knowledge can be cumulatively built over time, enabling and including greater numbers of students in their own learning and in broader conversations within the university and within the wider society. In essence, then, this study locates itself within this growing field of social realist research in higher education, and within this smaller field of research into pedagogic practice, and argues for a stronger theory of pedagogy.

3. The focus of this study

The overall argument developed and defended in this study is that there are certain approaches to, and kinds of, pedagogic practice that can enable cumulative knowledge-building with the assumption that this, rather than segmented learning, is desirable (see Maton 2009, 2013a, 2013b). These approaches have a particular theory of knowledge, drawn together from the work of critical realists such as Roy Bhaskar, and educational sociologists such as Basil Bernstein and Karl Maton. In essence, these approaches to pedagogic practice that enable cumulative learning view knowledge as ‘emergent from but irreducible to the practices and contexts of its production and recontextualisation, teaching and learning’ (Maton & Moore 2010: 5, emphasis in original). Knowledge is placed at the heart of pedagogy, and is viewed as being as capable of ‘talking back’ to the teaching and learning environment and activating a range of responses to the pedagogic approach taken. However, there is a clear recognition, in this view of knowledge, that different kinds of knowledge – everyday and theoretical for example – have different ends and purposes, and that not all knowledge or knowing is created equal. Different disciplines and different kinds of knowledge express this in different ways, but what all disciplines should have in common is the goal of cumulative or rather than segmented learning.

This study does not argue that this cumulative way of learning is not happening at all and lecturers need to make it happen. Rather it argues that lecturers and academic developers need tools to analyse and understand pedagogic practice so that we can see where cumulative learning is and is not happening, and why this may be so. Ideally, this set of analytical and theoretical tools will also give lecturers and other educators the means to keep it happening. As has been argued thus far in this chapter, constructivism does not offer us tools to examine pedagogy in this way, so teaching can seem a bit ‘hit and miss’ – sometimes students get it and it works and sometimes they do not, but constructivists do not have theoretical or practical tools to fully understand why, and lecturers tend to fill gaps like this with assumptions and personal or anecdotal evidence regarding what students know and do not know from their prior educational and home backgrounds, or about students’ motivation or interest or literacy levels.
Some of the claims made in this regard may well be valid, but they are not necessarily going to help lecturers make changes in their own pedagogic practices that will better enable larger numbers of their students to make conceptual and contextual connections and to build relevant conceptual pictures in more rigorous and appropriate ways. They will not enable an overt focus on epistemological access to powerful knowledge and ways of knowing in the disciplines.

This study thus aims to develop, using empirical data and findings drawn from two academic disciplines, a theoretical and explanatory approach that can be used to examine, question and understand pedagogic practice, not by looking at what is visible on the surface, but rather by looking at what is underneath. By this is meant that this study examines the organising principles that underpin and shape disciplines according to the kind of knowledge that is taught, the purposes of that knowledge within the wider field of practice, the ways in which these disciplines make claims to legitimacy and the ways in which knowers are placed and educated. Significant parts of the work of Basil Bernstein (1995, 1999, 2000) and Pierre Bourdieu (1985, 1986, 2005) form the theoretical foundation for this study, and underpinning the research as an ‘underlabourer’ is Critical Realism, in particular Roy Bhaskar’s ‘depth ontology’ (1975, 2008). The main conceptual and explanatory framework, drawn from the work of these theorists, is Legitimation Code Theory or LCT as it is referred to. The framework and foundations of the study will be discussed in detail in Chapter two. Thus, rather than go into more detail about the theoretical foundations and conceptual framework here, what is more important is honing in on the questions this study has asked and attempted to answer.

3.1 Research questions

The central question asked in this study is:

What kinds of pedagogic practices enable and/or constrain cumulative building of powerful knowledge in the disciplines?

There are three related sub-questions that unpacked this central question, and further guided the research as it unfolded and progressed:

1. How is knowledge conceived of, recontextualised and reproduced through pedagogic practices?
2. How can pedagogic practice be theorised to illuminate potential gaps as well as connections in terms of cumulative learning in ways that enable understanding and analysis?
3. What are the implications of theorising pedagogic practices using Legitimation Code Theory and social realism for enabling epistemological access to and inclusion within academic disciplines?

These questions are referred to and further developed throughout the study as they have guided the selection of the theoretical and conceptual foundations and framework, the methodology and methods, and the focus of the analysis and interpretations of the data and findings.

The final section of this chapter will outline the way in which this dissertation has been organised, and will explain the metaphor of an archaeological dig that has been drawn across all six chapters.

4. The use of a structural metaphor\(^4\) for the thesis: the metaphor of an archaeological dig

You may have noted an allusion to a ‘dig’ in the title of this chapter. This refers to a visual metaphor that has been used to refer to the way in which this research process has unfolded on a personal level, as well as the way in which the chapters have been connected together to form a whole. This metaphor has emerged from the study, and has been used structurally, rather than conceptually (Kelly 2011). The image of the layered archaeological dig emerged early on in the process of reading about Critical Realism and working out how the layered ontology in particular fitted with the research I was doing. As a structural metaphor it felt like a natural fit, and as I progressed with the reading, writing and thinking about this study it evolved until it crystallised into the form in which it has been used in the final version of this dissertation. In a profound way, this metaphor helped me to ‘find’ my thesis, and make sense out of the process of doing this particular research (see Kelly 2011). I am aware that there are other instances in the social sciences of the use of archaeology as a metaphor, most notable perhaps being Michel Foucault’s *Archaeology of Knowledge*, and that this could be a very detailed, complex and multi-layered metaphor. However, I am using this image in a very particular and simpler way, which I will describe briefly in this final section of this chapter.

Initially, I used the image of a layered dig to think about the structure of Chapter Two, and the ways in which the different theoretical or conceptual tools fit together. But this was fairly limited, and I found myself wanting to use and think with this image or metaphor more broadly. I wanted to use it to provide a metaphor for the whole process of doing and writing about the research itself – a metaphor for the process of doing this particular study. Thus, I started to look

\(^4\)Kelly 2011: 432
at how the image of an archaeological dig site corresponded with my visual image of the structure of this thesis and I developed a linked set of images or metaphors for each chapter that are stages in the 'dig' – that is, the research process for this study. For example, the initial process of scoping the dig site, working out where to dig and why there and not somewhere else is captured in sections 1 and 2 of this chapter. The focus of the dig itself is captured in section 3. Sub-section 4.1 of this chapter explains further the role each chapter has played in developing this structural metaphor.

What has also been useful has been using the metaphor not just to see what is there and what the research and writing process has looked like for me in terms of the metaphor, but also the blindspots or omissions. I am sure, in many real archaeological digs, there are unexpected finds that could take the archaeologists in different directions in terms of their thinking about the site than they had originally anticipated, things they did not account for in their scoping or planning. I am sure, too, that there are many things they could set out to try and achieve in one dig, but that they need to focus and delimit the dig process in order to give sufficient time and depth to the central focus of that expedition or venture. So, too, with this study there were things that were unexpected in the findings and data, as well as things that needed to be omitted in order to give sufficient time and depth to the focal argument of this study, for example focusing on the curriculum in each case study, or samples of student texts. Thus, this metaphor has been useful for providing a visual aid and guide to the unfolding of the research and writing process; a guide to the structuring of the thesis. But it has also been useful for capturing what has been necessarily omitted, and both the intentional and unintentional blindspots of this particular study.

Using Critical Realism as an underlabourer, in particular its layered ontology and the notion of having a tool to 'dig' beneath the surface to see what is really underneath so that you can better understand what you see on the surface, makes the image of a layered dig site one that resonates with, but also can cast a more creative and visual light on the study as it unfolds for, the reader. Legitimation Code Theory (LCT), too, offers tools that allow researchers to dig and to look beneath and to uncover and discover principles and codes that both underpin and shape practices. Thus this metaphor is not just a creative frippery; it has a resonance with the ontological and epistemological orientations of this study. However, as with many metaphors of this nature, there are limitations to its use and application.

In many instances in places where archaeologists choose to explore and dig and discover, it is likely that there are new civilisations built on top of older ones, and archaeologists dig down to see what was there before in an effort to understand how what is there now is similar or different to what was there before; they look at where we come from, and perhaps also use this
knowledge to cast light on where we are and where we may be going (Marsh 2013). A key departure in using this metaphor of archaeology and a ‘dig’ is that when an archaeologist digs in a particular site, he or she is looking for what was there before – sometimes hundreds or even thousands of years before – and uses what is found and what is known about the area to add to our knowledge about the time in which those artefacts were current as well as what they could tell us about the time we presently live in. I have not looked at the case studies discussed in this study as artefacts of a bygone era or civilisation. They are very much current. Thus, the image or metaphor cannot be extended to the content of the study itself. Rather, it has been applied to the process of the study, not to denote the digging down through past civilisations to find the old ones, but rather to show the way in which the research process has unfolded and taken shape as this study has progressed and the way in which the study itself as it is written has been structured and visualised. I have used it, in other words, to clarify how the parts of the study fit together to create a coherent whole that tells a particular story about pedagogic practice, using a particular theoretical and methodological approach at a particular point in time.

The following sub-sections detail the part each chapter plays in this metaphor, and summarises the contribution each chapter makes to the overall argument advanced in the study.

4.1 The outline of the chapters: layers in the dig

This chapter, Chapter One, set out the broader field in which the dig will take place. This chapter explored the dominant theoretical and paradigmatical approaches to pedagogic practices in higher education both globally and locally, and has located within these approaches crucial gaps that either sideline or neglect the role of disciplinary knowledge and related practices. This silence around the role of knowledge in pedagogic practices can lead to the exclusion of many students from gaining epistemic access to the ‘powerful knowledge’ (Young 2008b) of these disciplines, and the ways of demonstrating that knowledge to those who are part of these disciplinary fields. Key to this chapter was its explanation of the focus of this study, locating itself within the field of pedagogy or teaching and learning in order to argue for a need to develop a more powerful and rigorous approach to analysing pedagogic practices so that we can understand how and where cumulative learning relevant to the different disciplines may be enabled or constrained.

Chapter Two discusses in detail the tools that were needed to do this particular dig. Different terrains require different tools, and careful thought needed to go into which tools were needed for the research that needed to be done. In this study, tools drawn from Critical Realism and Legitimation Code Theory (LCT) have been used, and the latter includes relevant parts of Basil Bernstein and Pierre Bourdieu’s work. This chapter argues that these tools are relevant and appropriate for this study because its aim is to develop a framework for analysing pedagogic
practice that requires looking beyond or beneath what one sees on the ‘surface’. Critical Realism’s depth ontology provides a holding structure or ‘underlabourer’ (Bhaskar 1975, 2008) for the study, and Legitimation Code Theory, as a social realist approach, shares this ontological approach. The particular tools from Legitimation Code Theory that have been used have been selected because they offer analytical and explanatory approaches that enable this study to look beneath one or a series of lectures or pedagogic events to uncover patterns, gaps, silences and connections in an effort to examine what kinds of pedagogic approaches or practices can enable and constrain cumulative knowledge building and learning in the two disciplines being studied: Law and Political Science.

Chapter Three describes the ‘doing of the dig’; it redescribes the theoretical or conceptual tools detailed in Chapter Two as analytical and organising concepts and tools, and describes the research process in detail, looking in particular at the choices that were made by the researcher at different points in the study in terms of data inclusions and exclusions, the focus of the study and also the organisation of the data collected. There were two case studies in which the conceptual and theoretical tools were applied and this chapter details the reasons behind choosing a case study method as well as the limitations and affordances of this approach. It further discusses the relevant ethical issues, and narratively recounts the iterative research process and qualitative analysis process as these evolved.

Chapters Four and Five discuss what was discovered once the dig site was excavated and explores the findings of the study in each case, analysing the data using the tools detailed in Chapters Two and Three. Chapter Four tells the story of pedagogic practices in Law, and Chapter Five tells the story of pedagogy in Political Studies. In both chapters the data was used and analysed to support the argument made by the study for developing a framework for understanding the ways in which pedagogic practices and approaches may be enabling and constraining cumulative learning and knowledge-building in these two disciplines. Cumulative knowledge-building is a goal of the lecturers who have developed and also teach the curricula for the two courses examined in these chapters but at times they have been frustrated when their students have seemed to be breaking the course down into pieces and trying to learn these discretely rather than making conceptual and contextual connections. These two chapters use data gathered from course documentation, teaching observations and participant interviews to explore the ways in which pedagogic practices can be explored, excavated and understood using the conceptual tools drawn from LCT primarily, with the goal of enabling cumulative knowledge-building, and important conceptual and contextual connections.

Chapter Six, the concluding chapter, draws the threads of the argument together, indicating the conclusions that have been drawn from this study, considering the messy nature of pedagogic
practice, and the possible range of factors that could be considered when studying and analysing pedagogy in higher education. This chapter, in addition to drawing conclusions and making connections between Chapters Four and Five, also considers briefly areas for further research and also for using this framework and these tools in practical application, making changes to the ways in which curricula are developed and taught.
CHAPTER TWO: A THEORETICAL FOUNDATION AND CONCEPTUAL FRAMEWORK FOR THE STUDY – LAYING THE GROUNDWORK AND SETTING OUT THE TOOLS FOR THE DIG

1. Introduction

This study aimed to develop an approach to pedagogic practice that can both recognise the need for inclusion of a greater number of students within disciplinary discourses and knowledge-making practices, and also begin to go about analysing current pedagogy with tools that enable an in-depth and layered account of what enables and constrains this inclusion. In order to do this kind of analysis and provide a layered account of pedagogy that looks at cumulative knowledge building in the disciplines and teaching for greater inclusion of students in the principles and procedures of the disciplinary discourses, this study needed to go beyond social constructivism's focus on the experiences of students and its account of the socially constructed nature of knowledge to offer a richer and more sophisticated theoretical approach to understanding the role of knowledge in pedagogy. This study thus aimed to find an alternative approach to theorising pedagogic practice and student learning that draws on social realism, and a realist theory of knowledge. This theorising has implications for the doing of pedagogy as well, although that has emerged from the analyses in this study rather than been the focus of the study. In essence, a social realist approach to the study of knowledge and pedagogy does not seek an 'either/or' solution; this study has not argued that constructivism is wrong and social realism is right. Rather, this study has acknowledged what is missing in constructivist approaches to pedagogy: the knowledge that is being taught and learned and how this process unfolds though pedagogic practices and relationships (see Maton 2013a; Maton & Moore 2010; Wheelahan 2010).

This study focused on pedagogic practice, and as such there were several elements of each case study that needed to be considered in order to tell the story of pedagogy and knowledge building to which these case studies contribute. In order to look at these elements, and to look at what is happening beneath the surface or level of experience in these case studies, a particular theoretical foundation and a related explanatory and conceptual framework were chosen for this study. In terms of the archaeological metaphor used to imagine and visualise the unfolding of this study, this chapter begins with laying the groundwork for this study through its discussion of the theoretical foundations for the study, and then it goes on to set out the tools that will be used in Chapter Three to do the dig, as it were, by setting out in detail the relevant parts of the conceptual and explanatory toolkit that has been used.

The theoretical foundation is discussed in detail in sections 2 to 5 of this chapter, where the relevant parts of Critical Realism and the work of Basil Bernstein and Pierre Bourdieu are
drawn on as a foundation for Legitimation Code Theory (LCT), which is the explanatory and conceptual framework. LCT is a relatively new field, and many of the concepts subsume and build on earlier concepts drawn from the work of Bernstein and Bourdieu in particular. Further, LCT is an approach that draws on Critical Realism’s notion of ‘depth ontology’, looking as it does at what is beneath the surface of what we see, and analysing and unpacking these layers of meaning. The second part of the chapter (section 6) focuses on the conceptual toolkit or explanatory framework for the study drawn from LCT. These are the concepts that will be translated into analytical tools and used to code, analyse and make sense of the data.

2. Finding an ‘underlabourer’\(^5\): Critical Realism and depth ontology

One of the central concerns at the heart of this study is that teaching, learning and assessment seem to be guided by what is immediately visible or tangible – what can be seen and experienced and managed at the ‘surface’ or at a superficial level. A further, related, concern is that if pedagogy is focused on this level, there may be either success or failure in terms of students being able to learn and demonstrate learning and knowing in desired ways. In either case, the reasons for success or failure may not be able to be discovered or examined or researched, leading to an atheoretical and superficial approach to pedagogy, and to understanding student learning in different disciplines. The contention of this study is that, with theoretical tools and frameworks that allow for ‘digging’ beneath what one can see and experience, to look at the events that give rise to the experiences and the deeper mechanisms that influence the events and the experiences of them, educators can begin to find, analyse and understand what it is that is influencing the experiences and activities of both students and lecturers and shaping them in both expected and unexpected ways. This process of discovery and research can then, in turn, feed back into more responsive, relevant and appropriate pedagogy and more successful and meaningful learning for students, as well as the inclusion of large numbers of students in disciplinary discourses, understood here broadly as knowledge and ways of knowing.

The tools for digging in this study are drawn from LCT, which can be described as having a critical realist (Bhaskar 1975, 2008) ontology. The concerns at the heart of this research will be discussed in greater detail in the following sections, but before delving further into the theoretical foundations for this study, a brief overview of Critical Realism’s depth ontology and related commitments is necessary as these underpin the conceptual tools that have been used in this study.

\(^5\) Bhaskar (2008)
Critical Realism is a meta-theory – an ‘underlabourer’ (Bhaskar 2008) – and a particularly useful one as it has a ‘depth’ or ‘layered ontology’, which essentially means it allows researchers to dig down, beneath the surface, to examine the conditions of the context, be it a society, a university or an academic discipline. It allows researchers, specifically, to identify three domains and the interplay between them: the real, the actual and the empirical.

The domain of the real is the deepest layer, where certain mechanisms exist which are often not clearly seen or perceived by those drawing on them tacitly in their everyday lives (Bhaskar 2008). These mechanisms are referred to by Bhaskar (2008) as tendencies, generating mechanisms or structures, and they are always present, whether they are realised or actualised or not. They are also intransitive, because they exist whether or not we know tangibly that they are there. There are, in the social sciences, many mechanisms that can be actualised or left dormant, and there can be more than one being actualised at one time. In a classroom situation this is most certainly true. Bhaskar (2008) argues that mechanisms are ‘emergent’ (70), which in essence means that, within certain contexts, activated mechanisms may give rise to other dormant mechanisms and thereby set in motion a series of events and experiences that can occur as a result of the interplay of these mechanisms. This seems to be the case, especially, in ‘open systems’ where there are many different factors that can influence events and experiences (Bhaskar 2008: 81; Sayer 1992). A university course, such as those explored in this study, is a good example of an open system.

Mechanisms, when actualised, give rise to events in the domain of the actual. This is the second layer in the layered ontology. The events can be experienced by individuals or collectives, and the experiences occur at the uppermost layer, called the domain of the empirical. These experiences are relative, as the same event can be experienced in multiple ways by multiple actors depending on the different kinds of, for example, social, cultural or economic capital they bring to bear on their experiences (Bourdieu 1986), or their dispositions, attitudes or past experiences. However, it is important to note that mechanisms can be actualised and trigger events that are not experienced; events do not have to be experienced to be actualised (Bhaskar 2008). Everything is real, because the mechanisms always exist, and they are present, actualised or not, in all three levels. The actual and the empirical always arise from the real (see Figure 2.1).

In pedagogy, knowledge can act as a mechanism, for example, because it creates the possibility for certain events to occur. The world we see as real shapes what we can and cannot know – to paraphrase Maton and Moore (2010): we can believe that fairies are real, but we cannot know this because no real or tangible evidence has emerged to prove their existence. Lecturers use their knowledge of the parts of the world their disciplines or areas of research and interest are
concerned with to design curricula that aim to give students access to this knowledge, and also to ways of knowing (practices, applications, genres of writing and so on) and these curricula then structure what kinds of pedagogic practices are put into play, when and how. Thus, knowledge about the world (or part of it) can act as a generative mechanism that gives rise to certain kinds of events and experiences through pedagogic practice, and these are in turn influenced not only by the knowledge being taught and learned but also by things such as the lecturer’s personality, the size of the class, the way in which the lectures are given, the students’ prior knowledge and so on. Knowledge understood as a mechanism, and knowing, understood at the level of events and experiences, are two different but connected things.

Figure 2.1 Critical Realism’s depth ontology: The real, the actual and the empirical (Bhaskar 1975)

Critical realists, when examining the world using the depth or layered ontology, make three commitments (see Archer et al 1998; Bhasker 2008; Maton & Moore 2010). The first is to Ontological Realism. Simply put, this means that reality exists independently of us; knowledge of reality is not reality itself, but rather only part of it. There are things that exist that we can have no or only partial knowledge of; just because we do not know them does not mean that they are not there. For example, for a long time scientists believed that the world was flat before they discovered that it was in fact roughly spherical in shape. Gaining this new knowledge did not physically change the earth’s shape; it merely changed the way people knew what was already independently true. Maton and Moore (2010: 4) comment that ‘[w]e, as individuals, can believe in anything, but we collectively cannot in the same way just know anything’ (my emphasis). So, we can believe that the world is flat, but we cannot collectively know this, because we have
evidence to show that this is not true, like picture of the world from space that show it to be rounded in shape.

The second commitment is to *Epistemic Relativism*. This basically means that we do not make judgements and see the world from a vacuum – we are always socially and historically situated, and our perspectives are always influenced by this situatedness (Bhaskar 2008). We can only know the world in terms of ‘socially produced knowledges’ which ‘change over time and across socio-cultural contexts’ (Maton & Moore, 2010: 4). To continue with the example in the previous paragraph, much of the ancient world – ancient Greece and Egypt – held the view that the world was a flat disc, and many believed this until Magellan circumnavigated the globe in the 1400s and 1500s and found that the world was not flat at all. A Greek astronomer, Eratosthenes of Cyrene, actually discovered this 2000 or so years before Magellan’s journeys (Siegel 2011), but the fact that it took so long to become common knowledge, and that few people in the 1400s even knew of Eratosthenes and his discovery indicates that the perspective or ‘knowledge’ sailors, navigators and geographers held for many years about the flatness of the world was indeed shaped by where they were in history, and the kinds of power held by the ‘socially produced’ knowledge at that time about the world’s shape. They could not know the world differently until new knowledge was produced, and evidence obtained, to make the previous knowledge impossible to know anymore.

The final commitment is to *Judgmental Rationality*. This means that we can make judgements about knowledge on ‘rational, intersubjective bases’ (Maton & Moore 2010: 4). Not all perspectives are equal, and not all knowledge claims are similarly valid (Archer at al 1998). For example, when Eratosthenes of Cyrene worked out that the world could indeed be spherical, using mathematical calculations and logical deduction in relation to celestial events, for example solstices, eclipses and the rising and setting of the moon (Siegel 2011), there were many others who believed that the world was a flat disc. They did not perhaps have the evidence to back up this belief as Eratosthenes did for his knowledge, but if indeed the two different claims about the world’s shape had been presented, with evidence, it could have been possible to use judgemental rationality to decide which knowledge claims were more valid.\(^6\)

One of the key questions Critical Realism asks is: what must the world be like for science to be possible (Bhaskar 1998)? This question can also be asked more broadly as such: what must the world be like for the events and experiences we can see and have to be possible? In order to both understand and analyse events and experiences, and further to make changes to them, we

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\(^6\) This is, of course, acknowledging that at this time there was a lot that has been explained scientifically now that people then ascribed to fate, gods and other superstitions, such as crop failures and epidemics, for example. This example is merely illustrative.
have to be able to ‘see’ the deeper mechanisms or structures or tendencies that are being actualised in the happening of the events and experiences in order to ‘see’ the reactions to them in a context that enables understanding and knowledge, rather than assumptions and guesswork. Critical Realism, then, gives us a useful framework for a study such as this that is interested in pedagogic practice; more specifically in understanding what kinds of mechanisms or tendencies are being actualised in events and experiences at the levels of the actual and the empirical, and how knowledge as a structure or object with its own properties and tendencies is both taught and learnt in pedagogic events, such as lectures, tutorials or assignments.

The following two sections will turn to the theoretical foundations laid in the work of Basil Bernstein and Pierre Bourdieu primarily. The work of these two theorists is subsumed in and extended on in Legitimation Code Theory and this will be discussed in detail as the ‘conceptual toolkit’ in section 6.

3. Basil Bernstein, code theory, the ‘Pedagogic Device’ and the structuring of knowledge

3.1 Code theory

At the very base of Basil Bernstein’s theoretical work is ‘code’. This is Bernstein’s principle concept, and underpins his work on knowledge structures and on pedagogy (Bernstein 1971). Code is essentially an ‘orientation to meaning’ (Maton & Muller 2007: 16) – ‘a regulative principle, tacitly acquired, which selects and integrates [meanings, realizations and contexts]’ (Bernstein 1990: 14). Further, code ‘is a regulator of the relationships between contexts, and, through those relationships, a regulator of the relationships within contexts’ (Bernstein 1990: 15, my emphasis). Two of Bernstein’s most influential concepts, which are brought together to create the educational knowledge codes in Bernstein’s work and which are present in all of the codes in this study drawn from LCT, are classification and framing.

Classification refers to the relations and nature of differentiation between contexts, and the ways in which contents in the educational field of reproduction are bounded and insulated from one another (Bernstein 1971). Classification relates to power. For example, subjects within a Physical Science curriculum, such as Chemistry and Physics, may not be firmly bounded and insulated from one another, because if Physics is discussing the concept of mass, this may also be useful in understanding work within Chemistry where mass is a relevant concept. However, in a History curriculum, different subjects may be more tightly bounded and insulated, such as learning about Ancient Egypt and World War II, where there would be little connection. These are heuristic examples.

Framing refers to relations within contexts, and to the pedagogical relationship between teacher and taught; specifically the strength of the boundaries between what kinds of knowledge may
be transmitted in that relationship (Bernstein 1971; Maton 2006). Framing relates to control. For example, a classroom with weaker framing may see the students managing the pace of the lesson, or even having a say in what topics they will write about or discuss within an assignment and how they might do so, whereas a classroom with stronger framing would see the teacher dictating the pace of the lessons, and also telling students what they will write about or discuss and even how to do so.

Thus, classification regulates the what – the content – of what will be transmitted and acquired in the pedagogical relationship, and the boundaries or insulation between knowledges or contents, and framing regulates the how – the transmission – of the knowledges and contents, by managing the selection, sequencing, pacing and criteria of the contents or knowledges. In Bernstein’s (2000: 12) terms, classification establishes whose ‘voice’ is speaking, and framing establishes the ‘message’ it speaks. Graphically, classification is realised as a ‘C’ and framing as an ‘F’. Both classification and framing can be referred to as being either relatively strong or relatively weak in relation to one another and in relation to the contents or educational knowledge that is under analysis. Classification strength can influence the framing as well. Where there are strong boundaries, there are often powerful boundary maintainers – members of those disciplinary or content-based communities (Bernstein 1971). Where there are both strong boundaries and strong boundary maintainers, there is strong framing, which means that there are strong controls over what can and cannot be transmitted in the pedagogical relationship (Bernstein 1971: 206). Where there is less insulation between contents, there also tends to be less control over what can be transmitted in the pedagogical relationship, and thus there is weaker framing. This is not always true in empirical research, as these are heuristic concepts, or concepts that invite thinking and inquiry, but these are tendencies that have been observed in Bernstein’s (1971) own research. These concepts and codes will be drawn into the discussion as it progresses from this point, as they are foundational for Bernstein and for LCT.

Another key concept for Bernstein was that of the ‘Pedagogic Device’ and the elaboration therein of Bernstein’s conceptualisation of the development of curriculum and pedagogic practice out of wider fields of knowledge and practice. This study, as will become clear, is located in one dimension of this ‘device’.

### 3.2 The Pedagogic Device

Inherent in this study’s discussion of pedagogic practice is the notion of pedagogic discourse, which comprises two discourses that, through variations in strengths of classification and framing, shape pedagogic discourse and practice (Bernstein 2000). The first discourse is the
instructional discourse, which relates to the selection, pacing, sequencing and criteria of the knowledge being transmitted (Bernstein 2000). In this way one can link it to framing, and to the notion of shaping the ‘discursive order’ (Bernstein 2000) or the messages being relayed. Selection speaks to the content that is selected for the curriculum – what students will learn; pacing speaks to the pace or speed at which it will be taught – will there be many short lessons quite tightly paced, or lessons of variable lengths that can slow down or speed up depending on how students are understanding the material? Sequencing speaks to the order in which the content is to be taught – what needs to come first in order for students to grasp what will be taught later on, for example. Finally, the criteria speak to how the students will be assessed – who decides what will be assessed and how, and who will do this assessment. Will it be just the teacher, or the teacher and peers in the classroom, for example? (see Hugo 2012).

The other discourse is the regulative discourse, which relates to the social order and characterises the processes of recontextualisation of knowledge from intellectual fields of production into fields of reproduction, which will be more fully explained below. The regulative discourse is linked to the ‘voice’ that is dominant in the selection of knowledges to be recontextualised, and is always dominant over the instructional discourse (Bernstein 2000). The former is embedded in the latter and the two together create the pedagogic discourse which shapes pedagogic practice, encompassing teaching, learning, assessment and evaluation. An important note about the pedagogic discourse is that it is not a ‘discourse’ in the same way that Physics is, or English. It is, rather, a principle that dislocates, relocates and focuses these kinds of discourses in order to select what is to be transmitted in the pedagogical ‘relay’ (Bernstein, 2000: 25).

Bernstein (2000), in examining pedagogy, contended that studies of pedagogy at the time of writing and prior to it had tended to present pedagogy itself as a neutral carrier of the messages carried within the content and knowledge being transmitted and acquired. Bernstein (2000: 27) believed, rather, that the constitution of the ‘pedagogic’ relay was not ‘ideologically free’ and may indeed have an ‘intrinsically regulatory function’ that could influence the relay and what is carried by it. In Bernstein’s (2000: 36) own words, ‘In order to examine pedagogic relays and what could constitute them’ he developed the ‘Pedagogic Device’ which comprised three sets of rules that functioned together as ‘a symbolic ruler for consciousness’. These three sets of rules are distributive rules, recontextualising rules and evaluative rules (see Figure 2.2 below).

7 This point has been further iterated by Maton (2013a) and Young (2008a), who argue that the what of pedagogy is not neutral nor free from the influences of power, gender, race, class or other ‘social markers’. Previous research has not necessarily claimed that it is; rather this has been a blindspot that Bernstein aimed to address in his work.
The first set of rules relate to power. Distributive rules function to distribute ‘forms of consciousness’ through the distribution of forms of knowledge, and work in the field where the discourse is produced or created (Bernstein 2000: 28). The distributive rules actually regulate, through this distribution, access to the field of production, and control who has the ability to shape, make and distribute forms of knowledge (Maton 2013a), or in Bernstein’s (2000: 31) words ‘who may transmit what to whom and under what conditions’. These rules also ‘attempt to set the outer limits of legitimate discourse’ (Bernstein 2000: 31).

Recontextualising rules regulate the constitution of particular pedagogic discourses. They regulate the selection of ‘imaginary’ discourses that can be relayed in the pedagogic relationship out of ‘real’ discourses in the field of production. Bernstein (2000: 33) gives, as an example, the real discourse of carpentry, outside of pedagogy, out of which the ‘imaginary’ school discourse of woodwork, inside of pedagogy, is selected and recontextualised. Recontextualising knowledge from the field of production involves its dislocation, and then its relocation, refocusing and recontextualising as pedagogical knowledge – it is a process of pedagogizing knowledge (Bernstein 2000; Maton 2013a).

The final set of rules is the evaluative rules and these transform pedagogic discourse functioning at an abstract level into pedagogic practice which functions at a visible or tangible level (Bernstein 2000). This study, focused as it is on pedagogic practice as it functions at this level, is primarily located within this part of the Pedagogic Device.

A very important part of the Pedagogic Device is the notion of the ‘discursive gap’ that exists between distributive and recontextualising spaces, and between recontextualisation and evaluation. It is in this gap that one finds power, ideology, and the influence that those who hold
the power in the field(s) can have over which knowledge gets produced and transmitted and under what conditions, through recontextualisation, and pedagogy and evaluation (Bernstein 2000). Bernstein (2000: 33) argued that ‘no discourse ever moves without ideology at play’. In terms of the Pedagogic Device, this can be understood to mean that as the discourse of carpentry, for example, moves from the field of its production to the field of recontextualising, where the principle of pedagogic discourse dislocates, relocates and refocuses knowledge into the school discourse of woodwork, certain ideologies, as well as epistemologies and ontologies related to being a member of that discourse are at play. This play of ideology influences the recontextualising of the discourse of carpentry into the curricular form of it: woodwork. Again, when this curriculum is then transformed into pedagogic practice, governed by evaluative rules that generate certain practices and stances, ideology, epistemology and ontology are at play in the discursive gap between these two fields in the pedagogic, and actors will struggle over which pedagogic practices are most appropriate, transforming the intended curriculum into the enacted one (see Bernstein 2000). These discursive gaps are an important concept for understanding how Bernstein’s theorising lends itself to a concern with social inclusion and social justice in education, and understanding the structures that underpin what one can see and experience of pedagogical practice.

Bernstein’s approach to his work shares similarities with Critical Realism’s layered ontology, and particularly its attempts to understand the mechanisms and tendencies that give rise to events and experiences. An example could be the Pedagogic Device, and the rules that underpin and act as mechanisms that give rise to events and experiences in each level of the device. This is not to argue that Bernstein identified himself as a critical realist, but rather to indicate the links between the foundation his work lays and Critical Realism as it forms part of the framework for this study. It is clear that Bernstein was deeply concerned with issues of social justice, and to that end in understanding the conditions or structures that could give rise to the kinds of learning and education environments that middle class and working class children could experience, and why and how they could experience these environments in different ways. He was interested in understanding power dynamics around the structuring of knowledge, which he understood and theorised as having properties that arose from, but were not reducible to, the social contexts in which they had relevance (Bernstein 1999, 2000). He contended that as much as social contexts could and did shape knowledge, knowledge was a structure with its own properties and powers that worked to shape ‘social practices, identity, relation and consciousness’ (Maton & Muller, 2007: 25). But as well as being concerned with theorising the knowledge itself, he was also concerned with what one actually included in pedagogic practice, and as such a significant focus of Bernstein’s later work was on horizontal and vertical discourse and their links with knowledge structures, which we turn to now.
3.3 Knowledge structures and vertical and horizontal discourses

There are two discourses that Bernstein delineates and characterises: the vertical and the horizontal. Horizontal discourses are characterised by ‘segmentally differentiated’ knowledge that is ‘everyday or “common sense” knowledge’ and organised in segments where knowledge learned in one segment may or may not have any relevance to other segments (Bernstein 2000: 157). For example, the skill of learning to tie one’s shoelaces has no relevance to learning how to ride a bicycle. The vertical discourse, in contrast, is characterised by knowledge which is non-segmental and organised at the ‘level of meanings’, related ‘hierarchically’ and where context specificity is achieved ‘through recontextualisation’ (Bernstein 1999: 161); in other words this knowledge is capable of being abstract and universalistic. The vertical discourse is that which is valued in formal education environments, such as higher education, and from it Bernstein derived two ‘knowledge structures’, horizontal and hierarchical.

A horizontal knowledge structure is defined as ‘a series of specialised languages with specialised modes of interrogation and criteria for the construction and circulation of texts’ (Bernstein 1999: 162). It is graphically represented thus: $L_1, L_2, L_3, L_4, L_5, L_6, L_7,...L_n$ (Bernstein 1999). This knowledge structure is generally exemplified by the humanities and many of the social science disciplines, such as Political Science and Philosophy. A hierarchical knowledge structure, on the other hand, is defined as ‘a coherent, explicit and systematically principled structure, hierarchically organised’ which attempts to create very general propositions and theories, which integrate knowledge at lower levels, and in this way shows underlying uniformities across an expanding range of apparently different phenomena (Bernstein 1999: 161-2). It is graphically represented thus:

![Diagram of a triangle representing hierarchical knowledge structure]

The tip of the triangle represents the theory that best integrates or encapsulates the greatest number of propositions represented by the base of the triangle. This knowledge structure is generally exemplified by the natural sciences, such as Physics or Biology.

The development of these knowledge structures is also a key distinguishing feature between them. Horizontal knowledge structures develop through accumulation: ‘the introduction of a new language’ which offers ‘a fresh perspective, a new set of questions...connections, and an apparently new problematic, and...a new set of speakers’ (Bernstein 1999: 163). Hierarchical knowledge structures, in contrast, develop through integration, where ‘development is seen as the development of theory, which is more general, more integrating, than previous theory’ (Bernstein 1999: 163). What is perhaps most important for the purposes of this study is to note
that Bernstein referred to the knowledge structures as ‘tools’ for thinking, rather than as descriptive mechanisms. They are presented dichotomously and are thus not useful for describing what disciplines actually are in practice and reality as they cannot account, for example, for change over time. The reality is messier. Bernstein (2000) uses the example of Engineering as a discipline born out of the recontextualisation of knowledge from diverse disciplines for example Chemistry, Physics and Mathematics. Chemistry and Physics could be described as having hierarchical knowledge structures, while Bernstein (1999) has described Mathematics as more of a horizontal knowledge structure. Engineering would then likely have characteristics of both. This one example shows, then, that these knowledge structures need to be understood as thinking tools rather than descriptors of what actually exists.

It has also been noted, by Maton and Muller (2007), that there are elements of horizontal and hierarchical development in several disciplines, and that, as typologies, Bernstein’s two categories are limited and need to be extended and developed further into topologies that allow for a greater range and scope. However, in spite of these limitations, the knowledge structures do allow this study to surface the concept of knowledge as a structure with its own properties that are not entirely dependent on the social contexts in which that knowledge is known or used, that can and do shape consciousnesses and identities and practices.

In both kinds of knowledge structures the issue of acquisition has profound pedagogical and learning implications. These implications are central to this study. Acquisition in horizontal knowledge structures seems to be based, for Bernstein (1999), on more tacit and less visible processes. In a horizontal knowledge structure, in the distributive part of the Pedagogic Device, there is an array of languages that can be spoken and learned, but not all of them can be taught in the curriculum. Thus, in the second part of the Pedagogic Device, recontextualisation has to happen, and knowledge is chosen and recontextualised as educational knowledge which can then be transmitted. In this process, some perspectives are privileged over others, and Bernstein (1999: 165) argues that ‘a perspective becomes the principle of the recontextualisation which constructs the horizontal knowledge structure to be acquired’, and that this process is largely invisible to the acquirer but it is the basis for how the acquirer will learn to read, evaluate and create texts. This notion of a perspective being the principle for recontextualisation also highlights the discursive gap in the model of the Pedagogic Device, where power linked to social status, or gender or class, for example, influences whose perspective is the dominant one in the recontextualisation process (Bernstein 1999).

Bernstein (1999: 165) argues that acquirers in horizontal knowledge structures have to acquire a ‘gaze’, ‘a particular mode of recognising and realising what counts as an “authentic” sociological reality’ – ‘to know is to “gaze”’. This gaze is acquired tacitly, by being in a social
interactional relationship with those who possess the gaze, and can transmit orally the ways of reading, evaluating and creating texts from within the language being acquired (Bernstein 1999). Bernstein suspects that if this gaze is the perspective on which recontextualisation is based, and this is invisible to the acquirer, then the acquirer will indeed have difficulty in recognising the language that they are speaking or writing, for they will not know what it is to know if they do not possess the gaze. If this gaze can only be tacitly acquired, in an interactional social relationship with those who already possess it, then is there not an assumption here that those who possess the gaze will know how to help those who do not possess it to do so? Perhaps it needs to be acknowledged that in higher education teaching and learning environments in South Africa at present, there are structural challenges that make the acquisition of this gaze very difficult for many students. Large classes; young and inexperienced lecturers; more experienced lecturers who do not see themselves primarily as teachers and are not trained and supported as such; outdated or recycled teaching materials; venues that support 'transmission-style' teaching over more participatory teaching; and the socioeconomic, cultural and historical divides between many students and their lecturers – some or all of these challenges can constrain the formation of a 'social interactional relationship' between those who possess the gaze and those who want to possess it. If this is the case, then how a series of oral, written or non-verbal codifications of what counts as a gaze can clarify the perspective being used to underpin what counts as valid knowledge to be acquired becomes a central pedagogical concern.

