

A study of structure and agency
interactions in the changing context of
English higher education:
What is happening to Pedagogy and what are
we doing about it?

Thesis submitted in fulfilment of the requirements of
the degree of Doctor of Philosophy

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I hereby declare that, except where explicit attribution is made, the work presented in this thesis is entirely my own.

A handwritten signature in black ink, appearing to read "B. Conn".

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Abstract:

This research explores aspects of emerging pedagogy in the work of seven members of faculty across disciplines, in three English higher education institutions. It takes place in a context of changing global and national circumstances and contributes insights into pedagogy as it is enacted under the distortion of market forces and the commodification of education.

A case study approach, underpinned by critical realism is used to analyse participants' pedagogic endeavours. This is combined with a multi-level consideration of the global, national and institutional processes influential in each case. To overcome the epistemological challenges involved with dealing with the complexity of the myriad possible influences, methodological features of the research involve the use of retrodiction and abductive inference.

Features of agency, of human knowledge and pedagogy and of the changing nature of higher education are analysed by identifying structures as having interacting social, cultural and material aspects within a stratified reality. An Archerian morphogenetic approach reveals structure and agency interactions over time in participants' accounts.

The study finds that, in spite of adverse conditions, there is a richness and depth to participants' understanding and facilitation of their students' learning. Participants draw upon significant internal resources to overcome the problems faced in teaching. Pedagogic approaches that are most distorted, under the drive to commodify and marketise aspects of higher education, are those that allow students to develop their own practices within the discipline they are entering, and to reformulate external knowledge for themselves within their own unfolding experiences. This study claims that the use of critical realism has been an extremely fruitful way to analyse emergent aspects of participants' pedagogy within the current complex and shifting terrain of English higher education.

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Chapter One: Introduction

This project is about developments in pedagogy in the context of the current restructuring of higher education in England. Pedagogy is under pressure from changes in the global, national and institutional environments at a time when the state provision of higher education is being eroded and there is a shift towards marketised higher education (Bourdieu, 2003). This is a time when the public education sector is being opened up to privatisation (Ball, 2012; Brown and Carasso, 2013). In spite of structural changes occurring in material resources, social roles and relationships and the cultural environment in higher education in England (Barnett, 1999; Macfarlane, 2005), this thesis shows that there is still a profound level of richness and depth to some lecturers' development of pedagogy. At a time when almost half of the youth have attended some form of higher education (Furlong and Cartmel, 2009; Kearney, 2000), faculty have gained much experience and many insights into pedagogical possibilities in unique conditions. These insights are in danger of disappearing as universities struggle to cope with withdrawals in government funding by turning to other sources of income, and while student loans replace state provision of higher education (Holmwood and Bhambra, 2012). Universities respond to pressure as higher education becomes redefined as a commodity and reduced to a series of marketable products to be branded, kite-marked and sold to those who can afford to pay for them (Tuchman, 2009). At the same time, monitoring and performativity regimes (Ball, 2012) are distorting the very identities of lecturers and tutors (Shore and Wright, 1999).

Within these circumstances, the processes by which some lecturers have confronted the structures affecting them, and the changes to pedagogical practices that they have succeeded in or failed to carry out, become a source of knowledge. This understanding could empower others to achieve their own aspirations to develop their students' learning. Structures are defined as

material, social or cultural patterns that can inhibit or enhance living beings' ability to make changes to their environment. Examples include the physical environment; resources; institutional, social and work norms; legislation, and discourses. The concept of structure has been used to refer to social structures (Archer, 2010; Scott, 2010), but in this thesis it is extended to consider material structures as well as cultural structures each of which is defined and elaborated. Human agency is conscious human activity that results in, or resists, changes to environments, resources and relationships. Agency is affected by people's views, assumptions and models of their situation as well as past experience and cooperative efforts. Agency is also affected by notions about individuals' own abilities, their self-confidence, their organisational, social and political contexts and their understanding of their circumstances.

All human beings form views about the nature of knowledge, about their own abilities or confidence and about what is going on in their interactions with others. They construct underlying models about their situation. These models are constantly in a state of flux, influenced by experiences, ideological assumptions (Fairclough, 1995; Tollefson, 1991) absorbed from the society around them and their interactions with others.

Universities exist within particular historical conditions where specific structures constrain or facilitate the activities of staff. New structures may come into being wherever cultural and social life and material circumstances interact (Bakhtin, 1994). Structures may both facilitate and block various human endeavours. People can build, defend or destroy structures which affect the context in which they live and work. Various authors have considered the interaction of structure and agency (Archer, 1995; Giddens, 1984a; Hegel, 1977 [1807]; Marx and Engels, 1978 [1888]; Ritzer, 1998). Positions taken vary from considering human agency as dominant, to considering human agency as being totally subservient to the structures within which it operates.

Kogan (2000), has considered how structural changes in the higher education sector affect the role and identity of people working within these structures and Barnett *et al.* have commented on the relationship between teaching and research (Barnett, Coate and Williams, 2001). However, the focus is rarely on the interaction between structure and agency. When this issue is touched upon (Deem, 2006; Shelley, 2005) the focus is to study issues of management and leadership without extending into how these may affect pedagogy. One important feature of this research is that it explores the changing nature of structure and agency, with a specific focus on how pedagogical endeavours fare. It seeks insight into the depth and richness of pedagogy as it is developed by the participants, even in adverse conditions. Much current work on pedagogy in higher education tends to be driven by a preoccupation with correcting a perceived deficit in the teaching in higher education (Ambrose, 2011; Hénard and Roseveare, 2012) via prescriptive ideas of how one should teach, packaged as '*good practice*' (Higher Education Academy, 2011, p. 8), regardless of contextual and disciplinary questions (Walsh, 2012). There is a concentration on prescriptive advice to develop pedagogy rather than on studying pedagogical activities that are actually emerging and why. This is not surprising as a deficit approach to current pedagogy fits well with preparations for further marketization of higher education via degrading what currently exists (Sackmann, 2007). Neither does much of the current writing about higher education use a critical realist theoretical framework to take account of ontological depth. However, this thesis does so by making explicit the various strategies that participants have employed, to develop or to preserve pedagogical practices, within a multilevel contextual analysis. This research will empower staff working in Higher Education through providing a greater understanding of the degrees of freedom they might possess in their own contexts. This thesis explores aspects of emerging pedagogy in the lives of seven selected members of faculty across three contrasting English universities in the context of changing global and national circumstances. Developments within one department at one of the universities constitute a further case. The thesis also uses critical realism as a philosophical approach underpinning the empirical

work. It evaluates the efficacy of using an adaptation of Archer's (1995) theory of morphogenesis, to analyse the interaction between structures and agency of small groups and individuals. In addition, retrodictive moves to focus appropriate tools of enquiry are combined with abductive inference (Peirce, 1929) as a methodological tool to facilitate data analysis.

Various questions were formulated in order to further the aims of this research. These were: What are lecturers' pedagogical aspirations, views and conceptual models and what spaces for agential action can be seen in participants' accounts? What do lecturers value in pedagogical interactions with students? What pressures on pedagogy are illustrated by participants' accounts? How is higher education changing? What structures existing at global, national and institutional levels appear in the data about participants' pedagogical endeavours? How do these structures interact with each other? What powers result from these structures? How do people endeavour to influence the contexts in which they work so as to meet their pedagogical aims? Do their assumptions inhibit or empower their actions? How do people build, destroy or resist structures as part of their everyday endeavours? How useful is a morphogenetic approach in analysing the data? What does morphogenesis look like in the lives of participants? What enhances participants' agency in developing pedagogy and what blocks it? Under what conditions have people been successful?

In order to answer these questions and develop the research, a number of objectives were undertaken. These included constructing a theoretical framework based on critical realism; making an ontological analysis of the areas to be studied; designing aligned methodological approaches and methods particularly suited to this study; developing ways to analyse the data and finally drawing out the contributions of this research. Relevant literature is reviewed and built upon throughout this work and is not restricted to a specific literature review chapter. The next section provides an outline of the thesis, describing the overall layout and what is covered in each chapter.

In explaining the underlying philosophical position, there is a tension between giving readers just enough early elaboration of a concept to allow them to negotiate their way, and muddying the water with material that is explained in more depth in later chapters. Chapter two explains some main features of critical realism, namely ontological realism, epistemological relativism and the recognition that the world has a stratified ontology. Each concept is further defined and elaborated in subsequent chapters. Critical realism emphasises the importance of highlighting the ontological features of the area under study. The investigations into these features are carried out in the following three chapters. Chapter three defines and elaborates what is meant by structures and by agency and the morphogenetic approach to their interaction. How does human knowledge develop? What is its nature and how do these issues relate to pedagogy? Chapter four comprises an analysis of these while chapter five is about the changes in higher education globally, nationally in England and at an institutional level in the three Universities.

Chapter six explains the research design, developed to align critical realist epistemological approaches, methodology and methods with the analysis of ontological questions presented in preceding chapters. Data analysis consisted of theoretical thematic coding of the interviews, as well as considering new categories that emerged in the data and led to a refinement and theoretical realignment of the project in an iterative process. Results were also interrogated in terms of a detailed analysis of morphogenesis and morphostasis over time in each case. This was followed by asking what the world must be like to give rise to the data as it appears; a retroductive step to consider what hitherto hidden aspects of the context empirical data may imply. A combination of the above processes is used in this research for the first time, constituting a methodological contribution to knowledge. It has led to insights which are discussed in chapters seven, eight and nine, each of which is devoted to one of the universities studied. Although for the reader's sake the analysis is presented

linearly, various chapters were written simultaneously, with retrodiction causing new concepts to be analysed as new issues emerged from data analysis. The concluding chapter ten constitutes a discussion of the findings and evaluates the contribution of this research to new knowledge. It is claimed that this study has developed new conceptualisations of structures as mutually interacting material, social and cultural formations and has gained new insights into participants' pedagogical relationships. New epistemological and methodological insights into the efficacy of using a critical realist theoretical framework in an empirical study have been formulated in particular a multi-level approach has been used to consider how a structure at one level of a stratified ontology may give rise to processes and emergent phenomena at another. Micro morphogenesis has been shown to be a helpful methodological tool to reveal the interaction between structure and agency at the level of a small group of people or at the individual level. Additionally, retrodiction has been shown to be a useful approach to probe potential and emergent aspects of the area under investigation as opposed to only the empirical aspects appearing in data or the actualised phenomena. It is also claimed that this thesis vindicates the use of critical realism to capture some of the complexity of the social, cultural and material interactions in an empirical project. The next chapter introduces the philosophical framework underpinning this work.

Chapter Two: Philosophical Framework

This chapter¹ begins with the definitions of some terms and the elaboration of a particularly useful way of thinking, that the world around us has a multi-layered or stratified nature. This is followed by a consideration of what critical realists call the real, actual and empirical realms of phenomena and a discussion of what is known as the epistemic fallacy. Finally various epistemological implications of the philosophical approach taken are drawn out and the focus of the research is described in terms of the conceptual framework to be developed in the following three chapters.

The next section emphasises the importance of starting with an ontological analysis and explores what this means. To research pedagogy requires one to investigate how people learn, the interaction between the learner and the teacher; processes of communication and language use, as well as the effects of material, social and cultural environments. A critical realist position emphasises starting with an ontological analysis of the objects, processes and people involved (Sayer, 1992). Honderich elaborates the term ontology:

Ontology (Deriving from the Greek ὄν, genitive ὄντος: of being (part. of εῖναι: to be) and -λογία: words or articulation of, science, study, theory).

Ontology - understood as a branch of metaphysics, is the science of being in general, embracing such issues as the nature of existence and the categorical structure of reality (Honderich, 2005, p. 670).

Ontological questions are: Do these objects exist? What form do they take? Or, what is it? Is it 'real'? Can it exist independently of other things? What are its features? Is it a social object? Is it independent of social life? How does it relate to other things around it? Critical realists take an ontologically realist position, claiming that phenomena exist regardless of whether we know about them or not and that human social life is a part of this reality. In this research one might

¹ Parts of this chapter were presented at the IACR Conference in London in 2008,

ask: What are the necessary characteristics of a learner? Under what particular conditions is this learning taking place? What is the relationship between teachers and learners? Which aspects of this relationship are necessarily intrinsic to this particular relationship and which are not? This leads us further into deeper questions about what is it about human beings that allows learning to happen? Are there many kinds of learning? What militates against learning, and in what circumstances? Ontological analyses of pedagogy and the material, social and discursive contexts of learning are needed. Such analyses, based on a critical realist theoretical framework, are presented in chapters three, four and five and constitute the conceptual skeleton for this research. The next section of this chapter elaborates upon what is meant by a stratified ontology.

Any phenomenon, whether in the natural or social world, exists at a number of different levels as will be illustrated. This means that surface phenomena at one level could be due to changes or causal processes which are operating at a different level in a stratified ontology (Bhaskar, 1979). The stratification of the world is a tenet of critical realism. The world is stratified in time as well as space. For this reason, a study of the history and future of phenomena helps to shed light on causal processes. To illustrate, investigating what a learner is entails a study of the many physiological and psychological levels of being human, human beings interacting socially and the learner's context in a higher education institution within particular national and global circumstances. At all these levels learning is subject to material constraints, such as lack of food, walls and locked spaces or lack of money, as well as enabling physical or material structures such as funding mechanisms, doors and buses. Students can also be constrained or enabled by social structures such as regulations or timetables to be complied with or supportive social relationships in the classroom. They might find themselves operating within various discursive structures with particular ways of being addressed. They may speak in lectures, tutorials or friendship groups. Students will almost inevitably be subjected to cultural structures such as advertising texts, or particular ways in which knowledge is categorised and organised within their chosen discipline. These structures are not of the

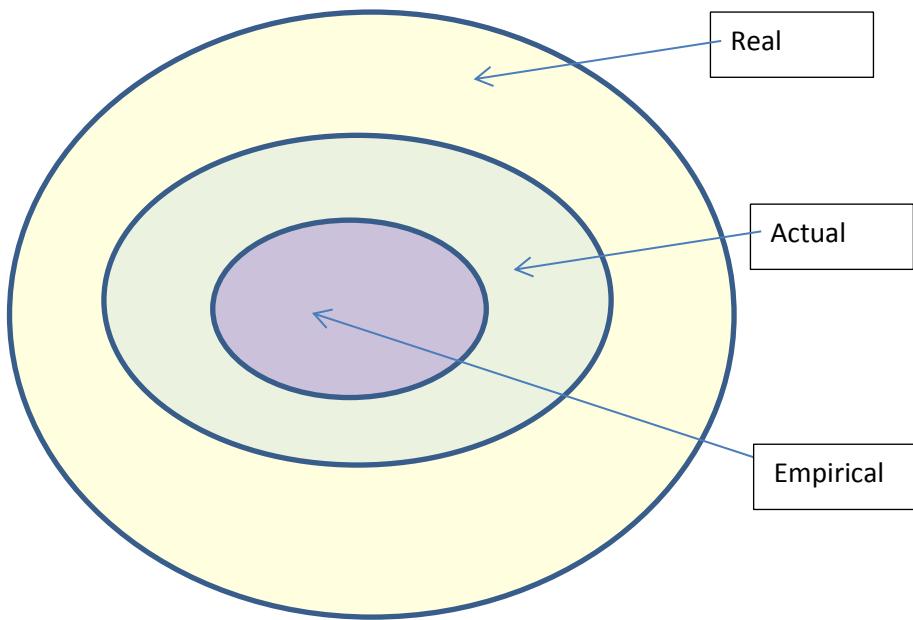
learners' making, and yet there are many possibilities for individuals to change their structural environment. To study these areas of a learner's life, we can draw on the disciplines of sociology, psychology, linguistics, law and economics amongst others. The need for interdisciplinary approaches is a necessary consequence of the stratification, or many layered ontology (Bhaskar, 2010) of the objects and processes involved with learning. Within the learner there is the level of internal reflexivity; aspects of the learner's psychology which are influenced by and used to influence her social life, such as linguistic and complex concepts which we might consider to be the domain of social psychology. Some physiological aspects of her thinking and feeling are influenced by her solo interactions with the material world to date and hence may be the domain of psychology. The learner also has a body which, via the discipline of physiology is shown to be made up of organs, each of which is a complex of different interacting tissues. This physiological level is also relevant to learning which may well involve experiences embodied in muscles or nerve connections. A lack of physiological flourishing may well demotivate learners.