Bernstein argues that this gaze is not a necessary component of acquisition of hierarchical knowledge structures. What is key to acquisition of hierarchical knowledge structures is 'mastering the procedures of investigation and instruments of observation and understanding the theory' (Bernstein 1999: 165). Developing a language comes later, 'if at all' (Bernstein 1999: 165). However, even if what is most important for the acquirer is the theory, acquiring a theory is still a matter of acquiring a perspective that underpins the recontextualisation in the knowledge structure; the perspective that states that this knowledge structure is the 'only and sole pathway to “truth”' and its procedures are the only way to arrive at that ‘truth’ (Bernstein 1999: 165). If one can indeed choose between theories, then those choices may well stand on a social base, just as they do in a horizontal knowledge structure.

Bernstein (1999) tends to present acquisition in horizontal structures as a more socially and culturally loaded process particularly with his comments about whose 'social' is being drawn on in deciding which knowledge is recontextualised from the intellectual field of production. In contrast, he argues that, even though there may be certain perspectives that underpin recontextualisation in hierarchical knowledge structures, recognising and constructing
legitimate texts is a 'much less problematic, much less tacit' process than it is in horizontal knowledge structures (Bernstein 1999: 165).

It is also important to note that Bernstein locates these knowledge structures in the fields of intellectual production and educational reproduction in the Pedagogic Device, and while these fields profoundly influence the field of reproduction, there does seem to be a gap between these two fields and the field of reproduction that an understanding of knowledge structures alone cannot account for. As Maton and Muller (2007) have noted, what Bernstein created is a theory of knowledge, not a theory of knowers. Elsewhere, Maton (2007) has also noted that Bernstein's educational knowledge codes account for the 'epistemic relation' of knowledge, but not the 'social relation'— in other words, this is another appeal for an account of knowers as well as knowledge. Further, Maton (1999) has argued that Pierre Bourdieu, whose work is central to LCT's foundations, has done the opposite in a way; he has theorised the social relation of knowledge, but neglected the epistemic relation. In developing LCT, therefore, and in so doing attempting to theorise and explore the epistemic and social relations of knowledges—or the knowledge and the knowers—in order to understand the principles generating and underlying intellectual fields, Maton has drawn on, subsumed and developed relevant parts of both Bernstein and Bourdieu's foundational work. We shall now turn to Bourdieu, before moving on to explore LCT's contribution to this study as a conceptual and explanatory framework built on this theoretical foundation.

4. Pierre Bourdieu: habitus, capital, field and practice

LCT also draws on Pierre Bourdieu's 'field approach' (Bourdieu 1985; Wacquant with Bourdieu 1989). Briefly, Bernstein (1996, 2000) developed a language to talk about knowledge as a visible object with its own properties and powers that emerge from, but cannot be reduced to, social practices, and which helps to shape those practices. In trying to analyse these 'properties and powers' Bernstein abstracted knowledge from lived practices and 'social contexts' in order to understand and show the ways in which the 'structuring of knowledge itself works to shape social practices, identity, relation and consciousness' (Maton & Muller 2007: 25). LCT, drawing on Bernstein and also now Bourdieu, can reconnect the study of knowledge to these lived practices and social contexts, and by utilising all three theorists' work, this study can then examine the lived practices and social contexts that shape, inform and change teaching and learning in the disciplines being studied.

Bourdieu argues that to live is to do so relationally, and the three key concepts that make up his field approach are all relational concepts. These three key concepts, which need to be
considered together, are ‘field’, ‘capital’ and ‘habitus’. Briefly put, all three concepts together go into creating practice. Habitus is defined as a ‘structured and structuring’ structure that partially shapes the choices and decisions agents make about their lives – social class, upbringing, education, and the agent’s past choices all form part of this concept (Wacquant with Bourdieu 1989: 42). It is ‘structuring’ because of the way it structures and shapes actions and choices, and ‘structured’ because it is not random or arbitrary (Maton 2008). It is more than habit, rather habitus focuses on the ‘generative’ principles that bring about the different choices and actions of agents, and because these generative principles are not static, habitus is always evolving, and exists in dynamic relation with capital and field (Maton 2008: 56). Jenkins (1992: 75) further elaborates by stating that ‘habitus only exists in, through and because of the practices of actors and their interaction with each other and with the rest of their environment’.

Linked to this concept is the concept of capital, and Bourdieu speaks of social, economic and cultural capital. Capital can be defined as the resources one has and can call on (Bourdieu 1986), and is also a relational and dynamic concept because capital is not static and not meaningful unless related to habitus and field. The last of the three concepts is ‘field’. Bourdieu’s concept of field is that of a ‘field of forces within which the agents occupy positions that statistically determine the positions they will take with respect to the field, these position-takings being aimed either at conserving or transforming the structure of relations of forces that is constitutive of the field’ (Bourdieu 2005: 29). Within a field there are agents who occupy various positions, and the field is structured internally in terms of the power relations therein between agents or occupants – power is derived from the agents’ position in the field, their habitus and the forms of capital they have access to. Fields are arenas of ‘struggle’ in which agents are either concerned with preserving or transforming the status quo of the field with respect to defining what counts as capital in the field (Jenkins 1992: 85). Practice results from an interplay of these three concepts, and can be represented thus (from Maton 2008: 51):

\[
[(\text{capital})(\text{habitus})] + \text{field} = \text{practice}
\]

Bourdieu has thus argued that to understand practices, we need to examine the fields within which the social agents are located and also the habituses that they bring into these fields – as relational concepts, field and habitus especially cannot be theorised in isolation.

In terms of this study, then, Bourdieu’s work as referred to very briefly here makes an important contribution: the concepts of field and habitus further allow this study to probe at what underlies some of the teaching and learning approaches and practices on the parts of
academic lecturers and students, although in a very limited way as Bourdieu's concepts here are foundational, as are Bernstein's, and have been drawn in largely because of the foundation they lay for LCT and the conceptual tools that will be further discussed in section 6. Field and habitus are complex sociological concepts, and this study, while acknowledging the very important role played by context in this kind of research, is focused more on using LCT as well as selected parts of Bernstein's theoretical work as a framework for exploring and theorising the pedagogical practices observed in two specific academic disciplines. Thus, some of the aspects of each field may need to be understood in simpler terms than they could be in order to maintain the focus of the study and provide only the necessary aspects of the context for illuminating it.

5. Summary so far

In sum, putting Bernstein and Bourdieu together, we can see that they complement one another with what they offer this study in terms of a theoretical foundation. What Bernstein gives us, with the Pedagogic Device and structuring of knowledge, is tools for thinking about, seeing and researching knowledge as an irreducible object with its own properties and structuring principles that are not neutral. His work focuses largely on discourses – pedagogical discourses – that, while they are being generated from social relationships, are also in turn shaping forms of consciousness and their 'contextual mode[s] of orientation and realisation' and therefore discourses motivate certain kinds of social relationships and solidarities (Bernstein 1999: 160). What is sidelined in Bernstein's work is a deeper and more sustained account of all the different kinds of capital that come to act in an educational setting, and this is offered by Bourdieu's work. In focusing on trying to 'see', describe and account for the pedagogical discourses and discursive principles underlying intellectual fields of production, as well as the recontextualising principles that shape the educational fields of reproduction, and the ways in which these principles shape the knowledge structures in the disciplines, what Bernstein ultimately sidelines in his analyses is the 'knowers'. While Bernstein does argue that the struggle for control of the Pedagogic Device – the 'symbolic regulator of consciousness' (1999: 37) – is a socio-political one, Bourdieu's analysis of the struggles to either preserve or transform the fields and the discourses working within them, and the kinds of capital (social, economic, cultural, scholastic) that actors in these fields and discourses bring to bear is a useful complement to Bernstein's work.

Thus, by using both Bernstein and Bourdieu, this study can begin to understand what the pedagogical discourses in the two case studies are, and how these act to include and exclude certain kinds of knowledge, and perhaps therefore, certain kinds of knowers from the pedagogic space. However, Bernstein and Bourdieu do not take us far enough in terms of analysing
pedagogy. They provide, following the structural metaphor of the archaeological dig, the coordinators for the dig site, and a way of understanding the basic lie of the land. They do not give us enough by way of sophisticated or appropriate tools for digging down and extricating the artefacts we are interested in understanding in new or different ways. What is needed, building on this foundation, is a conceptual framework for describing and understanding pedagogical practices, and how knowers are developed and positioned within pedagogical discourses and practices, as well as how knowledge is constructed and learnt through teaching and learning. The sophisticated tools needed here come from LCT and it is to this that we turn in the next section, looking at the tools we need to ‘do the dig’ for which we now have a foundation.

6. Legitimation Code Theory

LCT builds on both Bernstein’s educational knowledge codes, knowledge structures and the Pedagogic Device, and Bourdieu’s ‘field approach’. The framework is social realist, which draws on Critical Realism as an underlabourer, and thus offers a layered ontology in that it allows us to dig down to look at the organising principles and structures underlying and shaping the pedagogical (and many other, such as recontextualisation or research) practices we can observe and experience.

Part of the rationale for using LCT as the explanatory and conceptual framework for this study is drawn from a statement that asserts that

[b]y being anchored on the concepts of classification and framing, the strong external language of LCT also enables both qualitative and quantitative analysis of the underlying principles structuring curriculum guidelines, teaching practices...in a manner enabling systematic comparisons within and between these contexts (my emphasis) (Maton 2007: 104).

A second part of the rationale for using LCT is its ability to offer, through its focus on codes and looking at the organising principles underlying fields and practices, a powerful explanatory framework with relative conceptual economy (Maton 2013a). LCT does not erase and replace concepts from Bourdieu and Bernstein, rather it subsumes and extends them, as the following sections will show.

The conceptual toolkit that LCT offers has been drawn on in this study to develop an alternative framework for theorising pedagogic practice that will enable deeper examination of the organising principles underlying the fields and practices of the disciplines, as well as working with data and moving between the theoretical and empirical contexts to make meaningful connections and explanations. Maton posits that the extent to which any of the characteristics of
any of the legitimation codes, such as specialisation and semantic codes, actually apply within a particular disciplinary language of legitimation is ‘dependent upon the structuring conditions of power and control inhering within empirical contexts; these enabling and evoking conditions set the parameters within which these features may become voiced’ (Maton 2000b: 89). In other words, codes are realised differently in different contexts, and working with empirical data is essential when trying to see and make sense of the codes.

Bernstein (2000) also argued that theory and context must be repeatedly brought together in dialectical relationships in order for the theory to make sense, for the empirical context to be theorised, and for the theory to continue to grow and develop. Thus, this study takes on all of the selected theoretical and conceptual ‘tools’ as heuristic or illustrative devices; as ideal or abstract tools for thinking and for theorising, and understands that when theory is brought to a particular context, one may find some things are as the theory ‘predicts’ and some things are not necessarily predictable or even completely in line with the theory. LCT is an explanatory framework designed to solve problems, and all the tools selected from LCT for this study have been used for the purpose of the solving the problem this study posed.

The first part of LCT is Specialisation, and it will be discussed first because later sections draw on an understanding of specialisation codes and knowledge-knower structures in particular. Following Specialisation, this chapter will discuss Semantics, and will conclude with a summary of the main arguments that have been made in relation to developing the whole framework for this study.

6.1 LCT(Specialisation)

LCT(Specialisation) is based on a premise that all disciplines use certain discourses and languages to stake their claim to status, recognition and position within higher education, and that these discourses serve to ‘legitimate’ these disciplines’ claims to status, recognition and position. These claims to legitimation, though, are based on deeper, often invisible understandings of the underlying principles of the knowledge structure of the intellectual field in question (Maton 2007). Actors and discourses within these intellectual fields, out of which the educational disciplines and knowledge structures are drawn, are ‘selected and recontextualised on the basis of a principle emanating from the knowledge structure, knower structure or…neither or both’ (Maton 2007: 92). If we can understand the discursive practices of the intellectual fields as structures that select, position and empower actors and discourses in different ways, then we can address the generative ‘principles underlying these practices...in terms of their legitimation codes of specialisation’ (Maton 2007: 93). This is important, in this
study, because the specialisation code of the discipline has direct influence on curriculum design and also on approaches to pedagogy, and what is included and excluded in the pedagogic relationships between students and lecturers.

There are two parts to the Specialisation dimension of LCT that have been included in the conceptual toolkit for this study: specialisation codes and knowledge-knower structures. These will be discussed in the following two sub-sections, and these will demonstrate the ways in which these parts of Specialisation relate to the focus of this study.

6.1.1 Specialisation codes

Specialisation codes provide this study with a tool for thinking about and analysing the organising principles that form the basis for claims to legitimacy within the disciplines. The specialisation codes subsume and extend on Bernstein's concepts of classification and framing, discussed earlier in this chapter. Essentially, LCT's argument is that what Bernstein was coding using classification and framing in his work is the epistemic dimension of knowledge – he is coding knowledge. What is sidelined, as section 5 pointed out, is a coding of knowers. Knowledge is always 'social', in the sense that it is always made by someone, about something and for someone else. Bernstein's work does not imply that there are no knowers, but he does not make them a focus of his theorising which was more concerned with understanding the structuring and structures of knowledge in the fields of production in his later work. Thus, Specialisation subsumes educational 'knowledge codes', as it terms Bernstein's use of classification and framing, to examine relations within and to knowledge, and calls this dimension the 'epistemic relation' (ER) of knowledge, but it recognises a 'social relation' (SR) as well, which allows this coding process to take account of both knowledge and knowers (Maton 2007: 93).

LCT argues that the strength of classification and framing can be altered according to 'what can be legitimately described as', for example, "cultural studies" and 'who can legitimately claim to be doing "cultural studies"' (Maton 2000b: 85, emphasis in original). These two sets of relations are 'two distinct dimensions of [the] pedagogic discourse' (Maton 2000b: 86), rather than two different discourses. Maton, in developing his conceptions of these two dimensions, referred to them as two 'co-existing but analytically distinguishable' sets of relations which he termed the 'epistemic relation' and the 'social relation'. The former refers to what is being studied (the 'object' of study) and the latter refers to who is studying it (the 'subject' of study) (Maton 2000b: 85).

Using this analytical distinction between the epistemic and social relation, LCT conceptualises 'codes of legitimation' or specialisation codes as they are termed (Maton 2000b, 2013a). These
are empirical codes which can be used as both a theoretical and analytical base for getting at and describing the principles underlying both the field of production and the field of reproduction. LCT argues that by ‘varying independently the relative strengths of classification and framing for the social relation (SR) and the epistemic relation (ER)’ (Maton 2000b: 86), four possible specialisation codes can be developed. LCT uses plus and minus signs as Bernstein does to refer to weaker and stronger classification and framing. The four codes can represent points on a compass and a great deal of variation can be found within this compass or Cartesian plane (see Figure 2.3 below). The + and – are borrowed from Bernstein to show the relative strengthening and weakening of classification and framing in the four codes. As there is possibility for much variation, it must be acknowledged that the strengths of relations are ‘relative’: stronger and weaker (Maton 2013a: 9).

Figure 2.3 Specialisation codes represented in a Cartesian plane (Maton 2007: 96)

The codes on the top left and bottom right are termed a knowledge code (SR- ER+) and a knower code (SR+ ER-) respectively, based on where the emphasis is placed in terms of the stronger classification and framing (Maton 2000b: 86). With a knower code (bottom right) the disposition or the ‘gaze’ of the knower is emphasised, and this disposition can be ‘innate’, learned or ‘resulting from the knower’s social position’ (Maton 2007: 97). Elsewhere this code is defined as being legitimated on the basis of ‘extra-personal procedures providing access to knowledge of a distinct, constructed object of study, but on the basis of a distinct subject of study, the “knower”’ (Maton 2000b: 87). Thus the underlying principles of this code privilege who is learning the knowledge, their personal, professional or social attributes and attitudes. English, for example, is a subject of study which privileges the attributes, attitudes and positions
of students towards their texts and how they read and interpret the texts rather than the texts themselves.

A knowledge code (top left) can be defined as prizing 'possession of knowledge as the basis of specialisation' (Maton 2007: 97). Elsewhere Maton (2000b: 86) claims that discourses that exhibit this code are legitimated with reference to 'specialised and unique knowledge of a discrete object of study'. Thus the underlying principles privilege the methods and procedures in the field and what the knowledge is; for example in Physics what is privileged is the knowledge of Physics, the concepts and also the methods and procedures for doing research and for producing knowledge. Who physicists are as people is less privileged.

The code on the top right is referred to as an elite code, where both the attitudes and dispositions of the knowers as well as the knowledge procedures are important, for example in Music (Maton 2000b), where to be proficient one needs to have an innate disposition or talent for playing an instrument as well as technical proficiency learned through mastering skills and techniques. Finally, the code on the bottom left is referred to as a relativist code, where neither are particularly emphasised, meaning that there is neither privileging of procedure, skill or technique nor innate dispositions or attitudes over one another (Maton 2000b).

The second part of Specialisation that this study will draw on in looking at pedagogic practices in the classrooms or lecture halls is knowledge-knower structures, encompassing 'gazes' very briefly.

### 6.2 Knowledge-knower structures and 'gazes'

In building on the foundation laid by Bernstein and explained in the preceding section of this chapter, LCT has developed the concept of knowledge-knower structures in order to analyse both the epistemic relations of knowledge (drawing in and extending Bernstein's work) and also the social relations of knowledge (drawing in Bourdieu's field theory and concepts of habitus and capital). These structures are a necessary part of LCT because the concept of knowers (the social relation of knowledge) is important in a study of pedagogic practice, and it is necessary to locate these knowers within the knowledge structures and within the knowing itself. This is thus an important piece of the conceptual puzzle for this study. Further, drawing in and extending Bernstein's concept of the 'gaze' is necessary because this is an intrinsic part of pedagogy – lecturers and students entering into 'social interactional relationships' (Bernstein 1999: 165) in which the disciplinary discourses are taught and learned both tacitly and explicitly. What the gaze is and why it is needed influences the pedagogic approaches lecturers choose to take.
6.2.1 Knowledge-knower structures

Bernstein’s educational knowledge codes relate to the epistemic relation of knowledge; the *what* of knowledge. But what is less visible and discussed in his later work on pedagogy and knowledge structures is the *who*; who is the subject of the object which is knowledge. LCT’s knower structures speak into this gap, and provide a heuristic for making knowers more visible, and for beginning to look at the principles underlying the shaping and development of knowers in the disciplines.

Maton (2007: 87) claims that ‘for every knowledge structure, there is also a knower structure’; knower structures are explicitly linked to Bernstein’s knowledge structures. Maton (2007) argues that the Humanities, while operating (in the main) with horizontal knowledge structures, tend to have hierarchical knower structures. He defines a hierarchical knower structure as a systematically principled and hierarchical organisation of knowers based on the image of the ideal knower which develops through the integration of new knowers at lower levels and across an expanding range of different (innate and/or social) dispositions. It can be graphically represented in a similar way to the hierarchical knowledge structure, thus:

\[ \text{...} \]

The hierarchical knower structures of the humanities, then, are linked to horizontal knowledge structures.

In terms of the natural sciences, Maton argues that, while operating with hierarchical knowledge structures they in fact tend to have horizontal knower structures. Maton (2007: 92) defines this knower structure as ‘a series of strongly bounded knowers, each with its own specialised modes of being and acting, with non-comparable habituses or embodied dispositions based on different biological and/or social backgrounds and histories’. This knower structure can be graphically represented in a similar way to the horizontal knowledge structure, thus (where \( k = \text{knower} \)): \( K^1, K^2, K^3, K^4, K^5...K^n \). The horizontal knower structures of the sciences, then, are linked to hierarchical knower structures.

LCT brings Bernstein’s knowledge structures together with these knower structures to create what is termed ‘knowledge-knower structures’ (Maton 2007: 87). Maton (2007: 93) posits that if we can understand the ‘discursive practices of intellectual fields’ in terms of these structures, and understand that these structures ‘specialise’ and position ‘actors and discourses in different...
ways’ and that actors form different relations to both knowledge and knower structures as a result of this positioning or specialisation, then we can address the underlying principles of these practices of specialisation in terms of their specialisation codes. The important point being established here is that knowledge structures cannot be theorised and discussed in isolation from the knowers of that knowledge, and the roles they play in shaping pedagogic practice.

This idea that knowers can shape knowledge structures just as they can be shaped by them is taken forward by LCT in its account of ‘gazes’ (Maton 2013a). This is a useful part of a conceptual framework for this study because both disciplines that form the case studies are social science disciplines but they are quite different in terms of their knowledge/knower structures and specialisation codes: Law and Political Science. This may also mean that the way in which each discipline develops the appropriate ‘gaze’ to ways of knowing is different too, even though these disciplines, broadly, fall into the social sciences. The answer may lie in a more detailed account of knower structures in the humanities and social sciences. These, according to Maton (2007, 2013a), tend to be hierarchical in nature and so can be represented by the triangle. The point of the triangle is the ideal knower, and the base is all the different habituses that students bring with them, that need to be integrated and subsumed as the knowers ascend the triangle. The way in which knowers are integrated, and their habituses shifted and changed is through the development of the ‘gaze’. The gaze is essentially the means by which knowers can discern which knowledge counts as legitimate and which knowers are recognised as possessing legitimate knowledge. Possession of the gaze buys one access into the field and recognition as a knower.

6.2.1 Gazes

According to LCT, there are four possible gazes, and these all relate to varying strengths of social relations (SR) along a continuum because they relate to knowers and their dispositions, attitudes and ways of knowing rather than to the principled knowledge or procedures they acquire (see Figure 2.4 below). These four gazes are the born gaze, the cultivated gaze, the social gaze and the trained gaze (Maton 2013a).

Figure 2.4 Gazes and the SR continuum (adapted from Maton 2010: 166)
The born gaze calls to mind ideas of natural talent or genius (Maton 2010, 2013a). For example, think of Yo-Yo Ma, the famous cellist who began playing the cello at age four and began his public career at age five. He certainly has to practise, but it is arguably a large dose of natural or innate talent that has contributed to his successes. Many people could practise for years and not be able to achieve what he has (see yo-yoma.com, Bio). Thus the social relation (SR) is relatively stronger with the born gaze because very few people would have such a gaze from birth.

A social gaze is acquired by virtue of belonging to a particular social group, and is acquired by being a member of that group and sharing attributes that the group has in common (Maton 2010, 2013a). Possible examples could include Black feminists or White western crime writers. If you do not share the right attributes it would be difficult to acquire such a gaze, and so the social relation is relatively strong because the 'club' is hard to get into if you do not share certain attributes with existing members.

A cultivated gaze can be acquired through a long period of immersion in a particular field and its ways of knowing, valuing, thinking, reading, writing and so on (Maton 2010, 2013a). This gaze has a relatively weaker social relation because it can potentially be acquired by those able to be in such immersive relationships with those who possess the gaze – it can be taught and learnt. Think here, perhaps, of a historian whose particular approach to study and to the way they view the world is born of years of immersion in that field with those who possess a similar gaze. Finally, a trained gaze can be acquired by almost anyone willing to subject themselves to learning the procedures and processes related to knowing in that field (Maton 2010, 2013a). This gaze has relatively the weakest social relation because it is potentially the most inclusive in terms of a gaze being able to be taught and learnt.

On a continuum the gazes and related social relation or SR strengths could look as they do in Figure 2.4 (with ↓ and ↑ indicating relative strengthening and weakening, because there will be different gradations of strength and weakness as one moves up and down the continuum in empirical contexts). In other words, according to Maton (2013a), a trained and cultivated gaze as potentially more inclusive gazes tend to have weaker social relations (SR-) in terms of a code modality compared to a social or born gaze which are less inclusive gazes and have stronger social relations or are SR+ in terms of their code modality. But a cultivated gaze is relatively stronger than a trained gaze, even though both can be said to have weaker social relations compared to a social and born gaze. Thus, heuristically, a trained gaze would be SR-↓ and a cultivated gaze would be SR-↑ if you were to represent them using LCT’s shorthand for social relations.
Considering gazes as part of knowledge/knower structures and the bigger LCT toolkit for this study is useful because gazes are not acquired in isolation or through magical osmosis. Acquiring a trained or cultivated gaze, for example, is quite a deliberate process of being trained to do and know and think and see in ways that are unfamiliar to new students, but much more familiar to more senior and experienced academic lecturers and researchers in the different fields, in the case of this study Law and Political Science. The acquisition of a gaze is thus intimately related to the pedagogic relationship between lecturer and students, and also to the acquisition of disciplinary knowledge and ways of knowing.

What is important to take from LCT here, linked to the aims of this study, is an understanding of how gazes are acquired, and the role of the teacher as knowledgeable-insider in this process. In terms of the two case studies that have been chosen for this research, Law and Political Studies\(^8\), it is most useful to explore more closely the cultivated gaze (SR↑) and the trained gaze (SR↓). With these gazes it is necessary to have a basis from which to make ‘intersubjective’ and rational judgements about what counts as legitimate knowledge or ways of knowing; in other words, a ‘canon’ of sorts that forms a ‘focus and basis for intersubjective debate’ necessary for cumulative development (Maton 2010: 171). This canon is not necessarily hegemonic or static, as it can be and is shifted and changed as it is worked with critically from within the field through the cumulative building of knowers (Maton 2010, 2013a). However, students come into learning and teaching at university with a range of habituses formed through their interactions with their social and educational backgrounds, and this canonical knowledge can often seem abstract and difficult to place within the wider field, or even the structure of a course or degree programme (Maton 2013a).

In order, therefore, to make the knowledge meaningful the lecturer or teachers needs to start with the students’ experiences and make the knowledge – and the gaze needing to be cultivated – relatable to where students may come from (Maton 2013a). However, and importantly, the teaching does not end with the students’ experiences. Rather, it ends with the teacher assuming a more clearly framed role of knowledgeable insider, not in a transmission mode, but in the sense of clearly framing what does and does not count as legitimate knowledge, and the ways in which this knowledge needs to be known and communicated in order to become a legitimate knower and holder of the gaze (see Maton 2013a; also Wheelahan 2010). Students need to understand which conversations they are joining, what these conversations are about and how they need to speak and what they need to speak about in order to join in, to put it into somewhat crude terms. The aim, following the triangle that LCT uses to represent a hierarchical

\(^8\) Note here that ‘Political Science’ refers to the discipline; ‘Political Studies’ refers to the department at UWC that is one of the case studies.
knower structure, is a potentially inclusive one because the aim is to integrate an increasing
number of students and their habituses into the conversations and teach them what to talk
about and how to do so in order to be recognised as legitimate knowers.

Pedagogic relationships are the events through which these mechanisms in the form of
knowledges and ways of knowing are activated, and through which, in the case of the social
sciences, the ability to develop a field through the development of its knower structure is
strengthened or weakened. Pedagogic approaches and methods can encourage cumulative
learning, but can also result in fragmented or segmented learning, where knowledge-building
over time is made more challenging.

LCT(Semantics) enables an analysis of the ways in which teaching and learning can either
enable or constrain cumulative learning, which, as discussed in Chapter One (sections 2.3 and
2.4), is an important goal of higher education. It does so by examining, or ‘coding’ a different
dimension of pedagogic practice using two different codes that underpin disciplines as fields of
practice. These are termed ‘semantic gravity’ and ‘semantic density’. We turn to these concepts
now, as they are a necessary part of a conceptual toolkit for this study, focused as it is on
pedagogic relationships and practice.

6.3 LCT(Semantics)

LCT(Semantics), or Semantics, is used in this study as a second set of organising principles
underlying the two disciplines being studied. These tools have been drawn into this study as
well as those from Specialisation because they enable a closer focus on and analysis of pedagogy
and the recontextualisation of knowledge through pedagogic practice. They also enable this
study to begin to find an answer to the research question about pedagogic practices that enable
and constrain cumulative learning (see Maton 2009, 2013a, 2013b).

Briefly, Semantics puts forward the concepts of semantic gravity and semantic density as
conceptual tools for exploring the kinds of teaching and assessment that are happening, and
their aims, and the kinds of learning that is actually happening for and by students (Macnaught
et al 2013; Maton 2013a, 2013b). Together these codes and movements from stronger to
weaker semantic gravity and semantic density and back again can form what LCT terms the
’semantic wave’, which can be used to map a teaching and learning event, such as a lecture, part
of a lecture or a whole series of lectures. The semantic wave is the key to cumulative learning,
and also to progression in learning and in society as a wider concern (Maton 2011, 2013a).
These concepts will be explained in depth in the following sections of this chapter. Again, there
is a focus here on a depth ontology and underlying principles; a ‘digging beneath’ what one can
see in a classroom or series of students’ essays in order to understand what conditions, structures and/or beliefs could have given rise to what we can see.

6.3.1 Semantic gravity and semantic density

Semantic gravity (SG) describes the degree to which meanings are tied to their contexts (Maton 2011, 2013a, 2013b). Weaker semantic gravity describes a more distant relationship between concepts or knowledge and the context in which they can be applied or used, where meaning is less dependent on context, for example where one is working with very abstract or highly conceptual or theoretical knowledge. Stronger semantic gravity describes a closer relationship between concepts or knowledge and the context in which it is used, where meaning is very dependent on its context, for example when theory is being applied to a problem or task (Maton 2013a, 2013b).

The ability to accumulate knowledge and transfer it between and across contexts and tasks is compromised when teaching and learning leans too far towards weaker or stronger semantic gravity to the exclusion of the other. In other words, if learning is only/too abstract or only/too context-dependent, students may struggle to take the knowledge and use it differently in other contexts. Analysing shifts in semantic gravity can allow a researcher to theorise and to ‘see’ a teaching and learning event, such as a lecture, in a way that allows them to unpack moves from abstraction to context and back. This concept of shifts can be captured in a ‘gravity wave’ (Maton 2013a: 119).

Semantic density (SD) refers to the concentration of meanings within socio-cultural practices, whether these are comprised of terms, concepts, gestures, symbols, phrases etc (Maton 2011, 2013a, 2013b). Stronger semantic density denotes a symbol that has a greater concentration of meanings within it, whereas a symbol that has weaker semantic density has fewer meanings concentrated within it. These meanings can be axiologically condensed, epistemologically condensed or both; in other words the meanings can relate to emotions, feelings and sentiments as well as to empirical facts and features of the concept or term (Maton 2013a). For example, gold has both axiological and epistemological condensation in terms of its semantic density. Ordinary people might describe gold as a shiny metal, used to make jewellery, or used in art and dentistry, and it has sentimental and monetary value. A jewellery designer might add to that different properties of gold, in that it could be white or yellow in colour, and be used a gold leaf or as melted gold to make different kinds of jewellery pieces. A chemist might again add to that gold’s place on the periodic table, or gold’s atomic weight and number among other things (Maton 2013c). Using gold as an example then, one can see that the condensation of meanings in this term can be both about feelings and sentiment as well as about empirical facts regarding its
chemical composition and uses, and levels of condensation can be relatively stronger and weaker.

Semantic density strengths, like semantic gravity strengths, can be represented along a continuum, and can be relatively weaker or stronger at different points over time. Semantic gravity and semantic density can also change independently of one another, or they can change in relation to one another (Maton 2013b). Semantic gravity and semantic density can be mapped separately, although they need to be considered together if one wants to talk about semantic waves, and as these are at the heart of cumulative learning, and concerns about cumulative learning are at the heart of this study, this study will be focused on semantic waves where semantic gravity and semantic density shift inversely in relation to each other. Semantic waves will be discussed in more detail in the following section.

6.3.2 Semantic waves and semantic ranges

In Maton’s (2013b: 8) terms ‘[s]emantic waves are the pulses of cumulative knowledge-building’. A semantic wave, heuristically, comprises shifts in the strengthening and weakening of semantic gravity and semantic density from, for example, stronger semantic density and weaker semantic gravity, towards weaker semantic density and stronger semantic gravity as the concept or term is unpacked, explained and applied, and then back towards stronger semantic density and weaker semantic gravity as the concept or term is ‘repacked’ or abstracted and condensed again.

An example could be drawn from Law, one of the disciplines analysed in this study. If, for example, a lecturer was teaching students about a ‘delict’, which is the subject of a course students take in their second year, she might start from a point of stronger semantic density and weaker semantic gravity, because this is presented, initially, as an abstract concept with several meanings condensed within it. As she begins to explain what a delict is, and in which branches of law you might encounter it, she begins to strengthen the semantic gravity and weaken the semantic density, as she starts to unpack a few of the meanings condensed within this concept and also brings the concept closer to the areas of the law or contexts in which it has meaning. She may even include more concrete examples of this. This is the first part of the wave. To complete one cycle of the wave, she would need to ‘repack’ or decontextualise the concept again, weakening the semantic gravity and strengthening the semantic density as she moves back up to delict as a more abstract and denser concept again. She could further ‘wave’ as she again unpacks, explains and repacks this concept, deepening both students’ understanding of the abstract concept and its meaning and applications in the law over time (see Figure 2.5).

Figure 2.5 An heuristic example of a semantic wave for delict
LCT argues that in order to accumulate and transfer knowledge, students and academics alike need to move successfully through a series of semantic waves. One interpretation of a semantic wave could mean that teaching needs to start off at the beginning of the wave with fairly weak semantic gravity, where the concepts being taught are fairly abstract. Then, as the teaching of those concepts progresses, the knowledge needs to be linked to a context where it can be applied and understood in more grounded terms. But it cannot end there because in order to take that part of the knowledge further into the study of the discipline, the wave needs to shift back towards weaker semantic gravity where one is abstracting and generalising again, and then back down to a context in which the knowledge again can be applied and understood differently and so on. It may well be the case that as learning moves through the semantic wave, one also achieves stronger semantic density as simple concepts become understood and known in more complex ways, and greater concentrations of meaning can be condensed within concepts and terms. But it may also be the case that semantic density does not strengthen concurrently with successive semantic gravity waves. These are heuristic tools, and are realised in a range of ways in research and data (Maton 2013b).

One can also start in students’ lived realities and contexts, and move up out of these towards abstracting principles that can provide a theoretical lens, for example, with which students can understand or differently view their contexts, and then move back down into their context to look at another issue or moment that can be drawn up again into a more abstract or generalised place. So the semantic wave could move from a place of stronger semantic gravity and weaker semantic density to a place of weaker semantic gravity and stronger semantic gravity, and so on. Again, this is a heuristic example, and one can well imagine that the semantic gravity and semantic density strengths and weaknesses may shift inversely to each other, as in Figure 2.5, or shift in different ways.
Two further realisations of a semantic wave can be called ‘flatlines’ (Maton 2013b: 12) and ‘down escalators’ (Maton 2013b: 14). Flatlines can be both ‘high’ or ‘low’ depending on whether, in the case of a high semantic flatline, the meanings are abstract and not dependent on their context or, in the case of a low semantic flatline, where the meanings are closely tied to their context and are not abstracted at all. An example of a high semantic flatline (A1) would be, to continue with the example of a delict, a discussion about delicts in South African law that explained the conditions for filing a delictual claim and the limitations of these claims as well as some of the academic arguments regarding the validity of claims without any weakening of the semantic density around the term through strengthening the semantic gravity, unpacking and explaining some of the ways in which claims can be made or contested. By contrast, a low semantic flatline (A2) would involve a discussion, for example, about the different actions one could take to claim for losses or damages, and examples of situations in which these actions might apply without weakening the semantic gravity and strengthening the semantic density to relate these examples to a more conceptually generalisable or abstract notion of a delict in South African law.

Figure 2.6 Examples of high and low semantic flatlines A1 and A2

'Sdown escalators' occur when downward movements are made from presenting an abstract concept in technical, academic language towards the unpacking of that concept using simpler, more everyday language so that students understand what the concept means, or at least understand one or two examples of the concept, without applying it in a way that enables an upward shift towards 'repacking' or abstracting again. For example, if the lecturer read to the students about delicts from a legal text, and kept explaining the 'legalese' in more accessible language, moving from weaker to stronger semantic gravity and stronger to weaker semantic...
density, without connecting these points to a larger academic discourse or overarching conceptual framework regarding delictual action in law, this could constitute a series of down escalators (B) rather than a wave (see Figure 2.7).

Figure 2.7 A generic example of down escalators (B)

A final point regards semantic ranges. Briefly, in the case of Figure 2.5, the heuristic depicts quite a wide ‘semantic range’ – a significant series of shifts from stronger semantic density/weaker semantic gravity to weaker semantic density/stronger semantic gravity and back again and so on (Maton 2013a). In Figure 2.6, both of the flatlines depict very small semantic ranges by comparison, as there are very few or very small shifts within the flatlines. Semantic ranges speak to the ability to ‘wave’ and the range of these waves, and, in ideal terms, there is a need for students to have greater rather than smaller semantic ranges. Students, coming as they do from a range of socioeconomic, linguistic and educational backgrounds (CHE 2013) enter higher education with different semantic ranges (Maton 2013c). Some have greater semantic ranges, or greater ability to move between more abstracted and more applied or contextualised knowledge with apparent ease, by virtue of coming from home and school settings that are more congruent with the ways of learning, reading and writing at university (McKenna 2004). Other students, by virtue of coming from home and school backgrounds that have less congruence, may have smaller semantic ranges, and find it much more difficult to ‘wave’ or to make the necessary connections between their everyday knowledge and theoretical knowledge, or may be able to express simpler understandings of theoretical knowledge which weakens their ability to read and write in desired ways in their disciplines.
Students need to build their semantic ranges over time relevant to their field of study in order to build knowledge cumulatively, and in order to be able to make the relevant and necessary connections between their own or their disciplinary contexts and the applications of theoretical knowledge to the theoretical knowledge itself. This is particularly so for students who come from poorer socioeconomic backgrounds and struggle to make transitions to learning successfully at university, but all students need to be consciously taught how to build their knowledge cumulatively in ways that are relevant for the field in which they are studying. Thus, teaching in ways that enable this development over semantic ranges over time, thereby enabling cumulative learning, becomes an issue of social justice as it entails teaching in ways that make the connections between everyday and theoretical knowledge clear, that give students the criteria with which to judge knowledge claims (Wheelahan 2010), and that give students the means to articulate how knowledge can be understood both abstractly and in its application to specific problems, questions, scenarios, or even personal contexts. These semantic ‘tools’ have been used extensively in both of the case studies in this research. By combining semantic density and semantic gravity in semantic waves to probe the ways in which the pedagogic practices in the two case studies have opened up opportunities for cumulative knowledge-building, or constrained these, this study has been able to make valuable findings about what kinds of pedagogic practices do enable and constrain cumulative learning. These two case studies are discussed in great detail in Chapters Four and Five.

7. Conclusion

This chapter has introduced in detail the theoretical foundations for this study as well as the conceptual framework and tools that rest on and build on these foundations. The study has a critical realist ontology, and draws principally on Legitimation Code Theory (LCT) as a conceptual framework. The chapter outlined the relevant foundations for this framework drawing on pertinent parts of Basil Bernstein’s theory on the educational knowledge codes, the Pedagogic Device and vertical and horizontal discourses, including knowledge structures, and Pierre Bourdieu’s field theory, primarily his concept of habitus. These foundations provided the necessary explanatory framework for understanding how LCT has integrated and extended these parts of Bernstein and Bourdieu’s work to create a more encompassing conceptual and explanatory framework that enables research such as that enacted and reported on in this study to look at both the social and epistemic relations both to and within knowledge. Further, LCT has enabled this study to look at the principles underlying pedagogic relationships between lecturers and students in the two case studies in terms of the Specialisation and Semantic codes to understand how knowledge is understood in terms of the recontextualisation of curriculum
knowledge into pedagogic knowledge, as well as how lecturers understand their role in relaying and translating this knowledge to and for students through teaching and learning activities and relationships.