A second consequence of the stratified ontology of the world is that empiricism as a research methodology is inadequate, because empiricism assumes a flat ontology looking only at what occurs at one level. Empirically accessible surface phenomena often result from processes operating at a different level which also need to be uncovered in order to understand what is being investigated. In other words there is more to the world than meets the eye at the surface. There is a need to investigate underlying causes for what is observed, in order to understand them. Sometimes phenomena emerge as a result of things that exist at a different level. One example of such an emergent phenomenon might be a student's tacit understanding of unspoken cultural expectations in a classroom situation. The invisible enabling entities lie within the student's memory as the results of previous embodied experiences. In appropriate circumstances these allow non-verbal clues to make sense.

One final implication of considering the stratification of the world is that although a given structure can potentially set various processes into motion, these might not always be effective. Other structures at the same or a different level can block their effects. As an example, consider a child mathematician, an autodidact who has grown up puzzling over and solving mathematical problems on her own. She changes school and enters a highly gendered, unsupportive classroom where her abilities are unappreciated. She may become reluctant to show them, or they may even be denied altogether if she is never called upon to speak. Thus her considerable potential may not be actualised in that particular environment, remaining as part of the real world, but not emerging as empirically accessible via observation. A deeper consideration is needed to uncover what is going on. Under a critical realist approach it is possible to talk of three realms, *the real realm*, in which the student and all her potential exists; *the actual realm*, in which only those of her powers that have been actualised in the particular situation emerge and the *empirical realm*, in which only what is detected is evident. This is illustrated in figure 1.

The term *real* here means all the structures and processes that are in existence, together with the potential possibilities they encapsulate. The *actual* realm describes all the possibilities that have actually emerged i.e. what is actually happening. This is a subset of the real realm. The *empirical* realm describes only what is empirically accessed and is a subset of the actual realm. In other words the empirical realm contains all that can or has been detected or sensed or in other ways accessed empirically.

Figure 1 The real, actual and empirical realms



All structures have the power to set up causal processes in their environment, depending upon the particular contexts and the interaction they have with other structures at the same or different levels in a stratified ontology. In certain circumstances these powers can be exercised or actualised, giving rise to changes. In other circumstances they may remain possessed but potential. Some phenomena exist whether they are empirically accessible or not. In other words we can talk of structures possessing causal powers which may be simply potential powers possessed or powers actualised and hence exercised (Brown, Fleetwood and Roberts, 2002). It is also possible that a structure has powers possessed and actualised, but then negated by the action of other structures. This conceptualisation of the *real*, the *actual* and the *empirical* is an important part of a critical realist perspective.

Understanding pedagogy and learners, while taking a stratified ontology into account, involves an interdisciplinary approach as noted earlier. Yet each discipline has its own dominant ideas about how to conduct research, differing notions of what reality is and what may be known about and how to approach the subject. This means that educational research methodology is influenced by a myriad of different and contradictory approaches to research.

Particularly difficult, when drawing from a multitude of disciplinary perspectives, is the tendency for researchers to mix up questions of ontology and epistemology. This is sometimes referred to as the epistemic fallacy (Scott, 2000, p. 227) and will be discussed in the next section of this chapter, which considers epistemological issues.

Research claims made about the world need to be justified by explanations of the way in which the underpinning knowledge may be obtained. Scott and Usher (1999, p. 10) maintain that philosophical issues are 'integral' to the process of doing research as they affect the thinking of the researcher from the very start of designing the project. Hughes (1980) claims that issues of epistemology and ontology are connected to the making of research claims because as soon as someone makes claims about what exists in the world they are making ontological statements and hence they can legitimately be asked '*how can you possibly know this?*' and '*what are the limitations on your knowledge?*' Questions about knowledge are epistemological questions. Honderich notes the origin of the word:

Epistemology (Greek επιστήμη - episteme, "knowledge" + λόγος, "Logos", word or study of;

This means that epistemology can be thought of as the articulation or study of knowledge, or issues pertaining to it. Furthermore he goes on to note:

Epistemic - like 'epistemological', an adjective derived from 'episteme', a Greek word for knowledge. Anything thus described has some relation to knowledge (or at least to the justification for belief), or to the general theory of these (epistemology) (Honderich, 2005, p. 259).

Epistemological questions might be: What types of knowledge are we looking for in order to consider the ontological questions discussed above? How can we gain such knowledge? What is it possible to know? What must be done in order to find out about this entity? Is knowledge value-free? What are the limits on our knowledge?

Any ontological claim in research is always, in fact, accompanied with an epistemological justification about the basis upon which it can be asserted. Epistemological claims are sometimes clearly stated; at other times they appear as an inherent assumption within research claims. The authority to make ontological claims comes from the quality of the justification of how the researcher knows, and from how well he or she is able to show that the work done to obtain such knowledge has been carefully, thoroughly and systematically conducted. Hughes (1980) points out that there are different forms of knowledge and that the notion of knowledge is itself ambiguous. Is the type of knowledge the same in the natural sciences as compared to the social sciences? Are there many different types of knowledge? A stance needs to be clarified regarding these questions and a critical realist approach has proved to be useful in navigating through them in this research.

Once ontological questions have been identified and decisions have been taken about what types of knowledge are needed, it becomes easier to identify the processes to acquire them. From this point onwards it is easier to develop the methodology and research design that best suits these considerations. The point is that it is not possible to avoid having an ontological stance. According to Hughes (1980), decisions about whether objects exist independently of our knowledge of them are philosophical decisions and cannot be answered empirically because they are decisions about the empirical process itself.

There are merits in different methodological approaches for different purposes but discussion of each, amongst the community of educational researchers, seems rife with confusion about how the issues discussed above are handled. At the crux of the matter is the difficult problem of how to investigate the social world. Should we use the same methods that scientists use when approaching the physical world? Or is there something fundamentally different about social life and cultural phenomena that mean other ways must be found to study them? This issue has led many researchers to position themselves within opposing camps with accompanying stances towards 'positivism' or towards

what is commonly called ‘interpretivism’, with associated commitments to ‘quantitative’ or ‘qualitative’ methodological approaches. Yet both these camps tend to end up conflating ontological questions with epistemological ones. This is an example of the epistemic fallacy.

The epistemic fallacy occurs when questions of ontology are somehow conflated with questions of epistemology. This can happen when reality and our knowledge of it are conflated (Bhaskar, 1975, p. 36; Collier, 1994; Scott, 2000). According to Andrew Collier there are a number of forms this can take. First of all the question of whether an entity exists can get reduced to the question of whether we can know that it exists. So to illustrate this point, just because I cannot actually detect my students thinking deeply about mathematics, I am not justified in assuming that they are not doing so or that they do not have the capacity to do so. The actual realm can be mistakenly conflated with the empirical realm. Second, what sort of entity it is can get reduced to the question of the way in which knowledge about it is obtained. For example, teachers may talk about A-grade students in such a way that the term A-grade is taken to represent students’ capacities in all sorts of areas, totally unconnected to the particular context or test in which the A-grade was achieved. Here the empirical realm, the grade which was measured, is taken to stand for the real student’s capacity, regardless of their potential in different contexts. Third, the question of whether an object A has causal/ontological primacy over B gets reduced to the question of whether knowledge of A is presupposed by knowledge of B. If I learn that a student has lost a parent and then they start to misbehave in a class, it is easy to assume that the misbehaviour is caused by the loss. In fact there could be many different unconnected factors for the student’s behaviour, which are not known to me, such as a particularly ill prepared lesson, student hyperactivity after eating chocolate, or having been bullied. Fourth, the question of whether A is identical to B gets reduced to the question of whether our way of knowing A is identical to our way of knowing B (Collier, 1994, p. 76). One simple example of this in everyday life is the assumption that two students, both of whom score 30% on the same maths test, must have the same difficulties. In fact one might

have done no work all year and another might have misread the questions due to being dyslexic. Once again the empirical realm is being conflated with the actual one. In other words, what is happening is mixed up with what I can measure.

The epistemic fallacy is common when we fail to take note of the stratified nature of the world and the objects in it. The epistemic fallacy is also often evident if one assumes that positivism and interpretivism are the only options for research design. The complexities of the way in which these two approaches, of positivism and hermeneutic interpretivism, have developed are commonly lost in the everyday use of the terms within educational research communities. It is worth looking more closely at what is meant by these terms and at their history.

Positivism or '*positive philosophy*' as it was termed by Comte (2009 [1848], p. 10) can be considered to be a combination of two things. First, it consists of empiricism, i.e. what may be observed to occur is considered to be all there is, and if events happen to occur together then we may assume that one causes the other or we may make other generalisations about them which are then rather loosely called 'laws'. It appears as an emulation of a crude reduction of the scientific method to mere statistical analysis of reduced categories. This leaves the researchers with a flat ontology, in other words it leaves no room to consider phenomena in terms of their ontological depth within a stratified world. In fact, there is much more to the scientific method than empiricism. Finding patterns can be an initial aspect of an investigation, but model building, generating potential causal explanations and action in the world in the form of experiments are also all essential aspects of scientific approaches. So the first aspect of positivism is empiricism.

Second, positivism involves a reductionist approach where phenomena are reduced to a series of atomistic basic features. This is also an emulation of one aspect of scientific methods. Unfortunately the objects of the social world are

often too hard to define, pin down and isolate for such reduction to be particularly useful. In fact science does not operate in quite this fashion because, although both the search for observable patterns and the reduction of phenomena are parts of science, scientists also spend a great deal of time working to try to uncover mechanisms that may be causing observable phenomena. While both reductionism and empiricism may be useful in building models, neither of them is enough to uncover underlying causal processes. This issue is discussed in detail by Bhaskar (1998b, p. 48). [For a fascinating and still relevant discussion of the usefulness and limitations of reductionism see Koestler and Smythies (1969)]. Positivist perspectives are particularly problematic when the research is about people, who cannot be usefully isolated and controlled within closed systems such as laboratories, and cannot be prevented from interacting with the research process in the same way as inanimate material can sometimes be treated. In addition to this, the activities of the research process necessarily affect the objects and relationships researched, which makes it particularly difficult to define and isolate discrete variables in social science research. [For a current example of an attempt to do this type of research see McCann and Gardner (2014)].

Against the past dominance of positivism in the social sciences, can be seen the rise of radical relativism and its various variants, in what is often termed the hermeneutic tradition. The interpretivism mentioned earlier is a reflection of this trend. Here, some of the complexity of the world, and also of the reflexivity of both the researcher and the people being researched, is recognised. However, any understanding of the world is considered to be impossible due to the complexity of the task as well as, it is argued, the fact that human beings' access to the world is restricted to their sense perceptions, albeit enhanced by technical instruments. In this tradition, researchers have withdrawn, in the face of such difficulty, from attempting to investigate anything more than individual participants' and their own interpretations of the world. Research is thus reduced to a hermeneutic understanding of differing interpretations of experienced reality. This is taken a step further and in a classic case of the

epistemic fallacy, human interpretations of the world are often, in practice, taken to be the world itself. In one form of this interpretivist or hermeneutic position it is claimed that, as knowledge about the world is dependent on our senses and interpretations, there must be many equivalent realities corresponding to different observers. This conflates what is known with what exists. Another extreme idealist form this position can take is to propose that there is no actual reality and the only thing that matters is the way in which people construct models within their heads. This is not too much of a problem if only those adopting this position were consistent. The problem arises when the same researchers then go on to discuss the results of their research by making statements that give the impression that they are describing the world not the models. Yet another form in which the confusion between what exists and what and how we know arises, is when researchers assume that the actual reality is identical with the accounts given or observations made. From this perspective what is learned from interview or observation data is thought to be identical to what actually exists, instead of being mediated accounts of people's experience compounded by the inevitably selective interpretation that the researcher makes. John Searle critiques this position, pointing out that someone believing this could never take a plane on time, or operate in the modern world (Searle, 2008).

This opposition of positivism and interpretivism leaves no room for researchers to take other perspectives such as, to believe that a real world exists independently of our knowledge of it while at the same time considering that the reflexivity of people is part of the ontology of such a world. The opposition of positivism and interpretivism is misleading. It is in fact quite possible for some interpretivist researchers to take a positivist perspective when studying the views of research participants. This happens when interview data is coded and sorted into highly reduced categories and treated statistically in a purely empiricist manner. On the other hand, positivists can also base their research on data using ill-defined categories which are little more than their own interpretations of phenomena. Neither approach adequately addresses the

difficulty of investigating the social world. So what makes the social world so different? The key is that it is made up of people and so it is intrinsically an open system. Archer (1998a, p. 190) points out that even if they could be totally enclosed within a box, people would still act reflexively with intent and would start changing the situation. People's thoughts and ideas can affect their activities and hence their situation. Researchers cannot isolate themselves from those they are researching and hence the ontology of the social world is inevitably changed by the research process. This is not to say that research does not also make changes in the natural world. Since the development of quantum mechanics, we have been aware that measurements always change the world, but in the social world the changes are at the same order of magnitude as the research process and hence the effect is much more direct and influential. The relationships that a person is involved with will necessarily have an effect on her or him. This makes the social world ontologically different from the rest of the natural world in being much more obviously reflexive.

Humans find structures around them in the world they inhabit. In chapter three on structure and agency, the notion of structures and their operation is examined in more detail. In the course of human activity, people are constrained by these structures while at the same time being able to change them in various ways. Such changes can be consciously carried out or they can happen as unplanned results of human action. Changes can reinforce existing structures or change them and build different ones. This is an inevitable part of human activity. Bhaskar (1979) notes a division between those who believe that a unified scientific method can serve the study of both the social and the natural world who tend to insist upon a reductionist, combined with an empiricist, model of scientific method, and those on the other hand who have rejected naturalism altogether and instead attempt to devise new methodologies, claiming that as the subject matter is different so must the methods be fundamentally different.