This conceptual ‘toolkit’ is fairly full, but analysing pedagogy in practice is not a simple or straightforward process, and there are many dimensions to this process. This study has focused on cumulative knowledge-building in two disciplines, but in order to do justice to the stories both case studies have to tell regarding the kinds of pedagogic practices that can enable and constrain cumulative learning, two sets of tools are needed, primarily: Specialisation and Semantics. These tools both have layers of complexity that have not been explored fully in this study, partly because that would make the study too ‘theory-heavy’ and lessen the impact of the findings from the data, and partly because there was no need, in this study, to include all the tools and all the layers of complexity. This chapter has highlighted only the necessary foundations, and the tools that have been needed and used. The next chapter takes us further into the ‘dig’ by explaining how these conceptual tools were translated into organising and analytical tools that guided the gathering, organisation, coding and analysis of the data in both case studies.
CHAPTER THREE: RESEARCH DESIGN, ANALYTICAL TOOLS AND THE PROCESS OF WORKING WITH THE DATA - DOING THE DIG

1. Introduction

Chapter Two introduced the reader to the theoretical foundations and explanatory framework for the study, and to the central and related concepts underpinning and guiding it. To recap briefly for the purposes of drawing the theory into the methodological and analytical approaches this study has adopted: relevant parts of the work of Basil Bernstein and Pierre Bourdieu have been drawn on, namely the pedagogical device, vertical and horizontal discourses encompassing knowledge structures, and classification and framing in Bernstein's case, and primarily habitus in Bourdieu's. These concepts have been drawn into the study because of their relationship with the central explanatory framework and conceptual 'toolkit' the study is using: Legitimation Code Theory (LCT).

LCT has subsumed and extended these concepts of Bernstein and Bourdieu, which represent two sides of the same coin as it were, and developed a set of conceptual and analytical tools that offer greater explanatory power in terms of solving problems. In other words, Bernstein offers us a way of theorising knowledge, and Bourdieu a way of theorising knowers and social and disciplinary fields, and LCT brings these together into a set of tools that enable analysis of knowledge and knowers together, as well as pedagogic practices and curriculum recontextualisation within wider disciplinary and social fields. LCT has been chosen as the central conceptual and analytical framework and applied to this study not only because of the rigour that the conceptual framework enables in research, and the economy and depth of its 'explanatory power' (Maton 2013a: 19), but also because of its relevance as an analytical and organising framework for organising, exploring and analysing data.

This chapter will discuss in detail the ways in which the theoretical foundations have been drawn into an organisational and analytical framework, as well as the research design and the methods of both data gathering and analysis that the study has employed. In terms of the metaphor of an archaeological dig that is being used to visualise the unfolding of this study, this chapter relates the way in which the dig was carried out with the selected tools.

2. Restating the aims of the study

The main aim of this study is to develop a theoretical and practical set of tools or approaches for theorising, understanding and also doing pedagogic practice that offers not only a richer and more sophisticated language with which to analyse and talk about pedagogy, but also a way of
accounting for some of the absences in constructivist approaches to pedagogy, particularly where disciplinary knowledge is concerned. As Chapter Two pointed out, this study has not aimed to provide an alternative theoretical and practical approach that fully displaces constructivist approaches. This study does not simplistically argue that a constructivist approach is out and a social realist approach is in; rather, this study aimed to find an alternative to current approaches that can begin to fill some of the gaps in constructivist approaches to pedagogy discussed in Chapter One, particularly where disciplinary knowledge and its related practices are concerned.

In order to accomplish this task, related to the explanatory framework and conceptual tools adopted, there were several elements of pedagogy that this study was interested in exploring. These are:

- The underlying principles of the disciplines, read in lecturers' comments to students in lectures and in interviews, as well as in course-related documents. Here the study is exploring the Specialisation codes, looking at knowledge as well as knowers;
- The relational aspects of the pedagogic relationships between lecturers and students, read largely in the framing of the knowledge being taught, the approaches to teaching, and shifts as the intended curriculum is recontextualised into practice;
- How and whether there is an introduction of the field; and
- The shifts in semantic gravity and semantic density over the course of the semester in the teaching of disciplinary knowledge during lectures.

In order to examine these different elements of the pedagogic spaces that are created and negotiated throughout the semester in both case studies, LCT provided not only ‘conceptual lenses’ with which to explore and question pedagogic practices, but also analytical tools with which the research design was created and the data organised, read and analysed. Further, in order to examine these different elements through the chosen lenses, particular kinds of data were chosen from a range of sources, as required by a critical realist approach to research (Easton 2010), although indeed this is true of all research approaches where the aims of the research and the questions point the researcher towards certain kinds of data over others.

The following section discusses the research design before the chapter moves on to describe the data that was gathered.
3. Choosing an appropriate research design

This study adopted a qualitative, case study approach to research design and intention. Qualitative research is most often presented in research literature as the opposite of quantitative research, where the latter is understood as being concerned with measuring and quantifying things, such as how many students passed Political Studies 131 between 2009 and 2012 and what this could mean for changing the curriculum or how many African students have received Law degrees in South Africa since 2002 and what impact this has had on transforming the legal profession, for example. Quantitative studies, in order to present valid and reliable findings, often need to be done on a fairly large scale, and are rigorously examined for both internal and external validity and reliability (Golafshani 2003). Qualitative studies, on the other hand, tend to be more interested in depth and detail, and in data that does not represent measuring something, such as an attitude or a pass rate. They are more interested in narratives – the participants’ stories and own accounts – to extract themes and threads that help them to tell an in-depth, detailed and rich story about the subject of the research (Golafshani 2003). They are also, however, subject to examination for reliability and validity, but on a different scale to larger quantitative studies because their aims are often different. However, in spite of the evident differences between these two approaches, holding them as opposites is neither a true representation of these two approaches to research design and action, nor is it helpful.

In reality, many research studies involve a mixed method (Creswell 2003) where there are elements of both quantitative and qualitative research being carried out. To go back to the previous example, if you wanted to look at transformation in the legal profession, you would not likely be able to make your case only by collecting data on how many African graduates were getting law degrees. You would have to go and speak to these graduates in their new law firms, and speak to others in those law firms to develop an understanding of what transformation means in those contexts, and whether or not it is happening and how. So you would have both quantitative and qualitative research. Thus, these two approaches are simply two different, rather than opposite, approaches that you would draw on either separately or together depending on the research questions your study is asking and what it is that you want to accomplish with the research.

In terms of a Critical Realist ontology or ‘underlabourer’ as in this study, one could argue that quantitative and qualitative methodologies seem to be associated or concerned with different kinds of reality or ways of seeing the world. For example, quantitative research is often (but not always) supported by a positivist or scientific paradigm where the world being studied is regarded as being made up of ‘observable, measurable facts’ (Glesne & Peshkin 1992: 6, in Golafshani 2003). Qualitative research, on the other hand, seems to be informed by a range of
paradigms that have in common a more open approach to the research, and knowledge is more socially situated, as well as open to a range of understandings and interpretations depending on the philosophical paradigm the researcher is using (Golafshani 2003). In this study the methodology and methods for gathering, interpreting and analysing the data have been chosen in response to the aims and objectives of the study and its principle research questions, so as to enable the study to examine and understand the causal mechanisms, or principles, underpinning the data or the experiences and events they represent.

This study is interested in pedagogic practice, and in particular it is interested in finding a way to describe and analyse pedagogic practice using a different set of conceptual and analytical tools to the ones predominantly drawn on in higher education at the moment. Thus, it is interested in drawing conclusions that are not only relevant for UWC, or even for South African HEIs, but also for a wider context of HEIs and academic disciplines where pedagogic practice is of interest and a concern. The forms of data were chosen and gathered with a qualitative approach in mind, in the form of participant interviews, classroom observations and detailed, descriptive field notes, and documentary evidence. These data were collected in two academic departments which formed the two cases that this study considers in some depth and detail. This study thus used a qualitative, case study research design for particular reasons and these will be further discussed in the following sections.

3.1. Case study research design

This study combines, quite carefully, a case study approach and Critical Realism. Easton (2010: 119) argues that

Critical Realism is particularly well-suited as a companion for case research. It justifies the study of any situation, regardless of the number of research units involved, but only if the process involves thoughtful in depth research with the objective of understanding why things are the way they are.

Further, Yin (1989: 18, quoted in Easton 2010: 119) argues that ‘Case studies are more suited to how and why questions because “...such questions deal with...links needing to be traced over time”’. These two quotations perfectly capture the rationale for choosing a case study research method for this study, concerned as it is with working out ‘why things are the way they are’ in pedagogic practice in the two cases chosen, and further, because the ‘links’ between different parts of the cases that will need to be made to answer the research questions needed to be ‘traced over time’.
Case studies in education research are most often done on a small scale, and are clearly bounded and defined. They are looking for specific things in a specific place, and are characterised by in-depth and detailed analysis (Cohen, Manion & Morrison 2007). Often, case study research in education, while offering these particular insights and richness of detail and narrative, is critiqued for reaching conclusions that are difficult to apply beyond the site of the case or beyond the particular findings made (Flyvbjerg 2006; Thomas 2011). This can be a drawback in case study research design because researchers often want or need to make claims that are bigger than just the case or cases they have used, or applicable beyond that one context.

Further, as Thomas (2011: 24) argues, there is great value attached to what he calls 'generalisable knowledge' and often research that does not provide such knowledge, or that yields more particular or 'exemplary' knowledge is devalued or overlooked. This is a point worth considering in relation to this study, because the reasons for choosing a case study design are clear, but there is also a desire to create, to some extent, knowledge that finds purchase or meaning in contexts outside the one the study is located in, and that can also be generative of further research and questions about pedagogic practices in higher education. This is the aim of all critical realist research, and indeed all research that uses LCT as a theoretical and conceptual toolkit as well. I will return to this point below, but first briefly consider the benefits to case study research as well as some of the drawbacks and limitations of this choice that need to be managed.

One of the main benefits that influenced the choice of a case study design for this research project is the affordances for detailed and in-depth inquiry, and a more narrative approach to researching and writing about the cases, as well as its focus on people (Cohen, Manion & Morrison 2007). Case studies are designed within ‘temporal’ and ‘organisational’ contexts that ‘enable boundaries to be drawn around the case’, and drawing the relevant boundaries allows the researcher to examine the case in detail, and to create rich narratives that explore and evaluate the data in relation to the questions being asked (Cohen, Manion & Morrison 2007: 253). In terms of the questions this study asks, a case study design allowed me as the researcher time in two small, clearly bounded and specific sites over a defined period of time (one semester), and allowed a deep focus on the elements of pedagogic practice and design that this research has explored. The case study design also influenced, positively, the logistical elements of the research by keeping the categories or kinds of data gathered (see section 4) clearly defined and manageable in terms of the time frames for the research.

There are different kinds of case studies enumerated by researchers and research methodologists, and these are worth considering briefly and specifically because the kind of case study approach chosen was influenced by the aims of the study, and also influenced the
kinds of data gathered and how they were gathered and interpreted in relation to the theoretical and conceptual framework. Yin (1984) mentions both exploratory and descriptive case studies, where the latter provides the reader with thick narrative accounts, and the former tests theories. These two types of case study are similarly found in Merriam (1988), who talks about both interpretive and evaluative case studies, where the former aims to develop conceptual categories through interpretation and description, and the latter seeks to make judgements or evaluations of the data and context. It is perhaps not useful, or realistic, to hold these categories of case studies as discrete or separate. All case study research is, by its nature, descriptive and uses narrative techniques, akin to telling stories or creating detailed scenarios with participants, actors and processes discussed in detail, to explicate and discuss data. However, what these researchers are alluding to in creating these categories is perhaps the aim or focus that is driving the research – what is it this research wants to do? In the case of this study, none of these categories fully apply, although there are indeed elements of explanation, description and interpretation in the exploration of the two cases.

The theoretical and conceptual tools being applied to the analysis of these cases drawn from LCT and its ontological underpinning of Critical Realism demanded a case study approach that went beyond simply describing or evaluating these two cases, or indeed testing theory. In this study the aim is to produce knowledge that is about a local context but also able to be applied in other contexts so as to contribute to the body of knowledge about LCT, Critical Realism and the sociology of education; therefore it demanded an approach that is critical and layered in its relationship with the data and the relationship between the research questions, the theoretical framework and the data gathered. It is essential in a study such as this that one not lose sight of the complexities, and also the need to get to the mechanisms or principles underpinning the events and experiences recorded in the different sources of data. To try and argue that this study is either exploratory or descriptive or neither or both may be to over-simplify and thus obscure the layers and levels that the case studies exposed and that needed to be analysed and discussed critically. I will return to the way in which these categories have influenced the data gathering in section 4.

Considering the possible drawbacks in terms of possible limitations on the applicability or reach of the findings is also important, because these needed to be managed carefully. There have been criticisms of case study research in education because of the limited and also small-scale nature of this kind of research. Critiques have centred on the inability of the research to speak to contexts beyond itself (Campbell & Stanley 1966; Cohen, Manion & Morrison 2007; Flyvbjerg 2006) and also the limited and not fully conclusive or compelling nature of the findings, given the small scale of the studies (Campbell & Stanley 1966; Flyvbjerg 2006). This study, however,
has avoided these potential pitfalls. This is largely because of the theoretical framework that has been used to frame, shape and guide this study.

The critical realist approach discussed in depth in Chapter Two and mentioned again in the previous paragraph allows this study to enter into conversation and debate with other similar studies in the sociology of education, and will overcome the possible pitfall of reaching conclusions based on a small set of data that cannot be applied outside of the narrow context of the study itself. Even though these two case studies are small, and focused on specific courses and lecturers in specific departments in a specific university, the data they present and discuss forms part of a larger, global pool of data and research that draws on a similar social and critical realist approach, and uses similar theoretical and analytical tools for analysis and discussion.

Further, as this study was focused on uncovering and analysing the principles underpinning pedagogic practices rather than only examining the local practices at the level of experience (Bhasker 1975), it aimed to create knowledge about pedagogic practice in higher education that can be applied or find meaning beyond the two contexts in which it is being explored in this study. Thus, even though this study used a small scale, bounded case study design, it was not restricted in the sense of limited findings, limited applicability and limited usefulness.

### 3.2. Rationale for choosing the two case study sites

The two case study sites chosen for this study were the Department of Private Law (Law hereafter), and the Department of Political Studies9 (Political Studies hereafter). The case studies within these sites were Law of Persons 112 in Law, and Introduction to Political Studies 131 in Political Studies. There were two sets of reasons for these choices and they can be referred to as pragmatic and academic. The pragmatic reasons will be explained first, followed by the academic reasons.

The pragmatic reasons were primary in selecting these two case studies. The first pragmatic reason for choosing these two cases was access to data. In both departments10 the academic lecturers who agreed to work with me are colleagues with whom I have solid professional and also personal relationships. I have worked with all of them on previous occasions on research

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9 ‘Political Studies’ refers in this study to the academic department at UWC; ‘Political Science’ is the name of the discipline taught in this department, and is the name of the discipline in the literature in this field.

10 ‘Department’ refers to the physical context in which the academic lecturers who are participating work, and in which certain policies, interests and approaches pertaining to pedagogy and the recontextualisation of disciplinary knowledge are located and enacted.
and teaching projects, and these prior working relationships have allowed us to get to know one another personally and professionally, and to establish amicable and collegial relationships. I worked with Political Studies lecturers on a writing-related project in 2010, and in Law on a similar writing-related project in 2010 and 2011. I have also been involved with both departments in tutor training since 2011. It was thus quite straightforward to gain access to these two case studies, as the lecturers I worked with know me, and trust me, and they were very open to working with me.

The second, related pragmatic reason was openness and transparency. As a result of the amicable and collegial relationships I have with all of the lecturers involved, and the level of trust between us, particularly them trusting me, I felt they would be more open in talking about their approaches to teaching, as well as in sharing course documents and allowing me into their classrooms to observe them teaching. It was indeed the case that the participants were very open with me, and there were no barriers put in the way of collecting data for this study. This level of openness and transparency, on my part as well as on the part of the lecturers participating in the research, was very important in terms of ethical considerations, and also in terms of collecting valid and also valuable data.

The second set of reasons was academic in nature, and the first academic reason had to do with the types of disciplines these two cases represent. Here I am referring to Bernstein's (2000) concepts of 'singuals' and 'regions'. In this study the one case, Political Science, is understood to constitute a singular, while the other, Law, is understood to constitute a region.

A singular discipline, in Bernstein's terms, is characterised by a certain level of insularity from other disciplines, the professions or from the world of work beyond the university. Singular disciplines do not answer to professional bodies with their own standards and criteria for admission or certification, and thus their curricula tend to be developed according to a more internal logic (Bernstein 2000). Singualrs also tend to develop in a more traditional sense, in that the knowledge within the discipline comes from within it, rather than from other disciplines through recontextualisation. Where knowledge is recontextualised, for example philosophy in the case of Political Science, it is recontextualised according to this internal logic, and in relation to the discipline itself. This philosophical knowledge is displaced from its 'parent' discipline and recontextualised and in the process becomes politics knowledge and part of this singular. In other words, they do not need to offer certain courses or include particular

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11 'Discipline' refers more to the wider context in which the subject is taught, that is within the university but transcends its boundaries, as well as to the substantive and procedural knowledge that is taught within the contexts being studied, with the understanding that the logics applied here are not completely particular to this university or these iterations of the disciplines in the two case studies.
kinds of knowledge that students will need to gain admission to a professional body after graduation. They face inwards onto themselves rather than outwards in the way that vocational and professional disciplines do (Barnett 2006).

Singulars can be stronger, for example History or Physics, or they can be weaker, for example Philosophy, which can draw in elements on Ethics and Political Science. Political Science, taught in the Department of Political Studies, was characterised for the purposes of this study, as a singular, and as an inward-facing discipline. However, Political Science is a weaker singular than, for example, Mathematics, because it is influenced by other fields, such as Philosophy or Ethics for example. This is necessary to note because the concept of a singular is not neat or clear-cut; as Chapter Two pointed out, the reality is messier than the theory. This concept is being used here as an organising tool rather than a descriptor of what is real.

Exploring what it means to think of Political Science as a singular, we could argue that a person does not have to have a degree in Political Science to work in a political organisation or be a politician: there is no logical or predetermined career path for a Political Science graduate. Thus, curricula are developed and taught according to a different set of logics than to the logics applied in disciplines that do face outwards towards professional bodies, and that call on and recontextualise different singulars into their pedagogical knowledge base. Often, Political Science modules or courses are developed by academics to link with their research interests, particularly at postgraduate level, and while there are common courses that students take in most Political Studies departments in South African universities to build theoretical and analytical foundations for further years of study, some of the modules offered in different departments at different universities will vary greatly according to the specialities or foci of the academics teaching there.

At UWC and the University of Cape Town (UCT), for example, there are undergraduate courses called, similarly, 'Introduction to Politics', 'South African Politics' and 'Comparative Politics'. However, at UWC a course is offered in 'Research Methodology' and another in 'Ideology and Politics', which do not appear in the 2012 course guide at UCT, while at UCT students have the options, unlike their UWC counterparts, of studying 'Urban Politics and Administration' and 'Conflict in World Politics' (UCT Handbook 2012; UWC Handbook 2012). Thus, this case study was chosen because it may provide useful insights into the logics that shape the teaching of this kind of curriculum, and how students are introduced to disciplinary knowledge and ways of knowing, as well as to the wider field.

In contrast to a singular, a discipline that is characterised as a ‘region’ faces, on the one hand, in on itself and its own internal development as an academic field of research and study, but it also faces outwards, towards the profession (Barnett 2006; Bernstein 2000). The curricula in this
kind of discipline may have a certain level of internal logic, and if electives are offered they tend to articulate with the kinds of research expertise within the department, but there is also an external logic that needs to be taken into consideration. In a region, as it faces outwards, the curricula need to be developed with the aim of preparing students for a particular kind of professional practice, and the standards and criteria for admission into a professional body after graduation need to be accounted for when designing and also teaching the curricula at university.

Law, in terms of this study, can be characterised as a region as it is a professional discipline. One has to have a law degree as a prerequisite to further qualifying to practise as a lawyer or legal professional. The law profession has stringent standards that prospective lawyers must meet, as well as further examinations and practical training that students must successfully complete before they can be admitted to the bar (Law Society of South Africa n.d). Thus, there are two logics that influence the development of curricula, and also the teaching of the discipline; an internal logic aligned with the development of the academic field of the law and its study, and the external logic of the legal profession.

There was also an additional and interesting dimension to including a region in this study: that of the identity of the lecturers. At UWC there are trained advocates and attorneys who have practised the law now teaching students and they carry both professional and academic identities within themselves; both of the lecturers participating in this study are qualified attorneys who have completed their candidate attorneyship. Interesting questions that pertain to pedagogy and how lecturers who hold both of these identities approach their teaching included: How do these two identities intersect and interact as these lecturers translate the curricula into pedagogic practice in the classroom? How do these two identities shape these lecturers’ stances towards the what and how of the disciplinary knowledge and the professional knowledge of the law and its associated practices? This case study provided useful insights into the teaching concerns in a discipline that has to balance these two logics, which may complement one another or compete with one another in terms of how curricula are recontextualised into pedagogy.

Bernstein’s (2000: 9) typology of ‘singualrs’ and ‘regions’ (2000) was a useful organising tool and a way of substantiating the particular choices that were made in selecting the case studies. It also highlighted, conceptually, the different logics present in the way curricula were designed in the two cases, as well as in the ways in which these curricula were recontextualised into particular approaches to pedagogy. However, this typology is limited in terms of the claims one could make about regions and singualrs, because, as Bernstein (2000: 9) himself noted, disciplines are shifting and changing as the world around them shifts and changes, and the
typology is a tool one can use to think with rather than a way of describing what a discipline is or is not. Thus, it needs to be highlighted that these concepts were used in this study as thinking and organising tools, rather than as descriptors.

Both Bernstein (2000) and Maton (2000b, 2013a) note that when a researcher embarks on empirical research and brings theoretical concepts like singulars and regions, or indeed any of the Bernsteinian, Bourdieurian or LCT concepts used in this study, into specific empirical contexts, the context speaks back to the theory and challenges it, sometimes confirming, sometimes rejecting, and almost always extending and further shaping it. The approach taken in the design of this study is one that acknowledges the role that context plays in the application and interpretation of the conceptual and methodological tools that have been chosen. This will be further discussed in the following chapters when the data is analysed and discussed.

While this study is not comparative – the cases were not weighed against one another – it was decided that the data could be more rigorously analysed, and more usefully discussed if there was symmetry between the two cases. Thus, a further academic reason behind the choice of the two case studies was in the details. Both cases are first year courses, taught in the first semester, and in both cases the lecturers are younger academics; in Law both lecturers are working on PhDs and have permanent lecturing posts; in Political Studies both lecturers are on short-term contracts and are completing their MA degrees. These considerations were necessary because of some of the implications for the development of curricula and decisions about how to teach the curricula and adapt both the content and also the pedagogical approaches.

Although the curriculum is not the principle focus of this study, one cannot fully consider the pedagogy without also discussing, to some extent, the curricula in each case. Both courses are foundational in the disciplines because they introduce students to concepts and applications that students will need to come back to and build on in further years of study. Both courses are also, positioned as they are in the first semester, introducing students to new ways of thinking, writing, research and reading in higher education, and thus challenge students to shift their approaches to learning. There are clear differences which provided useful departure points in the analysis and discussion of the data, but the similarities provided useful moments in which the data could be seen more holistically instead of only as related to each case separately. This was useful for reaching conclusions that could apply to cases like these in other contexts, and made the findings of this study more able to contribute to the wider body of research on social realist approaches to curriculum development and pedagogy.

The next section moves on to discuss the kinds of data included in this study and methods of collection and recording.
4. Selecting and gathering the data

In order to focus on the field of reproduction, and examine and analyse pedagogy, the sources of data selected for this study all related to pedagogic practice. Thus, the data gathered included course documents; PowerPoint slides from lectures; classroom observations and videos; interviews with lecturers and additional sources. These are discussed in detail below.

4.1 Documentary evidence

I collected various documents from the Political Studies and Law departments and also from UWC more broadly. I used the UWC Charter for Graduate Attributes and Strategic Plan on Teaching and Learning as a source document for examining UWC teaching and learning approaches and policies more generally because it has been designed to guide academic faculties and departments in renewing, aligning and benchmarking their curricula against it as a standard. It has been approved by Senate and so is a public document. From the departments I collected study guides and course readers for each course as well as course information guidelines. I further requested from the lecturers their PowerPoint slides from lectures which were useful in reading the field notes and video transcripts and in writing the analysis of the cases.

Table 3.1 Documents gathered

<table>
<thead>
<tr>
<th>UWC documents</th>
<th>Political Studies</th>
<th>Law</th>
</tr>
</thead>
<tbody>
<tr>
<td>Integrated Charter of Graduate Attributes and Strategic Plan for Teaching and Learning</td>
<td>Course outline for POL131</td>
<td>Course outline for LOP112</td>
</tr>
<tr>
<td>Lecture PowerPoint Slides for POL131, Term 1 [120 slides divided into 7 'weeks' used over 21 lectures]</td>
<td></td>
<td>Study Guide for LOP112</td>
</tr>
<tr>
<td>Lecture PowerPoint Slides for POL131, Term 2 [207 slides divided into 7 'weeks' used over 22 lectures]</td>
<td></td>
<td>Lecture PowerPoint Slides for LOP112 [203 slides divided into 7 study units\textsuperscript{12} used over approximately 32 lectures, each repeated 3 times in 3 lecture blocks; an average of 35 slides per study unit which lasted roughly 4 lectures each]</td>
</tr>
</tbody>
</table>

\textsuperscript{12} There were 10 study units in the course, but one was made self-study and the Graduate Lecturing Assistants or student tutors taught two of them. I only focused on what the two lecturers were teaching, excluding the student tutors (more on this in section 4.6).
4.2 Lecture observations and field notes

In order to analyse the pedagogic practices, particularly in relation to the unfolding of a pedagogic process within a manageable and marked space, such as the two first year courses in the case studies, I attended almost all the lectures for the first semester of 2013 in both case studies. There were lectures missed due to clashes between lectures and my work commitments, such as writing workshops, as well as illness. However, the majority of classes were attended in both academic terms of the first semester. I attended 32 Law lectures with Rachel and 17 with Courtney13 (I missed most of her Monday lectures as the Political Studies class was held at the same time). I attended 16 lectures with Mike in Term 1 and 14 lectures with Frank in Term 2 for Political Studies14.

I sat in on the lectures as an observer, watching, listening and making detailed field notes. These field notes were made in a series of handwritten journals and later transcribed into Microsoft Word. They were not written into electronic format from the beginning because students in the Law course were asked not to use recording devices and laptops so I decided that to bring one in would make me conspicuous in a way that may prove distracting for students around me and possibly for the lecturer as well. Writing the notes by hand also enabled me to take notes in more graphic and creative ways, for example drawing images or writing across the page or in circles to represent visually what I was hearing and experiencing as an observer in the lectures. I found writing the notes in the moment and then organising these notes as I transcribed them electronically into more linear and traditional formats also enabled me to begin to analyse the data in a ‘soft’ manner (Hood, quoted in Chen & Maton 2014) as I was observing the lectures and later during transcription, so I felt more immersed in the data and not separate from it.

4.3 Video-taping of lectures

In order to capture verbatim the ways in which the lecturers discussed and presented the pedagogical knowledge during lectures, a discrete series of lectures was video-taped during the semester in each course. In Law this took the form of a particular study unit – The Beginning of Legal Subjectivity – which amounted to four consecutive lectures with both lecturers, and in Political Studies this amounted to a theme – social movements in Term 1, and Realism and Liberalism in Term 2 – which comprised five lectures in term one with the first lecturer and 5 lectures in term two with the second lecturer. As these lectures were an hour long, this

13 Rachel and Courtney are both pseudonyms chosen for the two lecturers in Law.

14 Mike and Frank are both pseudonyms chosen for the two lecturers in Political Studies.
amounted to a great deal of detailed data and time-consuming transcription. Considering the time this would take, as well as the focus of the conceptual tools which made it easier to select relevant or illustrative examples or episodes from the data (McLellan, Maqueen & Neidig 2003), I selected relevant sections of the video footage that corresponded with the data I was looking for and only transcribed these. I watched the footage several times, making notes of ‘episodes’ that would be illustrative or useful in analysing and discussing the data using the timeline, for example 11min 50 secs to 22 mins 35 secs. These episodes of data were then transcribed in Nvivo 10® and later coded and analysed with the field notes and other data.

The timing of the video-taping was negotiated with the lecturers and before taping the lectures I addressed the students, explaining who I was and why I was there and the form that the taping would take to assure them that they were neither the focus of the video-taping process nor would these tapes be seen by anyone other than me and the lecturer concerned. No objections were raised by either the lecturers concerned or the students in the classes, and the taping proceeded smoothly.

4.4 Interviews with lecturers

There were four in-depth, loosely structured interviews conducted during the first semester while the courses were in session. In Political Studies there were two lecturers engaged in team teaching, so one lecturer taught in the first term for seven weeks and the second lecturer taught in the second term for a further seven weeks. Thus, the first lecturer was interviewed in March as the term ended and the second lecturer was interviewed in early May, the week before the end of the second term. There were also two lecturers teaching in Law but they were teaching simultaneously as the class size was big (over 590+ students) and the class was split into three smaller lecture groups, A, B and C. One lecturer, who also coordinated the course, taught groups A and B, and the other taught group C. Both Law lecturers were interviewed in the first week of May, just over a week before the end of the semester, so that they were able to reflect more fully on their experiences of teaching the course. The interviews were recorded with an audio-recorder with the lecturers’ informed consent, and these tapes were transcribed into MSWord documents, which were then uploaded into Nvivo10® and analysed.

4.5 Additional data sources

In addition to the lecture observations, course and other documentary evidence and interviews, I also exchanged emails with the lecturers throughout the semester, and occasionally had casual conversations after lectures where they would ask questions about how I thought the lectures
were going, and whether they were making sense, or talking too fast and so on. Some of these exchanges were interesting and felt important or noteworthy, and became additional sources of data as I captured my impressions and their questions or comments as field notes and included some of this in the data analysis process where relevant.

4.6. Exclusion of tutorials as a data source

In terms of the data that has been chosen to be gathered and included in this study, tutorials in both Law and Political Studies have been excluded, mainly for logistical reasons. Simply put, there were three lectures per week per course, with an additional three lectures per week in Law because there are two different lecturers co-teaching the course. In Law there were 590+ students taking the course, and they were split into three lecture groups, two with one lecturer and the third with the second lecturer. This added up to a large number of tutorial groups and additional hours per week of observations. In Political Studies the situation was similar, with 480+ students and several tutors running more than 10 tutorials per week among them. Thus, there was no time to observe both the lectures and the tutorials. Even though it is acknowledged that tutors in both Political Studies and Law do enact pedagogy in their tutorials, their voices and approaches have necessarily been excluded from this research due to these logistical reasons.

A further reason for drawing this particular boundary and for only including interviews with and observations of the lecturers is that the lecturers influence the way the curriculum is designed, and have the most significant impact on the way in which it is taught. Even though the study was not looking explicitly or directly at curriculum design, it was more useful to speak with and observe lecturers who could make adaptations and changes to the curriculum as they progressed through the course and engaged in pedagogic relationships with the students in their courses. This added an interesting and valuable element to considerations regarding the shifting of semantic gravity and semantic density, for example, as will be discussed in more detail in Chapters Four and Five.

The following section considers the pertinent issues pertaining to locating myself in the study as a member of staff in the university within which this research took place, as well as a colleague to the members of staff I have worked with. It further considers ethical issues arising from doing research with colleagues in one’s own university.
5. Considering positionality and ethics

5.1 Positionality and doing research in one’s own university

The issue of positionality and locating myself in this study as the researcher was a challenging one. The lecturers I worked with were friendly colleagues and people I have worked with previously on other projects, particularly in Law. The two Politics lecturers are colleagues as well, but I have not formally worked with them on projects previously, although I have worked with other lecturers in the Department including the two coordinators working with the lecturers in Pol 131. Thus, I was given access to their classrooms, documents and ideas and thoughts without hesitation. I believe their willingness to work with me came out of their knowledge of me as a colleague, as a friend and as an ethical and trustworthy person. I am firmly of the opinion that they trusted me, and knew that my research would not seek to portray them or their departments in a negative light. The positive effects of these choices based on these existing collegial relationships are that there is a level of trust and comfortableness between myself and the lecturers which has allowed for a very open and flexible environment in which for me to do my research, and further that the trust they have in me, and the friendly and collegial nature of our relationships, has allowed them to be very honest with me; they have not simply told me what I want to hear or taken the ‘politically correct’ route in interviews.

However, in spite of the positive effects of the choices I made in selecting my case studies and participants, there were also challenges and potential pitfalls to consider. The largest challenge was that of doing research in my own institution, particularly with regard to ethical issues, and designing the research to be both rigorous and transparent (Trowler 2011), as well as the issue of gaining knowledge that may have put me, as the researcher, in a difficult position with regards to those it pertained to (Williams 2009). In terms of doing ethical and transparent research in one’s own institution, Trowler (2011) argues that one advantage of this is exactly what the case study design offers: a rich, thick, ‘emic’ account that blends experience with theory. This is also what Thomas (2011: 24) refers to as ‘exemplary knowledge’ linked with ‘phronesis’ or practical wisdom. However, the flipside of these rich accounts is that they do include a great deal of the researcher’s own experiences of and in the context, particularly one who plays the role of a participant observer, and thus the researcher may be impaired in offering more culturally neutral, ‘etic’ accounts; in Trowler’s (2011: 2) terms, the researcher may well struggle to ‘make the normal strange’. This is certainly a challenge that I was aware of throughout, particularly given the close collegial relationships between myself and the lecturers, and my hesitance around critiquing their pedagogic practice too strongly or including information that might seem to betray the trust and confidence the lecturers placed in me.
This hesitation on my part is echoed in William’s (2009: 211) notion of ‘guilty knowledge’. This is knowledge that one can learn when doing research in one’s own institution that may be harmful to colleagues if it is brought to light, and that may harm relationships between researcher and researched that are built on trust. This knowledge is difficult, and can present the researcher with particular challenges and questions around whether to pursue certain lines of inquiry that may lead to further difficult knowledge and ethical questions, or to change the line of inquiry to save the researcher from ethical dilemmas and to save the researcher and researched from possible harm.

I took into consideration that, as a result of the collegial and amicable relationships between myself and the lecturers I observed and interviewed, and their level of openness, they may well disclose information that could be ‘difficult’ in the sense that, once it was analysed and drawn into the framework of this study, it may not portray aspects of their teaching in the kind of light they may want to have shining on them. Alternatively, my analysis of the data might not be what they are expecting, and in sharing it with them and with the wider academic community through my thesis and subsequent publications, I may inadvertently cause them a kind of harm, or betray their trust in me.

This was a difficult issue to think through, because the trust my colleagues have placed in me is very important to me. I will continue to work with them in different ways when my present research has concluded, and I did not want to do anything to jeopardise those relationships. However, as a researcher I also felt an ethical and moral responsibility to my project, and to my questions, and also to truth and knowledge. How could I leave out potentially exciting and also illustrative findings if they will further my own knowledge, and also contribute to the growth of my field, even if those findings represent ‘guilty’ or difficult knowledge? In response to these questions, Williams (2009) raises a discussion about the nature of ethics and the ethical researcher, which will be returned to in the following sub-section below.

The conclusion I reached in terms of my positionality is that I am implicated in my own research, even though I was not a full participant observer in the case studies. I have vested interests in the departments in which I have done this research because I would like to continue doing research with these colleagues and also need to continue working with them as a professional within my university in the future, for example in running writing and tutor training workshops, and these interests have inevitably made me biased. However, this bias has not necessarily been a drawback, because all ‘insider’ research is biased to some extent; researchers examining their own contexts cannot be fully objective or neutral (Trowler 2011).

Further, in terms of the critical realist ontology this study adopted, it can be argued that while all knowledge is socially constructed, and therefore fallible (Easton 2010; Sayer 1992), the
knowledge is not completely reducible to the contexts in which it is created and has meaning (Sayer 1992). Even though, by positioning myself as I did in my study, and by choosing to work with colleagues who are also friends, I opened up spaces where bias can enter and be part of my data and my discussion about it, using Critical Realism and also LCT allowed me to move beyond a relativist notion of what I think is true or real based on my own observations. I was able to move beyond my own potential bias to create sound and analytically defensible claims that are critical rather than relativist in nature. By focusing on finding the generative mechanisms or principles underpinning and shaping experiences of pedagogy, Critical Realism and LCT allowed me to connect with the level of the real, and to see what was happening beneath the surface that could explain what I was observing of teaching and learning as it was happening, and why it could have been happening thus. ‘Observation is fallible’ (Easton 2010: 123), therefore I collected different kinds of data that have allowed me to ‘distinguish among alternative explanations’ (Easton 2010: 123) using the tools derived primarily from LCT.

Throughout this project there was a need to balance my dual roles as a PhD student and researcher and as a writing specialist with both the lecturers and the students. Some of the latter visited the Writing Centre and met me there, and thus saw me in two different ways, because they were also introduced to me in classes as a PhD student and observer. In Law in particular, I was asked to run a writing workshop for all three groups following the first test, and this presented a small dilemma because I was concerned that playing both roles in these groups would compromise my role as observer and researcher. However, I was obliged to do the workshops because of my professional role in the University. It is these kinds of ethical issues that I turn to in more detail now.

5.2 Ethical considerations

Williams (2009) and Pring (2001) draw a distinction between custom and character in research ethics. Custom denotes the systems of rules and protocols that bodies such as university ethics committees draw up, according to accepted standards and norms in particular fields, such as the biomedical sciences or the humanities. These rules are there, ostensibly, to ensure that the research will conform to these standards, and will be ethical in form and nature. Considerations here include, for example, informed consent forms and the ways in which these are worded, and interview protocols and schedules so that the kinds of questions that will be asked can be scrutinised for possible ethical conflicts. These rules and protocols, however useful they can be in ensuring that researchers approach their research carefully and thoughtfully, cannot really protect a researcher from ethical dilemmas and tricky situations that may arise in the field. They also cannot fully ensure that the research that looks ethical on paper will continue to be
fully ethical in the field; in other words, researchers could step away from their own protocols by making poor decisions when confronted with unexpected situations, and unless they confessed to this no one would be any the wiser. Thus, custom is contrasted with character, which seems to be a far more useful way of thinking about ethical research plans and behaviour.

Character is a dimension of research ethics that speaks to the disposition, morals and innate ethics of the person doing the research, and their ability to behave ethically and to make sound decisions in the face of dilemmas and unexpected situations that take the research as well as the participants into account. A focus on this aspect, rather than on the aspect of custom, can lead to a focus on training researchers to behave and think more ethically in the field, so that when issues arise that the researcher has been unable to account for in a proposal, dealing with these dilemmas will keep the research on track and will also enable to researcher to take account of the participants, and be more accountable for the decisions made. This is especially important in projects that rely on qualitative data gathering and analysis, where the ‘data’ are almost always people or involve people’s words, opinions and actions.

An example from my own research was a request from a lecturer I interviewed and whose classes I was observing to run a writing workshop with the three lecture groups as a result of their poor test results in Term one. This was not a large dilemma, but I did need to think carefully about my response. Would the conversations I would need to have with her and her co-lecturer about the students’ writing somehow jeopardise our interviews by giving them an insight into the theory I was using in the PhD which they could then give back to me later on in their own ways? If this happened would this be a form of a coerced or coached, rather than more authentic, interview? If I did these workshops with the students as a writing specialist, would this compromise my observer status in the subsequent classes? I decided to do the workshops, because this is my job at the university and it would have been unprofessional and also unfair to refuse. However, I included a short discussion on this in the previous section on positionality as this is linked to ethical concerns and considerations. I did feel that, in a small way, I was a little compromised as a researcher, and could no longer hold myself aloof as an observer. This additional, and unanticipated, involvement in the class changed my observer status and my positionality as a researcher doing research in my own university.

This also seems to be one of the challenges of doing research in one's own university, and especially in a field where one's research and work overlap: one is not fully able to separate the two and remain aloof or distant from the context in which the research is being carried out. In these situations, it becomes especially important to focus on the character of the researcher and their ability to make ethical and considerate decisions when faced with ethical dilemmas and situations they cannot have accounted for. Character, rather than custom alone, is what will
ensure more ethical research, and more considerate and careful research behaviour in the field and therefore more trustworthy and rigorous research. This kind of research may also have the benefit of growing the fields in which it is done, and published, in more robust ways, and challenging other researchers to raise their own standards in order to more ably join and extend these disciplinary conversations.

In spite of my own personal bias towards a focus on character rather than custom, I was bound by customary requirements for ethical clearance and approval at my own university and also at Rhodes University where I was registered as a student. I approached the UWC Research Office and requested permission to do the fieldwork for this study on campus, providing my proposal and the ethical clearance I obtained from Rhodes University. This permission was given via email. Informed consent was obtained from all the lecturers. A formal information sheet was provided to all of them, which detailed the aims and purposes of the research and what their participation would involve, as well as information about how to withdraw from the study and the ways in which the data would be managed in terms of anonymity and confidentiality. They were given a copy of this to keep, and asked to sign a short declaration indicating their understanding of the information sheet and their willingness to participate fully in the research.

There were also several email and in-person exchanges during January and February of 2013, as the data gathering began in earnest, about what the research entailed and the focus of the classroom observations in particular. All of the lecturers were concerned about whether or not their personalities or teaching styles were being judged or evaluated and our conversations, on email and in person, were mainly about reassuring them that this was not the focus of the study, and reminding them of the information in the informed consent documents. Thus the lecturers, through several discussions as well as the formal documents, were fully informed of the aims, nature and purposes of the study and their role in it. All of the lecturers gave their consent fully and voluntarily, and also warmly.

6. Analysing the data

This section is a narrative about the process I followed in translating the theoretical concepts into analytical tools, as well as the steps taken in the iterative process of developing an ‘external language of description’ (Bernstein 2000: 132) that would allow me to clarify, conceptually and analytically, the particular relationship between my data and the theory chosen to frame this study. It starts with a brief redescription of the concepts detailed in Chapter Two, turned into analytical tools, and then considers, in some detail, the iterative process of working from data back towards theory (Chen & Maton 2014).
6.1. From theory to analysis: tools and concepts

There are three primary sets of tools that this study has drawn from the conceptual framework into the data gathering and analysis process: Framing, Specialisation Codes and Semantic Codes.

The first tool was drawn from Basil Bernstein's work, namely Framing (F). To briefly recap what Chapter Two, Section 4.1 discussed, Framing (F) deals with relations within subjects, and in pedagogy terms relates to the level of control the teacher and students exert over the pacing and sequencing of the knowledge in the curriculum (Bernstein 1971). In short, Framing controls how the content is sequenced, the pace at which it is taught, and the levels of control teacher and students exert over the pedagogic process. Framing is also relatively stronger and weaker in different educational settings and in different disciplines and curricula. In this study Framing is used to analyse and understand the ways in which the lecturers approached their teaching and understood the selection, pacing and sequencing of their curricula recontextualised into pedagogy. Classification (C) was also initially a concept under which data was coded, but as this study focused primarily on the Field of Reproduction, and pedagogic practice, the data under this ‘node’ or concept was not brought as much into the analysis as that under the node of Framing. Thus, while it is a consideration and it will be briefly mentioned, Classification is not here included as a tool for analysis in terms of the discussions that follow in Chapters Four and Five. Habitus, too, was not included here as once the data was coded, it became clear that while it could be mentioned as part of the bigger picture in each case study, it was not a large area of concern, or fundamental to the analysis of pedagogic practice.

The second set of tools is from LCT, and these are Specialisation codes, ER and SR, or epistemic relations and social relations, which code the underlying principles of the fields of production, recontextualisation and reproduction in the Pedagogic Device. Briefly, ER is epistemic relations, and the underlying principle being coded prizes the ‘what’ of the knowledge – what is being taught and the specialised methods, procedures and techniques related to the knowledge (Maton 2000b). SR is social relations, and takes account of knowers – ‘who’ is doing the knowing and their attitudes, habitus and dispositions. Both the epistemic and social relations can weaken and strengthen independently of one another when researching academic fields of disciplines, so there are four Specialisation codes which were discussed in detail in Chapter Two. Briefly, they are the knowledge code where the epistemic relations are relatively stronger and the social relations are relatively weaker (ER+ SR-); the knower code, where the social relations are relatively stronger and the epistemic relations and relatively weaker (ER- SR+); the elite code, where both are stronger (ER+ SR+); and the relativist code, where neither are particularly strong (ER- SR-) (Maton 2000b, 2013a).
The final set of codes, also from LCT, is semantic codes. This study, focused on pedagogic practice and developing a theoretical framework that can add to, extend and also critique current approaches to enacting pedagogic practice, is using semantic codes to examine the ways in which lecturers are approaching building subject knowledge cumulatively over a course such as the ones in the case study. Thus, there are two sets of semantic codes being used here that were introduced as theoretical concepts in Chapter Two and have been translated here into analytical tools. The first is semantic gravity (SG), or the extent to which meaning is tied to the context in which it is taught (stronger gravity or SG+) or able to be abstracted and taken into other contexts and reapplied (weaker gravity or SG-) (Maton 2009, 2011, 2013a, 2013b). The second is semantic density, or the condensation of meanings bound up in a term, concept or symbol (Maton 2011, 2013a, 2013b). Weaker semantic density (SD-) denotes a symbol or concept with relatively fewer meanings condensed within it, and stronger semantic density denotes a symbol or concept with relatively more meanings condensed within it (SD+). Semantic waves, which bring semantic gravity and semantic density together, have been used in this study to graphically represent the ways in which knowledge is being 'built' cumulatively or segmented through pedagogy. Further, taking time into consideration, waves were drawn for parts of a class, and also for a series of classes on a lecture topic.

6.2 Developing the iterative analytical process: doing the dig by using the tools to bring the data to life

All the sources of data collected: the documents, the interview transcripts, the video-footage, the lecture field notes and the audio recordings were uploaded into Nvivo10®. Nvivo10® was useful as both an organisational tool in terms of storing, processing and ‘naming’ the data, and also as an analytical tool when it came to coding, recoding and organising the data around themes. As this was indeed an iterative and at times very complex process, it made all the difference to have a tool such as Nvivo10® to assist me in keeping track of the multiple sources of data as well as how they were progressively organised and described. It was certainly much neater and less complicated and confusing than mountains of paper and coloured pens and sticky notes, which would have been my tools had I not obtained access to Nvivo10®.

It was quite a challenge to move from raw data in the form of policy documents, interview transcripts, field notes and video-tapes to a polished account of pedagogy in the two case studies, drawing clear links between the data and the theory, and developing what Bernstein referred to as an ‘external language of description’, or ‘the syntax whereby the internal [conceptual] language can describe something other than itself’ (Bernstein 2000: 132). Chen and Maton (2014: 2) refer to this external language as a ‘translation device’, or the means
whereby others can understand the articulations between your theory and empirical data, as well as the analytical process you followed. This enables the findings to stand up to close scrutiny and also gives other researchers a framework or tool they can take on and adapt in their own studies, thereby cumulatively building strong knowledge in the field (Chen & Maton 2014). The conceptual language for this study, or the ‘internal language of description’ (Bernstein 2000: 132) was developed in Chapter Two. In Chapters Four and Five, I have bridged the ‘discursive gap’ (Bernstein 2000: 30) between this conceptual space and my empirical data, using the explanatory framework selected and designed for this study to describe the two case studies, and to answer the research questions this study posed. But creating this external language, where theory and research are brought together in new ways, and where research like this is able to make an original contribution to knowledge, is not a linear or simple process. Rather, it is iterative, particularly in a study such as this one which is interested less in what can be seen at the level of the empirical (Bhaskar 1975, 2008) and more in the generative mechanisms and underlying principles that lie beneath events and experiences. There are several ‘layers’ or steps to the process of analysing and describing the data when one is creating a translation device for one’s research.

The first step I took was to type up and organise, in MSWord, all of my handwritten field notes taken during lectures in both case studies. This was a fairly time-consuming process, but in typing up all the notes – six small notebooks’ worth – I was able to look at all this data again, and get a sense of the ‘whole’, whether this whole came in the form of two terms in the case of the Political Studies lectures where the course was split into two associated topics and lecturers, or a semester in the case of Law. This process of rewriting all the field notes also allowed me to organise them more clearly, as this was difficult in a lecture where the focus was writing down as close to verbatim as possible what the lecturer was saying in order to capture the actual pedagogic process, as well record notes on the kinds of language being used (formal or informal) and the kinds of examples used to illustrate concepts as well as the concepts themselves. It was very important to me at the time of attending the lectures to be as thorough as possible in recording the classes so that when I read over the notes months later I would not be lost or confused or wonder what I had meant by certain statements or observations.

The notes recorded the lectures chronologically from beginning to end, but were often quite graphic, using words as well as ‘word pictures’, and non-linear capturing of speech and ‘moves’ made by the lecturers (See Figures 3.1 and 3.2 respectively, below, for examples). This did make capturing them in MSWord a little challenging as it is more difficult to ‘draw’ in MSWord than it is to do so by hand, of course. However, as I was also uploading the field notes in Nvivo10® and analysing them there, I wanted them to represent the original notes in a slightly more
conventional, linear form to make it easier to read and code them later. Thus, as I typed I also reorganised the notes, omitting things such as announcements about posting of marks or missed tutorials, which I categorised as non-important administrative issues that I could ignore, and focused rather on capturing the teaching and learning processes that were recorded in the notes. This was partly to make the process more efficient in terms of the time it took, but also to ensure that the notes I eventually coded represented what the study was interested in and focused on. It took me a little while after lectures started to work out what the ‘what’ was that I was capturing, so I made notes about everything for the first two weeks, refining my process of selecting and writing notes during the lectures as the semester went on. Going through the notes as I recaptured them, with my gaze in action, enabled me to refine especially the earlier notes in small ways, and omit truly extraneous details and focus on what was important as indicated by the theoretical and conceptual tools I was using. This was a very useful process, and also, in small ways, moved me from data back towards theory.

Figure 3.1 Example of field notes from LOP112, Semester one: ‘a word-picture’
The second step I took, following Dooley (2001), and a suggestion in Chen and Maton (2014) was to draw simple ‘question maps’ for my data. Thomas (2011) warns against a rush to theorise when working with data in order to make one’s research more valid and valuable. But Chen and Maton (2014) argue for ‘immersion’ in the data, and letting it tell its own story before linking it with hard theoretical concepts, such as saying ‘this is definitely social relations’ or ‘that is definitely a knowledge code’. Question maps were one way of beginning the process of moving from data towards theory without rushing to theorise. There was not very much guidance in the texts that suggested this method, so I took the basic idea and adapted it. The basic idea is to work out a series of questions to ask of the data, so as to begin moving towards the theory while letting the data speak to you. These questions, though, do need to be guided by the conceptual framework of your study and by what it is that you are studying and why. For example, specialisation highlights knowers as well as knowledge, and leads you to questions
such as ‘what would an ideal Law or Political Science student be such as?’ and ‘what is the basis for being deemed successful in Law or Political Science’?

Practically, I started with the four ‘areas’ I was looking at, mentioned in section 2 of this chapter, and began to brainstorm, quite freely, a series of questions on each area that I could ask of the data as I read the transcripts and field notes, as well as the documents. I was careful not to theorise too much here, but this was difficult, because I already had the theory in my head quite clearly in its abstract form. However, even though I was not formally analysing data here, or linking data to theory explicitly, my ‘gaze’ as a researcher was definitely involved as I brainstormed the initial set of questions and then refined and narrowed these into a clearer and more focused set for each area I was looking at. As Chen and Maton (2014: 21) argue, ‘one’s “gaze” is always active in research’. These question maps gave me a useful starting place for beginning to organise my data fairly loosely around themes that began to emerge as I looked at answers to the questions in the multiple data sources.

**Figure 3.3 An early question map as an example**

Mapping the broad conceptual areas and tools, and brainstorming questions led to the emergence of themes in the data. The next step then was to create initial ‘nodes’ for each theme.
in Nvivo10® and I went carefully through the data to link pieces of it to each theme, putting this data into the different nodes. This initial thematic analysis, coming out of the question maps, was led more by what the data was saying than by the theoretical concepts I was applying in this study. So, for example, instead of calling a certain statement by a Law lecturer ‘knower focus, SR+’, I called it ‘developing necessary skills’ or ‘pointing to the world of work or practice’ and grouped all statements that pointed to that focus around it. There were many themes to start with, and many overlapped or were repetitive, but I left them there at this stage without trying to refine them too much.

The next step was to ‘super-code’ the data by moving up a level towards bigger nodes under which these themes could be organised. To do this I drew on the conceptual and analytical tools discussed earlier in this chapter and also in Chapter Two. Initially calling them ‘Habitus’, ‘Knowers’, ‘Knowledge’, ‘Gravity’, ‘Density’, ‘Classification’ and ‘Framing’, I started organising the themes or nodes I already had organised and coded into these parent or superordinate categories. This super-coding process pointed to ways in which I needed to refine and reorganise the data in some cases, by merging overlapping nodes and also by recoding data that had been coded incorrectly or miscoded in the initial coding and organising process. At the end of this process of super-coding and refining there were 21 nodes for Political Studies under the seven ‘super-nodes’ and 28 for Law in Nvivo10® with data attached to them from video transcripts and field notes, as well as from source documents and interview transcripts (see Appendix on pp. 191-194 for a graphic representation of the Nvivo10© coding).

At this point the articulation between the different conceptual categories started to become clearer, and this was a big step from the data back towards the theory, and towards my external language of description. But it was difficult to begin writing, so I needed a further step in the process that would help me to start organising the chapters, and writing about the relevant parts of the case studies in relation to my research questions. Thus, I created a different kind of map, almost a hybrid between a concept map and a mindmap (Buzan & Buzan 1996; Novak 2010). These maps were more clearly drawn for the second case study, as I wrote Chapter Four before I began coding data for Chapter Five to avoid confusing the two cases, and the process of completing a full data coding and analysis process for the first case before starting the second provided useful lessons to learn from. However, in both cases I started with the approach to teaching that the lecturers in each case exhibited according to the data, and re-read the data coded in the categories of Framing, Classification and Habitus. I started drawing maps around these concepts identified as my analytical tools, pulling in data from the nodes in Nvivo10® that illustrated these concepts in the pedagogical processes and approaches I was looking for and analysing (see Figures 3.4 and 3.5 for illustrative examples). Once I had drawn a mini-map for
each conceptual area or category I could then connect the different categories in ways that seemed the most logical, and so begin drawing a framework or structure for each chapter. It was during this process that Framing emerged as a much clearer category for analysis and discussion related to the overall research questions, and thus while Classification and Habitus were not discarded, they were not included as analytical tools to the same degree that Classification and the LCT tools from Specialisation and Semantics were.

Figure 3.4 Hybrid ‘map’ for organising the chapter and articulating links between the data (Political Studies)
This was the iterative, lengthy and complex process of generating what Chen and Maton (2014: 2) call a ‘translation device’; this is the ‘external language of description’ (Bernstein 2000: 132) that enables the relationship in this study between the data gathered and the theoretical and conceptual framework to be made fully visible, analytically sharp, and also open to debate, critique and further development through the use and adaptation of my ‘device’ in other related studies. This is, as Maton argues, how researchers are able to collectively build cumulative and powerful knowledge (Maton 2013a).

7. Conclusion

This chapter has set out, in detail, the process that was followed in doing the dig; in other words, the methodological approach and research design chosen for this study, the reasons for choosing this approach and design, and also an account of the methods employed in translating
the theoretical tools into analytical tools capable of accounting for the data gathered and telling its story in relation to the aims of this study and the questions it poses.

The first part of the chapter set out again the research focus, but from the point of view of the data: what needed to be looked for, and therefore what data was needed in order to find these things? This section opened onto a section that set out what data had been gathered and why. The next logical step was to discuss the research design – in this study a case research approach was chosen, with a critical realist underpinning – and some of the possible limitations and also potentials that need to be considered in using this approach. This case study design and the choices made in selecting the lecturers and cases to study created certain issues around my own positionality as the researcher, as well as ethical issues that were discussed in some detail, with reference to the critical realist ontology this study has adopted. In the last sections of the chapter the processes of analysing and organising the data were considered and discussed, explaining in detail the iterative process that was followed in organising, coding, reorganising and recoding the data as the ‘external language of description’ (Bernstein 2000: 132) or ‘translation device’ (Chen & Maton 2014: 2) was developed.

The following two chapters, Four and Five, will discuss the two cases in great detail using the data that has been gathered and analysed to tell the story about pedagogic practice in each of these two cases through the lens provided by the conceptual framework detailed in Chapter Two. Law will be discussed first in Chapter Four, followed by Political Studies in Chapter Five.
CHAPTER FOUR: ‘A SERIES OF CONNECTED CHAMBERS’ - KNOWLEDGE-BUILDING IN LAW

1. Introduction

The previous three chapters have laid out the first three stages in the ‘dig’ that is this study. Chapter One explored the surrounding ‘terrain’ and located the study within current research on education, indicating the gaps into which this study aimed to make its contribution. Chapter Two laid the theoretical foundations for the dig, and set out and examined the conceptual tools that would be used to do the dig, and to make sense of what was discovered in each case within the larger explanatory framework. Chapter Three reported on how the dig was actually carried out by explaining the analytical framework, the aspects of pedagogy in each case that were included in the study, and the process of ‘digging’ or gathering, organising, coding and analysing the data. This chapter and Chapter Five report on what was found in these dig sites or case studies that pertains to the questions this study has asked and sought to answer about cumulative knowledge building and pedagogic practice. This chapter will focus on Law, using the image of ‘a series of connected chambers’ or rooms to provide a visual image of what the data uncovered.

The course that students in the Law case study were taking was Law of Persons 112 or, in shorthand, LOP112. This course, along with the two lecturers who teach it, is in the Department of Private Law at the University of the Western Cape (UWC). It is a first semester course as it introduces students to the study of the law and key concepts within Private Law, and such as all first year courses at UWC, it is compulsory for all LLB and B.Com Law students. There were two lecturers for the course because there were almost 600 registered students divided into three lecture groups. Due to timetable constraints as well as the overwhelming workload, this is too large a class for one lecturer to teach alone. Rachel thus taught groups A and B, and Courtney taught the smallest group, group C.

All three groups attended lectures, each an hour long, on Mondays, Tuesdays and Wednesdays for 15 weeks, seven in the first semester and eight in the second. They also attended tutorials every second week run by Masters and PhD students in the faculty who work as Graduate Lecturing Assistants or tutors. The lecture venues were both large and tiered, with rows of

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15 The word ‘course’ is used here rather than module because, as you will see in Chapter Five, there are two ‘modules’ within a whole course, and this LOP112 course is not divided in this way, so the words ‘course’ and ‘module’ are thus used in this study to show this distinction.

16 Rachel is a pseudonym.

17 Courtney is a pseudonym.
benches and chairs on ascending steps. There was a constant hum of noise in the lectures for Rachel's classes, which had on average 250 students in attendance, while Courtney's classes, being smaller (about 120 students), were less noisy. Neither lecturer used a microphone, preferring instead to project their voices and request that students be quiet and pay attention. They were both audible for the most part, although this was not always possible when the classes were noisier than usual, and both lecturers were fairly strict in asking for quiet and respect for themselves and fellow students.

My experience, as an observer, was one of a well-organised and carefully planned course that aimed to introduce students to the law as an area of study, and specifically to introduce students to foundational legal concepts and their applications, to begin to develop their legal knowledge and associated skills and practices. The aims of the course are stated in the study guide:

> After completion of this module, you should be able to identify, formulate and give advice on legal problems relating to the beginning and end of legal personality and the legal status of legal subjects. The module also aims to encourage critical, independent thought by encouraging students to critically evaluate current legal rules. (Study guide, Law of Persons, 2013).

The pedagogic practices of both lecturers were focused on achieving these aims. This chapter presents, describes and analyses selected data gathered during the study, and focuses in the analysis on addressing the research question this study seeks to answer: What kinds of pedagogic practices enable and/or constrain epistemological access to, and cumulative building of, powerful knowledge in the disciplines? The chapter is organised into four main subsections: Curriculum (largely organising data around the concepts of classification and also habitus); Teaching practice; Specialisation; and Semantics.

2. Unpacking the metaphor: a series of chambers and the connections between them

This section begins by briefly examining the lecturers’ views on the curriculum they developed and taught, as both lecturers have been involved over the past few years in continuously developing and redesigning the curriculum for this course. Even though curriculum is not the focus of this study, it bears brief examination here because this is the ‘what’ that is being taught as it is intended to be taught (Bernstein 2000). This section then segues into the next section which is a discussion about the lecturers’ approaches to teaching and the ways in which they constructed and managed their classroom spaces. The chapter then moves on to look at the LCT dimensions of first Specialisation and then Semantics, using these tools to discuss the organising
principles of this discipline and what these tell us about the kinds of pedagogic practice that can enable and constrain cumulative learning.

2.1 Professional knowledge and identity formation: an overall sense of the curriculum and orientation towards the legal profession

There are two kinds of data that will be drawn on in this brief section of the chapter. The first is data that describes the ways in which the curriculum is shaped and designed, and to what end, and the second speaks to the ways in which, in their teaching, lecturers are beginning to alert students to the need to make shifts towards a new professional identity.

In terms of the curriculum, it is important to remember, as discussed in Chapter Three, that Law is a professional discipline, tasked with preparing students for a role within the legal profession. It thus has to ‘face both ways’ (Barnett 2009: 152): inwards onto itself, because there is an academic legal curriculum and a logic that applies to the curriculum in terms of the LLB being an academic qualification, and outwards towards the profession itself, because the profession requires LLB graduates to have particular knowledge and skills that they need to acquire and learn while at university. Thus, there are two sets of logic that lecturers need to apply when designing their curricula and what to include and exclude, and what knowledge to recontextualise and pedagogise. The professional character of this discipline also impacts on the way lecturers decide to teach and how they manage their classroom as will be further discussed in sections 2.2 and 2.3 particularly.

The lecturers reflected their consideration of these different logics when asked how they design their courses. Both lecturers teach other courses at second and fourth year level, and so both drew connections between this first year course and the others they have experience in designing and teaching. Rachel commented on the links she considers between the Law of Persons course and other LLB degree courses students will likely take, and how to write a curriculum that tries to articulate or link to the other courses, as well as with other universities’ LOP courses

*R*: ok, you’ve written a curriculum for this course, how do you decide how you do that – how do you decide what you put in; how do you organise it?

*Rachel*: Well we’ve been following, um, other text books. Basically we look at what other universities are teaching because obviously our curriculum has to align with others, and with the Law of Persons you need to teach certain things. Over the years I’ve inserted

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18 R = Researcher
things, I have taken things out, but for me mostly I have inserted things, I’ve always been one to insert things; new things, things that previous people haven’t thought to insert… Last year I introduced a topic on Birth and Adoption: Surrogacy – it hasn’t been taught in our Law curriculum. It’s taught at a final year level which I think not all students do it as an elective – Advanced Family Law. So I such as to make them aware that there…is a bit more…I generally play around and I look at what is relevant. So I do a lot of introspection where it comes to my course…. (Rachel, interview, May 2013).

As well as this internal logic of writing a curriculum that speaks to other courses and also other similar courses at different universities, there is a need to choose certain kinds of knowledge from the field of production, so that the course remains up to date as the laws affecting the Law of Persons change. Both Rachel and Courtney mentioned this other, more outward-facing logic and how it shapes what they decide to teach in their courses.

*R: So how do you decide year on year what’s relevant and what’s not relevant?*

*Rachel:* Well, you read the newspapers, you read court cases, you see what is becoming more and more topical. Surrogacy was only introduced in the Children’s Act which is relatively new, ok, so there – up until recently there haven’t even been court cases and we haven’t taught the students court cases because Courtney also covers Surrogacy in Family Law but I just feel that they need to understand that birth impacts on a person’s status. There are issues related which aren’t purely Family Law issues. So, there’s something called JQR which is the, JUTA’s Quarterly Review where they identify new articles that have been published, new legislation that has been passed, new cases etc, so I, every semester or every term, go through that and look at what is new, what are people talking about in the Law of Persons and I try and introduce that for next year (Rachel, interview, May 2013).

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*R: So how do you design this course, you and Rachel? What is the logic that’s gone into how you’ve set it up?*

*Courtney:* ... As far as what goes into the course, when we started, you know Law of Persons wasn’t really Rachel’s course, it was [another lecturer’s] course. And I co-taught with her and that is when the Children’s Act just also came in or…two years prior and half of it was divorce and the other half wasn’t – so whatever was being taught prior to that was the same, because the Law of Persons wasn’t really affected that much so there were only certain parts of the Children’s Act that really impacted that. Whereas with Family Law it was such as “Ok, I have to reshuffle, you know, a bit more” so we kind of just incorporated
various sections and as we went along we kinda, you know, added on (Courtney, interview, May 2013).

Part of the outward-facing logic, and deciding what to put into the curriculum, also comes from the profession itself, although because Law of Persons is a first year course the lecturers do not feel direct pressure from the profession to create a certain kind of curriculum. They both commented that they are aware of what the profession is looking for in graduates, and that UWC graduates tend to be criticised for not having enough of the relevant skills and knowledge, but they feel more pressure from internal sources, such as lecturers in senior year courses who want certain kinds of knowledge and skills included earlier in the degree programme so that they do not necessarily have to teach these later on. However, the demands of the profession are partly behind what the senior year lecturers are asking for of the first and second-year courses, thus they are taken into consideration, even if only indirectly. This data is also partly referred to in the next two sections, because the way in which lecturers referred to their curriculum – the what that they are teaching – was very closely linked to how they are trying to teach it. Rachel commented on this clearly in her interview:

*R: How much pressure do you feel from the professions in terms of curriculum development – do you feel that at all at the first and second year level, so do you feel that that’s more at the graduating levels?*

*Rachel: Not from the profession – from, from the faculty, the review – you know it’s [sigh] accreditation and all of that at the moment sort of feeling it internally...I’m not feeling it from the profession. I’m aware of it but not feeling it. But it’s just made me aware that I need to start doing something about it at first year level.*

*R: So now when you develop curricula you do take the professions’ concerns into –*

*Rachel: Yes, yes...I need to build more skills into my course* (Rachel, interview, May 2013).

Courtney also commented on factors that influence what she decides to teach when commenting on different sources of input into the first-year curricula:

*Courtney: ...where [lecturers from the later years] say “first year lecturers are supposed to be doing this, that and the other” and then the students don’t know how to write, they don’t know how to- ..., looking back, at us...I thought it was very important that we do research so that students are tested on finding these cases so that when they go into practice one day that they know how to go and look for a case online, because they don’t know, you know* (Courtney, interview, May 2013).
Another very interesting factor these two lecturers brought to bear in deciding what to teach, as well as how to teach, is their own professional and academic identities. Both of the Law of Persons lecturers have worked as article clerks, and have spent a little time in the world of professional practice. Thus, they have academic identities as teachers and researchers, but they also have elements of a professional identity, and experience and knowledge that they can bring to bear in trying to design curricula that address both the inward-facing demands of the academic LLB qualification as well as consider the outward-facing demands of the legal profession. This dual-view of both the academic curriculum and the professional world of practice influences the way they teach as well. Courtney commented on this, saying:

*The nice thing about Rachel and I is that both of us actually were in practice – do you understand? So when we – a lot of academics don’t, they don’t have, they’re not admitted and stuff such as that…But we were actually in practice and we kind of know how it works and we have actually seen how different theory is to practice* (Courtney, interview, May 2013).

Rachel made the following, slightly different comment:

*Rachel: … I have great insight [as a qualified Attorney] into what it is that students are required to know but the challenge is that I teach first and second years – it’s not where they are really groomed for the profession if you know what I mean. That really takes place in the third and fourth year level and I am trying to do my part from the beginning…* (Rachel, interview, May 2013)

This sense that both lecturers have of what the profession is looking for, from being exposed to some of it, also carries through into their teaching and the comments they make in lectures that indicate, perhaps somewhat tacitly at times, a shift that students need to make in terms of seeing themselves not just as legal students, but also as legal professionals in training.

These comments, made by both lecturers in relation to various study units and examples used in class, speak to a sense of habitus in the lecturers that informs their desire to begin to develop this in students through their teaching. Habitus, to recap from Chapter Two briefly, is more than habit; it is focused on the ‘generative’ principles that bring about the different choices and actions of agents, but these generative principles are not static, so habitus is always evolving (Maton 2008: 56). Jenkins (1992: 75) explains that ‘habitus only exists in, through and because of the practices of actors and their interaction with each other and with the rest of their environment’. Thus, more than being a random or arbitrary set of characteristics that students need to develop, habitus is shaped by the environment in which it is being nurtured – in this case the legal academic environment as influenced by the legal profession.
Students need to develop this from the beginning of the legal degree because they will need to make choices and take actions, both as students and eventually as legal professionals, that will mark them as belonging to this particular field, and that will enable them to interact appropriately with other peers, lecturers and eventually other legal professionals, and to practice the law in ways that grow the profession and that enable their own professional habitus to continue evolving. The data provided evidence of references to this need for a shift in their personal and academic identity. There were not very many of these overall, as this is a first-year course, and as Rachel pointed out in the above paragraph, this is not where students are ‘groomed for the profession’. But there is a sense that the lecturers are indeed trying to start shifting students’ mindsets from first year. For example, in response to a question in class from a student regarding the oral presentation, Courtney commented:

*I don’t mind the passion and, you know, the excitement but, it’s, not too many jokes, because in court you can’t really crack a joke. They’ll throw you out [Ss laugh] Ok? So you don’t have to come in suits and all of that jazz but you have to have a level of seriousness... the idea of doing an oral presentation...this is unfortunately the profession you have chosen and regardless of which route you take you’re either going to have to speak to clients, you’re going to speak in front of a magistrate, you might have to be a judge, ok* (Courtney, video, 11 February 2013).

In reference to habits that students need to begin to develop which speak to underlying qualities of responsibility and also relevant abilities, Rachel made two separate comments during the first lecture of the semester:

*If you are late you must bring proof – train stub, bus ticket etc – “we are preparing you for practice” – you can’t be late in court. The judge will throw you out and say you have disadvantaged your client.*

And

*no laptops and no recording devices – “you need to learn to listen” – there is no playback when you get to court. “It’s about learning to listen”* (Rachel, field notes, 2013).

Although this section on curriculum is not commenting directly on pedagogic practices in this course, it has been included because it is important to understand the logics that apply to the curriculum; these come through in a range of ways in the associated pedagogic practices in the field of reproduction, where teaching, learning and assessment occurs and is experienced. Thus, this section forms a brief background to the main parts of the story this case study tells about pedagogic practice and how we can use the tools discussed in Chapter Two to analyse and
understand pedagogy in order to identify the ways in which cumulative knowledge building and student learning can be both enabled and constrained. The following section examines the teaching environment these two lecturers have created, and the ways in which the curriculum that has been briefly discussed has been framed throughout the course.

2.2 Approaches to teaching: framing the classroom environment

Overall my experience of attending the lectures and being in the classrooms with both Rachel and Courtney and their groups over the course of the first semester was one of being in a fairly carefully managed environment. The lectures were quite tightly organised for the most part in terms of the pace at which they were taught, and in terms of how the question and answer discussions with the students were managed as well. Students were often invited to contribute questions and comments, but there were also fairly long periods where the lecturers were talking and teaching, and questions were often only seriously invited at the ends of these teaching ‘sections’, rather than all the way through. They did not make use of collaborative teaching tools such as getting students to ‘buzz’ in small groups, or getting students to discuss questions or cases in class, in groups, followed by inviting students to share their responses and take the lead in setting the pace and topics for the lecture. All question and answer-type discussions happened in class with the whole group, and were often difficult to follow, especially in Rachel’s group as it was large, the venue was tiered in fairly steep steps, and the students were never completely quiet. The overall sense of the course was of a carefully planned course that needed to be tightly managed in order for the curriculum goals of teaching, assessment and getting through a certain amount of knowledge content to be achieved.

There was very little room in the set-up of the classroom environment for the students to dictate the pace of the lectures, or the selection and sequencing of the topics. The tight selection, sequencing and pacing of the curriculum in the teaching environments seems to be largely due to the amount of knowledge and learning that goes into the semester-long course and how this course relates to other courses in the second semester and in second year. In the interview, Rachel commented on how they decide on the sequencing and also the pacing of the course:

Rachel: We look at how much we need to teach and so based on previous experience, we decide one lecture or two lectures – so it depends on how much knowledge there is. Minority is ...voluminous, so we had to spend almost three weeks on it...but this year we discovered that some of it was covered already...and then there were aspects of marriage and minors which Courtney will be doing in Family Law next semester again...so we, you
know, we have to evaluate our course in relation not just to our course but in relation to other courses (Rachel, interview, May 2013).

Courtney also commented similarly, although she added a dimension regarding selection, referring to how changes in the law itself have affected decisions about what to select for this course. She also echoed Rachel’s comment about using and reflecting on past experiences of teaching the course to help them with decisions around how to teach the course effectively:

R: So how do you design this course...what order you teach things in – how much time you give to things?

Courtney: Um...we based it on past experience. You know, last year we spent this much time on minority, we can’t do that this year – so let’s limit it to this many weeks... As far as what goes into the course, when we started, you know Law of Persons...that is when the Children’s Act just came in or...so whatever was being taught prior to that was the same, because the Law of Persons wasn’t really affected that much so there were only certain parts of the Children’s Act that really impacted that... (Courtney, interview, May 2013).

In spite of the fairly tight set-up and management of the course, both lecturers spoke about their approach to teaching as being open and welcoming of students’ input. The study guide tells students: ‘To acquire a long-term knowledge and understanding, study continuously, take part in discussions in class and with other students outside of class, work hard at tutorial assignments, do not hesitate to ask the lecturer about anything that you do not understand and think critically about everything you read and hear’ (LOP Study Guide, 2013). Courtney told her students that she expected them ‘to engage...in discussion’. She also told the students to “come to class prepared” and then you can interact in class and ask questions’ (Courtney, field notes, 2013). In the interview, Rachel described her approach to teaching ‘more of a conversation with the students’ (Rachel, interview, May 2013). Courtney echoed this approach in her own teaching:

The way I approach lectures is that I tend to ask a lot of questions, you know, and some days they don’t answer but there are days that they do... I always ask questions as I go along ‘why this, why that, why do you think it’s such as that? So that’s been my approach for the past – since 2009 (Courtney, interview, May 2013).

Thus, even though the teaching of the course is carefully managed, and the curriculum is full, and ‘busy’, the two lecturers both desire interaction and ‘conversation’ with their students, and they do invite students to ask questions and to approach the knowledge they are learning as critically as they can in class. There is collaborative learning to an extent, seen in class discussions and students asking questions of the lecturers about different aspects of the
knowledge and the applications of the law and legal principles, but the two lecturers’ approaches to teaching are not ‘student-centred’ in the sense of allowing students more control over the pacing of the lectures and topics for discussion. Their approaches could more accurately be described as teacher-directed and also subject-centred or focused on the content of the course itself (see Kreber 2007). Overall, this course is strongly framed, and control over the selection, pacing and sequencing of the study units (topics) within the course resides with the lecturers.

This understanding of the two lecturers’ approaches to teaching is necessary because the way in which both the lecturers understand their approach to teaching and their students’ roles and prior learning impacts on how the teaching unfolds and takes shape over the course of the semester. This stronger framing of the Law of Persons course may also be influenced by the specialisation code it represents, and may also shape the ways in which the knowledge is unpacked, explained, repacked and connected together for students, rather, perhaps, than by students working these things out in small groups as opposed to sitting and taking notes from PowerPoint slides. The following two sections examine the pedagogic practices of both lecturers using first the tools drawn from Specialisation and second, the tools drawn from Semantics, to examine what drives the pedagogic choices and actions of the lecturers and how cumulative learning is both enabled and constrained.

2.3 Underlying principles for success and legitimation: specialisation of knowledge and knowers

To briefly recap, Specialisation refers to the underlying principles of the discipline that shape the terms for recognition, legitimacy and success in that discipline (Maton 2013a). The underlying principle could be a focus on the object of the knowledge – the principled knowledge and procedures related to understanding, reproducing and creating knowledge in the discipline, and this would represent a knowledge code. Or it could rather be a focus on developing the subject of the knowledge – the attitudes, dispositions and personal characteristics of the knowers – and this would represent a knower code. There are two other codes, but they are not represented in this study, so in order to focus on what is relevant, we will confine this recap to the two codes that pertain to this study (see Maton 2007). Put differently, one could determine the underlying basis for success and legitimacy by asking and answering the question: Is the basis for achievement in the discipline the acquisition and mastery of a particular, specialised set of skills, knowledge and abilities, or the development of a certain set of personal or professional characteristics, attributes and attitude towards the knowledge in this discipline?
The specialisation code of the discipline has bearing on the teaching of the knowledge, because it speaks to the ‘ends’ of that teaching: is the goal a student-knower with a particular set of principled knowledges and procedures (which would be a knowledge code), or a student-knower with a particular set of aptitudes, attitudes and dispositions (a knower code)? LCT differentiates between the ‘basis’ for claims to legitimacy and the ‘focus’ (Maton 2013a: 31, emphasis in original). In other words, while there may be a focus on making knowledge claims with reference to using certain aptitudes, such as critical thinking (which would be a focus on stronger social relations), the basis for the claims is actually the knowledge in the discipline itself (which would be a basis of stronger epistemic relations). It is the basis that Specialisation is concerned with, and therefore the basis that will be focused on in this section of the chapter. This section considers how the specialisation code of the discipline of Law influences pedagogic choices and practices, looking at the basis for claims to legitimacy.

### 2.3.1 Principled knowledge and specialised ways of knowing

As this is a professionally-oriented qualification, the LLB degree is tasked with producing certain kinds of graduates – graduates with a particular set of practice-related skills, including particular kinds of approaches to and forms of research, writing, reading, and numeracy. These skills need to be learned and developed over the full course of the degree, which can currently be done over four or five years in an LLB degree, and this learning and practicing begins in the Law of Persons, Legal Systems and the Introduction to Legal Studies in the first semester of first year\(^{19}\). The data in this study is, as previously stated, from the Law of Persons which is a foundation course that introduces students to a range of legal concepts that they will revisit and add to as they progress to further years of study. It also begins to introduce students to the ways of thinking, reading, writing and speaking that are valued by the legal profession, both inside academia and in the world of legal practice. Thus, the course is focused on introducing students to essential foundational legal knowledge and concepts as well as a set of skills, practices and tools they will need to use to communicate with and about these concepts and knowledge.

Much has been written in the field of academic literacies about ‘skills’ as being a less desirable term for the particular discipline-related abilities and practices students need to acquire and develop (see, for example, Lea & Street 1998; Lillis 2001; Street 1995). This term is often approached with caution by academic literacy practitioners as it is used in much higher education writing, particularly in government policy on curriculum goals and writing, to refer to the need for graduates to be more employable through the acquisition of generic ‘employability

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\(^{19}\) These are the three first semester courses offered at UWC, but they are very similar to other LLB degrees in other South African Law faculties, as the LLB curriculum for years one to three is fairly set.
skills’, often quoted as being reading, writing, research and numeracy skills, which must be brought into higher education curricula across the disciplines (DHET 2012; Wheelahan 2010). However, this is not the way ‘skills’ is understood in this research, as the data shows that these skills are not understood as being generic and therefore they are not taught as such.

Both lecturers spoke, in their interviews and in their classrooms with their students, about ‘skills’, making comments such as ‘Law is about skills, you have to acquire those skills’ (Courtney, field notes, 2013), and telling students that ‘by this point in the term you should have mastered certain skills, which the test shows you have not done’ (Rachel, field notes, 2013). In her interview with me Courtney commented that one of the ‘complaints is the writing, the lack of research. They [students] don’t know how to find answers’ (Courtney, interview, May 2013). Here she was referring to the skills that LLB graduates are required to have, but these skills, including the critical thinking and analysis skills both spoke of and spoke to their students about, were not seen in any way as generic but were being developed or needed to be developed through close encounters with the disciplinary knowledge.