To differentiate our knowledge of entities from the entities themselves, Bhaskar (1979, p. 14) advocates the use of the term '*transitive realm*' to describe epistemological aspects of the world such as our knowledge, and the term '*intransitive realm*' to describe the rest. The fact that these '*intransitive*' things can also change over time makes the term rather misleading. Critical realists claim that what people hold in their heads can have an effect upon the intransitive aspects of the world. As an example, to build a bridge across a river people use knowledge. This means the transitive, or epistemological, realm has directly affected the ontology of the physical world. One of the reasons that the social world has to be investigated differently from inanimate material in traditional laboratory situations is precisely because what human agents believe affects their activity and hence their surroundings. The other reason is that as living things they operate in open systems and cannot be isolated from the rest of their material, social or discursive environment.

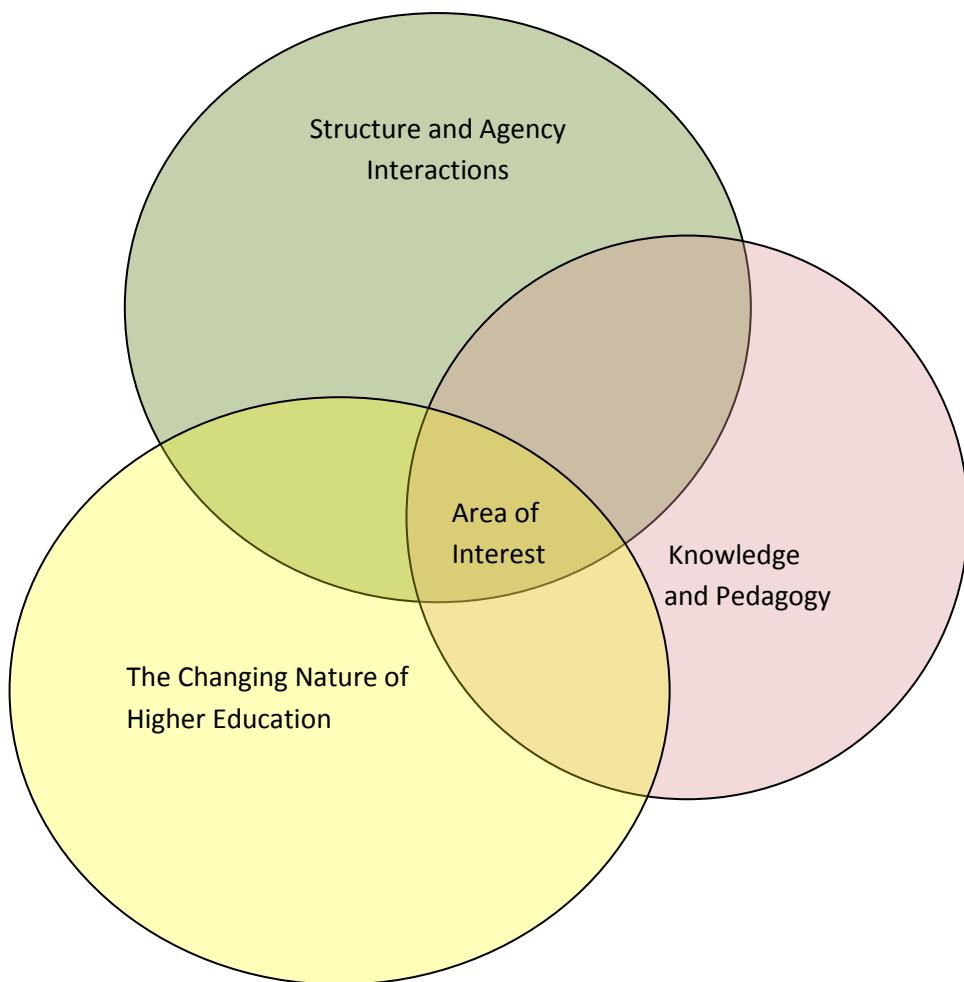
The stratified ontology discussed earlier also needs to be taken into account in the design of this research. Higher Education is changing at the global, national and institutional levels, all of which affect the lives of our research participants and hence the emergent pedagogy in their work. These questions raise epistemological questions which current debates about positivism or interpretivism cannot solve. These implications are discussed in chapter six, where the alignment of research design with a realist ontological stance, allowing for stratification of phenomena to be taken into account, is elaborated.

To conclude this section, this research project is designed with a strongly realist perspective rejecting empiricism and reductionist philosophical positions. To be a realist means to consider that there is a reality which exists whether we know about its existence or not. Realist approaches are consistent with a non-reductionist approach to methodology. They are also consistent with a rejection of empiricism, as we shall see later on in discussing stratification. (Archer, 1995; Archer, 1998b; Bhaskar, 1979; Collier, 1994; Sayer, 2000; Scott, 2000). Additionally, a critical realist position excludes theoretical approaches which

conflate epistemology with the ontology of phenomena. The world exists and its existence is not dependent on our knowledge of it, although our actions will affect it because we ourselves are part of it and are ourselves affected by our interactions with the world. The constructs or models that individuals may have in their heads are actually still a part of the world and have their existence in physical form within the actions - or inactions - of those individuals. This is equally the case when people have false models of what is going on. The veracity of people's consciousness is not the issue here. The point is that whatever they think or sense does affect their actions. Humans do change the social and physical world in some way or another. Thus transitive or epistemological issues, ideas, values and thoughts actually do affect how people act.

The next three chapters each take up a specific area of importance to this thesis. Ways of thinking about structures, agency and their interaction are explained followed by an exploration of concepts of knowledge and pedagogy. Then an analysis of the changing nature of higher education is made. In line with the stance taken earlier to carry out an ontological analysis, important concepts are identified and defined and a theoretical and conceptual map of each of these areas is drawn up in each chapter. The focus of the inquiry is shown as the 'area of interest' in figure 2.

Figure 2 Focus of the research



The focus of the research also bounds the levels of stratification at which empirical research will be undertaken. The focus on pedagogy means that most of the actual research will take place at the level of small group social interaction and individual class/lecture. Phenomena in the layers above this will be important in as much as processes and structures within them could be giving rise to causal mechanisms within the area of interest.

The next chapter is a deeper discussion defining what is meant by structures and agency and considering their interaction together with the importance of this question to this research.

Chapter Three: Structure, Agency and their interaction.

This chapter is about structures, agency, the morphogenetic nature of their interaction (Archer, 1998b) and the implications of the stratification of living things for agency. A critical realist approach allows us to study structure and agency across the sometimes jealously-guarded boundaries of traditional disciplines because we are led by an exploration of the ontology of the research area across disciplinary traditions. Along the way we shall find ourselves confronting two recurrent themes. Firstly, there is the materialism/idealism debate and secondly, the reductionist/holism debate. These themes resurface across disciplines. This chapter ends with an elaboration of what a stratified ontology of human life and behaviour means. The next section defines and elaborates on the concept of structure.

The word 'structure' always implies some sort of patterning or organisation. Lefebvre (2002) points out that the word is used so widely as to make it redundant. For this reason structure is defined, and different types of structures are elaborated here. We can identify three aspects of structure for analytical purposes. First, there are the material aspects of any structure. Second, there are social aspects to some structures and finally, there are semiotic or discursive aspects to some structures. These three aspects are inextricable in any real context, yet analytically separating them allows us to access the ontology of the objects and processes of this research. These aspects will be referred to as material structures, social structures and discursive structures respectively. All structures have their embodied materiality; social structures are about the roles and relationships between people and society. A subset of these social structures are discursive or to do with the realm of ideas and culture. In the following section each will be considered in turn.

The term ‘material structure’ is applied to the corporeal materiality of the things that we have to negotiate in our everyday lives. Examples of these are the existence of cellular or open plan offices; the physical layout and availability of lecture theatres, books in the library; electronic equipment, wired or wireless; laboratory equipment; the distribution of resources and so on. The physiologies of living things like our bodies are also examples. In many ways these are the easiest of the three kinds of structure to conceptualise. The next section considers social structures.

Porpora (1998, p. 339) identifies four common approaches to the concept of social structures. Firstly, social structures can be thought of as patterns of aggregate behaviour which are stable over time. Secondly, social structures can be thought of as law like regularities that govern the behaviour of social facts. Thirdly, social structures could be collective rules and resources that structure behaviour and finally social structures can be envisaged as systems of human relationships among social positions. Each of these will be considered in turn below.

The first of these approaches which considers social structures to be patterns of aggregate behaviour which are stable over time, is associated with the work of exchange theorists (Homans, 1975). This approach reduces every aspect of society to the activities of individuals, which are considered to be the basic units of social structure. Patterns are looked for and noted in an empiricist fashion but no explanations for social structure are sought at other levels, either within the psychology or physiology of the individual (Archer, 1995), or beyond them in, what Porpora calls, macro-social phenomena, such as economic crises, de-industrialization or power relations. Bhaskar (1998c, p. 212) considers this view of individuals and society to be Weberian. Archer (1995, pp. 4,34) refers to it as ‘methodological individualism’, referring to the method employed as ‘upwards conflation’. It is almost the antithesis of the next model.

The second approach which views social structures as law-like regularities that govern the behaviour of social facts is a Durkheimian position, which paints a holistic picture of a society that is not reducible to individuals within it. It separates individual human agency from the behaviour of society as a whole (Durkheim, 1982). Again, patterns in social phenomena, resulting from the actions of many people, are sought this time at a macro-level. The model involves an empiricist analysis of the large-scale or macro-effects. Again there is no probing of underlying causes. Porpora observes that this conceptualisation ignores relationships between humans; relationships which are not easily described by laws, even in the statistical sense. Taking this position prevents one from seeing exactly what such social structures might actually mean to individuals (Archer, 1995, p. 47). In Archer's (1995, pp. 3,46) terms this is 'methodological collectivism' leading to her notion of 'downwards conflation'. Like the first model, this one also assumes a flat ontology of the world rather than a stratified one as it looks at the macro level only, ignoring possible causal phenomena at lower levels.

The third model, of society as a set of collective rules and resources that structure behaviour, is associated with Anthony Giddens (1979). [See also Bakewell (2010) for a detailed description of this approach]. Giddens emphasises the role played by rules and resources, which, according to Giddens, constitute structures. Yet here, structures have only a 'virtual existence' (Giddens, 1979, p. 26). Giddens differentiates between structures and social systems, which he considers to be made up of situated practices. Giddens considers that the existence of rules causes people to behave in certain ways but he denies the causal properties of social relations in terms of the distribution of material resources. He ignores the material embodiment of social structures. Take the fact that money itself has its physical embodiment in coins, paper, bankers' drafts, invoices or funding agreements as an example. The significance of these physical things is socially agreed. Their physicality becomes so familiar in everyday life as to be forgotten. The material necessity of life means that lecturers need money, or at least an electronic alteration to their bank

statements at salary time, in order to continue their activities and this undeniably affects what goes on in their social and discursive lives. Yet the social power hidden behind this material resource is often not considered, when analysing their agency in the university. Giddens takes an idealist conception of social structures, which does not take their material embodiment or their interaction with material conditions, into account.

Furthermore, Giddens develops his theory of structuration by which he refers to the mutual dependence of structure and agency without considering time.

The constitution of agents and structures are not two independently given sets of phenomena, a dualism, but represent a duality (Giddens, 1984a, p. 25).

Archer (1995, p. 101) names this conceptualisation 'central conflation' because for Giddens, the concepts of social structure and agency are bound together so tightly in time that it is not possible to study their interaction. This point is further developed by Archer (2010)

The fourth view of society views it as a series of systems of human relationships among social positions. Porpora attributes this conceptualisation of society to Marx. It is also taken up by Bhaskar (1998c). Society is made up of roles with stipulated relationships between them, and rules governing these. Power is reflected in terms of the physical resources associated with roles and relationships. A crucial question becomes, who gets to stipulate and enforce these rules, and who has to obey them? Social roles may be occupied by generations upon generations of agents, each of whom will make some mark or other upon the roles and relationships they have occupied through the processes of morphogenesis. This model allows for a relationship between structures and the interests of different groups in society. Interests and power relations cause conflicts of interests and actors or agents can build new structures as a result. Porpora argues that the relationship between structures and the actions of agents, on this model, is not deterministic. People can be creative and choose to react in different ways even if they lose resources as a

consequence. Changes in structure can be, intended or unintended, consequences of the actions of people who may, or may not, know where their interests lie. People's understanding of their position may be incomplete. This model of social structures allows for society itself to have a stratified ontology where different aspects of both structure and agency emerge at different strata of society. Society can be considered to be stratified in various ways, in terms of size or scale. Alternatively, stratification according to the resources people controlled would be stratification by class and would reveal different emergent properties. This conceptualisation of society allows for a morphogenetic approach to the relationship between structure and human agency (Archer, 1998b, p. 374). In other words, agents find themselves within structures that they have inherited, which they did not choose nor make, but then find ways to change or adapt these to develop their own projects and change their social environment. This morphogenetic approach will be elaborated further when we consider the relationship between structure and agency. This is the model of social structure that is adopted in this research project. The next section considers, defines and elaborates what is meant by discursive structures.

Bertalanffy (1981a) claims that humans' ability to use a particular type of sign or symbol, with meaning attributed to it, distinguishes them from animals. Humans can use freely chosen signs, by which Bertalanffy means that the sign is unconnected with what it signifies. For example, rattling a cat's bowl may mean food to the cat but the signal is a part of its referent, in other words part of the thing signified. But many human signs are far removed from their referent representing completely different things. The symbol 'L' is not directly connected to the sound which is its referent. Such signs can be freely chosen and developed into a system. Another aspect of human signs is that the meanings of the symbols and the rules for how to use them are taught to the next generation. The bird's ritual is hard wired and instinctual and the bird will not pass the significance of a new danger to its young beyond one generation. Mice can learn to negotiate a maze, but they are unlikely to be able to pass this learning on to their young.

According to Bertalanffy, entire symbolic systems can be built on signs that have three characteristics. They are freely chosen, they are passed on to future generations and they are representative. The use of signs that have all three aspects distinguishes humans from animals. Some animals might use signs in some of these three ways, but only humans use them all. This difference allows humans to develop 'symbolic universes' (Bertalanffy, 1981b; Cassirer, 1946) such as mathematics, languages, classification systems and procedures which make up part of what Archer (1988, p. 104) refers to as the one human cultural system that exists at any time. Bertalanffy points out that signs with a set of rules to use with them constitute an algorithm. Groups of such symbols can be built up as shared texts and indeed larger systems with rules (Bertalanffy, 1981b). Language for example, consists of signs with socially agreed meanings and grammatical rules. Discursive structures can be spoken and written, ideographic, virtual, consist of buildings and towers or made into artefacts. They constitute the parts of the human cultural system. The smallest unit of a text from a social semiotic viewpoint is the socially shared sign, and it follows from this that no text is without a social context (Bakhtin, 1986; Hodge and Kress, 1988) or indeed its material context either. This is because the technology used to create it, to make it available or to use it, involves material structures (Kress and Van-Leeuwen, 2001). Patterned structures made of one or many texts, as they are created, transmitted and consumed, build up into a discourse, a generic overarching contextual structure where discursive interaction occurs and which is reshaped and moulded by each interaction. For example, the patterned structure of university lectures, with their unwritten rules for who may speak when, whose utterances have more status and so on, is such a discourse. So discourses become sites of interaction between texts and the social system (Hodge and Kress, 1988). They can occur during interaction between social actors when texts move from one participant to another and they can result in a continuous reshaping of social relations as a consequence. In other words the discourse both constrains the actors' agency while simultaneously being transformed by the texts the actors may produce. All discourses are potentially contestable and

such contestation in the cultural realm plays a part in morphogenesis (Archer, 2013), as discussed later in this chapter. Thus discourses are social sites in which texts, i.e. objects carrying significance, are produced and used. Hodge and Kress (1988) break discourses down further into *ideological complexes* and their inherent *logonomic systems* which we will now consider.