In the case of critical thinking, analysis and writing skills, these are required to be expressed in a very particular way in the first year tutorial assignments, and also in class discussions about cases. Students need to learn to use the FIRAC/IRAC method of doing case summaries, and giving 'clients' legal advice. This is a method used to answer problem-solving practical and theoretical legal scenarios both in South Africa and in law schools in the US, for example (see Candlin et al 2002; Simon 1992). Students need to extract the relevant facts of the case; state the issue at hand, or the question the court had to answer/client needs advice about; identify the particular rule or rules of law that the court used or that the court would use to respond to the issue in light of the facts; and then apply this rule to the facts and issue at hand to reach a valid conclusion. This is a very particular genre of legal writing (Candlin et al 2002), and requires a specific set of analytical thinking, reading and writing skills that law students need to become proficient in, and that attorneys employ when in practice.

Research skills are learned in the Law of Persons through a research assignment that has a written and oral component, which was a new assessment introduced in 2013, and required students to ask an original research question related to the Law of Persons, and attempt to answer it by reading legal journal articles, previous cases and judgements on the topic or related topics, and extracting relevant information to assist them in answering their question. This assignment also focused on developing analytical skills linked to the asking and answering

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20 FIRAC stands for Facts, Issue, Rule, Application, Conclusion and IRAC for Issue, Rule, Application, Conclusion. In case summaries FIRAC is preferred and in writing legal opinions, IRAC seems to be more commonly used as the facts are given in the factual scenario students respond to in their writing.
of particular legal problems or questions. Rachel introduced the research assignment to her students thus:

You may choose any topic covered during the semester or any topic that has bearing on the Law of Persons, okay. Now please note this is a research-based assignment. I do not want to see something that someone else has written about in the prescribed texts. You guys need to be innovative and you need to be original. If it comes out of here [holds up textbook] it's an automatic fail...Now the aim is for you to enlighten the rest of us about an area of law (Rachel, video, 11 February 2013).

Further, Courtney spoke to her group of students about the purpose of the assignment, saying: 'This type of profession needs you to be confident, needs you to have the ability to speak, so this is a good foundation.... Remember this [assignment] should be very opinionated, you should have opinions and criticise and analyse' (Courtney, field notes, 2013). While the focus of these directions from the lecturers was on the aptitudes and dispositions that students need to exhibit, such as being 'original' and being 'opinionated' and able to 'criticise and analyse', the basis of the claims students would have had to make in the assignments, and the basis on which they were assessed was actually the principled knowledge and related ways of knowing of the discipline. Thus, when one looks at the basis for knowledge claims one can see that the epistemic relations to knowledge are actually stronger than the social relations.

A further illustration of the difference between the focus and basis of and for knowledge claims or claims to legitimacy was in the ways students were guided, throughout the course, to develop some of the requisite ways of speaking about and discussing legal cases, problems and legislations. Being able to speak in recognised and accepted ways, according to the data, involves being able to use the appropriate and correct terminology, vocabulary, form and also style. To begin with form and style of responding: just as there is a particular genre a law student must employ to write a case summary or a legal opinion, so there is a particular style or form a student must follow in order to discuss a case or opinion with a ‘client’ or summarise a case in class. Students at this point in their studies are unfamiliar with this style, and need to be guided carefully. Thus, the lecturers model, fairly loosely, the desired form of unpacking a case summary.

Rachel: So the issue before the court was whether or not C, or in this case, Paul Johannes who was born after the death of the testator could also share in the inheritance. Ok, that is the issue that the court had to decide. What was the rule of law that the court based its

21 Students are asked, in factual scenario assignments, to respond to fictitious clients, with the aim of making the tasks more authentic.
decision on? You've now read the case. What was the rule? Which rule did the court rely on? [Ss: muttering, no clear responses yet]. What was the rule? [She is looking through papers at the desk briefly, waiting. No response]. The court relied on the nasciturus fiction to decide whether Paul Johannes was eligible to inherit. Ok. [Pauses]. So in every case that you read you have to identify “what is the question that the court is struggling to answer? What is the question that the court is grappling with?” Ok. Then you have to identify the rule of law which they applied. In this instance the rule of law that was applicable was the nasciturus fiction. Now how did the nasciturus fiction apply here? Yes?

S922: one, because he was conceived at the time of death

Rachel: yes,

S9: two, he was born alive,

Rachel: yes,

S9: three, because it was to his benefit

Rachel: there we go, ok. So that would be the application of the nasciturus fiction...So what conclusion would you reach? [Ss: call out, inaudible] Yes. Paul Johannes is therefore entitled to inherit. Now that would be your conclusion (Rachel, video, 13 February 2013).

Using the correct phrasing and form when revising and also relating their understanding of the knowledge being taught is also highlighted as being important. Rachel had the following exchange with her students in the first term when revising the concept of ‘birth’ in relation to how it is used in the Law of Persons. Not all of the student responses were audible, as the group was large and the noise levels were fairly high. However, the important thing to note is the way in which Rachel responds, guiding them to the style of response she is looking for.

Rachel: I need one of the definitions attributed to birth. Anyone else? Yes?... Proceed.

S5: in terms of the Common Law -

Rachel: [gesturing to him] in terms of the Common Law. You need to tell me where you are getting your definition of birth from. You can't just start telling me about complete separation; you must tell me which source you are getting that definition from, ok? So in terms of the Common Law, proceed.

S5: [inaudible]
Rachel: the child must be completely separated from the mother and is that it? Is that the entire Common law? What else is there? Yes?

S6: [inaudible]

Rachel: the child must live for a short while, no. No. No! Would someone such as to rephrase that? Yes?

S7: the child must live even... [drowned out]

Rachel: the child must live even if it is only for short while. Do you see there they use the same words, but the order in which he said it and the order in which she said it changed the meaning? For a lawyer, for a law student, that is important. Order of words is important. It changes the entire meaning (Rachel, video, 12 February 2013).

Later in the same lecture, while discussing other definitions of birth that students need to be aware of, she has an exchange with some of the students in discussing the Criminal Procedure Act, and the particular focus was on how to cite the Act, where she indicated that if they did not include the full citation it would be such as telling someone their name without their surname – it would be incomplete. She tells them the citation is: ‘Section 2(39) of the Criminal Procedure Act 51 of 1977, ok. It’s such as saying my name is John. No, John who? Ok?’ (Rachel, video, 12 February 2013). This kind of prompt around the correct way to cite a statute is given again a short while later when they get to the final piece of legislation in which birth is defined, the Births and Deaths Registration Act, where the responding student is prompted thus:

S10: Section 1, subsection 1 of the Births and Deaths Registration


Rachel told her students, during the semester, versions of the following: ‘words are your tools. How you use words depends on whether you pass or fail. As lawyers, as potential lawyers, you need to think about how you use your words. You need to think about the words and ask yourself “does that adequately answer the question?”’ (Rachel, field notes, 2013). Again, here, the focus seems to be on stronger social relations, looking at skills or aptitudes, rather than at principled knowledge or ways of knowing, but the basis on which these students are required to act, speak and think is actually the knowledge and related ways of knowing. This in fact signals stronger epistemic relations as the basis of specialisation, and weaker social relations.
Part of responding to questions correctly and speaking in the ways that are recognised and valued by the disciplines involves using the right terminology and vocabulary. Rachel and Courtney both prompted and guided their students on using the correct terms:

*Rachel:* How do you distinguish between a legal subject and a legal object?...[a student responds – uses ‘is’ so she stops him]. ‘You said “is”?’ [Students respond with ‘can’] *Rachel:* ‘Yes, you can have. Can have’. She then explains that the correct terminology is important to signify the potential to possess rights. She reiterates the same again with legal objects: ‘can have economic value but doesn’t have to have’ (Rachel, field notes, 2013).

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*On the board she talks and writes about citations of parties in litigation. E.g., ‘on behalf of’ – indicates no capacity; ‘plaintiff, duly assisted by’ – limited capacity. She alludes here to what different language and wording communicates* (Courtney, field notes, 2013).

It is thus very important that students respond to the questions posed and problem or factual scenarios given using the right terms, or what Rachel relayed to her students as the right ‘jargon’ or ‘the right language’ (Rachel, field notes, 2013). It is this accurate, or inaccurate, use of terminology that marks students as successful or unsuccessful in tests and assignments, largely because, as the lecturers comment, the words you use change the meaning of what you say, and an incorrect or inaccurate term can render a potentially good answer incorrect or even nonsensical. This need for accuracy and mastery of specialist terminology, vocabulary, and form and style, is also highlighted in terms of eventual practice: ‘As lawyers, words are your tools...An incomplete argument means your client loses’ (Rachel, field notes, 2013).

The focus on the particular skills or practices students need to master, such as responding using correct terminology, language and also form and style, for example, is perhaps one of the more overt ways in which this course, at least, faces outwards to the legal profession and also tries to lay a foundation for further years of study. Both lecturers talked about feeling pressure from senior year lecturers and the faculty, and less directly from the profession, to put in place the teaching of these disciplinary or legal skills from first semester of first year. The need for articulation between first and further years of study as well as between first year courses, and the need for the LLB as a whole to prepare students for practice is felt in terms of how to approach their teaching. Rachel commented on the need to build more ‘skills’ into her course, in response to these pressures (Rachel, interview, May 2013), and Courtney spoke about the need for a greater emphasis from first year on research and appropriate ways of writing in the discipline:
Courtney: …the realisation is, is that research is required no matter which route you go with your LLB. In practice it’s the theory which you learn which means nothing – that’s the unfortunate reality, it’s so different – so you are always going to be required to do research. Students don’t know what a law report is or where to find them; how to use an online data base, etc etc. Um, and to write, it’s also to incorporate writing, you know, let’s start instilling that now already…They want us to lay a proper foundation, we are going to lay it for them (Courtney, interview, May 2013).

Again, there seems to be a focus on skills, but these skills are not in any way generic, and the basis for these calls for skills actually lies in the need for students to have a more capable way of communicating the depth and breadth of their legal knowledge. Further, these ‘skills’ need to be more accurately understood as specialised knowledge-based practices, as the law profession and discipline works with particular and highly conventionalised genres of speaking, reading, writing and acting that students need to learn how to work within (see Candlin et al 1992).

Differentiating, in sum thus far, between the focus and the basis of claims to legitimacy, it can be argued that the organising principle of Law in terms of Specialisation is a knowledge code. Although there are certain characteristics that lecturers value in students, such as respect, responsibility and a mature and committed approach to learning, which signals the importance of social relations, having and displaying these characteristics does not ensure success in this course, or mark one as a successful law student. One could argue that being respectful, responsible, mature, committed, and critical about knowledge and learning are characteristics that would mark a successful university student in general. What is needed for success in the LLB programme as well as in legal practice is a mastery of particular, principled disciplinary skills, practices and knowledge, which signals stronger epistemic relations. Thus, the epistemic relations to knowledge are dominant, and can be represented graphically as ER+, while the social relations are less significant as an underlying principle for success in this discipline or field (SR−). The knowledge code is thus ER+ SR− (see Maton 2007; 2013a). One could, looking at the kind of knowledge code Law represents, refer to Law as representing a trained gaze as well, particularly in relation to the data analysed in this study. We could thus call Law a trained knowledge code. Figure 4.1 below plots this code heuristically on a Cartesian plane (Maton 2007, 2013a) to illustrate the concept of a knowledge code graphically.
What was interesting in the data, and this will be further discussed in the following section, was the ways in which this particular organising principle articulated with the organising principles from Semantics to drive the pedagogic ‘agenda’ as it were. Specialisation is the first part of the story the data is telling about pedagogic practice in this case study. The second part of the story, which speaks to how the knowledge is introduced, unpacked, repacked and built up cumulatively over time, is Semantics; specifically semantic gravity and semantic density.

### 2.4 The possibility of cumulative knowledge building: semantic gravity, semantic density and the permutations of semantic waves

Semantic gravity, to recap briefly, relates to how tightly or closely meaning is tied to its context. Stronger semantic gravity denotes meanings that do not make much sense or cannot be easily transferred beyond their contexts, and weaker semantic gravity denotes meanings that are fairly abstract or generalisable and applicable beyond their contexts (Maton 2009, 2011, 2013a, 2013b).

Semantic density refers to the condensation of meaning within concepts, symbols, phrases, terms etc (Maton 2011, 2013a, 2013b). Concepts with stronger semantic density have a greater condensation of meanings within them, whereas concepts with weaker semantic density have fewer meanings condensed within them. Thus, this tool can be used to trace both the growing conceptual ‘density’ of a key term or concept over time, and it can be used to trace the ‘unpacking’ and simplifying of dense concepts as they are explained and applied. It can therefore be used as an organising principle along with semantic gravity to trace semantic ‘waves’ (Maton 2013a, 2013b) within parts of lectures, whole lectures or over longer periods of time within a module or course (see Figure 4.2).
Permutations or parts of the semantic wave are ‘down escalators’ and ‘flatlines’ (Maton 2013b) (Figure 4.3). A down escalator moves from the concept in its more abstract form with weaker semantic gravity and stronger semantic density to an applied context, where it has stronger semantic gravity and weaker semantic density, but stops there without moving up from the context to the concept to consolidate understanding or to a related concept to extend the students’ understanding (Macnaught et al 2013; Maton 2013a). An example would be introducing a complex abstract term and then using more accessible language to unpack or explain what it means and then giving a few examples of its application to a problem or context that clarify it further.

Flatlines occur when the teaching is either all at the level of context with no movements towards abstraction or generalisation, or all at the level of conceptualisation and abstraction with no downwards movement towards application and exemplification (Macnaught et al 2013; Maton 2013a). An example would be introducing the same abstract and complex term and continuing to discuss its application in more abstract or generalised terms using abstract language, rather than coming down, as it were, to less complex or more contextualised explanations or applications. Escalators and flatlines both constrain the possibility of cumulative learning, as the ideal for cumulative learning is a series of semantic waves.
However, while semantic gravity and semantic density can be plotted together, and can strengthen and weaken inversely to one another, as they do in Figure 4.2, it is also possible to plot them separately or differently, as some of the data in Law suggests, because it is not always the case that as semantic gravity strengthens so does semantic density weaken for example. In some cases the semantic density seems to strengthen and weaken as successive ‘gravity waves’ (Maton 2013a: 119) are achieved but in other cases it may be that even though semantic gravity is weakening and strengthening through teaching in different kinds of waves, semantic density is doing something else, perhaps, and not strengthening or weakening correspondingly. In other words, semantic gravity and semantic density can strengthen and weaken independently of one another and not always in an inverse relationship (Maton 2013b). This section will illustrate how these tools have been used with the Law data to show in this case which kinds of pedagogy can both enable and constrain cumulative learning and how this occurs.

There is a great deal of data that could be selected and included in this section, and the two tools, semantic gravity and semantic density, can be used separately and together to analyse knowledge-building and learning. However, what this study was concerned with, cumulative learning over time within the two case studies and what this can suggest for contexts beyond the ones reported on here, required semantic gravity and semantic density to be analysed together in the form of semantic waves. Thus, only data that enables an understanding of semantic waves and permutations of these, and how they indeed form the ‘pulses’ of cumulative learning (Maton 2013b: 8) will be included in this analysis. The semantic waves or permutations of these have also been drawn heuristically using data that indicate an inverse strengthening and weakening of semantic gravity and semantic density in order to further the discussion on semantic waves and their role in cumulative knowledge building. This boundary was drawn for pragmatic reasons, as there was insufficient space to discuss all the kinds of data...
found in the study, and also for conceptual reasons, given the focus of the study as explained here. It must be noted that all the graphic representations of the semantic waves discussed here are heuristic, or illustrative, and are not ‘photo-real’ (Maton 2013c) representations of the semantic waves or pedagogic practice.

A large amount of time in both lecturers’ classes was given to introducing key concepts, breaking these down and explaining them in simplified language, often with illustrative examples, and then restating the concept before moving on to either extend the concept or link it to a new one. Most of the time the concepts were linked together within study units – there were ten ‘units’ or topics for the whole course – but there were some ‘super-concepts’ that were carried through all of the units and built on cumulatively over time. This overall sense of dividing the course into manageable units or topics, but creating links between them with certain key concepts created the image referred to in the title of this chapter: a series of small, but connected chambers into which topics are organised and through which content knowledge is recontextualised into pedagogic practice. In some instances, the connections were clearly drawn into semantic waves; in some instances there were ‘blockages’ in the connections between concepts and units, resulting in down escalators and flatlines. These tools then, and this image of a series of connected chambers, gave useful and valuable insights into cumulative and segmented learning in Law.

An excellent, and necessarily lengthy, example of a semantic wave was Rachel’s introduction to and development of the super-concepts of legal subjectivity and legal status. For reasons of brevity and clarity, I have focused on a few moments within quite a large wave to analyse the different ways in which the concepts of semantic gravity and semantic density can be used to understand how the knowledge is being introduced, unpacked through examples and explanation and then repacked and hopefully connected together.

Over the course of three lectures, Rachel introduced students in Group A to the key concepts of legal subjectivity and legal status, beginning with the distinction between law in the subjective and objective sense. She moved from here to the sub-concepts of legal subjects and legal objects, and then from there to the different rights legal subjects can claim and then back again to reiterate legal subjects and objects before moving on to the sub-concepts of natural and juristic persons. She moved from this point to the connected super-concept of legal status, which she returned to again and again in each study unit, as study units three to nine all deal with factors effecting a person’s legal status, starting with the beginning and end of legal subjectivity in units three and four.

As she moved through this wave, introducing, unpacking and connecting concepts, she also strengthened the semantic density around the concepts of legal subjectivity and legal status,
which are the two core concepts that were explored in this course. What was interesting with this particular wave was the strengthening and weakening of semantic density. It could be traced up and down, as sub-concepts such as legal object and legal subject were explained and examples used to ‘unpack’ these concepts, but it also strengthened over time. Thus, one could plot semantic density as both strengthening and weakening as the semantic gravity shifts are made, as well as strengthening over time read from left to right as the concepts become denser or more meaning is condensed within them. This macro wave is represented heuristically below in Figure 4.4, with time represented on the y-axis of this graph.

**Figure 4.4 Macro semantic wave on introduction to legal subjectivity and legal status**

While the macro structure of this series of lectures and concepts represents a wave, there are micro structures as well which represent different realisations of stronger and weaker semantic gravity and stronger and weaker semantic density. For example, where the macro wave starts, Rachel began with the distinction between law in the subjective sense and law in the objective sense, presented as a larger concept within which she discussed a few linked yet lesser concepts. My field notes from this lecture describe the process:

*She then moved on to the distinction between law in the objective sense and law in the subjective sense. Started with ‘what does objective mean?’ Got some answers and gave them a more formal definition – ‘law has no bias to the party to that contract...So law in objective sense ‘looks at what is the rule – you should not kill’. Small move here from jargon to a simpler explanation and an example.*

*Subjective – ‘what is it to be subjective?’ Law in the subjective sense is about ‘a network of legal relationships between legal subjects’; it is ‘concerned with the rights of the parties’; in law in the objective sense both parties ‘must fulfil their obligations in terms of that*
contract’ whereas subjectively the law looks at rights and ‘relationship between parties concerned’. ‘Has A or B fulfilled their obligations in respect of that contract? For example, my car and me. In the objective sense the law looks at the right of ownership – ‘it’s mine’. In the subjective sense it talks about my relationship with my car and my rights in a network – other people must respect my ownership and not damage my car and I must make sure it’s licensed… Moved on to 1. Relationships of subject to subject. ‘Another legal person cannot interfere with my right to own my car, for example he mustn’t steal it. 2. There are also relationships between subject and object – ‘the relationship between myself and the legal object I am the owner of’ so I can do what I such as with my car ‘provided that I don’t contravene the law’. Then moved into an illustrative example: I have a house and it’s hard to pay for my house because of the economy so I decide to grow weed to make money. I can enjoy my property anyway I such as but I growing weed contravenes the law, so if someone breaks into my property and steals all my weed the law will not protect me. ‘But if I am enjoying my property in the correct manner and someone contravenes that the law will protect me’. So what is the connection between subjective law and objective law? Subjective law asks what are your rights, and objective law asks what is the rule – how far do your rights extend. Goes back to the weed example to reiterate the difference (Rachel, field notes, 2013).

She begins with the first part of the concept, law in the objective sense, at a point of weaker semantic gravity and stronger semantic density, as this is a new and abstract concept for the students, who are hearing it for the first time. She briefly unpacks the concept by stating the definition formally – ‘law has no bias to the party to that contract’ – and then further unpacks this by giving a more colloquial definition, explaining that this means the law looks only at the rule involved, using the example of ‘you should not kill’ people. These two moves strengthen the semantic gravity and weaken the semantic density, moving students to a less abstract understanding of the concept of law in the objective sense as the meaning is ‘unpacked’ and simplified. Rachel then weakens the semantic gravity again when she introduces the second part of the larger concept, law in the subjective sense. She also strengthens the semantic density a little because she is linking the objective and the subjective and this concept of the law in these two senses becomes a little denser. Her next move again strengthens the semantic gravity and weakens the semantic density by unpacking the concept formally and giving a definition, and then further by giving a colloquial definition and then an example of her and her car, and people needing to respect her ownership rights.

Her next move, to introduce two related yet subordinate concepts, the relationships of subject to subject and subject to object, that fall within the larger concept of the two ‘senses’ of the law,
weakens the semantic gravity and strengthens the semantic density again as she moves closer to the abstract, but in both instances one can see her strengthen the semantic gravity and weaken the semantic density slightly as she gives examples to briefly unpack each concept. She then strengthens the semantic gravity and weakens the semantic density markedly by giving a colloquially told, illustrative example of growing weed to make money to afford her house, and what the law in both senses would say about that. She then weakens the semantic gravity and strengthens the semantic density by going back to the two initial concepts to reiterate their basic definitions and the connection between them.

She ends this particular part of the lecture with strengthened semantic gravity, returning to the weed example to ensure that students can see the application of the concepts to the example. What is interesting, though, is that the semantic density around the concept of the two ‘senses’ of the law, subjective and objective, is also strengthened overall, moving from the beginning of the explanation to the end, but as she moves back into the final example, she also weakens the semantic density again slightly as she re-unpacks this concepts as she has applied it to her example, simplifying it in the process. Figure 4.5 below heuristically illustrates these moves in the form of a graphic semantic wave. This is part of the larger wave depicted in Figure 4.4.

Figure 4.5 Micro semantic wave on law in the objective and subjective sense

In the same macro wave depicted in Figure 4.4, where the rights that subjects can claim are discussed, Rachel introduces four kinds of rights that all legal subjects possess by virtue of being legal subjects in the form of a list, although they are part of the bigger concept of legal subjectivity.
[Rachel presents] 4 categories of rights that legal subjects can have...Starts with corporeal rights. 'When a subject has ownership over a corporeal object he has a “real right”. 'Who is that right enforceable against?’ She then uses an example of her bottle of water. You have to get your own, this is mine, you have to respect my real right to own my water. Moves on to the 2nd category of personal rights. She starts with a common example – hiring a babysitter to care for her kids. She indicates that she has a right to expect the babysitter to perform her duties towards the children, and the babysitter can expect to be paid – she uses this example to highlight the difference between a real right and a personal right [drawing on the board]... Moves on to Personality property – ‘it is an aspect, for example, your dignity, your honour... it is an aspect that attaches to who you are’. She then gives an example: I don’t mind who sees me naked and there’s a peeping tom. He may not infringe on my dignity as much as an introverted person. These things are different for everyone. What he infringes on is an aspect of my own personality and that is not the same for everyone – these are personality rights. ‘Who is this right enforceable against?’ ‘Everyone’ ... Moves onto the 4th category – immaterial property ‘or what is also known as intellectual property’ [drawing on the whiteboard]. ‘What is immaterial property?’ ‘It is intangible products of the human mind’. For example, ideas. Immaterial property is a legal object, such as an idea, not what the idea becomes... Explains that these rights too are enforceable against everyone – she then recaps the enforceability of all 4 categories of rights and puts up a table on a slide as a summary overview (Rachel, field notes, 2013).

This series of rights and the examples and explanations linked to them represent four down escalators (see Figure 4.6 below). Even though these rights are discussed as part of a bigger, semantic wave linking concepts together to strengthen the semantic density around the super-concepts of legal status and legal subjectivity, there are moments within this macro wave where the concepts or knowledge are presented as small segments or lists, and as a result could be learnt as lists or segmented rather than understood as part of a conceptual whole.
There are also smaller ‘moments’ representing down escalators within the larger wave in Figure 4.4. The field notes capture quite closely a series of fairly quick moves beginning from weaker semantic gravity and stronger semantic density with the concept itself, for example, a natural or juristic person, and moving to stronger semantic gravity and weaker semantic density by unpacking and explaining these concepts using simpler language and examples to help students make more concrete sense out of them. There is a dotted line between natural and juristic persons, because these two kinds of legal person are connected, but only tacitly in the way Rachel introduces and explains them. For the most part, this data represents a series of down escalators, starting at different points in terms of the semantic gravity strength and semantic density weakness on the x-axis. The example from my field notes below, in text and then in the form of a graph, illustrates what is happening as these concepts are introduced to and discussed with students.

[Rachel] went back to a restatement of the distinction between legal subjects and legal objects…using the legal definition. Gave the example of a person owning a dog or a car – rights, responsibilities and duties of subject to object. She expanded to consolidate distinctions between legal subjects and legal objects. Rachel restated and revised again legal subjects and legal objects. Asked “who decides? he rights etc of legal subjects and objects? Who decides who has legal personality? The law decides”...“Our law confers legal

\[23\] These are difficult to represent in Figure 4.4 itself, so they are, such as the above example, represented in their own graph here but are noted in Figure 4.4.
personality onto 2 categories of persons – natural persons and juristic persons". Moved onto to explain that natural persons are people who are born – this wasn’t always the case. Roman and Germanic law – there were slaves who were legal objects rather than legal subject. Slave owners had rights, duties and capacities over them. ...Then she moved onto juristic persons. (Drawing on the board). Gave them quite a formal definition with the slide then used UWC as an example of a juristic person. She distinguished for them between personal and official capacity in the example – used the Latin term nomine officio to denote acting in an official capacity. If someone sues UWC they don’t sue the Rector personally, they sue in his official capacity. She then gave examples of types of juristic persons. Summarised these in very formal, technical definitions. She then went one by one and gave real examples and acts and requirements they would need to meet to be a juristic person (Rachel, field notes, 2013).

Figure 4.7 Micro-semantic wave as part of macro wave in Figure 4.4

Again, as with the previous example in Figure 4.6, these small moments representing down escalators could lead to the segmenting of pieces or parts of the knowledge and learning being depicted in the larger macro wave (Figure 4.4). The super-concepts of legal subjectivity, especially, and the connected super-concept of legal status are taught as a semantic wave over several lectures, where the semantic gravity shifts from abstraction to concretisation of these super-concepts through their connections with and explanations of subordinate concepts, such as legal subjects and objects, and legal capacities, and the semantic density strengthens and weakens inversely to the semantic gravity on a more micro-level in each part of the wave plotted on the x-axis, as well as over time on a macro level, plotted along the y-axis. Thus, these concepts should find application both within this course and beyond it in other courses, such as
Family Law and Customary Law in the second semester, where the students will come across them again.

However, it is possible that where parts of the macro wave actually look such as flatlines or down escalators, these smaller parts of the super-concepts may be segmented, learned as lists or as separate chunks of content rather than as integral parts of the larger concepts, and these may thus not be connected adequately with the super-concepts of legal subjectivity or legal status. There is, in these examples, a very useful and illustrative set of insights into why there may be gaps in the students’ understanding, which Rachel in particular commented on (Rachel, interview, May 2013), or why, as both lecturers commented on informally during the semester, students performed poorly on the first test, because they were trying to learn legal rules and application as lists or chunks of content rather than in a more conceptually whole or connected way, reflected in many students’ answers (Rachel and Courtney, field notes, 2013).

In Courtney’s lectures there are also useful examples that show different realisations of stronger and weaker semantic gravity and semantic density that can assist in the analysis of how knowledge is being introduced, unpacked, explained and connected in the lectures, and whether or not the knowledge is being taught cumulatively or in a more segmented manner (see Maton 2009, 2013b). The example below is of a fairly abstract account of a key legal principle, the \textit{nasciturus fiction}, which students generally struggle to understand and apply, according to the lecturers. With both Rachel and Courtney, a great deal of time was spent discussing this principle and its different applications, and the principle and the rules for applying it was repeated many times by both lecturers. This example does thus need to be read as part of a larger and much longer discussion about the \textit{nasciturus fiction} and its applications in law. The pieces that have been selected have been included here to give an example of a gravity flatline of sorts.

\begin{quote}
Courtney: Ok? So let’s proceed with the protection of the unborn foetus by means of the nasciturus fiction. As you know [referring to slide up] legal personality begins at birth. So prior to birth that foetus is not regarded as a legal subject, and therefore, because that foetus is not regarded as a legal subject such foetus cannot have rights, duties and capacities...However, in terms of Roman law it was recognised that there might be situations where the unborn foetus might have an interest...So what they would do is they would employ this fiction and by employing this fiction they would say that at the date of conception we will treat that child has having been born. Coz remember this is the scenario now (writing on board): the child has been conceived...This is the birth (drawing a timeline); this is where the child is going to be born, but during this period between conception and birth the law recognises that situations may arise where the child might
\end{quote}
have an interest. So what will we do? They will employ this fiction and they will say that if
the child was conceived by the time this interest began or came into effect or was available,
then we will treat that child as if he was already born...for example if that child could be a
beneficiary under a will, ok? So if such a situation arises, the law protects the potential
interest of the nasciturus...it will only become definite at...birth....So what do we do with
that interest?...It's kept in abeyance. In other words it's suspended until...the child is born in
the legal technical sense. In other words those common law requirements are met
(Courtney, video, 12 February 2013).

Here Courtney begins with legal principle of the nasciturus fiction, with stronger semantic
gravity and weaker semantic density; even though this data clip comes from the second half of
the lecture, this is the first lecture in which students are learning about this legal principle so it
is an abstract concept for them. The semantic gravity is slightly strengthened with the drawing
on the board of the timeline to create an illustration of the period of time under discussion, that
between conception and birth, but this discussion remains fairly abstract and the semantic
gravity is still relatively strong. Courtney then continues to discuss the issue of addressing a
benefit to the child, slightly strengthening the gravity by giving a small example of the foetus
being named as a beneficiary in a will, but then moving back to weaker semantic gravity and
staying on a more abstract level for the rest of this discussion as she goes into detail about the
requirements that would need to be met in order for the fiction to apply.

The semantic density is not really weakened noticeably over the course of this brief section of
the discussion, as the term has meanings condensed within it that are not unpacked or
simplified; it is still an abstract term in spite of very small moves to explain it. Overall this
introduction to the nasciturus fiction as it applies to the Law of Succession displays stronger
semantic density and weaker semantic gravity with only two small downward shifts. Unless the
abstract principle is applied and students are shown how to apply it, students could struggle to
use this concept in other branches of the law where it has relevance. Figure 4.9 represents this
example heuristically.
Figure 4.8 Semantic flatline in the explanation of the nasciturus fiction

SG+ SD+

SG+ SD-

Time

timeline

will

Courtney did go on, in the two lectures following this one, to apply this principle by looking at case law with the students, and by giving further examples of where the principle has also applied and no longer applies and why. Below is one example from later in this lecture which leads on from where the students are left with this semantic flatline.

Courtney: So if it is clear that the unborn child would have an advantage then our law employs this fiction and then we will...deem the child to have been born alive at the time of conception. Does everyone understand? So if there was or if I have this child over here and my child would have been able to inherit if he had been born, the law will keep that, um, division in terms of the will in terms in abeyance, ok? Suspended until my child is born. And if my child is born alive in terms of these common law requirements [points to board] then my child will also inherit...So what is the legal position over here of the nasciturus fiction?...Let’s use an example. [Goes to the board, starts writing] This is the testator. The testator will draft the will, and in terms of the testator’s will he says ‘I will leave my estate to my daughter and her children who are alive at my death’. Ok, so she has a child A and B and she’s also pregnant with C, so I’ll do C with a little circle there. In terms of the testator’s will he says I leave my estate to my daughter and her children who are alive at the time if my death. The testator then dies and at the moment that he dies that is when the estate is divided, usually, ok. At the time of his death the daughter already has a child A and B and she was also pregnant with child C. Everyone understand that example? [pause] If we look at when legal subjectivity begins, would C be able to inherit? No. ... Because? ... Not regarded as a legal subject. But now we have the nasciturus fiction and in terms of this fiction what is the position of C? We will deem that C was born at the date of conception, is it not? We will then keep his interest or this advantage in abeyance until birth, ok?... Now if we did not employ this nasciturus fiction would C have been able to inherit? ... No. So do you see our law then protects the unborn foetus? ... If C dies or is stillborn...can C then claim in terms of that will? No. The legal position is kept in abeyance until he or she is born
and acquires legal personality or until it is certain that the nasciturus will not become a legal subject...If the nasciturus becomes a legal subject he or she receives rights - the rights that were kept in abeyance for him or her (Courtney, video, 12 February 2013).

In this example, connected to the one represented in Figure 4.8, Courtney moved from a recap of the legal principle of the *nasciturus fiction*, which began, as in Figure 4.8, with stronger semantic density and weaker semantic gravity, and then moved down by degrees to strengthen the semantic gravity and weaken the semantic density as she unpacked this legal principle by showing how it works in practice using an example from the Law of Succession, similar to one of the cases the students needed to read and summarise during this study unit. She spends quite a bit of time explaining the example and linking it to the requirements that must be met for the *nasciturus fiction* to apply, and ends this section of the lecture returning to a more abstracted understanding of the requirements so that students could apply this principle in contexts or to examples other than the one in which it is applied here or in which it has meaning. Thus, while she begins with a semantic flatline, she does go on to turn this discussion of the *nasciturus fiction* into a semantic wave, which does weaken the semantic gravity and strengthen the semantic density before moving upwards in the wave towards weaker semantic gravity and strengthened semantic density.

Figure 4.9 Semantic wave for the explanation of the *nasciturus fiction*

There are more examples of escalators and flatlines within larger waves in the data. Often, even if smaller concepts, terms or legal principles, such as the four legal capacities all legal subjects have, are parts of a larger semantic wave – in this case legal subjectivity – these smaller concepts or terms are introduced and ‘presented’ as either down escalators where the legal principle or term is introduced in formal legal language and then explained and unpacked.
before moving onto the next concept or term, or as flatlines, usually where the term or principle is discussed in quite an abstract way. The sense students may get from this way of teaching these terms or legal principles is that these are sets of concepts or principles that can be learnt thus – as a list or as a chunk of content to be memorised – and the concern is that many students may attempt to segment and ‘box’ pieces of legal knowledge in the course and try to study for exams and tests by boxing these up and learning lists and sets of things rather than by trying to understand the way all the concepts link together in a whole.

This concern is echoed in the way in which the lecturers spoke to students about the first test, written in March 2013. There was a great deal of concern about how students had approached the studying for and responding to the test, and the majority of the class failed. In her feedback to the class Rachel commented:

*What went wrong? Too many things to mention. People did not study, or did patchy studying or selected things (to study)...you are not thinking about your writing; you're seeing words and responding. Test writing is “not a knee-jerk reaction, it’s a thoughtful process”...Talks to them about not knowing how to answer questions – lots of useless repetition; lack of clarity; poor grasp of key concepts; not seeing the overall picture – the connections between questions as part of a whole paper (some of them offered contradictory answers in some questions that were broken into parts) (Rachel, field notes, 2013).*

Alternatively, where the teaching of a concept represents too much of a flatline, students struggle to apply the concept to factual-type questions. Courtney, in her feedback to her class, focused on Question 2, which asked for a response regarding the application of the *nasciturus fiction* in a prescribed case. She commented that 'students misunderstood the judgement in the Mtati case and also the role of this case in the answer. They also made errors of faulty or contradictory reasoning in constructing answers' (Courtney, field notes, 2013). There is thus some concern that the students are not learning the knowledge within the course cumulatively, but are indeed segmenting their learning, at least in part.

There may be an opportunity here for making changes to how pedagogy is understood in terms of how the study units and the knowledge within them can be taught as parts of wholes, rather than as parts of parts, as well as how the links between the parts and the whole can be made clearer and more explicit in appropriate ways. Rather than a series of connected chambers, the lecturers could aim to understand their approach to teaching as different areas within a large chamber that is the course as a whole.
One of the interesting things noted in looking at this case study was the way in which the course was conceived in terms of the concepts it selected and recontextualised into the curriculum and then again into pedagogy: there were, looking at the study units, connections and also separations, and there were several concepts, legal principles and key terms that were taught through case law, relevant statutes and also fictitious explanatory examples. But there is no visible ‘framework’ into which all these concepts seem to fit, and in reference to which students can make sense of them.

As a foundational course, the Law of Persons seems to be introducing students to Private Law quite broadly, and to foundational concepts, terms and legal principles that will be referred to and built upon in different courses in further years of study, certainly with the sub-discipline of Private Law. Thus, it is necessary for students to have a firm conceptual foundation on which to base their further study, but which they can also use to practice the necessary skills they are acquiring in this course, such as applying legal principles to factual scenarios, analysing and critiquing legal positions and conclusions reached by courts, and finding the links between theory and practice in their reading and analysis of case summaries and legal judgements. But this course does not seem to be connecting these concepts in an obvious way with a larger framework other than that of Private Law as a ‘branch’ or sub-discipline of Law as an academic discipline, which is only referred to in the first few lectures, and not again. This may in some way contribute to an understanding of why many of these concepts or terms are introduced in segmented rather than cumulative ways, and perhaps clarifying for themselves and for students whether there is an organising, explanatory or theoretical framework into which this course and other Private Law courses fit may help lecturers begin to see for themselves the ways in which the connections are made in the legal theory and application and can be made more clearly in teaching.

3. Conclusion

This chapter has presented, unpacked and analysed the Law case study, attempting in this process to find part of the answer to the research question this study is focused on: What kinds of pedagogic practices enable and/or constrain epistemological access to, and cumulative building of, powerful knowledge in the disciplines? It began by looking very briefly at the curriculum and some of the ways in which this is shaped and influenced by the field of production. This section was kept brief because curriculum and the field of recontextualisation are not the specific focus of this study. However, it is necessary to understand the issues related to curriculum that were discussed, such as the way in which, as a professional discipline, Law must face inwards towards the academic discipline and outwards towards the profession. The
profession also influences pedagogy in terms what is recontextualised from the field of production into the field of curriculum or recontextualisation, which is then recontextualised again into pedagogy. The ‘what’ that is taught has a significant and direct influence on ‘how’ it is taught in this case study.

The second part of section 2 further looked at the way in which the course was framed, and there seems to be a tentative link, in this case, between the way in which the curriculum is designed, as a content-rich, highly structured and tightly sequenced and paced curriculum and the way in which the lecturers approach teaching, with carefully managed class interaction, a focus on the teacher over the student, and a focus on the knowledge or content itself, over a focus on the knowers.

The chapter moved on to look closely at the organising principles of the discipline, using the LCT tools drawn from Specialisation and Semantics. In terms of the specialisation code or organising principle, Law is a knowledge code, and the underlying principles privilege epistemic relations to knowledge over social relations to knowledge. In other words, the basis of claims to knowledge is the principled knowledge and specialised procedures that knowledge demands, rather than the development of ideal knowers with particular aptitudes, attitudes or dispositions. The knowledge and the related skills and techniques that students need to master are discipline and field specific, and are neither generic nor necessarily applicable outside of the legal field.

This knowledge code orientation influences approaches to pedagogy, and for both lecturers throughout the semester the way into any development of skills or disciplinary practices, such as writing legal opinions, summarising cases or doing legal research, was through the disciplinary knowledge itself, and the content knowledge pedagogised within the course. This further influenced the creation in both lecturers’ classrooms of a more teacher and subject-centred approach to teaching, rather than a more student-centred approach to teaching, and at the end of the semester, both lecturers anecdotally commented that students were beginning to understand what they needed to be doing in terms of summarising cases and writing legal opinions, stating and applying the rule of law in relation to problems and fictitious scenarios. While they have a long way to go, of course, the sense was that this subject-centred approach to teaching was starting to yield desired results in terms of student learning, and students did perform better in the second test than they did in the first, and better in the exam in June than in the first test, suggesting an upward progression in terms of learning.