In societies split by conflicting interests, where the products of human labour are distributed unevenly, the dominant social order is able to use discursive structures to develop 'false consciousness' or ideology. This is achieved by dominating the material structures through which communication happens. The word ideology is a contested one (Billig, 1991; Hodge and Kress, 1988) and here it is taken to mean 'a systematic body of ideas, organized from a particular point of view' (Hodge and Kress, 1993, p. 6).

Ideological complexes are defined as discursive structures containing a set of contradictory versions or views of the world which are 'functionally related' to one another (Hodge and Kress, 1988, p. 3). Advertisements are a good example of such a complex. False consciousness may be developed through one, or a series of such complexes. These paint particular pictures of the world which attribute status to objects and people through the way they are represented. Such complexes aim to further the interests of one group over another and are usually imposed, albeit indirectly, by one group upon another. The versions of the world that are portrayed are more in keeping with the interests of dominant groups, their desires and their ideal situations are portrayed as reality. If dominant interests were imposed by pure force then the ideological complex would be redundant and it would not be possible to achieve compliance by consent. See Gramsci's (2007 [1932]) work about hegemony. Ideological complexes always contain some distorted element of solidarity that anyone can identify with. Without this element there would be no reason to engage. However, this causes contradictions within an ideological complex, and the different parts of such a complex tend to fall apart under close scrutiny. The contradictory aspects of the ideological complex mean that it both legitimates

and ameliorates assumptions which support domination. The aim of ideological complexes is always to manipulate or to constrain behaviour in some way. In an advertisement, the audiences are positioned in an active reading/viewing/listening or other form of engagement. But the only way the text makes sense is when its assumptions are accepted, even momentarily and even if they are nonsensical. Billig (1995) claims that hundreds of such repeated encounters may well have a permanent effect on the recipient. One example of an ideological complex is common in the plethora of statements of policy, or institutional strategy documents, which assert making profits as the basis of the operation of higher education institutions. This is part of a larger marketization discourse. Within ideological complexes, Hodge and Kress claim there is a relationship between the degree of coercion and the degree of concentration on normative elements such as rules used in coding and decoding. Ideological complexes can be used by dominated groups too, to subvert or resist domination (Hodge and Kress, 1988, p. 3). Existing discursive structures are subverted to show the world in a different light with different assumptions and perspectives. Freire's (1985) call to peasants to become subjects in society's conversation by mastering the process of writing is an example of such resistance.

An inherent part of each ideological complex is its system of rules for the successful operation of the ideological complex. This logonomic system specifies how the meanings within an ideological complex should be received. Examples mentioned by Hodge and Kress (1988, p. 4) include generic rules determining the production of genres or politeness, etiquette, industrial relations discourses or legislation. People have to be encultured into using such rules, policed by social agents; however they can be challenged by social agents too. The logonomic system tends to exclude certain areas of social life from the discourse and it also has a categorising function. People are categorised and subtle behavioural rules for social life encoded. Implicit assumptions about who may do what to whom abound. A doctor's consultation or a police interview, are examples (Fairclough, 1989). The logonomic system constrains some forms of

behaviour and incites agents to engage in others. In this way a theory of society is transmitted. The ideological complex is equivalent to Bertalanffy's system of signs and the logonomic system constitutes the rules or algorithm needed to interpret it.

Although ideological complexes can be powerful and sophisticated they are often subverted, resisted and contested through the texts that people themselves create. They often have to change to accommodate resistance. In terms of epistemology, signs, texts and discourses can be deconstructed to expose the underlying assumptions that they carry. Discursive or cultural structures always occur within social situations and have material embodiment.

In this section three analytical categories of structure have been discussed; namely material, social and discursive structures. The next section is about the agency of living things as opposed to mechanical systems.

Agency makes living things different from machines, but what is it? The problems of mind and matter, reality and appearance, form and substance have shaped western philosophy since the time of Plato (Adrian, 1971). Idealist perspectives search for the answer to the nature of the difference in terms of consciousness or mind located outside of the material world, looking for it in notions of the spirit or soul (Hegel, 1977 [1807]). Materialists, on the other hand, have tended to look for it in terms of the nature of matter itself. A dualist approach was put forward by Descartes and is known as Cartesian dualism. Ryle claims that Descartes was

Reformulating already prevalent theological doctrines of the soul in the new syntax of Galileo. (Ryle, 2000, p. 24)

The influences of scientific approaches on psychology led to the search for a materialist explanation of life. At the end of the 19th century William James (1884), reflecting on consciousness, said that he could see no need to separate the thinker from the thoughts. There was a move away from Cartesian duality which was considered to be the 'official doctrine' as late as 1949 by Ryle (2000).

A materialist approach is currently taken by Dennett (1993) who opposes the separation of mental and physical entities. Ryle goes on to point out that in everyday life, you do not just talk of a person's mind '*calculating, conjuring, hoping, resolving, tasting, bluffing, fretting*'. You talk of a person doing these things, emphasising their embodied nature within human bodies and other things.

We refer to the things made up of steel, granite and water; wood, moss and grain; of flesh, bone and sinew carrying out the actions.(Samuel, Ayer and Ryle, 1971, pp. 306-310).

According to Searle (1992) both Cartesian dualists and behaviourists accept the opposition between things mental and things physical. Behaviourists try to dismiss the mental aspects by equating them with physiology; while modern day dualists such as functionalists equate things mental with the functions they serve for society or for the individual. Consciousness is reduced to aspects of itself such as intensions, will or desires which are identified with how they might be measured (Bratman, 1999). For functionalists, if some other process carried out the same function, it would be considered to be identical (Bratman, 1999). Both positions commit the epistemic fallacy, discussed in chapter two, by mixing up the identifiable or measurable aspects of a thing with the thing itself. Searle (1992, p. 50) argues that 'the subjectivity of mental content is lost' in this process. In other words, although emotions, ideas, perceptions and thoughts are caused by and can be traced through physiological processes, the subjective experiences, which are the body's reactions to these processes, are qualitatively different and emergent from these processes but not ontologically identical. Neither does understanding the 'function' that a feeling such as fear plays in protecting someone tell us anything about the subjective experience they are going through.

To get to the heart of agency we need to highlight the active side of human interactions with the world. In considering subjectivity we consider:

ourselves, our ego, the "I" who does the perceiving and the thinking and acting, the person who is conscious and aware of his identity and his surroundings. (Adrian, 1971, p. 299).

It is the word ‘acting’ that is significant here. Marx criticised materialism as it existed in his time, for not considering the role of the subjective form of human sensuous activity in changing the world:

The main defect of all hitherto-existing materialism - that of Feuerbach included - is that the Object [der Gegenstand], actuality, sensuousness, are conceived only in the form of the object [Objekts], or of contemplation [Anschauung], but not as human sensuous activity, practice [Praxis], not subjectively. Hence it happened that the active side, in opposition to materialism, was developed by idealism (Marx and Engels, 1968 [1845], p. 28).

According to Marx, human subjectivity cannot be divorced from human activity in the world. Not just humans, but all living things make changes to their environment. The agency of a living entity is defined in this research as its ability to evaluate and change its environment, whether material or, for humans, social and discursive. All living things have agency, whereas non-living things such as machines do not, at least not without recourse to human agents, either within their design as a programme or in the role of operator. The reason for this lies in a fundamental difference between mechanical systems and biological systems. In the following section we trace agency from the molecular level upwards in living things and life as an emergent feature.

According to Schrödinger (1944b) life is an emergent feature of a certain type of organic, covalently bonded large molecular and is connected to its size. Such molecular structures are able to maintain a level of stability in the face of thermal disruption: that all-invasive effect described by the second law of thermodynamics which causes structures to disintegrate in line with the increasing entropy of the overall system. Living things are able to organise the matter of which they are made up, as well as matter in the local area around them, replenishing themselves, seemingly in defiance of thermodynamic pressures to disintegrate. This is at the root of agency. It is a process, allowing a living thing to make changes to itself or to the environment. The basis of life lies in huge covalent molecules of DNA, and interestingly, it was Schrödinger’s comments on life, which inspired the discovery of DNA (Crick, 1982). Agency

then, is an emergent property of combinations of structures which have the ability to remain stable in spite of thermal disruption. The first act of agency is to remain stable in adverse circumstances. When a living thing dies this stability breaks down and the organism can no longer maintain itself, suffering the fate of thermal disintegration like all other objects.

Such stability comes at a cost which is that energy is needed to maintain life. The environment is changed as a result. The cells within living things are constantly interacting with the environment. Gases are exchanged, as food is broken down and energy released. This energy is now used to order the molecules of the environment and to absorb key substances against concentration gradients via osmosis. It is used to build tissues out of large numbers of similar specialised cells. At the next level of complexity organs, such as lungs, livers, kidneys, brains, eyes, etc. are built up out of tissues. All of these processes actively use energy to order the environment as opposed to degrading it. This is the one distinguishing feature of a living structure. It also means that living things cannot exist without interacting with their environments and have to always be open to the environment, not isolated in closed systems (Schrödinger, 1944a).

So the second act of agency is to make changes to and be changed by the environment. Whereas mechanical systems are subject to external control or initial programming, living systems have some internal locus of control over themselves (Weiss, 1969). Bhaskar calls this emergence of agency '*synchronic emergent causal powers materialism*'. According to him we can:

credit intentional embodied agency with distinct (emergent) causal powers from the biological matter out of which agents were formed, on which they are capable of reacting back (and must, precisely as materially embodied causally efficacious agents, do so, if they are to act at all)....(Bhaskar, 1998a, p. 601)

It is this very acting back upon the world by the agency of living things that makes it necessary to apply a dialectical approach to the study of agency. Agency allows a living thing to change its environment and in the process it makes changes to its own capacities and properties. The idea of action and

thought as constitutive of each other has been developed by Charles Taylor in his discussion of Hegel's philosophy of mind (Taylor, 1985) and is seen in his own formulation of human agency.

Neither a reductionist nor a holist approach fully explains this difference between living and non-living things. This is partly because neither can appreciate agents' interactions with the environment, but there is another reason. Emergent properties cannot be explained either by considering agency as the simple result of increasing complexity made up of the smallest mechanical units arranged with minute precision, or by reducing living things into smaller and smaller components. Neither holism nor reductionism allows for a stratified ontology, which can explain emergence. In biology, according to Paul Weiss, detailed attention to the study of the ontology of living things solves problems that cannot be solved in the reductionism/holism debate (Weiss, 1969). Weiss notes the one-sidedness of both approaches stating that empiricists:

may not see the forest for the trees, but to deny the existence of the forest is self-inflicted blindness (Weiss, 1969, p. 11).

The additional aspects of the whole are due to the interactions of the parts with each other and with the environment. This means that neither a 'top down' nor a 'bottom up' approach is enough. This 'top down' versus 'bottom up' debate was seen in the discussion of social structures earlier in this chapter. Weiss's (1969) call to pay attention to the stratified ontology of the biological world and the development of emergent factors is echoed in the sociological debate, by Archer (1995) and in the study of complex systems by Elder-Vass (2005). The subjective factors that distinguish life, such as consciousness, have this quality of emergence from physiological features at a lower level.

In this next section the difference between human agency and the agency displayed by other living things is considered in terms of the symbolic or discursive structures mentioned earlier. This leads into a discussion of the cultural system; followed by ways of conceptualising the self and the properties of human agents. These ideas are then applied to the interacting cultural, social

and material realms of human life. Earlier in this chapter we considered Bertalanffy's claim that the ability to use a particular type of sign constitutes the difference between human cognition and that of animals. Mastery of the use of systems made up of such signs and rules, adds to a person's potential ability or power to make changes to the material, cultural and social environment and thus enhances her or his agency. Having the ability to develop such systems for others enhances a person's agency even further. The question of who only gets to learn and use these signs and rules, and who develops and controls them will be contested in any society where resources are unequally distributed. Understanding this point is crucial if we are to understand that control of education systems is highly contested.

The variety of human practices develops an associated variety of symbolic systems. Each discipline has its own, with particular categories, definitions and specialist terms, so do all crafts and professions. The existence of many symbolic systems within any one society, necessarily leads to cultural diversity within the same society. The cultural sphere is as rich as all the practices pursued. Although the symbolic systems across human societies may be different, the very fact that they can be learned by new generations and by outsiders, means that they can potentially be understood by any human being who manages to do the work to learn them. This brings these symbolic universes within the category of what John Searle calls 'epistemologically objective' knowledge (Searle, 1995, p. 13). In other words, this aspect of human knowledge is *both* perspectival *and* potentially universally accessible to all humans who are prepared to do the work to understand them. I may not currently understand the particular way an experienced carpenter categorises the materials she uses, but I am capable of doing the work to learn them and to do so, not only will I have to gain the knowledge and embody it into myself through practice but I will also have to master the professional culture of the carpenters. Nevertheless, it can be done. To deepen this discussion on human agency the next section looks at the human cultural system in more detail.

Archer denounces the 'myth of cultural integration in society' (Archer, 1988, p. 1) that everyone in a society has the same culture. According to this myth, dominant culture is considered to be totalising and unquestioned. Archer argues that conflating the cultural system with the socio-cultural interactions of society masks their interaction with each other. In other words, it masks the way different practices are changed by and make changes to the cultural resources. It masks resistance to ideological hegemony by the powerful. At the same time the vast store of human culture which is available at any particular time is potentially accessible to all humans. It comes into being whenever human interactions with the environment are embodied in artefacts, rituals, symbols and the attribution of significance to objects and events. As long as they are recorded using some form of technology such as writing, or manufacture, traditions of behaviour or oral records crafted into songs or stories, they are available to others. They are made up of symbols plus rules for their production and interpretation, and so constitute examples of discursive structures. As these are potentially accessible to all humans there is in fact just one human cultural system at any time. It is made up of all the results of human practices embodied in such things as artefacts, books, films, web pages, sound recordings, languages, mathematics, or musical notation, together with the ideas they carry. Access to this exteriorised joint human memory (Steigler, 1998) may be restricted for example when books are burned or libraries forgotten. Sometimes a new language needs to be learned or other forms of work have to be carried out before this shared resource can be accessed. The degree to which a person can have access to the human cultural system is contextual and is often contested and is a question of relationships of power.

Bertalanffy claims that symbolic systems have given humans three advantages: First, they allow change to take place at an accelerating pace because the ability to pass knowledge on to future generations frees us from evolutionary timescales. Second, humans have been able to do away with much of the trial and error in solving problems because the use of symbolic systems allows the use of higher order concepts and reasoning, or thought experiments. Third, the

possibility of ‘true or Aristotelian purposiveness’ becomes possible (Bertalanffy, 1981b, p. 3); in other words it is possible to hold an image or concept of one’s goal in mind while working towards it. Vygotsky postulated that in order to explain the development of *higher order* thinking it was necessary to look to the social life of human beings and he pinpointed language (Vygotsky, 1966; Vygotsky, 1978). Symbolic systems give us cultural tools as prosthetic devices, to extend our agency within the world and over time.

Geertz (1975) claimed that replacing instincts with the ability to use signification systems allows new generations of humans to learn from the collective experience of previous generations. Geertz related this development to a huge expansion in the size of the human cerebral cortex in evolutionary history; an expansion which appears to have developed in parallel with the development of tools and with language. The cultural realm depends upon social interaction, because only through social interaction can non-referential symbols mean anything to anyone.

This next section considers humans as structured beings with a stratified ontology. Like all living things, humans are themselves made up of structures. A stratified ontology of the person allows for qualitatively different powers to emerge from the actual physiological and atomic structures that make up that person. The stratification occurs in time as well as space, so the past experiences of a person have to be taken into account as they affect the present. Just as a person’s resilience to illnesses may depend upon her past experience of infection, aspects of current social awareness are affected by past experiences. In the cultural realm, the more I am exposed to a language the more my vocabulary develops and the more I understand it. In the material realm, the more I play the piano, the stronger my fingers and coordination become and the more my musical capacities develop. These personal internal structures, or embodied properties, of a person can give rise to enhanced powers to interact with the world. Examples might be properties like better muscular coordination

or a larger vocabulary which allow powers of balance or of communication to emerge in favourable circumstances.

The powers needed to be a good teacher, such as empathy or the ability to inspire, may be different from the powers needed to be a rock climber such as a head for heights. They emerge from different personal embodied properties (Archer, 2003) within a person which could be based on past experiences, perhaps laid down in developed muscles, habits or traditions, and other material, social and cultural resources within the person's make up. These people's emergent powers (Archer, 2003) then go on to interact with powers emanating from other structures in the environment. The quality of a person's agency is contextual. If the conditions are not right such structures have potential powers that never get realised. This is where the critical realist concepts of the real, the actual and the empirical realms become so useful because some potential powers in the real realm only start to act in some contexts and not in others. The question of human reflexivity is developed in the next section of this chapter, as it has great importance to human agency.

Structures and agency have different properties and powers which are not reducible to one another. This very irreducibility allows us to examine the interplay between them (Archer, 2003, p. 2). Social, cultural or discursive structures can have 'temporal priority, relative autonomy and causal efficacy' in relation to phenomena, but this efficacy is always mediated via social agency (Archer, 1995; Archer, 2003; Bhaskar, 1979; 1989). In other words there has to be something to be restrained or empowered before a structure can affect it. Archer (2003) claims that human agency is not only affected by structures but it also depends on the person's awareness of them. Agential subjectivity affects the way agents interact with structures around them. Archer points out that people are reflexive. This means that although we might show how external structures can affect agents, we need to trace how structural influences are received and acted upon by agents too. It is the interaction between the powers of external structures and the powers of agents' internal properties which make

changes happen. So the projects people hold dear are important factors in what happens. This is where the agent's powers to deliberate, to evaluate, to care, to believe and take positions or not, come into play. Archer claims that people's reflexivity is central to agency.

According to Charles Taylor the human self, as opposed to that of other animals, is evaluative, reflective, has will, has depth and has the capacity to articulate. Taylor differentiates his notion of self from behaviourist models based on computer simulation, which conceptualise the self as a purely individual affair, independent of its environment (Taylor, 1985). In other words Taylor rejects input-output based models of self, regarding the self instead, as a 'strong evaluator'. He sees the self as doing more than just deciding between two alternatives by reducing them to quantitative values. For Taylor the self is able to reflect upon, what he calls 'second order desires'; the ability to evaluate desires. This concept of strong evaluation is about articulating, as well as simply carrying out, reflections or 'self interpretations' (Taylor, 1985, p. 27), in order to make choices. Any assessment is, by definition, tied up with questions of value. Human agency is connected to self-interpretation in terms of value (Taylor, 1985). In other words humans can evaluate their own evaluations.

This ability helps people to develop their awareness of the circumstances and their options. People's reflexivity affects the chances of success of their projects in different structural contexts. Archer claims that there is an inner subjectivity which is real and influential in determining people's actions. People act within social situations (Archer, 1995, p. 14). Cultural contexts which temporally precede social situations, and can be causally efficacious, are to some extent autonomous from them as is also the case for material contexts. Inner subjectivity then, is emergent from personal embodied properties. These develop via interactions with the environment giving rise to the emergent powers that people possess, such as an understanding about more aspects of the world or the assessment of options and plans. These powers are ontologically subjective (Searle, 1992), meaning that only the person they

belong to can directly access them. This does not make them any less a part of the real world. People do not always have to operate alone and their ability to link up with others in joint ventures can increase their potential agency. This section has elaborated on issues of human reflexivity and the next section considers the relationship between agents' actions in changing their environment and how their activity also changes them as well.

When we make material changes to the world, our own physical bodies change as a result of our activity. Examples of this are eating or going to the gym or learning to play the piano. Our every act as an agent develops resources to increase our agency further. In the course of our physical activity we leave in our wake the results of our work in changes to the environment, in artefacts and tools. The process is so familiar to us in our everyday lives that we pay it little attention. When the changes being made are social changes, we build social structures and institutions; design new roles and relationships and change or preserve existing ones. By fulfilling a role in society we can perpetuate that role; by making changes to the way we carry it out we develop it further, or undermine its potential, for our successors (Bhaskar, 1998c). At the same time we gain and embody experience of how to operate in these situations. Yet there is a connection between the social world and the cultural realm too. The cultural sphere is full of social rituals and values based on social structures and institutions, ideas generated through the repetition of social activities and new ideas made possible as a result of new social structures which in their turn are changed by those with the new ideas. This is the realm of language, of ideas and of mathematics, of categorisation or in other words, of discursive structures in the cultural arena. New vocabularies, new stories, new ways of thinking, images of what the world could be like, these are all to do with ideas and can be called ideational resources or cultural embodied properties of the agent. By changing this discursive realm we change the cultural system; we develop new words, or more often new ways of using them. We might reject certain ideological stances, certain ways of categorising people and so on, yet it is not the feeling of opposition itself that makes changes to the discursive realm. It is through our

use of discursive structures in the course of our daily lives that we are constantly shaping this system while adding to our own capacity to act by developing new embodied properties.

Socio-cultural activity changes and is changed by the cultural system (Archer, 1988). Similarly many material changes, made by human agents, have social repercussions. The separation between the material, social and cultural realms that is made in this chapter is only analytical. In fact the three realms interact inseparably all the time. The more a person can access symbolic systems or cultural resources, the more they learn and develop cultural embodied properties and gain greater possibilities and potential powers to envisage future goals and articulate and evaluate their own actions and thoughts in pursuit of their goals. The greater a person's embodied properties the greater is the emergent power to understand and use cultural resources, and the easier it is for them to resist ideological pressures to act against their own interests. This section has considered what might contribute to human agency and has explored aspects of the cultural sphere in the light of this question. Charles Taylor's view of humans as strong evaluators and Bertalanffy's ideas about symbolic universes have been used to consider how human agency in the cultural arena might be enhanced. The next section is about the way in which structure and agency interact.

In making changes to their environment, which is already structured when they enter it, living things are also capable of making structures to assist themselves. Initially such changes involve shaping the material structures found in the natural environment. The natural world is full of fascinating examples of this. Birds make nests, underwater animals make shells, corals and termites make intricate and elaborate structures to enhance their ability to survive and adapt to the changing environment. Human interaction with and control of the environment, through the use of technology, has reached a high degree of sophistication; from the use of natural structures such as flint and wood, to making metals, machine tools, high-rise flats, factories and machines. All these

have increased human collective agency. Each new generation of people was born into a world of structures they did not make and each generation retains changes or remakes structures to enhance their agency. This process is morphogenesis (Archer, 1998b) when it leads to structural changes and morphostasis when it does not.

The same applies to the social and discursive aspects of the world too. How can concepts and ideas, that are shared, become individualised by humans? In what way do the social structures form and change humans? And how do humans transform the socially developed concepts, ideas and social structures they find around themselves? Undoubtedly these processes occur constantly around us. People find themselves surrounded by socially produced cultural formations and social structures which constrain and enable how they are supposed to behave and be. Equally, people are constantly retaining, forming and transforming these very things as they live their lives. The reductionism/holism debate rages through the discussion of structure and agency interactions. The main positions were noted by Porpora (1998, p. 339) earlier. Reductionist perspectives consider individual human agents to be the active force in the creation and the perpetuation of society. This is what Archer calls an upward conflation model. The holists consider social structures to constrain the activities of individuals, arguing that you cannot reduce society to the activities of individuals. Archer calls this a downward conflation model. Both of these models might capture some elements of truth, but by embracing empiricism in their approach, neither of them account for the various emergent properties which become apparent on moving from the level of individual activity; to the level of groups; to the level of movements and to the level of whole societies. It is clear that some sort of multi-levelled approach is needed to consider structure-agency interaction.

The fact that structures act upon human agents means that there are changes to those agents, resulting from their activities, which affect their ability to change their environment. Thus there can be thought to be structural changes to the agency itself, in other words the development of internal structures, which

Archer (2012) calls embodied properties of the agents. The point is that there are emergent properties of both structure and of agency which interact to give rise to further emergent structures in society. This can be seen in any social process, but to study the interplay of structure and agency requires a study of timeframes. To understand the interplay of structure and agency the issue needs to be considered at many levels in a stratified world and time must be taken into account as a factor. This is one of the epistemological challenges of this thesis. A morphogenetic approach to the relationship between structure and agency (Archer, 1995, p. 135) lends itself to considering both structure and human agency over time in a morphogenetic spiral. Figure 3 is a diagrammatic representation of some aspects of morphogenesis. Bhaskar points out that

Society is both the ever-present condition (material cause) and the continually reproduced outcome of human agency (Bhaskar, 1979, p. 43).

Figure 3 Morphogenesis

A diagrammatic representation of morphogenesis

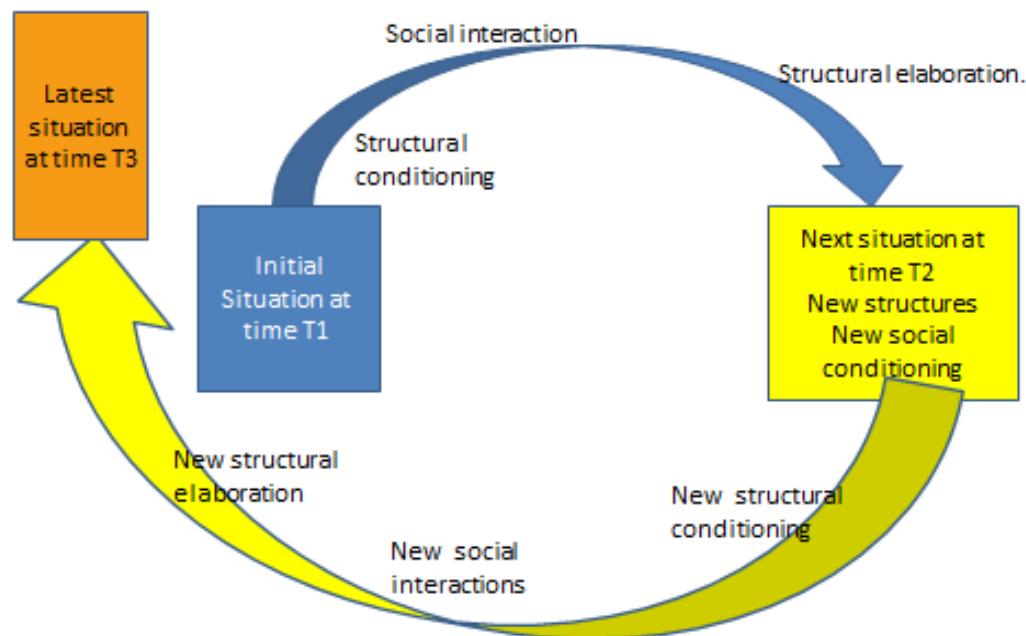


Figure 3 is based on Archer's (1988) description of morphogenesis. It shows the way in which agents find themselves in particular material, social and cultural

structural environments which constrain and condition them. Potentially they can make changes to these environments through interacting with them and with other agents. As a result of the interactions there is a stage of structural elaboration in which the situation changes or resists change giving rise to new structural circumstances and the agents might or might not develop new capacities, or properties, which give rise to further powers of interaction. The three boxes represent different times. Finally, the new circumstances lead to new conditioning and new interactions and then elaborations take place and so on in a spiral over time.

Although Archer discusses morphogenesis in terms of social structures, this diagram may be used to show the cycle, regardless of whether the structures being considered are social, discursive or material structures. In fact *in situ* they are always an interacting combination, which is why the term social interaction is appropriate in all cases except people's individual interactions with nature. Archer's notion of analytical dualism (Archer, 1988) can be used to separate the ideational (or discursive) from the social in order to get a purchase on the exact relationship between the social and the cultural spheres at a particular time, always remembering to put them back together when applying the fruits of such deliberation. Similarly, material structures in both the environment and embodied within agents need to be abstracted and analysed separately from the social and the cultural in order to understand the materiality of the way in which both the cultural and the social spheres operate. In the actual world these three spheres made up of the social, the cultural and the physical systems always occur together, with phenomena emergent out of their interaction.

In the final section of this chapter some of the ideas explored are used to draw up a stratified ontology of human life within a higher education setting. This gives an idea of what both structures and agency might look like at different levels and examples are summarised in table 1 though these are not comprehensive. Emergent properties also arise from the relations between entities at each level. Each stratum will be considered in turn starting from the

atomic level. The levels of interest in the context of this research are all the levels from the physiological level onwards. One important point to note is that all the levels coexist simultaneously. There is another dimension of stratification over time to be considered and this is not shown in table 1.

The atoms around and within a living thing are constantly rearranged during life processes and the replication of DNA at the next level up, the molecular level. If we were the size of atoms we would not be able to see why the movement of the atoms is not random. The mechanism determining what is happening is only seen at the next level up; at the molecular level (Bertalanffy, 1969). The replication of DNA is characteristic of life. Large organic molecules can build up structures with the ability to retain their stability against thermal disintegration and replenish themselves from the environment. One example of this is the living cell.

The cells of a living thing are constantly interacting with the environment, exchanging gases, taking in food producing energy. This energy is crucial to agency as it is used to power the life processes which make changes to the environment. Many cells combine to make tissues, which combine further to build up organs in complex organisms. Only on death does the organism decay allowing the degree of disorder within it to increase (Schrödinger, 1944b). This distinguishes a living structure from a dead one. This is also the reason why living systems are only found as part of open systems. They cannot survive without constant interchanges with the environment. Life processes are always connected with the increase of entropy somewhere outside of the living organism in question. Examples of how this increase of entropy occurs outside the organism while it decreases within it are seen at the next level up, in the dissipation of heat to the environment or the breakdown of other organisms through feeding and digestion and so on.