The final section of the chapter analysed the pedagogic practice itself using the LCT tools from Semantics, semantic gravity and semantic density, to look at the ways in which cumulative knowledge building, stated in the study guide as an overall outcome for the course, was either
being constrained or enabled. Applying the concepts of semantic gravity and semantic density and analysing illustrative teaching moments using the tools provided enabled us to see what is happening beneath the level of the empirical where teaching and learning is experienced by students and lecturers. It enabled this study to look at how knowledge can be ‘packaged’ for students in terms of how it can be taught cumulatively or segmentedly, or in both ways. Rachel in particular talked about a ‘gap’ between what her students seemed to be understanding in class, reflected in their questions and comments, and what they then wrote in response to test and assignment questions. She indicated that she thought what was in the gap was what was happening ‘under the surface’ (Rachel, interview, May 2013), but she did not seem to have a way of analysing what that might actually be or how she might be able to address that in her teaching.

This case study builds the overall argument this study is making about the role of knowledge in pedagogic practice by showing that how the LCT tools of Specialisation and Semantics, as well as the Bernsteinian concepts of framing and the Bourdieurian concept of habitus, can fill these gaps with useful, understandable and powerful analytical and explanatory tools and approaches that can make a significant contribution to how pedagogic practice is both understood and enacted. Rather than learning generic, ‘employability’ skills, and related pieces of contextual and conceptual knowledge, students need to be learning relevant, conceptual knowledge and related skills, techniques and practices that make sense within the context of the discipline and the wider intellectual field it draws on and feeds into. This is particularly relevant in a professional discipline such as Law, which is sending students into a defined field of practice. These skills and knowledge are not understood as generic, because the knowledge itself as an underlying ‘structured and structuring structure’ or generative mechanism continuously shapes the kinds of teaching and learning events that are relevant, authentic and necessary for students to progress within their degree programmes and beyond to further study and professional practice.

The following chapter undertakes a similar analysis of the second case study; that of the academic discipline of Political Science and a first year course introducing students to the study of Political Science and the study of International Relations, taught within the Department of Political Studies at UWC.
CHAPTER FIVE: ‘A SERIES OF SMALL WALLS’ – KNOWER-BUILDING IN POLITICAL SCIENCE

1. Introduction

The previous chapter discussed the ways in which cumulative learning is enabled and constrained in Law, specifically referring to the case study of the Law of Persons 112. Using primarily Specialisation and Semantics from LCT, Chapter Four illuminated the organising principles underpinning this discipline, enabling a close analysis of the way in which knowledge in particular is placed in the curriculum, and how it is recontextualised in teaching and learning. This chapter, Chapter Five, will use the same tools to discuss the ways in which the organising principles underlying Political Science as a discipline, taught in the Department of Political Studies at UWC, influence and shape the decisions made regarding how the course in question is taught, and how cumulative learning can be enabled or constrained.

The course that is the focus in this chapter is ‘Introduction to Political Studies 131’ or POL131 in shorthand. This is a first year, first semester course compulsory for all students doing a B.Admin degree. It is also a course that B.A, LLB and B.Com students can take as an elective, whether or not they are in their first year of their studies. Thus the student body tends to be varied in terms of the foci of their degree studies, as well as in terms of the amount of time they have been studying at university when they register for the course.

As it is taught at an introductory level, the course covers two broad areas of political study: a basic introduction to foundational political concepts, such as power, the state and governance, taught as a module over the first seven weeks of the semester; and a basic introduction to foundational concepts within International Relations, for example realism, liberalism and economic structuralism among others, taught as a module over the second seven weeks of the semester. The course as a whole was developed as two semi-connected24 halves by two senior lecturers in the department, and it is taught by two junior lecturers in the department. Mike25 teaches the first seven weeks and Frank26 teaches the second seven weeks. Neither of the lecturers is formally involved in developing the curriculum before the course is taught, although they both are given some space to make minor changes as needed during the teaching of the course. This course was developed by two senior lecturers in the Department who also

24 There are some concepts, such as power, that appear in both parts of the course, and it was designed to enable students to build their learning across as well as within the two parts of the course.

25 Mike is a pseudonym.

26 Frank is a pseudonym.
coordinate the course. Mike and Frank could not neglect to teach any part of the course, or add radically new material, without first talking to the senior lecturers who coordinated and developed the course. There was thus autonomy over the pedagogic approach they each decided on, but only limited autonomy when it came to the actual curriculum or course content and materials.

My experience as an observer watching this course was influenced by my own academic background. I studied Political Science at both undergraduate and early postgraduate level, and although I did so at a different university, I learnt these foundational concepts in similar courses at first year level. Thus, unlike Law, this discipline is very familiar to me, and the knowledge is familiar as well. I was thus able to make similar observations about the teaching to those I could make in the Law lectures, but with a different kind of judgement about whether or not the pedagogic approach was successful in making sense of the knowledge in the ways I felt it should based on my view as a graduate of this discipline. For example, I felt I could more confidently assess, based on my own knowledge and experiences, whether the examples used to illustrate concepts made sense or were relevant and useful in making the concept less abstract or obtuse. This was slightly more difficult in Law where the knowledge structure and also the knowledge content of the curriculum were fairly new to me, even though I had worked in that course as a writing specialist for two years.

The aims and outcomes of the course were detailed in the course outline thus:

The aim of POL131 is to familiarise you with the basic concepts and theories in Political Studies (generally) and also International Relations, a sub-stream of Political Studies.

Learning outcomes: After completion of POL131 you should be able to:

• Identify, define and describe key concepts in Political Studies, e.g. power, legitimacy and authority.

• Identify, define and describe the key concepts in International Relations, e.g. sovereignty, world order, international anarchy, international political economy, etc.

• Explain Galbraith’s theory of power and apply it to South Africa.

• Compare and contrast the key theories of International Relations, e.g. Realism, Liberalism and Marxism.

• Differentiate between and explain selected processes in Political Studies and International Relations, e.g. social activism, development or trade. (Course outline, Introduction to Political Studies, 2013)
The curriculum, although designed and presented in two halves, is intended to assist students to achieve these outcomes by the end of the first semester. If you read these carefully, though, you can see that although the outcomes are listed here for the course as a whole, each of them does pertain to a different half of the course, and there are no obvious connections drawn between 'Political Studies' as the first half and 'International Relations' as the second half. Aims 1 and 3 pertain to 'Political Studies' and aims 2 and 4 pertain to 'International Relations' and the final aim mentions both, but not necessarily as connected. This was borne out in the way the course was taught, which was very much as two halves, or, as the metaphor for this chapter’s role in the dig suggests, as a series of small walls, the connections between which were not always very strong or clear. For example, there were concepts, for example power and the State, that were integral to both parts of the course, but possible connections using these concepts were not necessarily made as clearly as they may have been.

This chapter, much such as Chapter Four, is organised loosely around the conceptual tools drawn through from Chapters Two and Three. This chapter will build a picture of the pedagogic approaches and practices used by both of these lecturers in this course using these analytical and conceptual tools to unpack, explain and explore the data that is relevant to this study. It contributes to the overall argument of the study by focusing on the ways in which cumulative learning and knowledge building can be both enabled and constrained, and by exploring the kinds of pedagogic approaches more broadly that can centre the knowledge of the discipline in the learning and teaching processes, and focus on making the processes of 'knowing' clearer to students and lecturers in particular ways.

2. Unpacking the metaphor: seeing the ‘small walls’ in the findings

As with the previous chapter, this section contains four sub-sections that each contribute to building an overall argument about cumulative knowledge building and pedagogy in this discipline. The first two sub-sections provide valuable background information and analysis regarding, briefly, the curriculum and design intentions behind it, and the way in which the teaching environment, overall and individually, was framed or organised. The final two sub-sections hone in on Specialisation and Semantics, and use the relevant LCT tools to analyse the organising principles underlying the pedagogy in this course, and make relevant links to the discipline of Political Science on a larger level.
2.1 Considering the relationship between the curriculum and the teaching of it

Curriculum, as pointed out in Chapter Four’s discussion of Law, is not the specific focus of this study, but it is difficult to talk meaningfully about pedagogy without giving some consideration to the way in which the curriculum has been designed, as well as to some of the possible enablements and constraints of the curriculum for the teaching of it. This section thus briefly discusses the curriculum of this course, drawing mainly on the lecturers’ own opinions and experiences of this.

A key consideration in analysing the relationship between curriculum and pedagogy is the ‘discursive gap’ (Bernstein 2000: 30), in terms of Bernstein’s Pedagogic Device discussed in Chapter Two, between the field of recontextualisation where curricula are developed through the selection and recontextualisation of relevant knowledge from the field of production, and the field of reproduction, where these curricula are taught and assessed. In many academic departments in universities, lecturers themselves write the curricula they teach, and select and recontextualise the knowledge that students within the discipline need to know in particular courses or modules in order to progress according to the logic or structure of the discipline. These are not necessarily personal or individual choices, but are rather informed by the logics of the discipline within both the field of production and the field of recontextualisation (Bernstein 2000).

There is perhaps, in these cases, less of an obvious gap between the curriculum as it is intended to be taught and the curriculum as it is taught, because the course developer and lecturer is the same person. The lecturer can navigate the teaching of the course differently if they have also immersed themselves in the process of selecting and recontextualising the knowledge that will be taught, and also how it will be sequenced, paced and evaluated. However, in some cases, as with Political Studies in this case study, courses or modules are developed and even managed or coordinated by academics who do not then teach and assess students taking the module or course. The two Political Studies lecturers did not write their own curricula for each half of this introductory course. They were both teaching courses designed by colleagues and Frank in particular, who taught the second half on International Relations, spoke about the difficulty of doing this. He commented that ‘it’s slightly different when you have somebody being the co-ordinator and then teaching. It’s almost sort of someone building the car and says “OK, drive it well or, you know, find your own route to your destination”’ (Frank, interview, May 2013). Thus, there is a larger potential discursive gap in this case study because the intentions of the curriculum writer and those of the lecturer may be different, and the lecturer may enact unforeseen changes to the intended curriculum.
Another aspect of curriculum’s relationship to teaching worth analysing briefly here pertains to framing, in particular how the curriculum is paced and sequenced in terms of how it is written and intended, and how it is actually paced and sequenced when it is enacted (Bernstein 2000). Again, there is a gap between the intended and enacted curriculum – between the curriculum and the teaching of it – and this gap can be articulated or bridged in different ways depending on the relationship between the lecturer and curriculum writer if these are two different people, and also taking the students and the range of possible teaching and learning environments into account. Both lecturers made some adjustments to the pacing and sequencing of their curricula as needed, judged on their impression of how students were grasping the material or responding to their teaching. They both felt encouraged to do this by the coordinators, but there was still a course outline and set of topics that needed to be taught in each part of the course. Mike commented that:

*I think there was a synergy between the co-ordinator of the module and me teaching it in a sense that we started, um, with “What is Politics?” But week one I could sense that the students had a different understanding of what Politics is all about…I had to jump some of the weekly preparations and go straight to Galbraith because that was the core of POL131 and reading Galbraith myself for the first time I knew that I would not cover it within a week so I had to ensure that at least I have two weeks…* (Mike, interview, March 2013).

In Frank’s case the change was more in terms of the relational aspects of the classroom environment, and the organisation of the lectures to allow for changes to the pacing through bringing in different elements:

*...mine [part of the course] is a bit more challenging because it’s theory...it’s all, you know, it’s historical stuff so you have to be very creative. And, so what I did was...for example one, um, Friday...I split, um, the lecture into three components. I did a clip which I think they enjoyed, the video clips of summaries of stuff...then I had, sort of a theory bit which I taught and then I would have a discussion at the end. ...So, um, I tried to scaffold the content in that sense* (Frank, interview, May 2013)

There were thus different ways in which these two lecturers recontextualised the intended curricula in terms of their own approach to teaching it, seen in the ways in which they paced and sequenced their parts of the course in response to students’ reactions to the teaching itself, but more importantly to the theory that was being taught, and its various applications to different problems and practical or contextual examples.

The approach to teaching on both halves of the course was looser and seemed less organised than the approach observed in the Law case study, and while both lecturers seemed interested
in what they were teaching, for example Mike commented that ‘politics...I think that’s very much in my blood’ (Mike, interview, March 2013), neither of them seemed to be deeply immersed in the knowledge they were teaching. Both spoke about needing to spend time trying to get to grips with the ‘material’ themselves. When asked about what he would change if he could teach the course again, Frank commented that ‘I think the course design was fine. I think, um, maybe just me being a little bit more familiar with it and you know, um, thinking it through a bit longer’ (Mike, interview, May 2013). Mike, when asked the same question commented that ‘...it was a challenge for me because [the coordinator] gave me the course material and the slides that she used last year, so in as much as she packaged the material, I had to package the slides because I am the one teaching the material’ (Mike, interview, March 2013). Perhaps this sense I had of looseness and the lecturers having a less in-depth knowing of the relevant knowledge is partly because they did not develop the curriculum as well. There could be a necessary link between conceptual depth in terms of a lecturer’s understanding of their course and how the pieces fit together and their role in the development of the course itself and the engagement with the knowledge that this process requires.

In terms of orienting the curriculum and the teaching towards a profession or vocation, unlike a professional discipline such as Law, there is no particular profession or vocation that these students are being prepared for. This discipline is, in Bernstein’s (2000) terms, a singular, and therefore there is no need to orient the curriculum or the teaching of it towards a particular profession or vocation. In the sense that there is a political ‘profession’ out there for students to aspire to, Mike made a few references to ‘political analysts’ when students were getting into discussion groups in class, for example telling them: ‘we are political analysts now, we are going to analyse this issue’ (Mike, field notes, 2013). But these references were made more in terms of getting students to play a more analytical or critical role in class discussions rather than pointing to a particular field and set of practices that go along with that field. Thus, in terms of the curriculum, the discipline faces inwards onto itself and not outwards as well towards a professional body (Barnett 2006). This does affect the teaching, and also the way in which disciplinary knowledge is conceived of in pedagogic approaches; this point will be further explored in section 2.3.

What was interesting in relation to orienting students to further learning or practice through the design of the curriculum, the knowledge included and considering how to teach it, was the perspective both lecturers brought to this course gained from teaching second-year courses as well, and also writing the curricula for these courses. Both talked about having a reflective approach in terms of the kinds of ‘skills knowledge’ they know students need to do well in second year, and in terms of the ‘building blocks’ that need to be in place in terms of theoretical
knowledge. Frank, in his interview, indicated that he uses his own experiences as a student when he thinks about designing curricula and pedagogy in terms of embedding necessary skills:

...when I'm developing courses and course material... I'm looking at students, I'm thinking “Listen here, what did I use to be able to get me through first year, second year, third year? What kind of skill set did I need?” And then I try to embed that. So it's not sort of a prescriptive thing but rather, you know, what do they need to do well in this thing? What tools do they need? Well they need to read, summarise, um, critically analyse, they need to substantiate their argument, they need to, um, read a bit deeper than what is given them (Frank, interview, May 2013).

Mike noted that he looks for connections in terms of the theoretical knowledge between what he teaches in both first and second year now that he has taught both first semester modules:

Mike: I think with POL131...it's more of an introductory module, right, because we cover, what is Politics and then we look at gender-related issues, and then we look at social movements, then we look at ...the State, at the composition of the State –

R²⁷: power

Mike: power, yes. So, so those components for me, I think they are good building blocks because I also teach 211. So at 211 level I – that's where I am in a position to say “okay we've covered this at first year level, now how do I bring it in such a way that it, it, it now requires an in-depth analysis?” ...I managed to instil that sense of continuity, you know – I think that continuity is very key (Mike, interview, March 2013).

So, while there is no obvious orientation in the curriculum or teaching towards a particular field, there is a sense of building some kind of ‘continuity’ between the years of study in the Political Studies degree programme, and the links come both in terms of the skills students need to have to work with the knowledge, as well as the disciplinary knowledge itself.

Both of these lecturers focused on students, in talking about how they approach their teaching in particular, and this ‘student-centredness’ was a strong theme that emerged in this case study. This is explored in more detail in the next section.

2.2 Student-centred pedagogy and the focus of lecturing in Political Studies 131

A marked point in the field notes and interview data is the student-centredness of both lecturers' approach to teaching these courses, and this is visible in how they think about

²⁷ R= Researcher
recontextualising the curricula into pedagogic practice as well as in the way they structure and manage the lectures. In terms of thinking about recontextualising the curricula into pedagogy, both lecturers take a reflective approach, considering their students’ prior learning as well as their present learning as required by the discipline, for example the necessary skills and also theoretical knowledge they need to acquire. Both lecturers spoke quite a bit in the interviews about the need to consider where their students come from in terms of their educational and home backgrounds, but that this should not necessarily mean that they need to make things ‘easier’; rather they need to teach in such a way as to enable these students to learn the required skills and knowledge effectively.

In talking about how he thinks about discipline or class management related to learning in his lectures, Frank commented that:

_I will be strict in terms of my approach but at the same time, um, they need structure and that actually helps those because I’ve seen some students ... they come from an academic, um, institution where there wasn’t really structure...[they’re doing] you know, x amount of subjects and there are no linkages between everything so they’re not trained to see them. ...when we’re having lectures, this is a focused learning time. It isn’t just about having random discussions. It’s very interesting having discussions, um, in class but are they learning the skill?_ (Frank, interview, May 2013).

Mike commented that:

_...you have the responsibility as a lecturer to say “this is my module, um, this is the standard that I expect students to engage in. I’m conscious of the fact that you all come from different backgrounds, I’m not going to lower what I am presenting so as to fit the one coming from rural areas, nor I am going to put it across in such a difficult manner so as to make the one coming from a private school” – so within that period of an hour as a lecturer you have the responsibility to satisfy all these students coming from different backgrounds and you have the responsibility to, to ensure that by the time they leave the lecture, they are all looking forward to attend another lecture_ (Mike, interview, March 2013).

His focus here was both on making the knowledge accessible to students from both poorer and better-resourced educational backgrounds, as well as on what he sees as his responsibility in terms of engaging all students through a more student-centred approach to teaching and learning.

A further aspect of the student-centredness of the teaching was the weaker framing in general around the control of the classroom space, as well as the bringing in of more everyday knowledge or horizontal discourse (Bernstein 1999) from outside of the classroom and
curriculum, and allowing students to have some control over what topics were raised in discussions. These topics that students were asked about or encouraged to bring into the classroom did, however, need to be relevant to either political theory or International Relations. Mike and Frank both commented on this in their interviews, and it came through very clearly in the field notes and video data as well. For example, Frank commented that:

_Sometimes you must ask them, what is their issue because they come from a disadvantaged background in terms of, they haven’t really had a teaching or learning culture, so what would be cool? Well maybe if you wean them off on certain things and you know ease them into the theory ‘coz then they can see the point, this is the point of the theory, this is how it works, isn’t this cool?_ (Frank, interview, May 2013).

Mike commented that he approaches students as the course progresses and asks them:

...this very simple question: “where are we now in terms of our politics of our country?” So if they say that the problem is Social Movements then I will say “okay let’s deal with Social Movements”. If they say the problem is Black Economic Empowerment then I will say “ok, let’s deal with that. Let’s go out, find information, bring it to class and we discuss it, right?” And if they say the problem is xenophobia, I say “Ok, that’s fine; let’s problematize that”. So how I package my material – it’s a package that deals with topical issues, but at the same time deals with the application of theory as well, right, to those topical issues (Mike, interview, March 2013).

Thus both lecturers gave a fair amount of space to students to raise topics of interest, partly as a way, in Frank’s words, of making the theory ‘cool’ or more relevant to them in more authentic or recognisable ways. This seemed to be Mike’s motivation too.

Related to this relaxed framing of the lectures in terms of letting students raise topics, and bring outside knowledge into the classroom as long as it was relevant to the course, was the way in which the lectures were managed or structured. The two lecturers approached their teaching fairly differently in some ways, and some of this discussion will be picked up in sections 2.3 and 2.4 in more detail. Frank, for example, used what I described over and over in the field notes as a ‘summary’ tone when discussing the information on the slides, which was mostly the theory. Initially, because I started attended his lectures two weeks into the second term, I thought he was summarising information taught in the two weeks I missed, but later I realised that this was part of his overall approach. I wondered, perhaps, if this ‘summary’ style of moving fairly quickly and also shallowly through the theory was not also linked to his comment about needing more time to immerse himself in the knowledge being taught in his part of the course. Frank tended to slow down and take more time when thinking of and discussing examples to illustrate
certain concepts, though, and in his lectures, as in Mike’s, a fair bit of time in several lectures was given to student discussion or ‘buzzing’ about aspects of the topic under discussion.

Mike’s approach was less hurried and also less organised, looser. He spoke more slowly, but also seemed to think on his feet more, changing things around almost at the last minute, it seemed. For example, there was this instruction given to students during a lecture, setting up a discussion towards the end of the term:

*Alright. Here is the question for today. You are requested to come up with a plan that will promote [pause] – here is a plan – here is a question: you need to come up with a plan using the Galbraith theory you are requested to approach two decision makers and the plan must ensure that it promotes the awareness against teenage pregnancy...* [tutor is talking to him about the Q] *Ok, ok, ok. Basically – alright – here is a plan, we need to do this, all of us...we need to come up with a plan that will promote safety on campus. You need to approach two people, alright, key decision makers around your plan and you also need the influence or the support of your fellow students. It’s basically a plan to ensure that there’s safety on campus...using the Galbraith theory* (Mike, video, 8 March 2013).

Perhaps his ‘loose’ style was also connected to his comments about coming to the theory, such as Galbraith’s theory of power, for the first time properly on preparing to teach this course (Mike, interview, May 2013). He digressed often in his lectures, contributing to this sense of a looser or less organised approach to his teaching, and perhaps with a stronger grasp of the theory and the ways in which to make the links between theory and context his lectures would have been able to stay loose in the sense of giving students time to contribute to the discussions, but would have been more focused and less disorganised regarding the connections between the ‘small walls’ in the form of the principled or theoretical knowledge. In Frank’s case, a stronger grasp or deeper understanding of the theory may have enabled him to make stronger connections between theory and fairly colloquial examples, and may have made the theoretical parts of the lectures less ‘summarised’ and more ‘taught’ in an explanatory way that drew clearer links between theory and context. This will be further explored in section 2.4.

Finally, in relation to the approach each lecturer took to teaching, Frank and Mike had different approaches to discipline or classroom management, and these can be linked to what they tended to see as necessary or important in terms of students’ approach to learning. Frank wanted students who were open-minded and thinking, but in relation to the course material or topics, rather than in a general sense, and he also seemed to want students who were thinking in other ways in terms of being considerate of one another, and respectful of the learning space that they all occupied in the lectures. Mike was more focused on students feeling excited about learning and interested in and passionate about politics as he professed himself to be. While he
also valued open-mindedness and critical thinking, this sense of wanting to create in students a willingness to come to lectures and learn was strong, and underpinned the way he managed the lecture space and approached his teaching. For example, Mike commented that:

…I think the module, how it’s packaged and how it’s presented, it should be done in a manner that will instil that sense of excitement – students should be excited, should be looking forward to attending the lecture...you need to sit down and plan and ask yourself “what is it that I can package and present that which will make them sit for the entire hour and not just reading slides in the lecture” – that is boring and students can actually pick that one up and say “what’s the point of attending a lecture if this person is reading slides – I can sit at home and do that myself”. So as a lecturer you have the responsibility to read the course reader and, and go through the entire course outline and see, identify points that will spark a debate and identify issues which could be much more controversial (Mike, interview, March 2013).

Frank, on the other hand, commented

...for me it's not really a popularity contest. For me it's about – I'm thinking about those kids who really want to be there, who've made lots of sacrifice and I understand that, I understand the sacrifice which comes with learning and wanting to, to better yourself....if you have a disciplined approach, you know, in anything – anything that is worthwhile definitely requires discipline...if you have a cohort of kids who have not known discipline how can you really um, you know, build that into the teaching and get the better quality student who is open minded, thinking... (Frank, interview, May 2013).

Thus, both lecturers, in different ways, through classroom management, including students in class discussions, and in making relevant changes to the pacing and sequencing of their lecture topics, created student-centred teaching and learning environments that were quite closely focused on the students themselves, particularly on how they were learning and how they felt about learning but also on what they were learning.

The next section builds on some of the findings in this section by considering the organising principle of this discipline using Specialisation codes as the tools for illuminating and analysing these findings.

2.3 Taking student-centredness further: graduate attributes and ‘knowing’

Briefly, LCT(Specialisation) is based on a premise that all disciplines use certain discourses and languages to stake their claim to status, recognition and position within higher education, and that these discourses serve to ‘legitimate’ these disciplines’ claims to status, recognition and
position (Maton 2007, 2013a). These claims to legitimation, though, are based on deeper, often invisible understandings of the ‘underlying principles’ of the knowledge structure of the ‘intellectual field’ in question (Maton 2007: 93). Actors and discourses within these intellectual fields, out of which the educational disciplines are recontextualised, are ‘selected and recontextualised according to the underlying principle of their knowledge structure, knower structure, neither or both’ (Maton 2007: 92). In other words, Specialisation is concerned with the underlying principle – a focus on knowledge, or on knowers themselves, or neither or both – that shapes the focus of the discipline, and the influence this has on the way the discipline develops and also claims legitimacy and status with higher education.

Understanding the specialisation code is important, because it gives us necessary insights into why certain curricula are developed in the ways that they are and what kinds of pedagogical approaches are more or less suited to teaching the knowledge and related practices relayed by the curriculum. For example, the professionally-focused curriculum in Law is influenced by the underlying principle of a knowledge code, and the curriculum and pedagogy are based on developing specific sets of skills, technical knowledge and procedural ability, rather than a particular kind of person or set of attributes or dispositions (although this is not absented from the curriculum or the pedagogy; it is just not the basis of the legitimacy claims this disciplines makes).

2.3.1 Knowledge or knower code?

The data made evident that Political Science as an academic discipline represents a knower code. In essence, this means that the curriculum and the pedagogy are based on developing knowers, or a certain kind of knower; someone with a particular set of attributes or a particular disposition towards learning or knowledge (see Maton 2007, 2013a). As discussed in the previous section, there is a student-centred approach to teaching and the students’ needs are considered in this discipline when curricula are designed and pedagogic approaches planned. What kinds of knowers do they need to be to be successful? What kinds of skills or attributes need to be embedded or built into the curriculum? These are the questions that these two lecturers, at least, have mentioned and considered in relation to their teaching and course design. The notion of teaching certain foundational concepts or knowledge is not absented, but it is not the basis of what counts as marking a student as a successful Political Science student. Rather the basis of specialisation is on the who being taught as opposed to the what; in Maton’s (2007) terms, the subject of the knowledge rather than the object. The what, or the knowledge, is the vehicle used to develop the who, or the knowers.
Both lecturers talked to their students over the course of the semester and also to me in the interviews about the kinds of attributes and skills that successful Political Science students need. They talked about these to some extent in relation to where they see these students going once they have graduated and entered the world of work. Frank talked about wanting his students to be ‘open-minded’, ‘thinking’, ‘curious’; Mike talked about wanting his students to be ‘interested’, ‘excited’, ‘interactive’; they both spoke about wanting their students to be critical and to think about issues with open minds. Frank made this comment in his interview:

I would such as the students to be critical thinkers and not just, for example, take information just on face value, but also to see the mechanisms of how theory works. So, for example, theory says, um, X. Um, how does theory X or how does the theory prove how these events, you know, cause and effect...and the, you know, a possible analysis to it...So having that analytical and critical thinking, um, skills and also just developing, you know, a coherent argument – supporting it with actual theory and facts...What we are schooling and teaching them is actually skills, um, and it is critical things, skills. It’s um, being able to construct an argument and, um, teaching them how to analyse things in a systematic and critical way (Frank, interview, May 2013).

Mike gave his students the aims of the module or section of the course he was teaching, although these could apply to the course as a whole, thus:

To be able to argue coherently

To raise controversial issues and back them with facts

To be able to write academically

To be able to stand up and defend a point you make (Mike, field notes, 2013).

He further told his students, in the second week of the course that: ‘It is our hope as a department that you will learn to evaluate facts and listen attentively and work out what is fact and what is not. So it won’t matter who is talking but rather what they are saying – the content and the context. You will be able to evaluate and weigh information without being swayed by emotion’ (Mike, field notes, 2013). Reading critically, analysing texts, articulating and defending arguments are skills in the sense that they are things students need to be taught and learn how to do well, and in different contexts. But when considered with the data in which both Mike and Frank talk about the attributes they want their students to have or develop, or the dispositions towards knowledge and learning that successful Political Studies students need to develop and nurture, these ‘skills’ are revealed as practices connected to the discipline – knowledge practices rather than generic skills that mark Political Science graduates or students from
others and that give students particular aptitudes or abilities regarding knowledge inside and outside of the discipline.

When asked what a degree in Political Science would enable students to do professionally, or what these lecturers understood themselves as training students for, neither lecturer could give a clear indication of a particular profession or field that would require a particular or specialised set of skills or knowledge. Rather there was a sense of training students to work with any knowledge and any information, and helping them to develop these attributes and related ways of knowing and approaching knowledge so they will be able to work in a range of possible professional fields and adapt, and succeed. In other words, they are cultivating a gaze (Bernstein 1999; Maton 2013a) – a way of seeing the world through a set of lenses provided by political theory or International Relations as two sub-disciplines of Political Science28, but that largely prepare students to be certain kinds of knowers rather than to work only within a specific field. Frank, for example, commented on the need for students to be critical and able to think and reason:

> I think it’s, it’s more – it isn’t about the content, but rather about, you know, constructing arguments, thinking critically, seeing the different levels of analysis, um, and that is actually a life skill. You...no matter what, whether you are working in an office or out in the field, you, your ability to think and reason and all of those things...that is a skill which actually gives you such as, the – you know, you can have degrees in, and grades, for being an Accountant but if you can’t think critically about how to solve a problem within, it does not really help you much (Frank, interview, 2013).

Mike made the following insightful point during the interview about the possible purposes of a politics degree and again the focus is on cultivating knowers, rather than on specific principles or procedures:

> Mike: I think the role of the module basically is to, is to instil a sense of critical citizenship...If we can create a student who time and again would always say “On what grounds are you saying this?” I think that for me would be the, the biggest achievement. So that will mean that the student can go to the private sector or the student can go to the public sector for as long as the student is able to say “on what grounds Sir or Mrs, are you saying this? Can you justify your point?” I think if we do it such as this, it will be okay...if with your Political studies degree you can go and be the CEO of the biggest hospital in South Africa that for me would be okay. If you can go with your political studies degree

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28 There are four sub-disciplines in total. The other two (other than the two discussed in this case study) are Comparative Politics and National Political Thought/Systems (e.g., South African Politics).
and be the Governor of the Reserve Bank, that would still be okay... (Mike, interview, March 2013).

This cultivated knower code (Maton 2013a) affects and shapes the pedagogy as well. It can explain perhaps part of the reason for the 'looser' approach to the framing in terms of pacing and sequencing, as well as the more relaxed organisation of many of the lectures, with space given to students to raise issues for discussion and to engage in more openly interactive and collaborative discussion or 'buzz groups' during lectures. These discussions, as well as this control given to students to have a say in what issues are important, relevant or worthy of discussion, were part of the lecturers giving expression to their need to teach students to be more questioning and critical; to think for themselves and be more active, engaged and interested students and learners. If the lectures were what Frank referred to as a 'soliloquy' where he did all the talking and the students did all the listening (Frank, interview, May 2013), then there would be few opportunities to develop these abilities in the lectures and in conversation with a lecturer working within this knower code who has the 'gaze' (Bernstein 1999) or the approach to learning and the related ways of knowing or skills that students need. These lecturers are trying to model the behaviours they want their students to adopt by asking questions of their students, and by engaging them during the class discussions and after during the plenary sessions where students feed back on their small group conversations. However, both noted an interesting 'danger' inherent in these class discussions that lecturers need to be aware of.

Both noted that, while discussions are interesting and can even be a lot of fun, they need to be doing something that is helping students to achieve the aims of the course, or develop these abilities. Frank commented: ‘...when we’re having lectures, this is a focused learning time. It isn’t just about having random discussions. It’s very interesting having discussions, um, in class but are they learning the skill?’ (Frank, interview, May 2013). Similarly, Mike said:

_I think there is a danger of making the course exciting – there’s moving away from the core teachings of a module because you can make the course exciting – students can be excited, um, and happy to go and attend the lectures but all that you do is just discuss general stuff – that’s the danger, right. Um, and the best way to avoid that is to always remind them that, 'look, inasmuch as we are discussing this, how do you relate what we are discussing to what’s in the course reader?_’ (Mike, interview, March 2013).

Thus, while lectures should be interesting and include opportunities to develop certain abilities, aptitudes or academic dispositions that mark Political Science as a knower code, this is an academic discipline, and there is theoretical knowledge that must be learned. These abilities and skills may be general in the sense that they may apply to many social science disciplines
similarly, for example in Philosophy or Sociology which are knower codes in similar ways, but they are not, however, generic; they are academic abilities, aptitudes or dispositions that are learned in higher education settings. As such they are learned as the students are presented with different theoretical ‘lenses’ with which to look at current issues or topical issues, learning how to think critically and analytically, how to question and how to take a position or articulate and defend an argument using relevant theory, evidence and explanation.

Thus, Political Science has, as its basis, a focus on knowers and developing a certain kind of knower with a critical, thoughtful, engaged and curious disposition, and a certain set of aptitudes related to knowledge, such as being able to read analytically, make and defend coherent arguments in the manner recognised by the discipline, and being able to make relevant links between knowledge in the everyday political sphere with theoretical knowledge. The emphasis in this discipline is therefore on the social relations of knowledge (SR). As this section has shown, although particular theories or concepts – the epistemic relation of knowledge (ER) - are often the focus of the teaching and learning, they are not the basis for claims to legitimacy in Political Science. Political Science thus represents a knower code, with stronger social relations and weaker epistemic relations (SR+ ER-). This is represented heuristically in Figure 5.1 below.

**Figure 5.1 Political Studies as a knower code represented on a Cartesian plane (see Maton 2007)**

2.3.2 The nature of the disciplinary knowledge

Before moving on to consider the pedagogic practices of both lecturers in detail, looking specifically at cumulative and segmented learning (Maton 2009), it is worth briefly understanding the way the knowledge in the course is understood by these two lecturers, and
the nature of the knowledge structure in Political Science. An understanding of knowledge can be connected to an understanding of the nature of this knower code, as well as the underlying influences that shape how the lecturers have chosen to teach their halves of the course.

Political Science departments are often found in universities in the faculties of Arts or Social Sciences. It is a social science discipline, and can be defined a horizontal knowledge structure (Bernstein 1999). There are different sub-disciplinary areas of research and one does not need to be proficient in some to be able to specialise in others; there are what Bernstein (1999) would call different ‘languages’ and different ‘speakers’ engaging in a range of conversations, but not necessarily across the sub-disciplinary areas. For example, one of the senior lecturers who wrote the curriculum for the second part of the course on International Relations is a researcher in this area, specifically in nuclear arms proliferation and security studies. The other senior lecturer is a specialist in South African and comparative politics. The former Head of Department is a political theorist, the only one in the department at this point, and also teaches modules in contemporary and historical political thought and South African politics. I have worked with all of these academics on previous projects linked to teaching and learning, but not to this study, and I can therefore comment with some authority that the lecturer with a research and teaching specialisation in political thought would not feel confident teaching International Relations or even a full course on comparative Latin American politics because this is not his ‘language’. There are different ‘languages’ or sub-disciplines, making this a horizontal knowledge structure, and as in many social science disciplines, these languages are not necessarily connected to or conversant with one another and do not need to be for the discipline to advance and for researchers to add to existing conversations and start new ones based on their research.

There are two separate sets of theory presented to and discussed with students in this course. The first, as noted in the introduction to this chapter, is theory that can be described as fairly basic and foundational to the study of Political Science as a discipline. The concepts that are explored and applied to different cases and examples include power, the State, sovereignty and governance. The second set of theories is quite particular to International Relations as a sub-discipline, and includes concepts such as realism, liberalism, constructivism and economic structuralism. Liberalism, for example, is studied in Political Science in different ways. In International Relations it is a lens that is used to look at issues of security and cooperation in the international system. In a political theory course where students might read political philosophy by John Stuart Mill, a prominent early Liberal theorist, the concept would be used more abstractly to look at a much wider range of issues in Political Science and not just at the international system. Thus, even though both Mike and Frank use the concept of power, for
example, they are not entirely used to denote the same things – in Mike’s course the term is used more broadly and in Frank's part of the course it is used in relation to the way states operate within the current international system. The point here is that the theoretical knowledge taught in each half of the course may look similar in some ways, as the same terms appear. However, because this is a horizontal knowledge structure and because the two sub-disciplines being addressed in each part of the course are interested in different problems or units of analysis, there are differences, some fairly subtle, between the two sets of theory. This is important to remember when looking at the data that indicates the ways in which these concepts are being taught, and also applied in different contexts.

In the first part of the course, given Mike’s comments about what he saw as his responsibility to the students in terms of their learning, and also his goals in terms of the knower code orientation of the discipline, I observed that the issues, rather than the concepts, drove the discussions and the curriculum in the way it was enacted or realised in pedagogy. This may or may not have been the intention of the curriculum developer, but this is not the focus of this study; the focus is pedagogy in action. The concepts, as they were drawn into discussions and used as ways of thinking about, understanding and also critiquing various current events and issues, were drawn in as they found application, rather than *a priori*. For example, the course did start off with discussions about a foundational reading in the course reader by Andrew Heywood called ‘What is politics?’ and out of this discussion concepts emerged and were defined, such as governance and the State, for example. The students also had to read parts of John Kenneth Galbraith’s seminal text, *The Anatomy of Power*, but this ‘theory of power’ as well as the concepts raised by Heywood were not taught and then applied systematically or in a clearly planned way as such. Rather they were fairly loosely introduced, to some extent as they pertained to various issues that were raised, some unplanned for such as the Marikana strikes and killings\textsuperscript{29} near Rustenberg in the North West Province which happened in early 2013 after the curriculum was written.

Through these discussions as well as others on different issues regarded as current events, the concepts of power and the state became somewhat clearer over the course of the seven weeks, but the conceptual learning was less of a focal point than the ability of students to read and respond critically to the core texts, and begin to apply some of the theory to these topical issues.

\textsuperscript{29} 34 miners were killed and 78 injured by police during a clash that arose after strike action by a group of miners working for Lonmin Platinum Mines spiralled out of control (Nicolson & Marinovich 2013). This was a big issue, covered extensively in newspapers and television and social media, and the inquests are still ongoing as of November 2013.
using critical thinking and analysis skills. Mike commented on the debates and issues that came up in the course, saying

*I think the module co-ordinator...did a great job in terms of ensuring that the issues that were to be taught were quite topical issues and of course we were also indirectly assisted by our own ruling party on some of the, (laughs) on some of the issues...The Marikana...That painful killing of that Mozambican guy – that came at the right time and also the Oscar Pistorius issue – that came at a time when we were dealing with, um, gender related issues. So everything just sort of connected, and I think that was a blessing in disguise* (Mike, interview, March 2013).

These comments further show that he had a looser and less well-defined approach to teaching the concepts he needed students to learn; the concepts were there, and were chosen because they were foundational and necessary for students to learn in a first-semester-of-first-year course, but they seemed to be taught as the issues indicated they should or could be, rather than *a priori* or before getting into the issues as ways of seeing the concepts in action.

In the second part of the course students had a textbook that contained the reading they were required to do, and the theory that needed to be *covered* (Frank, field notes; interview, 2013) drove the teaching agenda rather than the issues predominantly calling up the concepts as in Mike’s part of the course. For example, Frank started with fairly general tools of analysis that he referred to again and again over the duration of the course: the individual, state and system levels of analysis that International Relations theorists use to examine different events. He also started with the history of the international state system that was being analysed and discussed in the course before moving on to present the different theoretical schools of thought, or lenses, using mostly colloquial examples to exemplify the concepts. Frank made an interesting comment about his view on the difference between his part of the course and Mike’s: ...

*...[Mike’s] course is more conversational in nature and it’s stuff that, you know, it’s everyday stuff so they have sort of prior knowledge, um, regarding that so they can grasp it better. So mine is a bit more challenging because it’s theory which you have to lay down...it’s all, you know, it’s historical stuff...’* (Frank, interview, May 2013). There were fewer topical issues raised in this part of the course, although towards the end of the course, when looking at feminist theories in International Relations, they did have a heated debate about the gendered nature of male/female relationships, and South Africa’s recent involvement in the Central African Republic was also referred to.