At the physiological level, knowledge of the natural world becomes embodied as a result of the exercise of human agency at the physical level or in the natural

realm and in the realm of non-linguistic practical activity (Archer, 2000, pp. 161-173). These aspects of human agency operate at the next level up, the level of individual consciousness. The human body has a tendency to act, all things being equal, in such a way as to alleviate pain, discomfort or stress. At the physiological level the life processes tend to respond automatically to maintain homeostasis. The heart may beat faster to pump more blood round the lungs for a person working in a stuffy room. More blood pumped to the surface just under the skin will help the body to lose heat in uncomfortably hot conditions and so on. At this level the organism is reacting to changes in its environment and the reactions are mainly automatic. However, depending on the complexity of the organism there is also the option to get up and physically move out of the uncomfortable environment. Yet such an option may be overruled at a higher level of the strata. The reason is as follows. Such processes will be accompanied by various emotions, which become part of the more conscious internal conversation of the individual Archer (2000). These emotions, arising from changes at the physiological level, play their part, together with other emotions, and will eventually contribute to what the individual may decide to do. That decision takes place at a higher level and it is not impossible for a human being to remain in an uncomfortable physical environment for other emotional reasons that operate at social or institutional levels. Such examples may be such as the fear of a fierce boss or the sacrifice of one's own comfort for the sake of others.

The learning processes evident at the physiological level occur as tacit understanding is encoded or embodied in the physiology of individuals (Archer, 2000; Hyaden, 1969; Schrödinger, 1959). The level of consciousness is the level at which new decisions can be made regarding what Archer calls the natural and practical realms, both of which correspond to the material structures discussed earlier. Archer (2000) argues that the practical lives of individuals give rise to conflicting emotions the resolution of which determines what they decide to do. Individual human agency, in the sociological sense, emerges at this level. Deliberation takes place here, where individual human consciousness operates.

Decisions that are taken in the practical realm and all of the physical interaction with the environment do not need the use of language. This is also the realm where individuals have to deal with conflicting priorities in the ‘dance of the emotions’ (Archer, 2000, p. 220), as the demands originating in the practical, physical and social spheres may be conflicting. The next layer up concerns the effect of social life upon the individual.

In keeping with the work of Vygotsky (1978) and Freire (1994; 2000), cited earlier, the discursive structures of society have their effect on the awareness of individuals even when they are alone. Books, radio, past conversations all carry discursive perspectives and ideology and this affects the transitive realm in the sense of the consciousness of individuals. This is the level where the influence of social life is felt in the life of an individual who is working alone; a primary actor (Archer, 2012). These influences are part of the ontology of the people considered at this level. Although just one individual is involved, social, cultural and linguistic effects are manifest. Language in the form of a reflexive, ‘internal conversation’ (Archer, 2003; Archer, 2012) becomes important.

At some stage, however, agents can join others to become corporate agents (Archer, 2012), sharing common aims to bring about desired situations. This is the level of social interactions. Cooperation becomes possible as do clashes between conflicting interests. It is the realm when the emergent properties such as with me, against me, friend, foe, superior, subordinate, comrade or rival, appear for the first time.

Table 1: Some examples of structure and agency in a stratified view of the world

Stratum	Structural phenomena	Human Agency
Atomic /molecular levels	Wireless technology. Radio waves interact with humans at the atomic level.	Molecules retain structure against thermal disintegration. DNA replication, which selectively takes up and organises atoms in the environment.
Cellular level	Physical effects of stress and wellbeing.	Constant interaction with the environment. Gases and nutrients taken in, waste products and energy released. Cells reproduce to make tissues which form organs. Energy used to maintain order and stability.
Physiological level	Working conditions, time allocated, individual access to resources, stress. (All human activity affects this and all the next levels down.)	At the physiological level the life processes tend to respond automatically to maintain homeostasis.
Individual Consciousness	New practices, old ideas now tacit, and implementation in new conditions (conscious and unconscious).	Sense of self emerges. Reflexive self-evaluation in material realm.
Social aspects of mind	Interpersonal cooperation or rivalry and tensions, dominant ideas or models of teaching, individual actions, modelling. All forms of discursive structure which carry ideological meaning	Language develops. Sense of social self emerges. Emergent Property: social identity. Also cultural and structural emergent properties of individual agents.
Small Group Social	Research groups, collaborative teaching or research activities, informal groupings within a department, cultural positions and individual interests, individual access to resources.	Agency in collaboration/conflict with others. Corporate agency, collectively seek to transform constraining structures.
Institutional level	Course teams, strategic plans, internal policies, management structures, internal markets, Institutional culture, resource distribution, rooms. Departments, faculties.	Corporate agency.
National level	Policy, national structural changes in higher education, funding mechanisms, competition between higher education institutions, Institutional cultures, unions.	Corporate agency. Social actors emerge.
Global/ International level	Multinational Corporations in Higher Education, International Law, WTO ² rulings, World Bank funding of education, UNESCO, Repercussions of the “Credit Crunch”, the OECD process, Neo-liberalist agendas, the Bologna process within Europe.	Social actors, give rise to global structural changes and hence to other possible roles for agents. Also corporate agency.

² WTO: World Trade Organisation, UNESCO: United Nations Educational, Scientific Cultural Organisation, OECD: Organisation for Economic Cooperation and Development.

At an institutional level emergent properties are roles in formal positions within institutional structures. These are roles that can be occupied and developed by successive generations of human agents. The potential to become corporate agents is still evident. With the formal positions come emergent properties of status and power and access to the control of resources.

At the national level, agents develop the potential of becoming what Archer calls *social actors* (Archer, 2000). These are those who aspire to change society at the national level. Roles are much wider ranging at this level and so are the formal positions and power issues that develop here. Structural changes at this level can affect the possibilities of many other corporate actors as well as individual agents. The category of '*corporate agent*' is still open at this level. Emergent here are national policies and institutional roles. Social actors could potentially make wide ranging structural changes affecting millions of individual agents. The level above this is the international or global level. Chapter five covers the question of what aspects of both structure and agency may be emerging at this level in higher education. The influence of structures like the internet and modern communication systems lead to constant changes. The effects of international finance systems emerge at this level as structures are manipulated by corporate agents such as banks or conglomerates of shareholders on the stock markets. The effects are internationally felt.

In this chapter the constitution of human agency as the capacity of human beings to make changes to their physical, social or discursive environment has been elaborated. The way people make use of, and create as needed, physical, social and discursive structures in order to further enhance this agency has been considered. In the process of existing within, and changing these structures, human agency changes its own internal structures. This morphogenetic development of structure and agency takes place within a world which is stratified in various ways and develops through time, with emergent properties of structure and agency appearing at various layers in the social and physical

world and over time. In the course of the exploration of this subject, the recurrent reductionist/holist debate in the areas of biology and sociology, as well as in the consideration of the emotional aspects of agency, has been discussed. Both reductionist and holist perspectives have been strongly influenced by empiricism which has denuded them of useful analytical potential and obscured issues of emergence and stratification in the objects of study. The constant appearances of idealist and mechanical materialist perspectives which have tended to obscure the issue under scrutiny rather than exposing it for analysis have also been encountered. In navigating the terrain, the lens of critical realism has been used to cut through some of the confusion in the literature. Finally, during this chapter, a start has been made at identifying the stratified ontology of human life and behaviour with a consideration of what structure/agency interaction means and what is emergent at various layers. This analysis needs to be further developed in order to scope the terrain in which this research will take place. The next chapter takes up the analysis of knowledge in some depth in order to deepen an understanding of pedagogy and learning.

Chapter Four: Knowledge and Pedagogy

The purpose of this chapter is to extend the ideas developed so far to consider the connection between the development of knowledge and the agency of humans as stratified beings and to draw out implications for pedagogy. Knowledge is created whenever humans interact with their material, social or discursive environment. It is an emergent product of human practice as people exercise their agency (Sayer, 1984; Taylor, 1985). All living entities gain knowledge of their environment as they make changes to it. Their knowledge sits in the embodied changes they themselves undergo as they exert their agency. But, as we have seen, humans can encode their knowledge in artefacts and symbolic systems (Bertalanffy, 1981b; Cassirer, 1944) to share it with others and use collectively. Only humans reify knowledge by exteriorising it in objects, using various technologies (Steigler, 1998). This is a process that started with writing and has now reached unprecedented proportions with a huge variety of media in use (Jewitt, Kress and Mavers, 2009; Kress, 2010; Kress and Van Leeuwen, 1996). Humans can also develop knowledge to sophisticated levels of abstraction and generalisation with the help of symbolic systems such as languages and classification systems. But this also means that knowledge can lose touch with its origins and appear in a canonised form, alienated from those who produced it, and sometimes not fully understood by those who are supposed to use it.

The ability to share what has been learned allows people to develop knowledge collectively too, making joint projects possible. Some aspect of the knowledge developed is therefore connected with facilitating this sharing process and, over time, gives rise to various shared cultures; ways of doing things, particular vocabularies, algorithms, categorisation systems, seminal texts and theories, all of which are specifically suited to particular crafts, professional practices and epistemological projects. Different academic disciplines each have such cultures and traditional ways of being which have been developed over time. A novice or

student entering any craft or discipline has to be acculturated into these forms of knowledge, developing various relevant social experiences too and gaining in status as they become proficient in them (Lave and Wenger, 1991; Wenger, 1998).

In chapter three the notion of a single human cultural system was introduced. Archer (1988) claims there is only one human cultural system at any time and defends this position against the opposing claim of cultural relativism. This is not to deny that people have different languages, cultures, technologies and so on, rather it is to make the point that all of these can potentially be accessible to any human who can do the requisite work involved to learn them. Archer defines the cultural system as anything that can be interpreted or understood by a person; as the sum of all the 'parts' as opposed to the 'people' that are involved with cultural activity. This system encompasses all knowledge gained by humans in the world. It constitutes a record of past and present ways of doing things, ways of categorising or conceptualising the world using models and theories. It is embedded in social interactions and social relationships. Archer however, advocates an analytical separation between such objects making up the cultural system, which she calls the 'parts', which might be the artefacts, libraries, stories, films, traditions and so on, and the social interactions involved, or agential action which she calls the 'people'. This analytical separation is needed so that we can trace the role played by culture in social relationships. Archer's terminology is slightly misleading because personal embodied properties are structures within people who are structured and stratified beings and could be considered as 'parts' within 'people'. The point however, is not to conflate structure and agency.

Another way of thinking about the cultural system is via Bhaskar's (1979) idea of a transitive realm in which people's perceptions and ideas or feelings are located. In other words transitive entities are epistemic, or to do with knowledge and how it is organised into concepts arising from our interaction with the world and ourselves. A major aspect of this transitive realm for any one

person would come from the parts of this shared human cultural system that she or he has access to. Aspects of the transitive realm that lie outside the cultural system are experiences of a human individual which cannot be directly experienced by others. Searle (2008) gives a stomach ache as an example of knowledge that is both ontologically and epistemologically subjective.

The human cultural system is made up of the first category and is potentially accessible to others. It consists of intransitive objects embodied in material, social and discursive structures, both within and outside of people, and the cultural system changes through time as people modify it. Knowledge gained can be reified in this way if it is objectified in some way. This can happen when it is written in books, encoded in oral stories consciously passed on, or encoded in other academic or pedagogic texts. In other words it has been separated from its originating practices and re-embodied into external entities which can be shared. Theoretical knowledge is this kind of generalisation of knowledge, which has yet to be reconfigured or used in new contexts. The use humans make of symbolic universes allows for very rich and complex creations which encode experiences and analyses. Theory about practices can be codified and turned into books with instructions or outlines for people to follow, into algorithms describing or analysing particular courses of activity, or even into traditions. Such theoretical knowledge is always de-contextualised. The pedagogical implications of this are that learners need to test and change their received knowledge in new contexts to see if it is still useful. They bring it to life for themselves. If this is not done they rely on prescription and formulaic approaches to practice. Separation of knowledge into the work of the head and the work of the hand may train students to follow prescriptions, but be unable to develop their own practice and develop new knowledge. It can also act as a gateway to exclude those who do not already have legitimate peripheral experience of a discipline or practice. It is not however, useful in developing students to be critical and confident practitioners.

Parts of the human cultural system remain locked up in libraries, perhaps in books that nobody has read for years. Other parts of it are inaccessible to many sections of the people as a result of their lack of ability to understand a particular language or to access people's unrecorded practices. However, given the chance to do the necessary work there is no reason why they cannot understand it. At the same time, as Archer has argued, it is certainly not the case that there is cultural integration of all peoples into national cultural systems (Archer, 1988). No one society is totally culturally integrated within itself. In fact the more contact there is between different societies, the greater the possibilities for dissent from dominant cultural perspectives within each. The degree of integration into the human cultural system depends on a myriad of factors, not least the fact that large parts of the cultural system are hidden from large parts of humanity at any time. It is of course possible to highlight and to bring some aspects of the cultural system to people's attention while ignoring others, through newspaper reports, controversies, debates, speeches, carefully constructed arguments, advertising and so on. Such activities go on all the time as part of socio-cultural interaction between people. It is also possible to suppress aspects of the human cultural system by deriding ideas, by putting a negative 'spin' upon a perspective or by banning books, ideas and practices. Finally, it is possible to destroy cultural objects and take them out of the human cultural system altogether. Such activities go on when some people have an interest in suppressing certain types of knowledge while promoting others. So the crucial question again arises, who gets access to which parts of the cultural system and under what circumstances? This is a question that confronts pedagogy time and again.

Archer claims the human cultural system is itself full of contradictions and incompatibilities but that logical coherence determines how long they continue to be influential. While this might be true, it is a weak argument for the resilience of logical structures particularly when Archer points out that manoeuvres in the sociocultural realm can be used to protect the interests of one group of people when necessary. An analysis of the role of the cultural

system in socio-cultural interactions involves analysing how power relationships play out. It takes social and economic power to make people accept views of the world which contradict their own experiences and their own interests.

Not only is knowledge crystallised in shared symbolic systems, it is embodied in people's own physiological structuring, as they engage in agential action (Hyaden, 1969). This is in the sense of tacit abilities and skills which have developed through activities repeated time and again. Examples of this are: the ability to type, the balance to walk a tightrope, the fine motor skills of a heart surgeon, or indeed developing immunity after exposure to particular diseases. In short any ability which gets better with practise gives a person personal embodied properties (Archer, 2012), which are held at all levels within their make-up. These tacit aspects of human knowledge on both physiological and social levels are a consequence of the stratified nature of a person.

The world exists independently of our knowing about it. Material, social and discursive structures within it are ontologically objective. We, including our reactions to the stimuli of the outer world, are of course also part of the world and colour, sound, smell, taste and our feelings are equally real too, but are ontologically subjective (Searle, 1995, p. 13), which means that they are only fully accessible to the person doing the sensing. These entities are emergent from the body's physiological reactions. According to Kant, as we cannot learn directly about *things in themselves* existing outside ourselves, human knowledge can only be made up of the reflections of the world outside us (Kant, 1998 [1787]). In doing this he separated knowledge from the material world. Hence knowledge could only exist as ideas. This popular way of thinking about knowledge ignores its embodiment and opposes the world of the mind to the so called real world. By driving a gulf between the objective and the subjective, Kant sets up a form of dualism which hinders our understanding of these entities and their interaction with us (Sayers, 1985, pp. 19-31). As we are constantly interacting with the world, any study of human life is to study mutually interacting processes not just discrete objects. Sayers suggests that a dialectical

approach based on Hegel's development of the interpenetration of opposites, is useful. Rather than separating the objective and subjective, the material and mental or reducing them to each other, it is possible to conceive of them as dialectically related to one another, or as Marx puts it

...thinking and being, to be sure are distinct but at the same time in unity with one another [(Marx and Engels, 1975, p. 138) cited in Sayers p15].

This implies that knowledge itself is the product of this continuous process of interaction between humans and their environment; in other words human practice. One product of this process is the embodiment of knowledge gained. Someone's practice in changing their environment also changes their own material structure by adjusting muscles and the connections made across nerve pathways, especially when actions are repeated. Hegel elaborates a unity of constantly interacting opposites through which we simultaneously reform ourselves and the environment:

We have all reason to rejoice that the things which environ us are not steadfast and independent existences; since in that case we should soon perish from hunger both bodily and mental (Hegel, 1975 section 131z) cited in Sayers (1985, p. 16)

According to Sayers, by eating and drinking we incorporate the objective world into ourselves to become stronger, which allows us to make further changes to the world. We

...appropriate the objective world and transform it into thought, and thereby give substance and sustenance to our subjective being. In practical activity, on the other hand, we translate our subjectivity, our ideas, purposes and intentions into reality: we thereby realize it and embody it in things. Here, in all our awareness and in our every action, we have the interaction and interpenetration the concrete and dialectical unity of consciousness and matter (Sayers, 1985, p. 16)

Marx makes a similar point in his notes on Wagner (Marx, 1975). Similarly Schrodinger points out that our senses give rise to impressions of the material world within us and if we act upon these sense-impressions, by moving a limb or by making a sound, then we begin to see the nature of human reflexivity and human sensuousness as a practical activity where all our interactions with the

world make impressions upon us just as we make impressions upon it. Searle makes the same point.

In general there is no action without perception, no perception without action (Searle, 1992, p. 195).

This process is as restrictive as it is liberating. Humans are restricted by their senses, they are not able to probe the object's ultra violet or infra-red properties for example, in the way that bees or goldfish can, although technology can enhance their senses. What is perceived is never value free as a result of human needs and interests. Our direct knowledge of the world is consequently always fallible, perspectival and subject to correction by further interactions. One consequence of the dynamic relationship between living things' agency and the environment is that there is a need to constantly adapt to changes. This process of adaptation occurs at all levels in the stratified entity that is a human. In the next section this is explored at physiological and social levels with particular attention to the role of consciousness in the development of new knowledge.

According to Schrödinger (1959) consciousness is a mechanism to help a living thing to adapt to changing surroundings. Schrödinger approaches the question of consciousness indirectly by asking why all nervous processes are not conscious. Reflex actions are unconscious reactions to stimuli which are initiated in the nervous system but bypass the brain and are not conscious. Both conscious and unconscious actions involve nerves responding, with activity, both to the external environment and within the physiological system. There are other mainly unconscious actions which do go via the brain and of which we can become conscious. Examples are: breathing, adjusting to walk uphill, blinking and so on. The question is what is the role of consciousness? According to Schrödinger:

Any succession of events in which we take part with sensations, perceptions and possibly with actions gradually drops out of the domain of consciousness when the same string of events repeats itself in the same way very often (Schrödinger, 1959, pp. 4-5).

This is the basis of tacit knowledge. With practise, some learned activities become so embodied as to be automatic. If the environment should change the action required would need to be different. The stimulus:

...is immediately shot up into the conscious region, if at such a repetition either the occasion or the environmental conditions met with on its pursuit, differ from what they were on all the previous incidences.
(Schrödinger, 1959, p. 5)

It is when unfamiliar situations or '*relevant differentials*' (Schrödinger, 1959, p. 5) are encountered, that a different treatment is required. Learning to ride a bicycle and then trying to do it in icy conditions; swimming in calm water and then suddenly encountering a strong current; driving on roads and then driving on a motorway are all examples. They require conscious attention to adapt a previously unconscious activity to new circumstances. A physiological structure that facilitates unconscious activity enables an organism to operate efficiently, even in changing circumstances. We seem to acquire mastery by repetition, and the details of the process of learning gradually fades from conscious thought to be retained at some deeper level of the organism. The experience of acting in a certain way, once acquired, is held somewhere, but where? Musicians and dancers may call it muscle memory.

We are conscious of only those issues about which we currently need to make decisions (Archer, 2000, p. 143; Schrödinger, 1959, pp. 3-4). If we consider a living thing to have a stratified ontology then the repeated use of the same muscles and nerves can give rise to underlying changes in muscular structure and neural connections at the physiological level. This is how the gradual patterning of brain cells and muscle-eye coordination may occur as we learn to manipulate the environment, learn to walk or to move away from discomfort. To give an example from practical life, when first learning to play the flute, the novice will concentrate very hard on fingering and breathing and the very act of making a sound at all. Later, as these things are mastered she will go on to become conscious of questions of harmony and rhythm or vibrato, while knowledge about issues of fingering and breathing are now held in 'muscle

memory' or as 'tacit knowledge' at the physiological level. It is only when the individual meets a new situation such as the need to use a different fingering, where decisions have to be reconsidered, that conscious deliberation is needed and the issue comes up for consideration again. The changes in the physiology of a person as a result of gaining practical skills are practical personal embodied properties. These are structures which are within a person and in particular circumstances they can give rise to personal emergent powers, such as the ability to swim or ride a bicycle. When changes in circumstances or new intentions mean that personal emergent powers are not enough, then the person has to engage in conscious deliberation to find more suitable actions.

A parallel process occurs at the social level when the fully developed individual begins to come into contact with others and social interaction develops, knowledge is laid down within the products of social interaction, such as learning a language or accessing new features of the cultural system. Thus at the social level humans have found ways to embody shared knowledge in ways that more than one individual can access. People have shared understandings of ways to be, some of which are quickly relegated to the unconscious too. Searle has developed a concept of '*the background*' consisting of all the embodied '*capacities, abilities and general knowhow*' that allow people to concentrate consciously, only on what they need to work on in the complex social and discursive environments of everyday life (Searle, 1992, p. 194).

The importance of engaging student agency in the learning process cannot be underestimated because consciousness is associated with the initial learning process. Once learning has occurred, '*knowing how*' can become an unconscious business.

...consciousness is associated with the learning of the living substance; its knowing how (Können) is unconscious (Schrödinger, 1944b, p. 11).

The role of consciousness in learning allows us to concentrate at the cutting edge of experience where new situations are being mastered.

One implication of this for teaching is that tacit knowledge within a new discipline can only be assimilated via students' experiences of partaking of work within the community of practitioners. The accumulation of facts and procedures as encoded in texts is not enough in itself. Students have to make use of such knowledge for themselves within practice at an appropriate level. One implication of this for curriculum design is that learners need to experience practices first hand at whatever level they are able to do so. Bruner's (1963) model of a spiral curriculum is one way to develop such modes of pedagogy. New learners can have various degrees of legitimate peripheral participation (Lave and Wenger, 1991) in authentic practices. Novices have to be challenged in various ways, taking them out of familiar practices so as to encourage reflexive deliberation within the scope of their developing practice. They have to be able to bring whatever resources they can muster, to solve authentic problems in order to develop new personal embodied properties, whether these are material (physiological), social or discursive and cultural properties. No matter how much students are given lists of relevant facts and procedures, until they actually use the new knowledge to develop their own practice, their own agential action as new practitioners of the discipline, they will not be able to progress beyond repeating other people's practices. Pedagogy is about facilitating the student's trajectory with carefully chosen experiences. Too much prescription restricts the student to theoretical knowledge alone; it inhibits the process of the student's development of personal embodied properties, which build the capacity to eventually apply his or her knowledge to new situations without help. Tacit knowledge has to develop at many levels within humans, not all of which can be accessed through exteriorised knowledge. Some students may well have gained legitimate peripheral experience of practices if they have had family backgrounds that gave access to them. A lawyer's daughter, for example, may be more able to 'fit in' with the various unspoken expectations of the courtroom, but other students would have to find ways to gain the experiences to do so. In the past a deficit model of students from working class backgrounds was an effective way to exclude them from higher education (Apple, 2013). This is no longer acceptable and some of the participants in this

research have found ways to allow students to access more of the hitherto unseen aspects of the disciplines they teach, through engaging in authentic experiences of the discipline.

In this chapter the development of knowledge as it emerges from human activities to exert agency has been discussed. Knowledge is conceptualised as shared when embodied in a human cultural system. A consideration of how tacit knowledge, both material and social, is laid down within individual humans, as structured and stratified beings, has led to a particular view of consciousness. Some implications of these ideas for pedagogy have been drawn out. The next chapter is about higher education and how it is changing both globally and at a national level in England.

Chapter Five: The changing nature of higher education.

This chapter presents an analysis of the changing nature of higher education at the global level and at the national and institutional levels in England. It is set against a context of three main types of changes. Private markets are being created in education (Brown and Carasso, 2013; DfES, 2003), higher education is being redefined as a commodity for sale, and prescriptive directives and monitoring regimes are impinging on human agency at all levels, drawing people into activities around marketized discourses and performativity (Ball, 2012; Clegg, 2008). Higher Education is emerging as a transnational entity through the cross-border provision of university services. According to Verger (2010), universities are being expected to play an increasing role in nations' economic competitiveness. To do this, many English universities are redefining their nature and aims, expanding their branch campuses across the world and exporting activities to other countries.

International communication and the flow of ideas across continents are not new. In the 1300s, both Marco Polo and Ibn-e-Battutah (Mackintosh-Smith, 2003), described educational exchanges between different nations. Today, a number of overarching structures have emerged, operating across countries, especially since the Bretton Woods conference in July 1944. The World Bank, the Organisation for Economic Co-operation and Development (OECD), and the European Union (EU), the North American Free Trade Association (NAFTA) and the Association of South East Asian Nations (ASEAN) amongst others, are cited by Ball (2008, pp. 1,32-37) as having had an influence on current policy thinking. Such supra-national structures aimed to prevent a repeat of the unbridled competition that brought two world wars, while preserving capitalism. Further legislative structures have since emerged in the form of international laws, the rules of the World Trade Organisation, the stipulations of the International Monetary Fund (IMF) and the World Bank and to a lesser extent the other

bodies of the United Nations, although the latter are less committed to making the free market, and the maximisation of profits, drivers of the world's economies (Ball and Youdell, 2007; Bassett, 2006). Rules and regulations are discursive structures, but the stipulations of such structures can be enforced by additional social and material means. Other, different but connected, discursive and social structures are international meetings, conferences and discussions within the various trade treaty organisations such as the G20³, NAFTA⁴, APEC⁵ or the EU⁶. These organisations develop joint agreements which then draw members into action, through joint conferences where neo-liberal policies (Harvey, 2005) are promoted, and consensus is sought. Such discussions are underpinned by the economic interests of the powerful, and the threat of economic penalties for non-compliance (Henry *et al.*, 2001). The influences of bodies such as the OECD are felt through processes of normalisation and peer pressure amongst groups of nations whose governments share a commitment to a particular neo-liberal promotion of 'market forces, good governance and democratic values' (Henry *et al.*, 2001, p. 2), where the second two of these entities are assumed to be predicated on the first. In this way education policy is being shaped on a global scale. Policies across nations are converging to produce a unilateral view of 'best practice' based on the methods and doctrines of what Ball calls the 'neo-liberal imaginary' by which he means the promotion of market forces above state regulation and above the advancement and well-being of citizens. Ball (2012, p. 2) claims that networks of philanthropy, business and governments are coming together in sites of policy outside of the framework of the nation state. This is carried out by a range of governmental and non-governmental organisations operating on the international or global level and setting up processes that nations need to contend with (Henry *et al.*, 2001).

³ Group of 20 is a forum for the governors of central banks and governments of the world's 20 self-styled major economies.

⁴ North American Free Trade Association.

⁵ Asia Pacific Economic Cooperation is a forum of 21 Pacific rim countries.

⁶ European Union

Countries respond in different ways according to their particular historical, economic and socio-political situations. In such discussions, education is often used as a bargaining tool to enhance economic competitiveness in international trade deals. Verger (2009, p. 240) points out that some countries have opened up their education sector for privatisation in exchange for favourable terms in other trade deals, such as the right to export agriculture, cotton and textiles to European markets. In these conditions those aspects of education which facilitate its use as a commodity are increasingly seized upon in the global arena. Education and education policy are themselves being exported as profitable commodities (Ball, 2012). In this way, Verger (2010) claims, international and multinational organisations with a primarily profiteering agenda are playing an increasing role in higher education affairs and influencing national policies pertaining to it. Some nations like England have opened up public higher education to private competition (Brown and Carasso, 2013). Restructuring programmes by the International Monetary Fund, which tend to demand privatisation of public assets, are redefining education itself (Carnoy, 1995) as a tradable commodity for sale on an international scale.

Agents can act individually or as conglomerates by sharing primary agency (Archer, 2000). Owners of private education companies and multinational corporations (Ball, 2009) operate as corporate agents to maximise their profits from education. The World Bank (Jones, 1992; WorldBank, 2002) works to promote the creation of markets in education. The IMF exerts control via its conditional loans and the Organisation for Economic Co-operation and Development (OECD) creates conditions for the normalisation of education systems and the acceptance of a neo-liberal agenda across its member countries (Henry *et al.*, 2001). These structures act in such a way as to enhance the collective social agency of all those who profit from the opening of markets in education. Many multinational corporations are setting up bodies to train their own personnel and calling them universities (Tuchman, 2009).

Research is another area which is being commodified. Marginson and Simon (2009) point out that the process, by which research performance is tabulated for global comparison, acts as a normative mechanism to increase competition by affecting the status of the countries and higher education institutions involved. The desire to score highly in such comparators hampers the publication of research in languages other than English and devalues types of research which do not score well on such normative criteria. Similar comparators are set up for education provision. When the OECD produces tables of comparative figures across countries, there is normative pressure on policy makers and institutions to adjust their education systems in order to fit in with the categories, regardless of national or local contexts and needs. Yet for a government to make adjustments to compete under the categories in such tables of comparison means it must accept the categorisation and all the assumptions regarding what constitutes education and its purpose.

Education and healthcare have traditionally been considered to be too deeply bound up with human needs and human rights to be located outside the domain of national states. They have been considered too precious to be bought and sold to the highest bidder (Price, Pollock and Shaoul, 1999). Kelsey (2003) points out that since the 1970s increasing numbers of transnational service companies have been arguing that state provision is inefficient and inequitable and in need of reform. This stems from their interests in market creation for if state provision of education is adequate and effective then there is no market in education. One of the ways to develop such a market is through the degradation of state funded education. According to Sackman:

... a stable niche for markets will only be provided if the political elites degrade the state provision privilege and/or if private suppliers offer education in new fields of the education system previously not occupied by state providers. Only then can new actors appear and national education markets evolve (Sackmann, 2007, p. 157).