30 South African National Defence Force soldiers were sent to the Central African Republic (CAR) in March 2013 as part of an agreement between the South African government and the president of the CAR. It was a controversial issue because while official reports claimed that the soldiers were there to assist with
The focus was on the set of theoretical concepts students needed to learn, and through learning these to further develop the ability to think critically, debate issues, articulate and defend their views using the theory, and read texts critically and analytically. Frank commented on the need for his students to make connections between theory and context:

...that’s the thing – that you are able to use the theory, because sometimes the theory is so disjointed from the actual realities, but if you can let them see it in everyday, that it’s everywhere around them whether they apply it to the levels of analysis, to relationships they have, so they see value in terms of building their knowledge base rather than just learning content (Frank, interview, May 2013).

In sum, then, Political Science, typographically speaking, represents a horizontal knowledge structure, and in this particular course students are being introduced to at least two ‘languages’ or sub-disciplines within the larger discipline. However, this is an observation I have made as a Political Science graduate rather than one drawn from field notes or course documents. Thus, while this is indeed a knower code and the epistemic relations are weaker in terms of being the basis for claims to legitimacy in this discipline, the disciplinary knowledge taught is the focus, often, of developing the knowers and their necessary dispositions and aptitudes. It would therefore be important to make the boundaries between these two languages clear to students, as these two sub-disciplines comprise different sets of Political Science knowledge, and draw in the world outside of the university in different ways. They also use core concepts such as ‘power’ and ‘the state’ differently, and students, in order to develop the ability to be critical in required ways, and to be able to read and think in nuanced ways, ’between the lines’ and ’behind the lines’ (POL131 course coordinator, email, October 2012) in each of these sub-disciplines, students would need to see the boundaries and also be taught how and when to cross them (see Muller 2000; Wheelahan 2010).

The data shows, however, that the differences between these two sub-disciplines were not very clearly drawn in this course as a whole, thus leading to the visual metaphor for this case study as representing ‘a series of small walls’, or seemingly disconnected or weakly connected topics organised around issues, debates or concepts, rather than around a connected and coherent or principled organisation of knowledge and a range of examples or applications. This raised concerns about whether and how students would be able to achieve the outcomes for the course around critiquing certain issues using relevant theoretical or conceptual approaches within Political Science, or approaching knowledge and assignment tasks more critically and training, other reports claim that they were there to protect business holdings. 13 soldiers were killed and 9 were injured in later March when they were attacked by rebels. The soldiers were withdrawn in April 2013. (http://www.citypress.co.za/news/sa-soldiers-return-from-central-african-republic/)
analytically. It is difficult, and this was evident in the data on class discussions, to be critical in the required ways without an in-depth knowledge of what you are being critical of, and also what counts as critique. A lack of ability to either attain this in-depth knowledge in the course, or develop sufficiently this ability to be critical and analytical can constrain rather than enable ongoing and cumulative learning in this particular discipline.

Semantics, particularly semantic gravity and semantic density can be brought together to draw semantic waves or permutations of these, and these semantic waves are at the heart of enabling (or constraining) cumulative learning. In order to further examine and discuss the question of how and whether cumulative learning was enabled in this course, and draw tentative conclusions about how it could be enabled in a discipline such as Political Science, the final section turns to an analysis of the data using Semantics before concluding the chapter.

### 2.4 Building conceptual depth and linking theory and context: the application of Semantics

This section uses the tools provided by LCT(Semantics), semantic gravity and semantic density and semantic waves to explore the ways in which cumulative learning is conceived of and either enabled or constrained through the pedagogy of this course. This section follows on from the previous three which have looked at how the curriculum and the teaching environments have been designed with a particular underlying knower code in mind, and also with a particular kind of student-centredness and view of pedagogy as participatory and engaged in certain ways. This section now brings the discussion round to the ways in which students are actually being taught to achieve the outcomes set for the course and also for them, tacitly, as fledgling knowers within the discipline.

An interesting mix of permutations of semantic ‘waves’ were evident in the data; some fairly steep, and others quite flat, as if there was a weaker ‘swell’ behind these waves. As a brief reminder, a semantic wave moves, for example, from weaker semantic gravity where meaning is less strongly tied to its context (SG-), and is abstract or generalised, to stronger semantic gravity (SG+), where meaning becomes more closely connected to its context through, for instance, an example illustrating a concept or clarifying meaning. These semantic waves further implicate semantic density, which refers to the accumulation or condensation of meaning around a term, concept or symbol (Maton 2011, 2013a, 2013b). Semantic density refers to the number of meanings a term, concept, symbol, gesture etc could have. Weaker semantic density signals a small or low condensation of possible meanings and stronger semantic density signals a greater condensation of possible meanings around a term (Maton 2011, 2013a, 2013b). In a semantic wave where semantic gravity and semantic density strengthen and weaken inversely, as the
semantic gravity strengthens so does the semantic density weaken and vice versa (see Figure 5.2).

Figure 5.2 Generic example of a single semantic wave

![Semantic Wave Diagram](image)

Ideally, there should be upward and downward movement to form a ‘wave’ so that students are not only seeing the practical applications of their learning, and linking the new knowledge with existing knowledge, but they are also learning to abstract and generalise, using theoretical or conceptual lenses that can help them take their learning and knowledge into contexts beyond the one they are currently in (Maton 2013a, 2013b). Further, moving from weaker to stronger semantic density over time is a necessary part of cumulative knowledge building. If terms or concepts that are used in different (or similar) ways in texts and other disciplinary conversations, for example ‘power’ in Political Studies, are not built up over time to have stronger semantic density, students will not have control over these terms or concepts and will lack explanatory and analytical power when it comes to using and applying them.

When semantic gravity and semantic density are analysed together the result is ‘semantic waves’, or various (often pedagogically problematic) permutations thereof, such as ‘flatlines’ or ‘down escalators’ (Maton 2013b: 12, 14). There is one permutation of semantic waves that is relevant to the data that has been presented and analysed in this chapter: semantic flatlines. A flatline occurs when the learning or teaching ties the knowledge or meanings either too closely to the students’ contexts and does not help them to use principled knowledge or theory to make sense of the context – a high flatline – or too closely to the abstract concepts without any moves to link the conceptual knowledge to existing or recognisable contextual knowledge or applications – a low flatline (Maton 2013b). In low flatlines that are too ‘conceptual’ (A1), semantic gravity remains fairly weak as the topic or concept is taught and semantic density remains fairly strong, and in high flatlines that are too ‘contextual’ (A2), semantic gravity is
generally stronger throughout and semantic density weaker (see Figure 5.3). In other words, there is a move to unpack and explain a concept, moving from weaker semantic gravity and stronger semantic density towards stronger semantic gravity and weaker semantic density, or vice versa.

**Figure 5.3 Generic examples of high and low semantic flatlines**

In both Frank and Mike's parts of the course there are, predominantly, examples of flatlines and waves, and by examining the pedagogic approach taken by both of these lecturers using these semantic tools, drawing in the data and analysis from the previous three sections of this chapter, we can begin to understand the ways in which reaching the learning outcomes of the curriculum may be enabled and constrained by the pedagogic practices.

An important goal is cumulative learning, seen in the lecturers' comments about wanting students to make connections between what is learnt in this course and their existing knowledge, and wanting students to have the ability to take what they learn in this course beyond it to integrate this learning with learning in other courses in further years of study as well as in the world of work eventually. If there are too many instances of flatlines, for example, it may well be that this goal of cumulative learning will be unmet, or perhaps under-met by students, because they will not have been given the right or sufficient learning opportunities to develop the necessary knowledge or related aptitudes and skills.

It is important to note that in this case study, as in Law, there are many different ways in which gravity and semantic waves could be drawn using the rich data this study has gathered. Semantic gravity and semantic density can strengthen and weaken inversely or in other ways in relation to one another (Maton 2013b), and it could be possible to map them separately as well as together. The data my study has gathered could paint quite a multi-layered and complex picture of pedagogy if space and time allowed, but neither do. This is a study focused on cumulative knowledge-building and pedagogy, rather than just on semantic structures or
profiles (Maton 2013a), and following Maton (2013b: 8) who argues that ‘semantic waves are the pulses of cumulative knowledge-building’, this case study, as with Law, is only looking at semantic waves that map semantic gravity and semantic density together, acknowledging that this is one tool, rather than the only tool, that can analyse this data and create noteworthy findings.

2.4.1 Introduction to International Relations

Earlier in this chapter I made an observation that Frank seemed to work through the theory in his lectures with what I referred to in the field notes several times as a ‘summary’ style or tone. He slowed down and spent more time on the examples, overall, but it was unclear at times in the lectures how the examples and theory were being drawn together, and how students were being brought into a more cultivated gaze in terms of using the theory to think about the examples, and shift from seeing just their own contexts and knowledge about the world to seeing beyond these to different ways in which they could understand their context or prior knowledge. A closer look at two lectures, looking at one topic – feminist theories in International Relations – analysing them using semantic gravity and semantic density may help us to understand this in more detail.

In the first two linked lectures, parts of which are focused on and represented in Figures 5.4 and 5.5 below, the topic of discussion was feminist theories in International Relations. This was towards the end of the course, in the week before exam revision started. In the first lecture, before looking at the theory, Frank invited students to participate in class discussion on gender and sex. He started by asking them to take out a piece of paper and spend a few minutes writing their responses, based on their own views and opinions, to the following questions: ‘What is a man? What is a woman?’ (Frank, field notes, 2013). After they had written down their thoughts, some students volunteered their answers and Frank facilitated the discussion. This is a summarised account of the discussion captured in the lecture field notes:

Frank: ‘rules before we get started...rules of engagement...everybody has the right to express their views’ – he highlights respect, and also opening their minds to ‘different paradigms' and also to ‘debating’ points that are raised.

He asks: ‘What is a man?’

Students respond: ‘He has a penis’; ‘Is a human and can get a woman pregnant’ (To this point Frank responds: ‘so what if he’s shooting blanks? Is he not a man?’); Testosterone and muscles (Frank asks him: ‘so what about women bodybuilders?’); a female student makes a link between sex and gender (she gets applause). Frank responds: ‘so it’s not just about genitalia; it’s about other issues that contribute to defining male and female’
He then asks: ‘What is a woman?’

Students respond: ‘Women can bear children and are portrayed as weak but are actually very strong (Frank links this to an answer about how people carry themselves – what are the roles of men and women?); MS\textsuperscript{31}: men are someone women can feel safe around, protectors; women are more nurturing;…MS: society enables me as a man – I am a social construct – men and women are social constructs – different from sex as biological…(Frank responds: ‘so how do we define roles for men and women?’)

FS\textsuperscript{32} answers: society determines what their roles are – some people define roles according to what they have grown up with; another FS focuses on parenting – women can play the role of men, and men cannot play the role of women when it comes to raising children. …Last Ss: idea of tradition can be used when it is ‘convenient’ for people – such as women must also work but they should be subservient at home…. [Frank] ends the debate and the lecture thus: “…the whole point of the exercise is where we are covering feminism in International Relations…distinction between two things: sex (in the biological sense) and gender (as a social construct)”. Ideas about men and women are used to advance the interests of one party over another. “In the 21st century women are adopting new roles but what are women doing with their new opportunities? Are you perpetuating stereotypes of barefoot and pregnant in the kitchen or a more positive image of who you really are and want to be? Think about that – see you tomorrow” (Frank, field notes, 2013)

This discussion or debate is represented heuristically in Figure 5.4 below.

**Figure 5.4 Semantic flatline for discussion on men, women and gender**

![Semantic flatline for discussion on men, women and gender](image)

\textsuperscript{31} Male student

\textsuperscript{32} Female student
What is interesting to note is that there were opportunities to ask students to think about what they were saying in response to the two initial questions in ways that required more critical thinking, and thinking beyond or outside of just what they know and think related to their own lived realities or contexts. However, these opportunities were not really taken, beyond asking students to think about how we decide which roles in society are for men and which are for women and why. Frank could, perhaps, have asked them to think about some of their comments in relation to contexts other than their own: for example, what about roles for men and women in places such as Afghanistan under the Taliban, or in Sweden, which is quite a lot more liberal, politically, and affords many rights to men and women equally. This may not have been a big shift towards weaker semantic gravity and stronger semantic density, but it would have signalled the need for students to move beyond their own views and opinions to consider that there are different ways of seeing the same issue based on what principles are at play in shaping different contexts. He also ended on a note of stronger semantic gravity and weaker semantic density on the concepts of gender and sex with his comment about what students themselves are doing to perpetuate or challenge gender stereotypes, which kept the discussion as it wrapped up very tied to students’ own contexts and experiences, and the meaning of the terms ‘gender’ and ‘sex’ less condensed with the kinds of meanings he seemed to be getting at in this discussion.

This lecture fed into the next lecture, where Frank introduced students to three different schools of thought within feminist theory in International Relations. He started the lecture by framing the role feminist theory plays in challenging traditional International Relations theory, saying that the latter is ‘biased towards “masculine” ideas e.g., realism is about power and security’ (Frank, field notes, 2013). Then, linking this topic briefly with the discussion from the previous lecture, he commented that ‘women have characteristics associated with them such as compromise and nurturing’ and went on to link this to high politics and low politics and aggression versus passivism and then to the private and public spheres. He stated that the private sphere is not considered to be important in traditional International Relations theory – e.g. the idea of staying home and raising children – but that feminist theorists argue otherwise. He then put up, and discussed in fairly quick succession, three sets of slides on the three ‘schools of thought’. Each of these schools was named, and then explained first in fairly abstract conceptual terms and then unpacked in more accessible language and finally examples were given, such as war etc, which these different schools have opinions on and analyses of.

These three schools, noted in Figure 5.5, are Feminist Empiricism (1), Feminist Standpoint Theory (2) and Feminist Postmodernism (3). What is important to note when looking at this description of the data and the heuristic diagram in Figure 5.5 is that, instead of looking at each
'school' separately and explaining each in turn such as this, Frank drew comparisons and contrasts between (1) and (2) and then between (3), (1) and (2) to show how they both complement and differ in their objects of enquiry or their theoretical focus. This part of the lecture, then, represents a semantic wave, taking students from stronger semantic density around the broad concept or theoretical topic of feminist theory in International Relations and weaker semantic gravity, as this is quite an abstract notion, through three successive ‘waves’ in which students, just in this topic, can cumulatively build a sense of what feminist theories in International Relations are, what they say about the international system, states and power, and what issues act as objects of their theorising and analysis.

He moved on, though, from this section of the lecture to another debate or ‘buzz’, asking students to apply these new concepts to the question: ‘Do you think we will have less war if there are more women in positions of leadership?’ (Frank, field notes, 2013). Students responded to this question in the discussion saying things such as:

women are more emotional – they would rely on their emotions; all wars started with a man in charge. You are also generalising – not all women are the same; men and women are different – they do have different traits – implied by society, upbringing, parents, but we can determine our own decisions so this is a bad question because God created different sexes but did God say in the Bible I created two different minds?; ...there would be less war if there were more women leaders because look at Nkosazana Dlamini-Zuma and the difference she made in Home Affairs. Men are only in politics because they have a family history or example of Obama who is only the president because he’s black (Frank, field notes, 2013)

What is noteworthy here, in relation to the overall aims of the course and the cultivated knower code that underpins this discipline, is the gap between theory and its application in the class discussion. In the previous lecture it was perhaps understandable that there were few significant shifts towards weaker semantic gravity and generalisation or abstraction because students had not yet been taught the three feminist theoretical approaches and could not thus use them as a ‘lens’ with which to think about their answers to the two questions. In the discussion that follows the teaching of the three theoretical lenses in this lecture it is less understandable that Frank in particular would not prompt students more clearly to begin to make shifts towards weaker semantic gravity by asking them to think about their comments as, for example, a feminist standpoint theorist or a feminist postmodernist. Frank did not ask the students specifically to reflect the theory in their answers, and when they did answer he did not take opportunities to stop and make links with the theory, thus missing an opportunity to model the kind of applied critical thinking that is a stated aim of the course and a crucial element of
cumulative learning. He ended this discussion, as with the previous one, with a comment that tied the learning specifically to the students’ own way of being in the world, their own contexts: ‘...it is great as men and women to celebrate traits but it’s only inasmuch as you can uplift people around you and...when we look at gender we therefore need to look at what we are projecting. Is what people assume about us the whole of who we are?...You are in a very strategic and important position to make this change. So the question is, what are you going to do with this new lens?’ (Frank, field notes, 2013).

Figure 5.5 Semantic wave and flatline for teaching of and discussion on feminist theories in International Relations

Although Frank’s module came after Mike’s, chronologically, I have discussed it first because of one of its more defining features, which was the aim of using the theory or concepts to drive the teaching, rather than drawing in the relevant concepts as the issues demanded. This approach did lend itself, overall, to steeper waves, where there were waves, and I conjecture that this is because starting with the theory created the potential for a steeper wave or greater semantic range because of the opportunities for unpacking key terms or concepts, applying them to a range of scenarios and then repacking them into their more abstract form. However, as I have attempted to show with these two examples, unless the process or manner of applying theoretical lenses or concepts to problems and scenarios is modelled repeatedly, students may not be able to learn cumulatively through connecting theory and context. They may, rather, be versed in the theory and well-versed in their own contexts without necessarily being able to connect the two in the required ways, or apply the theory to contexts beyond their own.

In Mike’s module, things worked differently, as will be discussed in the following sub-section, although the result was largely the same: students could give accounts of the theory in more
abstract or ‘textbook’ terms, and could speak at length about their own views and understandings of topical political issues, but struggled, at least seen in the data from classroom observations, to connect the two.

2.4.2 Introduction to Political Studies

In Mike’s part of the course, the concepts were more often drawn out of the examples or current events, rather than used to select and understand the events that were brought in as examples. In this way, his approach was different to Frank’s and overall, the heuristic waves I could draw using the data tended to be shallower, as if there was a weaker ‘swell’ pushing them along. As with the previous sub-section there are also two examples that are analysed as semantic waves.

The first example comes from a lecture about halfway through the course, where students were being asked to look at a few of the key concepts raised in this foundational introductory course and apply them to a specific context to understand them more clearly. They needed to use their course readings to understand the concepts as well. The concepts were, primarily, the State, legitimacy, power and authority, and the context was the Lonmin/Marikana strikes and the attacks on the miners by the South African Police Services. The following is a summarised excerpt from the field notes:

Mike: “OK... I'm going to show you some pictures. What is a state? Can anyone answer? What is a state and is that different from a govt?” He then went on to say what govt is; ministers, parliament. A State is more inclusive, includes govt, security and judiciary. He told the students “I want you to go and do that reading once more”...in South Africa there is also a political system which is overarching. We have a democratic, non-sexist constitutional political system. He seemed to want to contextualise these issues of legitimacy, authority, the state, power etc, within the shootings at Marikana. He put up pictures on the projector and started to tell the background story to the Lonmin strikes at Marikana. He showed them pictures of the mine, then the conditions for the workers at the mine – several images – and then the gatherings of the strikers. He commented that someone had the authority to call them...and the legitimacy to speak on their behalf. [Several images of workers gathered were flashed through as he spoke]. He talked about the wages the miners wanted and who the workers were demanding them from, using a narrative storytelling style. Then he said that profits for mine were affected so the ‘state was called in to respond’. They had to call people with authority and legitimacy to speak to the workers. Authority, “if you see in your readings” has three dimensions.

He started with Traditional authority and summarised what this is. He went back to the Marikana story – the state was watching, and the police, ensuring that there was a
“constitutional” process. The workers were angry with the traditional leaders and felt that they weren’t on their side...he went on to highlight tensions between traditional authority and constitutional rights.

Then he went back to the government/state, the police as representing government and the army...as representing the state and put up pictures of the army and police...He talked about the tensions between strikers and those who did not want to strike and the state’s duty to protect them... Returned to police and disciplinary hearings that would have been the lot of those who didn’t want to shoot the workers and links this again to power vs authority.

Mike: “Leaders had to emerge after Marikana – people with legitimacy to speak. So church leaders, government. The duty of the state is not to kill, it is to protect...a picture can tell a thousand words so it’s your interpretation as you read. What is legitimacy? What is a state?” Went on to talk, with examples, about legitimacy – actions against the state e.g., civil disobedience...The strike was illegitimate, but the state was forced to listen, so it brought about legitimate results. “So you need to look at legality along with legitimacy”. Ended by commenting that the commission of enquiry’s outcome will determine how issues of legitimacy, power, authority, state, govt must work together in the political environment that is “constitutional and free from harm” (Mike, field notes, 2013).

Figure 5.6 Semantic wave for discussion about Marikana strike and power, the state and authority

You can see from Figure 5.6, and from following the extract closely, that there is a semantic wave, but that it is quite a ‘flat’ wave. The concepts here seem weaker than they perhaps could
be – they form a weaker ‘swell’ that drives the wave or the discussion connecting theory and context. Mike starts with stronger semantic density on the concepts of the state and power and weaker semantic gravity as the question posed refers to these concepts quite abstractly, initially. He then weakens the semantic density and strengthens the semantic gravity by explaining what the state is and how it differs from government. The rest of the extract follows a long, contextualised example in which these two concepts as well as other related concepts such as authority and legitimacy are introduced and briefly explained in relation to the example. This extract and the heuristic diagram usefully illustrate the earlier argument about the issues dictating to some extent the drawing in of concepts as needed, and explaining them in relation to the context, rather than the contexts or examples being drawn to illustrate the concepts or theory. This could explain why the wave is flatter or has a weaker ‘swell’ or pulse pushing it along.

In the second example, which is illustrative, too, of several of the lectures captured in the field notes and on video, similar concepts are discussed, but the concept of power is dealt with more formally and in more detail. The following extract is taken from the field notes and represented graphically in Figure 5.7.

Mike started by reminding the class that they had had a debate in the previous lecture, and that power was one of the concepts mentioned in the debate. ...

Mike: what is the definition of power? What really is power?

S1: the ability to enforce your will upon others (Mike repeats this)

S2: I would say it’s the ability to control outcomes and circumstances and make people act to your will

S3: power within the political context... about resources

Mike: so power is the ability to decide who gets what and how...power is the capability to exert influence over resources.

He then gave them Galbraith’s definition of power and used an example of taking a taxi from Gugulethu to Khayelitsha\textsuperscript{33}. If you sit in the front you will have to count the money. It is not written, that is the way it is. If it takes two hours, or not, power is with the driver and door executive, whether you’ve paid your R8. That’s where your power begins and ends.

...Mike put up a slide which listed the instruments of power, and went through them and recapped examples he used yesterday. He asked questions here, such as “is it necessary for

\textsuperscript{33} Townships within Cape Town.
the country to buy arms? We’re not at war so why do we need arms when people need houses etc?”. Students responded by saying that we need arms so that whoever wants to attack us will think twice. Mike: ...so condign power has a lot to do with war and forceful means of submission.

Mike put up a new slide with picture of money. He asked “is this compensatory power, giving a reward?”...The next slide up has a definition of conditioned power – he read this out to them...then he states that for you to exercise power Galbraith maintains that for someone to maintain power they need personality as well as a source.

He then moved quite quickly, with some questions and answers but very little ‘teaching’ or explanation...through the three sources of power which were given as personality, wealth and organisation. Some of the slides were images that he did not really talk to at all and some were text.

Mike: OK, so you have the three instruments: condign, compensatory and conditioned, Ok...And then you have the sources: wealth, personality and organisation. Now you need to buzz – which sources speak to which instruments? In other words, if you were to pair these up how would you align them? Would wealth go with condign power, or compensatory power? Now you need to think of a case in SA where all 3 are combined, 3 in 1. In the following discussion the students raised the issue of Marikana as a case that shows all three sources and instruments of power. This discussion came towards the end of the lecture and was quite brief. He facilitated the discussion, reiterating, consolidating and extending their responses (Mike, field notes, 2013).

Figure 5.7 Semantic wave on the types and sources of power

![Semantic wave on the types and sources of power](image-url)
Even though there is quite a lot of class participation and the overall tone is quite ‘loose’ and informal, there is a fair bit of the discussion that has relatively weak semantic gravity and stronger semantic density around the concept of power. Mike uses examples, but mostly he is talking about the concept of power in relation to the state, and is largely summarising and going over again the forms and sources of power that Galbraith talks about in the text that the students have to read and refer to in lectures and also in their assignments. This is, in Mike’s terms, the one ‘big’ concept in his part of the course and he comes back to it over and over again. In his words, *you always go back to say “Galbraith, Galbraith, Galbraith”* (Mike, interview, March 2013).

In this lecture, he starts by bringing in a question asked in the previous lecture, which introduced Galbraith’s theory of power, with its three forms and three sources. He then asks students to define power which they do fairly abstractly, using definitions from the reading. There is a move towards stronger semantic gravity and weaker semantic density with the example of taking the taxi, but this is not a particularly useful or even applied example and so while in technically weakens the semantic density, it is not clear that this example would be particularly helpful in assisting students to understand what power is. After a brief question from a student edited out of the data text for reasons of brevity and focus, Mike put up a series of slides that focused, fairly abstractly, on explaining the sources and forms of power, and there were a few small shifts to stronger semantic gravity with the pictures that he put up in the slides, for example a picture of money, and of crowds of people at a protest march. But this part of the discussion is quite abstract, especially because Mike flashes through images on slides without really explaining or situating them within the discussion. There is a bigger shift towards stronger semantic gravity and weaker semantic density when he asks students to ‘buzz’ and then facilitates a discussion that applies the overall concept of power and its parts to the Marikana issue, which has the aim of both connecting the issue to a relevant context or example, and unpacking and teasing out the semantic density around the forms and sources of power and their application to the example.

Again, here, there is a wave, but it is quite a flat one in parts, although in this case because it stays fairly close to weaker semantic gravity and stronger semantic density and a fairly abstract discussion about power, with only fairly small shifts towards stronger semantic gravity, using examples and explanations to contextualise and illustrate the concepts as they can be applied to different contexts. There is a bigger shift towards stronger semantic gravity and weaker semantic density in the buzz, but as in Figure 5.5 representing Frank’s teaching of feminist theories in International Relations and the following debate, in the case of the discussion in Mike’s lecture following this buzz, there were several comments from students that represented
stronger semantic gravity and weaker semantic density in their ability to abstract the concept
from its application to a more general and more condensed understanding of it, and Mike did
not make these connections explicit in his facilitation either. Rather he repeated comments from
the students and added his own to these, but linked the students’ comments to one another
rather than the contextualised commentary to the concept of power.

Although there are several other lectures in which power is discussed, both abstractly and in
relation to different examples or issues, that allow the students to begin to apply the concepts to
different issues or events or examples, the same definitions of power seemed to keep coming up
over and over, which indicated a limited strengthening of semantic density around this concept
over the duration of the module. In Frank’s section of the course power was a central concept as
well, but it was used in a more instrumental and less theoretical way, largely in relation to the
behaviour of states in the international system, and also in relation to explanatory frameworks
for the international political system, such as Realism and Liberalism. Thus, although this
concept was similarly named in both modules within the course, it was not necessarily used in
the same ways or even to mean fully the same things beyond the basic definitions in the extract
from Mike’s lecture, above: power as the ability to exert your will over someone else, and to
control or use resources for your own gain or the gain of those connected to you.

It seems that Mike’s part of the course, which was more closely allied with South African Politics
and Political Theory as sub-disciplines, used the core concepts such as power and the state in
more theoretical ways, to look at problems and issues through an academic political lens. In
contrast, in Frank’s section of the course, allied with International Relations as a sub-discipline
of Political Science, the concept of power was also used in relation to the state, but in a more
instrumental way, as a way of talking about how the state acts towards other states, and in
relation to explanatory frameworks such as Realism, which hold that states are unitary,
sovereign, power-hungry and defensive, in essence (Frank, field notes, videos, 2013).

While not representing two necessarily incommensurate uses of the concept of power, these
two modules do represent two different sub-disciplines of ‘languages’ within the horizontal
knowledge structure that Political Science seems to be. The connections, beyond Frank using a
similar basic definition of power to the one taught by Mike in term one, were not explicitly made
between these two modules, and between these two ‘languages’. Thus, while there may have
been a measure of cumulative learning within these modules, over the course as a whole this is
called into question, as these two modules represent ‘small walls’, kept quite separate, rather
than connected chambers, thus indicating a segmentation of learning across this course.
Further, there are instances of ‘small walls’ within these modules read as the different concepts
of theories that students were asked to apply or connect with different contextualised examples
or scenarios. How exactly these small walls were supposed to be connected to create coherent rooms or spaces – how the theory was supposed to be applied to the issues raised in the modules to create a coherent explanation or analysis of the issues – was less clear overall due to missed opportunities on the part of both lecturers to draw these connections or model this kind of cumulative learning.

3. Conclusion

This chapter has discussed and analysed relevant elements within the case study of Political Science pertaining to pedagogy, knowledge and cumulative learning. The course analysed is a first year, first semester course divided into two modules; the first is a more general introduction to foundational concepts in Political Science as a broad field, with particular reference to South African examples and politics, and the second module is an introduction to the specific field of International Relations.

Political Science is, in Bernstein's terms, a 'singular' discipline in the sense that there is no particular profession or vocation that is the natural point towards which students are directed through the course of the degree, as in Law, for example, or Accounting. The discipline does not, therefore, answer to a professional body outside of the university in terms of what to include in or exclude from the curriculum, and the curricula beyond first and second year level are often designed and written with the research interests and areas of specialisation of the individual university departments in mind, rather than because students need to have certain sets of principled knowledge or procedures in order to integrate into a particular field or profession. There are indeed certain theoretical lenses or bodies of work that students studying Political Science at almost any university would read; there is a canon for each sub-field or 'language' within this horizontal knowledge structure. For example, there are key theorists such as Hobbes, Locke, Marx, Galbraith, Lukes and Mill that almost all students, certainly in South African Political Science departments, will read if they take a foundational political theory course in first or second year.

Although there is a body of knowledge that students will come to know, this discipline is not a knowledge code, because the body of knowledge – the principled knowledge – is not the underlying orienting principle of specialisation; in LCT terms, the knowledge may be the focus of the teaching and learning, but it is not the basis on which students are judged to be successful or unsuccessful in the discipline. Rather, Political Science is a cultivated knower code with stronger social relations (SR+) and weaker epistemic relations (ER-). The lecturers' comments reflected that, in this case certainly, this knower code could be attributed in part to the
observation that this discipline is singular, and there is no definable profession that students could end up working in. Thus, because students need to be able to adapt to working in a range of fields – some mentioned by the lecturers for this course were politics, banking, management and also academia – they need to be equipped rather with a set of aptitudes, and have a certain set of approaches to working with knowledge, whatever that knowledge may be. They need to be able to think critically, to conduct research and read with understanding and a critical eye; they need to be able to articulate and defend a position and debate different positions with colleagues and peers; they need to be able to write well, and express their ideas and arguments both verbally and in writing.

These ‘skills’ are fairly general, although they are academic in nature and are intended to be purposefully taught and learnt in academic settings. They are general in the sense that they are not particular to this discipline; these ways of knowing or demonstrating learning and knowledge are asked of students in many social science and humanities disciplines, and many of these are often also knower codes, such as English or Cultural Studies (Maton 2007, 2013a). This is not, then, a principled set of procedures, but rather a set of aptitudes or dispositions towards learning and knowledge that students need to develop over the course of their degree, and also beyond. This knower code orientation influences the approaches taken by lecturers in terms of pedagogic practice. What was interesting to see in Mike’s teaching, predominantly, was the way in which the knower attributes that were desired in students, such as critical thinking and making clear arguments using theory and examples to substantiate them, often drove the pedagogic agenda, rather than the structuring or sequencing of the selected disciplinary knowledge itself.

What was further interesting to note was that this had limited success, seen in students’ seeming inability to link the theoretical knowledge to their existing knowledge, or to their examples or opinions in class discussions. This could be because there was a looser and less ‘principled’ approach to the teaching; the acquisition and use of academic skills was at the core of the pedagogic approach. Perhaps if the disciplinary knowledge – the core concepts and theory – itself had been brought into the centre and these aptitudes and abilities developed in relation to the knowledge in clear, more defined ways as knowledge practices rather than simply academic skills, especially given that these are first years students new to this field and these disciplinary discourses, there may have been more progress in developing these practices, even in the short time given to these modules and the course as a whole. Even though Frank had a more organised approach to his teaching, the ‘summary-style’ approach he tended to use when discussing theory also leant his part of the course breadth rather than depth in terms of teaching the knowledge, which seemed to leave students on the whole ill-equipped to draw the
theory meaningfully into their comments in class discussions. They were asked to do this, but few were able to, and neither lecturer specifically focused on guiding this in the discussions either.

In terms of the data examined in section 2.4, we can see flatter waves and even flatlines that indicate that the approach to pedagogy in some instances constrained cumulative learning, driven as it seemed to be by the lecturers’ desire to create a certain kind of student with a set of aptitudes or ways of thinking, reading, writing, speaking, etc., rather than developing desired abilities, practices or skills in relation to a body of disciplinary knowledge. The seeming lack of ability of many students who contributed to class discussions to link theory and context in ways that showed them to be making articulate arguments, or substantiating their claims, or justifying their opinions with critical reflections on what they were reading or learning in class, could be due to the flatter waves that tended to link the theory very clearly to specific contexts, but struggled to show how it might be applied or understood beyond those contexts.

In many cases the theoretical concepts were tightly linked to contextualised case studies, examples or narratives that may have made them clearer or less abstract, which enabled students to understand them in more accessible terms, although not all of the examples were necessarily strong in terms of their explanatory power, such as Mike's taxi example. However, the concepts were not then always sufficiently abstracted again, to enable students to generalise sufficiently to apply them in other contexts and in other topics raised during class discussions. The students seemed to struggle to draw links between the abstract theory and a range of possible applications, and the ways in which this needs to be done according to the rules and conventions of this discipline that dictate what counts as knowledge and ways of communicating it do need to be modelled and taught as part of a disciplinary discourse.

It is not clear from the data collected in this study that these lecturers were doing enough of that explicit modelling and perhaps the lens cast onto the data by the conceptual tools drawn from LCT can begin to show ways in which the pedagogy can be examined, unpacked and understood to enable changes that may make the goal of cumulative learning in this course, and perhaps in the discipline more widely, more attainable for students and lecturers.
CHAPTER SIX: CONCLUSIONS – SIGNIFICANT FINDINGS IN THE DIG ITSELF AND IMPLICATIONS FOR THEORISING PEDAGOGY, CHANGING PEDAGOGY AND FURTHER RESEARCH

1. Introduction

The previous chapters have detailed the planning and unfolding of the dig, as well as examined the findings in detail. This final chapter looks at the dig and especially the findings and considers what they might mean within the fields in which this study is located, such as pedagogy, social realism and higher education. It also considers what further research and practice are necessary in order to take the research process begun here further.

This study has posed and answered important questions regarding the kinds of pedagogic practices that enable and constrain cumulative knowledge-building and learning in academic disciplines within higher education. This study was largely premised on an assumption, supported by research in higher education and discussed in detail in Chapter One, that cumulative learning is necessary for the goal of lifelong learning to be possible to achieve, as well as the goal of enabling students’ epistemic and ontological access to disciplinary discourses and ‘systems of meaning’ (Wheelahan 2013). The aim of the study was to develop a theoretically and analytically stronger theory of pedagogy than those more commonly available and used in higher education research and practice, one notable and very popular example being constructivism. Contra constructivism’s relativist position regarding knowledge in curriculum and pedagogy, which essentially claims that knowledge is socio-historically constructed and therefore inextricably connected to both power and knowers, this study has taken a social realist approach to this research, which argues that knowledge is indeed socially constructed, but not just in any way or by solitary individuals but rather by actors within social fields of practice. Social realism also argues that while knowledge emerges from these social contexts or fields, it becomes about something other than just itself or just the knower once it has emerged, and therefore that it is not reducible to the knowing or to the context; it is, rather, objective and has its own properties and powers. This study used relevant parts of Legitimation Code Theory’s realist conceptual and explanatory framework to do this research.

This study further argued that including greater numbers of students in disciplinary discourses and systems of meaning (Wheelahan 2013) is necessary for social inclusion and social justice to be achievable. This is particularly important for students from educational, socioeconomic and linguistic backgrounds (CHE 2013) that are less congruent with the kinds of teaching and learning practices and habituses valued in higher education (see Bourdieu & Passeron 1990; McKenna 2004), and many student entering higher education in South Africa and globally come from an increasingly diverse array of backgrounds, and bring with them different kinds of
social, economic and cultural ‘capital’ (Bourdieu 1986). This means, in fairly crude terms, that increasing numbers of students will come into higher education with a range of levels of preparedness for study at this level, and with diverse approaches to studying and engaging in their own learning. In LCT terms (Maton 2013c) students come to university with different semantic ranges; some are more and others less able to ‘wave’ or to move with relative ease between different contexts and abstracting or generalising principles or conceptual knowledge.

Given these realities, designing and enacting pedagogies that enable the greatest number of students to move between and beyond their present learning contexts so that they can become ‘capable and adaptable lifelong learners’ becomes a central concern for higher education research and practice. A further concern is creating pedagogies that enable students, especially from poorer backgrounds, to increase their semantic ranges as they become more familiar with disciplinary discourses, systems of meaning, knowledges and related skills and practices. This study has also, then, been concerned with pedagogy not just as a matter of enabling cumulative and interconnected learning, understood as a core goal of higher education, but also with enabling this kind of learning as a central goal for achieving greater social inclusion and social justice in and through education.

Using a qualitative, case-study research approach, documentary, classroom observation and video data, and interview data was gathered over the course of a semester in two first year courses in two different disciplines, Law and Political Science, which were taught by two lecturers each. Using the selected tools from Legitimation Code Theory, in particular drawn from Specialisation and Semantics, relevant aspects of the data were selected and analysed in order to answer the central and sub-research questions posed by the study. This chapter summarises and comments on the key findings of the study in relation to the research questions and considers this study’s contribution to the field in which it is located. It further considers the implications of this research for practice as well as for future and further research.

2. Major findings and answers to the questions

This section restates the research questions as a reminder for the reader of the focal points of the study, and it addresses the ways in which the study has answered these questions, beginning with the central research question:

What kinds of pedagogic practices enable and/or constrain the cumulative building of powerful knowledge in the disciplines?

The sub-research questions further addressed in thus section are the following:
Firstly, how knowledge is conceived of, recontextualised and reproduced through pedagogic practices, and

Secondly, how pedagogic practice can be theorised to illuminate potential gaps as well as connections in terms of cumulative learning in ways that enable understanding and analysis.

The final research question posed, regarding the implications of theorising pedagogic practices using Legitimation Code Theory and social realism for enabling epistemological access to and social inclusion within academic disciplines, will be addressed in section 3.

2.1 Enabling and constraining cumulative learning

In response to the first, main question, this study made several findings. Firstly, pedagogic practices that are focused on knowledge in the disciplines as part of a larger disciplinary discourse rather than seemingly discrete selections of pedagogic content knowledge do seem more likely to enable cumulative or connected rather than segmented learning. Further, courses or modules that focus on assisting students in acquiring, using and producing (see Young 2008b) relevant disciplinary knowledge in appropriate ways rather than on ‘covering’ content or developing skills, are also more likely to achieve an outcome of cumulative learning. Pedagogic practices that are focused on taking students in a very structured and highly managed way through a defined and tightly paced and sequenced set of content can constrain cumulative learning. This is because this approach can lead to learning being segmented through knowledge and related practices being taught as ‘units’ of content, or as parts of a whole, with the whole itself (being the disciplinary discourse) being obscured. Students are thus constrained from appreciating the way the learning in the course can be connected to other courses or other parts of the wider disciplinary discourse they are learning. This was the case, although in different ways, in both case studies, where the teaching was focused on getting students to learn and understand the content, rather than introducing students explicitly to the ways in which knowledge is acquired, used and produced in the discipline, and why these ways are valued.

Pedagogic practices that are focused on developing within students a specific set of aptitudes, dispositions and academic skills, such as critical thinking, argumentation and analytical reading and summarising, for example, can also constrain cumulative learning by obscuring the ways in which the knowledge within the discipline fits together to create a basis on which to found the development of knowledge practices, rather than general academic skills. Even though academic skills such as critical thinking and analytical reading could be said to be expected of
many social science, and higher education, graduates, the ways in which different disciplines within the social sciences demonstrate critical thinking and textual analysis are often different, sometimes subtly so, and the differences are integrally connected to the rules and conventions of what counts as knowledge within those disciplines.

For example, in Political Studies lecturers commented that students needed to think more critically about more than just the Political Science knowledge they were learning. The form this seemed to take was being able to think more analytically about topical issues or questions, using the conceptual or theoretical knowledge they were acquiring, and make coherent arguments connecting the theory and the issues (Chapter Five, section 2.3.1). Well-evidenced and conceptually strong arguments are highly valued in all sub-disciplines of Political Science.

In Law, critical thinking looked slightly different, and was focused on being able to think analytically about a set of facts and produce a persuasive legal opinion within a formal and conventionalised structure, such as IRAC (Chapter Four, section 2.3.1). Students needed to think about a particular problem or set of problems within the discipline of Law in a particular way, and produce a particular form of thinking that is valued in the field of Law. In neither discipline are these academic ‘skills’ or practices generic. Therefore if a lecturer did present and attempt to teach these disciplinary practices as discrete skills, tacitly or unclearly connected to not only the knowledge but also the wider disciplinary discourse, including values, ideologies and practices, student may begin to separate theory and skills, or knowledge and its practices, which can segment learning.

Thus, this study has found that pedagogic practices that focus on introducing students to a disciplinary discourse, which entails a focus on knowledge and the way it shapes learning, including ways of reading, thinking, writing, speaking and also being, can enable cumulative learning over time. By focusing on the discourse, and the knowledge and rules for acquiring, using and producing that knowledge in recognised and valued ways, pedagogic practice can overcome the segmented learning that can occur when the focus is on a defined set of pedagogical ‘content’ or units of learning that must be covered, or on a set of loosely defined yet important skills that can become disconnected from, or only implicitly connected to, the disciplinary knowledge and related discourse.

2.2 Understanding and recontextualising disciplinary knowledge

In response to the first sub-research question summarised above, this study found that in both disciplines knowledge is implicitly understood as important, and in Law especially, it is part of the basis for legitimacy and success as this is a knowledge code. However, knowledge and
content, in the case of Law, and knowledge and skills, in the case of Political Studies, tended to be confused a little.

In the case of Law, the recontextualised pedagogic knowledge itself was packaged into study units, which comprised a lot of facts, cases, statutes and legal academic debates that students needed to learn. The content itself drove the pedagogic agenda, and the knowledge code underlying the discipline strongly influenced the decisions taken by the lecturers in terms of how they framed their classroom spaces and exchanges with the students, how they paced their teaching, and how they taught the content itself in terms of the ways in which concepts and terms were introduced, explained and drawn through the course, in the study unit topics, and in the case law and statutes. The course was taught in such a way as to create many down escalators, even within larger semantic waves, meaning that students were being taught pieces or units of information, rather than being explicitly given the ‘code’ to unlock the desired ways of acquiring, using and producing knowledge in pedagogic terms, for example in assessments.

It was indeed the case that there were semantic waves, longer and shorter in terms of the time taken to teach certain units of study or themes within the course (for example Core terminology and concepts took a week to teach, but within that week a small wave on a particular term took half a lecture), and steeper and shallower in terms of the moves between conceptual and contextual understanding. However, if the rules and conventions that explain or govern what counts as knowledge and what does not, and why, are not made explicit through the teaching, and it is not clear that this was consistently the case in Law, at least in this case study, students may be denied full epistemological access to the disciplinary discourse. In a professional discipline such as Law, where epistemological access is very closely connected to ontological access – to becoming a legal professional – pedagogy that limits epistemological access and cumulative learning has serious consequences for student success and for social inclusion both within the academic discipline as well as the world of professional legal practice.

In the case of Political Studies the disciplinary knowledge was less centrally placed within this course, seen in the way in which it was recontextualised through pedagogy, although this was not the case in both modules equally. Mike was far more focused on having interesting and controversial debates, and getting students excited about politics in the everyday sense such that Political Science as a disciplinary discourse tended to be pushed into the background. The everyday knowledge about political issues that students brought with them was not always clearly distinguished from the theoretical knowledge of the sub-discipline (Political Theory) into which this course fit, and the overall sense of the course was one of blurred boundaries and unclear principles for how and when and why to cross these. This could further explain why many students, even though we can only make this conclusion based on the responses of
students who spoke up in class, seemed unable to connect the theory with their opinions and examples and at least begin to show the acquisition and use of a cultivated disciplinary gaze.

Frank was more focused and less loose in his approach, but rather than being focused on introducing students to the discourse of International Relations as a sub-discipline of Political Science, he was focused on the pedagogical content of his part of the course and covering that within the allotted time. This could explain his ‘summary-style’ approach to his teaching, given the sense in the course of ‘covering’ rather than teaching or unpacking the knowledge and the related practices as ways of communicating what counts as knowledge for International Relations and why. There were several class discussions in which theory and examples were explicitly required to be linked, but the students who responded to the prompts and spoke up in discussions, which represented a fair percentage of the class, seemed unable to do this in the desired ways, or were limited in their ability to do this, thus indicating that they were struggling to take learning and knowledge from term one into term two, and also that they were struggling in term two to make relevant and meaningful connections between the International Relations theory and the debate topics.

Looking at both parts of the overall course it is of course very important to note that this is a first semester course, so the extent to which students will acquire and use these knowledge practices in relation to the Political Science knowledge selected and recontextualised in the modules will be limited. But in terms of the course aims and objectives, particularly regarding cumulative learning, it seems that a focus on covering a certain amount of content, which drove Frank’s teaching plans and agenda, and a focus on getting student students to engage in debate using their own prior or existing everyday knowledge, which drove Mike’s section of the course, did not fully serve the ends of cumulative knowledge building and also had the effect of sidelining the disciplinary discourse and the knowledge as the entry point into that.

In both case studies a finding was made in relation to a connection between the semantic ranges that were visible in the waves, down escalators and flatlines and the ‘drive’ behind the pedagogic approach, either the ‘content’ or codified disciplinary knowledge, or the contexts or problems in which the theory or more conceptual content knowledge was applied. I refer to this as ‘swell’ and use a metaphor of swell and surfing waves in order to explicate this particular finding.

In the ocean, the swell is one of the key elements that influences the height and depth of waves; a weak swell means flatter waves and a stronger swell means deeper, higher, more powerful waves. If you were surfing these waves, you would find it much easier to paddle out in the flatter ocean, and it would feel a lot safer than paddling out in the larger, often rougher surf. But, as a surfer, you want to start, perhaps, with the smaller, less difficult waves and with expert
coaching and practice progress to being able to surf the larger, more powerful waves with greater confidence and skill. You will not become a better surfer, or be confident enough to leave your break and find other breaks in which to test out and improve your surfing ability if you only ever surf the little, safe waves.

In this study, the data in these two cases has led me to a finding I can connect with this metaphor. The student is the surfer, and the disciplinary knowledge, combined with the pedagogic approach taken, forms the swell and the waves. The lecturer would be the surfing coach, and the repeated opportunities to acquire knowledge, apply and use that knowledge and receive feedback through a range of tasks would be what I refer to above as practice.

Students in their first year, when they are new to their disciplines and to the ways of teaching, learning and studying offered and expected at university, need to start off with the smaller, safer waves, or smaller semantic ranges. It may be wiser to begin with knowledge students bring with them from their prior learning or home contexts, and bring them slowly and with guidance into the more codified or structured disciplinary discourse with all its expectations than to plunge student into deep waters and steep waves. In this way, such as a novice surfer, students could build up their ability and confidence to tackle the steeper, larger waves. In teaching and learning this would mean moving students through cycles of learning, practicing and feedback towards more challenging theory and problems or questions that require them to employ greater and different abilities, knowledge and levels of confidence. In other words, moving from smaller or shallower to steeper waves gradually increases students’ own semantic ranges over time, and makes them more capable of moving between conceptual and contextual learning. To return to the metaphor, this approach to teaching can enable students to feel more confident about searching out new breaks, or new learning environments and contexts, such as a different degree programme or a change in career, because they will have been taught in such a way as to be able to apply and adapt their knowledge and their related abilities, skills, aptitudes or practices to these new contexts.

In Political Studies there was a weaker swell, overall, in both modules within the course, but this took slightly different forms. In Mike’s section, the module that students took in the first term, the driver was the political debates, topical issues and problems, particularly those in South Africa such as the Marikana massacre and the behaviour of certain political leaders. The concepts that were integral to the course and conveyed the disciplinary knowledge to students were brought into these contextual problems or debates as the debates called for them, rather than introduced, explained and exemplified through examples and debates. Thus, as we saw in Chapter Five in section 2.4.2, there were flatter waves and flatlines, representing a weaker swell pushing the waves along. Only a small section of the data was represented in this chapter, but
the trend or pattern over this part of the course tended towards smaller semantic ranges in these discussions, and this was little increase over time.

This module was only seven weeks long, and perhaps one could argue that this is too little time to make any significant increases in the semantic ranges of the class discussions, or of the students in their ability to begin to connect theory with problems or different contexts. However, while it is a short period of time, there should have been some indication of an increase, and certainly the outcomes for the module and the course expect this. But this may not have been possible because the pedagogical approach taken, to begin with issues and everyday knowledge of the students and connect these with theory in bits and pieces as relevant to the issues, obscured the boundaries between everyday and theoretical knowledge, and further segmented the theoretical knowledge rather than introducing students to parts of a connected whole. This could also explain why many of the students who contributed to class discussions were unable or barely able to connect the theory or concepts with these debates, and use the disciplinary knowledge as a lens with which to view current political events more critically or differently and so begin to develop a cultivated gaze.

In Frank’s section of the course the concepts came first, but rather than being explicitly connected to the elaborate examples he came up with, most of which drew on students’ everyday knowledge about the world, the connections were tacit and there were often leaps between theory and context without scaffolding the process of moving up and down the waves. Further, in discussing the theory rather shallowly and in a ‘summary-style’, Frank made the theory seem less connected to the examples he gave, to which the theoretical concepts were supposed to apply, and in this way made it feel as if the theoretical concepts, for example, Realism or Liberalism could be learned as lists, with many of the students largely left unsure as to how to make connections or apply theory to create the well-evidenced, coherent arguments Frank wanted them to make (Chapter Five, section 2.3.1). Although the concepts were taught before the examples and explanation were given, the manner in which Frank taught these concepts made the swell weaker in a different way to the way this appeared in Mike’s section of the course, but the principle here seemed to be the same: if the conceptual knowledge is taught in a shallow way, or is presented as too disconnected from the ways in which it is applied or the contexts in which it could find application, the result is likely to be more segmented rather than cumulative learning, and smaller rather than larger semantic waves over time, with students struggling to increase their ability to ‘wave’ or to grow in ability and confidence as they attempt to surf semantic waves in their own learning.

In Law, both lecturers were similar in their approach to introducing students to the conceptual, formal legal knowledge or pedagogic content, and it was this that drove their approach to
teaching their Law of Persons curriculum. They attempted to start off slowly with key terminology and concepts before moving, in Study Units 3 to 10 with the range of legal scenarios and contexts in which students could encounter and would need to understand and use the terms and concepts. Generally, in the data from both lecturers, the conceptual knowledge came first, was explained using more accessible terms and was then applied, either in case law or in fictitious or real examples. Students’ everyday knowledge was called upon less obviously, although in the examples there were clear attempts to connect the legal knowledge to students’ own lives and their own experiences in the world, such as inheriting from a will, or acquiring a legal domicile if they move countries or provinces.

The semantic ranges, initially, were smaller, and the discussions in class were less abstract as the course started. But as the course progressed, the semantic ranges did shift, and students were increasingly required, especially after the first formal test and the mid-term break, to make changes in the way they responded to tasks, such as verbally summarising cases in class or in writing. They were required, specifically, to use more and more of the correct legal phrasing and terminology, and the data shows this to be an attempt at increasing students’ ability to surf the semantic waves that the lecturers tried to create in their teaching with more confidence and ability. Again, this is a first-year, first-semester course, and the shifts will be fairly small, but there was, in both lecturers’ data, a clear sense of them attempting to move students through repeated cycles of introducing or reiterating concepts, explaining them and then applying them, from a place of being novices to a place of being able to show signs of acquiring the beginnings of a trained gaze. Concepts such as legal status and legal subjectivity were also drawn through several different study units and this further enabled the students to begin to see how these terms could find application in different contexts.

While there were instances in the data where an overfocus on getting through content resulted in down escalators and also flatlines, there were also strong semantic waves pushed along by a strong swell in the form of the codified legal knowledge, and while it was not fully clear that this has enabled as much cumulative learning as it could have, it certainly seems that this approach could enable this kind of learning. However, as stated earlier in this section, there needs to be less of a focus on ‘covering content’, and more of a focus on creating opportunities for students to repeatedly connect theory and problems and context in different ways, with feedback and pedagogy that is focused on introducing them not just to pieces of relevant knowledge, but to a wider discourse within which the knowledge and related practices have relevance, make sense and form part of what the discipline recognises and values. This kind of pedagogy, as this study has shown inasmuch as the data has enabled this, can enable both epistemological and ontological access to the disciplines in which students are learning and working. This is
important in all disciplines, but perhaps has a different kind of significance in professional
disciplines such as Law where there is a particular kind of professional and knower that
students need to become.

It may be the case, in some disciplines, that what counts as recognised and valued knowledge
and related practices or skills as well as professional or personal attitudes may need to be
challenged. But I contend, along with many other researchers concerned with issues of
epistemological and ontological access in higher education, that students need to be taught the
disciplinary knowledge and ways of knowing so that, if they do decide to challenge these, they
will know what they are challenging and why, and this will make their actions all the more
credible. In order to break the rules effectively, or bend them, it is useful to know what the rules
are and to have some experience of playing by them first. Thus, in order to teach students the
rules and conventions of the disciplines, pedagogic practice in academic disciplines needs to
have an understanding of its underlying principles – what is the basis for success and
legitimacy, and why is that so? It further needs to understand how knowledge can be
accumulated over time, and connected across courses and across different parts of a degree
programme so that these connections between conceptual learning, between contexts and the
shifts or moves between them can be explicated repeatedly to students as they eventually learn
to see and make these shifts in the ways they read, think, write, speak and act in their
disciplinary contexts. This kind of learning and teaching can further enable students to move
more capably between disciplinary contexts, because they will develop a clearer understanding
over time of where the boundaries are, what the boundaries demarcate and how to cross them
in the ways in which they write, read, speak, think and act.

Current constructivist approaches to teaching and learning development at UWC and in many
other universities nationally and globally which include curriculum alignment and a focus on
setting and achieving learning outcomes are focused on the level of the empirical, and tend to
collapse teaching events, such as lectures and lecturers’ and students’ experiences of these
events, into this uppermost level of Critical Realism’s depth ontology. The effect of this is an
inability to look beneath this layer to understand why some approaches to pedagogy yield
desired learning results and some do not. In other words, it cannot see, as this study has done
using the alternative conceptual and analytical framework created, the organising principles of
these two disciplines that have profound implications for both what is taught and how it is
taught.

Constructivism is a paradigm rather than an explanatory framework for research and practice
and as such provides few useful tools to analyse why students may not be achieving the set
learning outcomes. As a framework for designing pedagogic approaches or methods as well as
curricula it also makes it difficult for lecturers and researchers to account for how different kinds of knowledge need to be taught as well as how to select, sequence, and pace the teaching of different knowledges, and how to think through the moves that need to be made between the necessary abstraction and generalisation of conceptual or principled knowledge and its concretisation and application in contexts in which meaning can be made out of these abstract concepts or knowledge. It is the ability to move students through successive semantic waves that makes the learning and teaching authentic as well as cumulative. In short, the framework created in this study used to direct the study and the data gathered, as well as analyse the data, has offered what constructivism is largely unable to: a lens on pedagogy that can enable lecturers to examine their teaching critically, and to see, understand and also begin to fill gaps with teaching and learning activities and assessments that address the knowledge structure of the disciplines, and the ways in which the knowledge needs to be taught in order for students to learn cumulatively rather than segmentedly.

2.3 Creating an alternative approach to researching pedagogic practice

In response to the second sub-research question, this study found that Legitimation Code Theory, as a social realist analytical, conceptual and explanatory framework, has provided a powerful set of tools for analysing and understanding pedagogic practice in these two disciplines. The data this study was able to gather, guided by these tools and the research questions posed, was rich and varied, and it is a pity that time and space in this particular study did not allow for more of this data to be included, analysed and discussed in depth. This study concludes that, in order to make stronger claims about pedagogic practice – to argue for a stronger theory of pedagogy as was this study’s aim – a framework that can help researchers to dig beneath appearances and surfaces to find, see and understand the real mechanisms and tendencies that are shaping and giving rise to practices, events and experiences is necessary.

Knowledge is a generative mechanism that is real, and has its own powers and properties that enable it to talk back to pedagogic practices, shaping them as it is in turn shaped by them. This has come through in the findings of this study. Further, this study has shown that there is a great need in research on pedagogic practice for a theoretical and analytical framework that can focus on knowledge and related ways of knowing without conflating or collapsing the two. In other words, while they are, as social realism argues, two aspects of a relational field of practice, actors doing the knowing and the knowledge that can be known are two separate things and need to be analysed separately in order to understand, within discipline-specific fields, what kinds of knowledge and practices are valued, and what kinds are not. This understanding is necessary for designing pedagogical approaches that enable the kinds of cumulative and
ongoing teaching and learning that will bring students into the disciplines as recognised knowers over time, and that will give them the means of acquiring, using and producing knowledge in the ways that are valued or acknowledged as being valid. Thus, LCT as a broad and deep set of conceptual, analytical and explanatory tools is one such framework that has allowed this study, as part of a wider field of social realist research in higher education, to make strong, valid claims about pedagogic practice, as it has enabled a layered, nuanced and thick empirical account of the pedagogic practices in these two disciplines.

It is worth noting here, in spite of these findings, that a classroom or lecture hall is an open system in critical realist terms (Sayer 1992). In other words, events within classrooms do not happen with any fixed regularity, and while one can observe certain patterns, it is difficult to attach causes to these with any certainty. Similar kinds of behaviours could be caused by different factors. For example, students may comply with rules for behaviour in lectures at first because they are new to university and the lecturer and feel less secure. Later on they may comply because they see the value of these rules for promoting a respectful learning space in which they can listen to and learn from their peers and lecturer. These case studies, and indeed any lecture room or pedagogic relationship such as the ones represented in this study, are open systems in the sense that there are many different factors that have influenced the behaviour of both lecturers and students, such as past teaching or learning experiences, desired goals for these courses, or relative levels of expertise or knowledge of the disciplines. It would impossible to control for all of these, and this study has necessarily attempted to draw valid conclusions based on particular pedagogical patterns emerging from the data, taking into account the fact that these conclusions could be different if other parts of the system were taken into account in the analysis, or if another lecturer was teaching the same course.

In spite of the fact that these case studies represent open systems, and that any patterns or regularities noted in the data gathered and analysed in this study may not be found in the same way if, for example, different lecturers taught these same courses, it is possible to extend the findings and conclusions to contexts beyond these specific case studies and this particular university. Specifically, one could certainly argue that Political Science, as a discipline taught in many different universities around the world, tends to be a knower code, and given the nature of how the learning needs to happen – in close contact with knowledgeable lecturers and peers over time, immersing students within the disciplinary ways of thinking, reading and responding – it tends to be a cultivated knower code. Thus, while different lecturers may approach the teaching of a course such as the one discussed in Chapter Five in a range of ways influenced by, for example, their own research interests or their own immersion in the disciplinary knowledge and ways of knowing, what may well be similar across Political Science departments will be a
need for students to cultivate their gaze over time, with the basis of achievement being the ability to cultivate this gaze and the attendant dispositions, attitudes and abilities successfully.

Looking at Law, one could argue that this discipline, certainly in South African universities, tends to represent a knowledge code, given the emphasis in practice on legal professionals being technically competent, deeply knowledgeable and well trained in the required ways of doing legal research, leading evidence, writing heads of argument or preparing legal memos or briefs for example. Further, because of the stronger focus on these technical or knowledge-based rather than personal or knower-based competencies or abilities, it tends to represent a trained gaze which students who apply themselves and become proficient in the required knowledge and procedural and technical practices can acquire successfully.

These findings may not always hold true in every case, and empirical research in different Law faculties and Political Science departments in different national contexts may reveal contrary data, but as a rule of thumb this kind of knowledge can be useful in at least beginning, as a lecturer or a curriculum writer, to understand what kinds of knowledge or aptitudes are valued and what kinds of things are emphasised, often tacitly, in the way the discipline is presented and taught to students. This kind of understanding, and an ability to use some of the tools this study has used to analyse and unpack pedagogic as well as curriculum processes and underpinnings can help lecturers to begin to make changes in their teaching that can address this sense of a ‘gap’ between what is expected and what many students are able (and unable) to do adequately. Although this study has necessarily drawn boundaries around what has been selected and analysed from the data, as well as around what LCT and other conceptual and explanatory tools have been used, it has found that using the kind of framework created and employed here can provide a useful, illuminating and also empowering alternative approach to creating pedagogic environments than the ones offered by many constructivist approaches that are currently very popular in higher education.

Having discussed the significant findings and the responses to the first three research questions this study posed, this chapter will now turn to the final research question and consider this study’s contribution to the field, as well as briefly discuss the implications of this research for pedagogic practice and for further research.

3. Implications for the intellectual field, for practice, and for further research

There are two subsets of implications of this research that need to be discussed in this section. The first is the implications of this study for the intellectual field of production in which it is located: the research and literature it speaks back to and the conversations within the field it
has sought to join and contribute to. The second is implications for shaping and speaking back to the pedagogic practices in these two disciplines and the possibilities of translating these tools into practical tools for changing and growing practice in these, and other, disciplines. Leading on from this are implications concerning further research.

3.1 Speaking back to the literatures: this study's contribution to the field of research

The field of research using Legitimation Code Theory is relatively small compared to other intellectual fields of production within higher education research. But it is growing fast, and many new studies are being proposed, conducted and reported on. As Chapter One pointed out, however, there are many more papers and articles reporting on research into curriculum, and understanding how knowledge structures and specialisation codes influence what kinds of knowledge get recontextualised into curricula and how this happens, rather than on pedagogy. This study thus aimed to contribute new understandings of how LCT tools, in particular from Specialisation and Semantics, can be used to create a conceptual and explanatory framework that can be used to study pedagogy in a relatively novel way.

Semantics in particular is a very new part of the LCT 'toolkit' and thus there are not yet very many studies researching how Semantic tools can be used to analyse and understand curriculum design, and there are even fewer about pedagogic practice and knowledge-building processes in different academic disciplines. The tools themselves, semantic gravity and semantic density, are relatively new compared to the Specialisation tools which were first written about over ten years ago. It has therefore been a challenge to apply and enact their use in this study, as one can at this stage only draw heuristic diagrams to represent teaching moments or a series of moments, and this can seem a little vague rather than concrete and exactly measurable. I would argue that trying to measure how high or low one is on a semantic scale would perhaps be easier in the intended curriculum on paper rather than in the enacted curriculum seen in the messiness of teaching and assessment. Nevertheless it is one of the limitations of this study that it can only present the reader with heuristics, rather than with more accurate, clear and measured representations of classroom dialogue and interaction.

In spite of this limitation and others noted in the following sub-section, one of the contributions this study has made is to join this rapidly growing conversation, or set of conversations, on social realist and LCT analyses of pedagogic practices, and how different kinds of emphases and underlying organising principles can shape and influence different kinds of pedagogic practice with important implications for cumulative learning, social inclusion and epistemological access. Legitimation Code Theory research is one field to which this study has contributed,
extending conversations regarding, in particular, the use of Semantics to analyse and understand practice, and adding new understandings to the ways in which Specialisation can also be used to analyse different dimensions of pedagogy.

A further field of research and practice this study speaks into, and perhaps also troubles, is that on ways of teaching to enable epistemological access and student success in higher education. Much of the current research that is gaining ground and also followers in higher education centres on how to create ‘authentic’ learning experiences for students that teach them skills that are relevant for the world of work and that are also relevant for them to be lifelong learners and critical citizens in the world. In part this research is influenced by student-centred approaches to learning that prioritise students’ prior learning and personal ways of making meaning out of their learning (see Chapter One, section 2.1 for detailed discussion). Much of this research is influenced by constructivist paradigms and tends therefore to conflate knowledge with knowing, and in doing so becomes ‘knowledge-blind’ (Maton 2013a: 4). This knowledge-blindness means that these studies tend to take a relativist approach to knowledge, which means that knowledge as an objective and real mechanism that can act upon students, lecturers and pedagogy as much as it is produced through pedagogy and made sense of by students and lecturers in social contexts is obscured. Research that does this can end up presenting ways of designing pedagogic approaches or methods as a kind of one-size-will-fit-all; for example creating authentic learning environments with ill-defined tasks and an emphasis on student-led inquiry and teachers as facilitators rather than knowledgeable expert teachers (Herrington & Herrington 2006; Jonassen 1998), or student-centred learning with an emphasis on students being more able to select what they want to learn, and manage the sequencing and pacing of their learning to a greater extent (Chen et al 2011; Mims 2003).

A final area of research to which this study has made a small contribution concerns the differences between teaching disciplines that can be regarded as singulars and those that can be regarded as regions. Although I cannot reach very firm conclusions here, and more research would most certainly be needed to do so, my study does point to a difference in terms of the way in which lecturers tend to orient students towards a field of practice as very clearly defined or less defined and clearly articulated. In Law, a professional discipline, the lecturers made many mentions of ‘practice’ defined as practicing the law, and indicated at different points during the course what students might need to do, think about, or take action on one day when they are practicing attorneys or advocates. In Political Science, by contrast, while there were mentions of students thinking like ‘analysts’ or like ‘NGO workers’ what this consisted of was less clearly defined or articulated, and there was a more vague sense of what the possible world of practice was here. It seems that, based on my data and a broad understanding of other
professional disciplines like Physiotherapy, Accounting and Engineering, that teaching in regions does require lecturers to face both ways (Barnett 2006) in their pedagogic practice and not just in their curriculum design. They need to bring the world of practice more visibly and more articulately into the classroom and show students what will be expected of them through the assessment tasks they design and the teaching and learning activities they set up and use to enact the curriculum in practice. Based on my data and my own experience of studying in disciplines like Political Science, English and Philosophy, which can be described as singulars, I can tentatively conclude that there is far less need for such lecturers to consider the world of practice or to bring it into the classroom in tangible ways. Thus, this study's small contribution to this research can be summarised as saying that this study has begun to grapple with the ways in which singulars and regions need to consider which way they are facing in pedagogy as well as in curriculum, and that considering this in the latter does not always ensure that the students make the relevant connections between the world of academia and the world of practice; the connections need to be made meaningfully where relevant through pedagogy and assessment as well.

There are limitations to how much my study can both contribute to and trouble current and existing research and literature, narrow as its focus is. But I hope it has made a valuable contribution to research on pedagogic practice by offering a viable, strong alternative to research that focuses shallowly on pedagogy as being student-centred and focused on more general or generic kinds of learning that can be used by students to make their way in the world, rather than more deeply and in a nuanced way at what the tools and methods need to be helping students to learn in relevant ways within different disciplinary contexts and the worlds of work that these tend to connect to.

### 3.2 Implications for practice and further research

As noted in both Chapters Four and Five, data were carefully selected to show instances of semantic waves where semantic gravity and semantic density strengthen and weaken inversely to one another. This is, as was explained in these chapters, only one possible permutation of a semantic wave, and it may well seem more intuitive to readers that semantic gravity and semantic density should strengthen and weaken in relation to one another in a range of ways, and not always inversely. There are instances in the data I have gathered where this is indeed the case. However, in selecting the data to analyse and discuss in these two chapters, I considered very carefully my overarching research question. My concern here was not to test the limits of the LCT tools, or to provide a highly nuanced semantically dense account of these two disciplines. My overall goal was to find and use an alternative theoretical and analytical
framework for examining, analysing and also critiquing pedagogic practice. As such, I aimed in this study to provide readers with a broader and more accessible view of LCT and what it has to offer as an alternative to social constructivism, even though this may well mean losing some of the nuance and complexity that could be drawn out of the data. I believe this aim has been achieved. Noting the limitations of what I have done in this study, and the many other ways in which data like mine can be analysed and understood, points to exciting avenues for further research and enquiry, especially in the area of Semantics.

This is more of a conceptual or theoretical study rather than a study creating a practical intervention or project and assessing its successes and failings. There is empirical data to support the findings this study has made, but this is study aimed to understand current practice and possible gaps and silences identified by lecturers, in current research and in my own experience in working as a tutor, lecturer and academic development practitioner over the last eight years. This study was an initial attempt to identify particular pedagogic practices informed by my researcher’s gaze which was shaped largely by LCT and social and critical realist underpinnings and analyse them to find a stronger theory or more persuasive or credible account of what is happening and why this might be so than current constructivist approaches have offered.

But the findings of the study do have strong implications for pedagogic practice, and could be used to develop and guide further work with lecturers in these disciplines, as well as further research on this work. The data and findings could be shared through workshops and seminars with the lecturers who participated in this study, and with others in their departments, and this could be a powerful starting point for conversations about how knowledge is indeed conceived of, recontextualised and taught within these disciplines, and how we could rethink long-held, tacit and sometimes constraining assumptions we may be making about what is possible in teaching, and what students come to higher education with and what they need to leave with as just two examples.

The tools used in this study, while highly theoretical, can also be translated into more accessible analytical and explanatory tools for lecturers unfamiliar with LCT to begin to think about, see, understand their own teaching and their students’ learning in new ways that open up possibilities for growth and change in both. The toolkit used in this study is not claimed to be the answer to these kinds of questions, but it is clear that it is an answer to the kinds of questions this study has been asking, and to some of the larger questions about social inclusion and social justice and how to ensure that these concerns become part of higher education in more overt ways. It is a productive answer too, because this study has opened up other questions about, for example, professional education and knowledge and articulations between
academic and practice. It has thus opened up possible avenues for practical work with lecturers and students as well as further theoretical and empirical research that builds cumulatively on the research discussed here and that further challenges some of the findings of this and other similar studies and continues these necessary conversations.

This study therefore has important implications for enabling the thinking about and analysis of pedagogy and the role of knowledge in pedagogy that can open up possibilities for the enabling of social inclusion and social justice through epistemological access for even larger numbers of students. This is because, as this study has shown, the basis for inclusion should not be primarily a recognition of and catering in pedagogy to different learning styles or socio-cultural backgrounds and everyday knowledges; rather the basis for inclusion, according to this study and to social realist studies with which it is allied, is access to the ways of acquiring, using and producing knowledge in the disciplines that make the rules and conventions clear, explicit and attainable through participation in a pedagogic relationship with a lecturer who is able to enable cumulative learning.

This claim does not negate the arguments and discussions about the social nature of knowledge and the extent to which some come to acquire it more readily than others because they have had access to schooling and also home backgrounds that are more like the university environment and are more recognisable to them. Creating pedagogies that can enable cumulative learning and that focus on introducing students to more than pedagogical content knowledge or technical and academic skills, and that address different organising principles as well as different bases for success and achievement in the disciplines, is no small task. This is, in reality, a large task and may be overwhelming for many lecturers working in higher education in South Africa and around the world given global pressures on universities to widen access and participation and on lecturers and tutors to make it possible for many more students to successfully join the ‘knowledge economy’ and society as productive contributors. These pressures mean that classes are growing in universities around the world, making it more difficult for lecturers to give students many opportunities to try, make errors, receive feedback and eventually succeed at assignments, for example, or to get to know all their students’ names and backgrounds. Making the kinds of changes to pedagogic practices that this study suggests may enable and facilitate different and perhaps more desirable kinds of learning will not easily and unproblematically answer very real concerns about how students from linguistic, socioeconomic and school backgrounds that are very different from those of universities will be able to make sense of this learning or do it successfully.

Much work still needs to be done, and research that includes talking to students, looking at their work and bringing in their experiences and understanding of teaching would be necessary to
begin to explore these concerns more effectively. This kind of data was not included in this study, and so these voices and experiences are not present. This study, as the start of my own research using tools such as those offered by LCT and social and critical realism, was focused on one part of the puzzle, and this focus has enabled me to begin to grapple productively with some of my own concerns discussed in Chapter One, as well as some of those of my colleagues.

Understanding where students are coming from, even if this is limited by the size of a class or a lecturer’s workload, is a very necessary step in engaging students in their own learning processes as well as in making them part of a group of students learning together. Social inclusion and social justice concerns cannot be adequately served by a greater focus on knowledge and on access to disciplinary discourses alone without any concern for students’ lived realities as well as their prior learning and already-held knowledge about the world around them. To go back to the point made in Chapter Two, section 1, this study did not aim to replace one way of doing things with another, or argue for some kind of ‘either/or’ approach. Rather, it attempted to take a ‘both/and’ approach following social realism (Maton & Moore 2010), arguing that there are gaps in current approaches to pedagogy that may be part of the reason why, in South Africa at least, so many students are failing to make sense of their learning at university and are failing or dropping out (see CHE 2013; Scott, Yeld & Hendry 2007).

This study has suggested that part of what is creating this gap is the knowledge-blindness of many current constructivist approaches that focus on how we teach without being fully able to consider more deeply how the ‘what’ we are teaching influences the ‘how’. Thus, this study has aimed to consider more fully the ‘what’ – the knowledge and related practices, attitudes and discourses – in a way that brings this back into thinking about and doing pedagogic practice with the end goal, hopefully, of creating a framework that can be used as a starting point for practical work with lecturers around rethinking and reimagining pedagogic possibilities in their lecture halls and classrooms. A further goal is continued and expanded research into how we can best support, guide and teach the greatest number of our students to surf the waves of their present and future learning and related ways of doing and being with greater confidence and with greater understanding of what they are doing, when and for what purpose.

Perhaps, by developing and using stronger accounts of pedagogy such as the one this study has discussed, we can educate graduates to be better prepared for lifelong learning, for work, and for contributing to growth and change in society; not through giving them access to generic skills but rather by giving them access to understanding the rules and conventions (Boughey 2005) of their disciplines, the maps of the boundaries and borders between different kinds of knowledge and ways of knowing, and the means for understanding when and how to cross them in their ongoing learning and work. It is my hope that this way lies greater social justice in the
sense of both epistemic and ontological access to disciplinary knowledge and learning for many more students, particularly for those from poorer socioeconomic and educational backgrounds for whom higher education is often a mystery and a struggle. I hope that this study has provided an alternative way of analysing and understanding pedagogy in higher education to those presently offered by constructivism, and that, by using and expanding on the tools this study has used to create this alternative 'external language of description' (Bernstein 2000: 132), we can begin to think differently and more productively about how we can educate future generations of graduates.
REFERENCES AND SOURCES

1. Primary sources

Documents

Introduction to Political Studies 131, Email from Course Coordinator, October 2012.
Introduction to Political Studies (POL131), Course Outline, Semester one, 2013.
Introduction to International Relations (POL131), PowerPoint Slides, Semester one, 2013.
Introduction to Political Studies (POL131), PowerPoint Slides, Semester one, 2013.
Law of Persons (LOP112), Course Outline, Semester one, 2013.
University of the Western Cape (UWC). 2011. Integrated Charter of Graduate Attributes and Strategic Plan for Teaching and Learning, University of the Western Cape. Online at: http://www.uwc.ac.za/TandL/Pages/Graduate-Attributes.aspx#.Ujr5Lca_BXw.

Field notes

Field notes. Law of Persons 112, Rachel (Group A), Semester one, 2013.
Field notes. Law of Persons, 112, Courtney (Group C), Semester one, 2013.
Field notes. Introduction to Political Studies 131, Mike, Term one, Semester one, 2013.
Field notes. Introduction to Political Studies 131, Frank, Term two, Semester one, 2013.

Interviews

Interview, Courtney, Law of Persons 112, 7 May 2013.
Interview, Frank, Introduction to Political Studies 131, 13 May 2013.
Interview, Mike, Introduction to Political Studies 131, 20 March 2013.

Videos of lectures

Lecture 1, Courtney, Law of Persons (LOP112), 11 February 2013.
Lecture 4, Courtney, Law of Persons (LOP112), 18 February 2013.
Lecture 1, Rachel, Law of Persons (LOP112), 11 February 2013.
Lecture 1, Mike, Introduction to Political Studies (POL131), 4 March 2013.
Lecture 2, Mike, Introduction to Political Studies (POL131), 5 March 2013.
Lecture 3, Mike, Introduction to Political Studies (POL131), 8 March 2013.
Lecture 1, Frank, Introduction to International Relations (POL131), 22 April 2013.
Lecture 2, Frank, Introduction to International Relations (POL131), 23 April 2013.
Lecture 3, Frank, Introduction to International Relations (POL131), 26 April 2013.
2. Secondary and textual sources


Buzan, T., & Buzan, B. 1996. The mind map book: How to use radiant thinking to maximize your brain’s untapped potential. New York: Plume.


Leibowitz, B., Bozalek, V., Rohleder, P., Carolissen, R., & Swartz, L. 2010. 'Ah, but the whiteys love to talk about themselves': discomfort as a pedagogy for change. *Race, Ethnicity and Education, 13*(1), 83-100.


Street, B.V. 1995. Social literacies: Critical approaches to literacy in development, ethnography and education. London: Longman.


Appendix: example of data coding from Nvivo10©

This is a screenshot from Nvivo10© to indicate what the coding looked like in the programme. This is the data coded for Law (Chapter Four). This was a list generated at an early stage of the coding process, using the generative or more ‘emergent’ descriptive codes guided by the data itself.

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<th>Sources</th>
<th>References</th>
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Below is an example of the way the data was coded under the seven headings mentioned in Chapter Three that were used to organise the data for both case studies. Again, this example is from Law (Chapter Four). This example is taken from my research journal, transcribed from Nvivo10©, and is from a later stage in the coding process when the data had been organised under the headings, and repetitive or similar categories or nodes had been merged and ‘cleaned up’. Beyond this stage, in both case studies, lay further organisation of this data into themes and paragraphs as the chapters began to be drafted.

**Habitus**
- Pointing or orienting to the world of work

**Density**
- Accumulation of knowledge
- Building up concepts over time

**Gravity**
- Highlighting important points for learning
- Interconnectedness of disciplinary knowledge
- Simplifying complex language
- Unpacking concepts and scenarios
- Use of concrete examples to illustrate concepts

**Framing**
- Approach to teaching
- Assessment issues
- Collaborative learning in class
- Correcting student errors in class
- Experience of teaching environment
- Teacher control of the classroom

**Knower**
- Characteristics of a successful attorney
- Discipline or student management
- Knowledge as open to debate and contestation
- Personal comments on the nature of the discipline
- Professional and academic identity
- Student attributes

**Knowledge**
- Academic writing and responding to tasks
- Development of necessary skills
- Responding correctly using correct form or style
- Responding correctly using correct terminology or vocabulary
- Teaching or modelling of desired learning or responding

**Classification (Professional knowledge)**
- Changing nature of knowledge in the discipline
- Development of curriculum
- Facing towards the profession
These final two examples illustrate part of the stage following the stage of coding on p192, where I further grouped, reorganised and plotted the data I had coded to begin to form sections, sub-sections and paragraphs for each chapter. These are snapshots from my research journals which I kept by hand.

**Example 1: Political Science**
Example 2: Law

Finished the section on knowledge - covered most of the data 'category' I found useful. Now need to move onto 'Knower'. Bit stuck here, this is kind of what I have:

- Desire for students to be responsible, independent, active learners, motivated to do new.
- Characteristic of attorneys
- Knowledge goes to concentration + olebase
- not sure if this fully fits here - may also link to skills (knowledge)
- but part of this is knower characteristics like curiosity + questioning
- perhaps it would be more sensible to link this to knowledge
- Critical thinking, analytical through as knowledge drives

Relates to framing as it means to relational aspects of the classroom.