Transnational companies, organised within bodies such as the United States Coalition of Service Industries (Lim, 2013) and the European Services Forum

(Coalition of Service Industries and European Services Forum, 2014), specifically work for the privatisation of state-funded services while insisting that private companies' profiteering activities should not be restricted by too much state regulation. Ball (2009) has analysed the activities of a number of such education companies both in the UK and internationally. In the international arena, such companies have been developing structures in the form of binding rules and agreements which give them access to the services of other countries to be opened up as markets. Kelsey (2003, p. 268) claims that such companies demand guaranteed access to countries' service markets, with little or no restriction on foreign direct investment and no protection for local firms or employees. They also demand the dismantling of public services which they refer to as 'public monopolies that lock up potential services' markets'. They insist that these demands be met and enforced with 'sanctions that bite'.

Kelsey goes on to point out that the World Trade Organisation's General Agreement on Tariffs in Services (GATS) was a market-opening instrument under the rules of the World Trade Organisation. Trade agreements made under GATS may not be withdrawn at a national level by subsequent governments. It is designed to bring privatisation into the state sector of countries that engage with agreements within it (Tilak, 2011). Such agreements have continued to grow in spite of the stalling of the GATS in 2009. The GATS is currently being replaced by the Trade in Services Agreement (TiSA), which is particularly aggressive on the question of dismantling public services to facilitate markets. It is planned to develop even more

...cross border data flows, regulatory transparency and coherence, movement of business persons, global value chains, and rules for state-owned and state-sponsored enterprises that compete in commercial markets. Not all of these have been tackled previously. Services businesses (sic) worldwide look to the TiSA negotiations to break fresh ground by achieving new disciplines and new market access commitments beyond current levels of openness (Coalition of Service Industries, 2014, p. 1).

These various organisations and structures are all in keeping with and help to extend neo-liberal principles. Neo-liberalism is defined by Harvey as

....in the first instance a theory of political economic practices that proposes that human well-being can best be advanced by liberating individual entrepreneurial freedoms and skills within an institutional framework characterised by strong private property rights, free markets, and free trade (Harvey, 2005, p. 2).

In this section some of the agents at the global level have been discussed. The next section is about some of the effects of global structures. The agents outlined above create and modify a range of structures at the global level. At one end of the spectrum there are multinational trade agreements, and the consequences of non-compliance is tantamount to breaking international law, and at the other end they can be simple discursive structures like a new definition or term, or a particular way of categorising learning or pedagogy as evident in international tables of comparison (Vincent-Lancrin and Kärkkäinen, 2008; Vincent-Lancrin and Kärkkäinen, 2009). These categories and definitions work as discursive structures. They are not imposed by physical force, and the consequences of not adopting them may be relatively trivial. However they do carry with them a range of assumptions and ways of looking at the world and at the processes of learning.

Ball (1998) elaborates on how such discursive structures exert an influence in education. As in all discursive structures, only certain knowledge is drawn upon and certain knowledge is ignored. In this way assumptions are carried forward within the categorisation structures. An international report on a country, by the World Bank or the OECD, may appear to be a disinterested, depoliticised document, yet within it education is assumed to automatically increase the economic competitiveness of a nation. This move ties education to the economy without any need to explain the process by which the two are linked. Consequently education is subtly re-defined as being exclusively those aspects of education reflecting the particular definitions of economic development, based on the degradation of state-funded education systems, which is referred to as

progress. For example, note the connection of ‘private sector growth’ with education in the following text:

The human mind makes possible all other development achievements, from health advances and agricultural innovation to infrastructure construction and private sector growth (World Bank, 2011, p. 1).

The World Bank advocates a form of creeping privatisation which moves in as state provision is gradually removed. Yet private companies are still to be subsidised and supported by national states through redefining what is meant by a country’s education system:

At the country level, the Bank Group will focus on supporting reforms of education systems. The term “education system” typically refers to the public schools, universities, and training programs that provide education services. In this strategy, “education system” includes the full range of learning opportunities available in a country, whether they are provided or financed by the public or private sector (including religious, nonprofit, and for-profit organizations).....This more inclusive concept of the education system allows the Bank Group and its partner countries to seize opportunities and address barriers that lie outside the bounds of the system as it is traditionally defined. (World Bank, 2011, p. 5)

The World Bank provides funds to help private providers compete favourably with public provision.

The world bank group has invested \$500 million in 46 private education projects (World Bank, 2011, p. 47).

Brock-Utne (1996) describes the history of the role played by the World Bank in the demise of sub-Saharan Universities in the late 1990s. The World Bank initially advocated closing universities in Africa and sending scholars overseas to learn. Faced with the unpopularity of this position, the World Bank changed it to ‘restructuring’ African universities and reducing their number to provide training in only those areas required by the market (Brock-Utne, 1996, p. 336).

The particular epistemic categories put forward by any discourse can be uncovered by a careful analysis of the texts produced within it. These might be definitions, classifications, links between concepts and assumptions which perpetuate selective definitions and forms of analysis aimed at making vested

interests more palatable to the public (Ball, 2009; Walker, 2009). One consequence of the circulation of such discursive structures is the emergence and spread of a view that education must be subjugated to profit-making disguised under the phrase 'the national economy'.

Rizvi and Lingard (2011, p. 18) also claim the OECD and the World Bank strongly link the idea of education to the wellbeing of national economies resulting in an increase in policy borrowing across nations and a global shift from social democratic to neoliberal approaches. National governments are pressured to increase participation in higher education and to link higher education to the 'alleged imperatives of the global economy'.

The next section is a more detailed account of the way in which apparently innocuous discursive structures can be extended to create social and material structures to further the same aims in the form of an 'organisational field' (DiMaggio and Powell, 1983; Jakobi, 2007, pp. 41-42). An organisational field is defined as a space within which a flurry of activity around certain aims takes place causing large numbers of people to be drawn into and influenced by practices which share particular notions, procedures and ways of acting. For example, conferences, courses and seminars can be created around a particular discursive formation, such as *the knowledge economy*. These result in the creation of a number of texts such as papers and web pages and people moving around the world to attend meetings and conferences. Money and other resources are spent and people are involved in building social relationships drawing them further into activities around these. Thus both social structures and material resources start to develop. At this stage there has been a move from purely discursive categories, such as a particular way of conceptualising learning, to social and material changes to the world which further the shared assumptions. In Ball's terms 'networks of social relationships' involving agents who legitimate and disseminate a shared 'discursive ensemble' (Ball, 2012, p. 11) are built. These social and material structures extend the organisational field's influence, carrying the initial definitions and categorisations wider. As

such structures grow the consequences of ignoring or not engaging with them starts to affect all those who are involved in education. They can be resisted but the point is that they need to be engaged with. Non-compliance with them carries greater consequences as they become more influential. This is how organisational fields grow (DiMaggio and Powell, 1983; Jakobi, 2007).

There are three aspects to the process. First, there is an increase in information load. Ideas based around a concept are exchanged, advice given and sought about it and there is an increase in interaction between agents. Social structures grow up around a common goal or world view. Second, some of these emerge as structures of cooperation and domination between the various agents involved. This is an important point, because whenever people accept things that might be blatantly nonsensical or against their own interests, power and resources are inevitable involved. Third, a common enterprise is created, around which agents are engaged in social and material activities, eventually drawing in more people.

Once an organisational field has developed, it creates a rationale for governments to create, to copy, or to buy readymade, policies in line with its premises. Other structures such as regulatory frameworks (Jayasuriya and Robertson, 2010) solidify these practices and tie agents, often initially on a voluntary basis, into them. One example of such a structure is the voluntary Bologna process originated in the Bologna declaration of 1999, a process aimed at creating a European Higher Education Area with agreed regulatory and qualifications frameworks (Gvaramadze, 2008). The MERCOSUR-Educativo in Latin America could also be considered to be creating and operating in similar regulatory spaces outside individual nations (Jayasuriya and Robertson, 2010; Verger and Hermo, 2010).

The OECD operates quite innocuously through drawing in prominent researchers to work on different projects, which although varied share a particular 'punch' to them (Henry *et al.*, 2001). These positions are reflected in a number of publications, conferences and *educational indicators* set into comparative

reviews amongst others, all of which act as growing discursive devices to propagate a particular neo-liberal conceptualisation of globalisation (Vincent-Lancrin and Kärkkäinen, 2008; Vincent-Lancrin and Kärkkäinen, 2009). Policies at a national level are affected by policy frameworks which are articulated and disseminated by such supranational units as the OECD (Deacon, Hulse and Stubbs, 1997).

Globally, stronger structures with harsher consequences for non-compliance also exist. Examples of these are tied loans and other forms of foreign direct investment in the educational infrastructure of a country. Failure to pay these back in time leads to high interest rates resulting in poverty and increased debt, trapping nations into yet more structures with harsher consequences for non-compliance such as the restructuring packages developed by the IMF and underpinned by international legislation. The increasing indebtedness of many nations has led to demands for privatisation as part of the conditions attached to rescheduling of loans or Structural Adjustment Programmes (SAPs) (Carnoy, 2000; Kamat, 2004; Tikly, 2004). Foreign direct investment in the public education sectors, debt financing and interest repayments are also used by global institutions to influence different nations' education systems. Sumner (1979, p. 268) claims that legislation, or law, can usefully be considered as a 'politico-ideological phenomenon' which is produced within a political practice aimed at developing, defining and perpetuating relations of power between agents. In the context of transnational private education deals, legislative structures can pave the way for the use of sanctions, military force, economic coercion, or the punishment of nations by marginalisation or isolation.

All these emerging structures set up various processes or causal mechanisms aimed to open up markets for the privatisation or *liberalisation* of education services. Such processes have different effects in different contexts, depending upon which other mechanisms are present to interact with them. In critical realist terms, which mechanisms are actualised depends on the contexts. The

next section addresses the relationship between the global and national structures affecting higher education.

The term globalisation is used to express a view that encapsulates the inevitability of the neo-liberal agenda and the futility of resisting it. New developments in technology enabling electronic communication and fast travel are cited to paint a picture of a global economy hurtling out of control and independent of any nation.

While the world economy operates largely uncoupled from any political frame, national governments are restricted to fostering the modernization of their national economies. As a consequence, they have to adapt national welfare systems to what is called the capacity for international competition (Habermas, 1996, p. 292)

Bauman (1998) argues that global forces severely curtail a nation state's ability to use Keynesian interventions to stimulate economic demand, making it increasingly difficult to maintain a separation between internal national markets and global ones. Marginson and van der Wende (2009) claim that funding streams from abroad affect the priorities of higher education institutions in ways that contradict national policies. Robertson (1995, p. 40) defines globalization, as the 'compression of the world as a whole' involving the linking of localities.

Waters calls globalisation a

social process making the constraints of geography on social and cultural arrangements recede while people become increasingly aware that they are receding (Waters, 1995, p. 3).

Appadurai (1996, p. 22) associates globalisation with the rapid flow of peoples across the globe as well as with the existence of diasporic public spheres where immigrants to one country can continue to participate in the politics of their country of origin through technology such as the internet, media and rapid transport causing a disjuncture between individuals and the state and a 'post national political order'. The term globalisation is conflated with 'ideological convergence' which is

multifaceted and intimately related to free trade, technological innovation and information communication, demographic change

linked to the development of global societies, socio-cultural, economic and ideological convergence (Thomas, 2004, p. 2).

In an echo of Habermas's 'uncoupled world economy' the term globalisation has come to mean that nation states, institutions and individuals are powerless against powerful, but unidentified global forces.

In the extreme case, a 'world economy' comes into existence which actually has no specifiable territorial base or limits, and which determines or rather sets limits to, what even the economies of very large and powerful states can do. Sometime in the early 1970s such a transnational economy became an effective global force (Hobsbawm, 1994, p. 277).

Bassett extends the same idea to apply specifically to the area of higher education which he claims is being redefined by global forces:

No longer is international higher education made up merely of national systems that educate citizens for local employment and national service. Instead, higher education is being redefined at many levels as an international service industry to be regulated through the marketplace and through international trade agreements (Bassett, 2006, p. 4).

All these positions contribute to a top down view of a global economy hurtling on independently, which is a popular view that Dale (2000) calls the Common World Educational Culture (CWEC). According to this dominant perspective, nations, regardless of their contexts or history, can simply solve their educational problems by understanding and adopting various unproblematic universal values about the nature of education, state and society, which happen to be in line with the neo-liberal agenda. Educational problems are assumed to be due to a deficit in a country's understanding of these issues and can be *fixed* by taking instructions from a 'common world educational culture'. (Dale, 2000, p. 427) The term 'globalisation' has come to mean these things in dominant discourses and hence tends to act as a pacifying notion.

However, technological developments do not have to lead to neo-liberalism per se. There is agency at the national and institutional levels. It is not obvious that effects due to local and national structures should be automatically overridden

by phenomena at the global level. After all, universities can choose whether or not to extend their operations abroad, and national governments have to decide to cut state funding for higher education to make such strategies attractive to universities. The workings of a world economy and the movement of capital across borders cannot take place without specific actions by nation states. Interest rates, foreign exchanges and stock markets all need to be put in place to allow the financial markets to operate (Holton, 1998, p. 80). National governments also have to accept trade liberalisation policies, and a certain level of social and political stability is needed for any *world economy* to operate. Archer (1990) critiques Habermas's perspective for its inability to account for agency. Structures at the global level can create mechanisms or potential drivers influencing regional, national and institutional levels. That the strong neo-liberal stance taken by the WTO, or in a position paper by the OECD, for example, can significantly affect national policies (Dale, 1999; Henry *et al.*, 2001; Rizvi and Lingard, 2011) is not in doubt. However, these can also be countered or resisted. Tax concessions have to be granted and a myriad of other structural changes accompany the activities of multinational organisations, all of which national states have to decide either to facilitate or oppose or turn a deliberate blind eye towards. In critical realist terms, for some nations the power of these global processes to change education systems will be actualised and national policy will reflect a similar conceptualisation of education. In others the powers will remain real but potential while other mechanisms stemming from economic, social and political structures within current or historical developments of the nation will work against them although, should circumstances change, they may become actualised.

The term *globalisation* gives a nebulous impression of a modern world with fast high technical communications verging on science fiction, where all the solutions to the world's problems are just around the corner waiting to be accessed by *the knowledge economy* or other neo-liberal notions of market solutions. The term *globalisation* carries a distinct impression that neo-liberalist processes just happen under no one's control and serving no particular interests. It implies

there is no alternative, even in the face of deteriorating working and living conditions. The term itself encourages people to be passive in the face of demands to marketise everything instead of seeking alternatives to neo-liberalism.

A bottom-up view of the interactions between national and global structures is not enough to explain what is going on either. Some powerful nations are directly involved in creating mechanisms that affect the global levels and other nations. Some of these states appear to be voluntarily giving up sovereignty to solve problems that they cannot individually solve (Dale, 2000, p. 444). According to Verger (2010, p. 13) it is necessary to look at 'who controls what and on what scale' by adopting a 'pluri-scaler conception of education' by which he means going beyond 'methodological nationalism' which only considers the national scale while at the same time not taking the opposite or a 'globalist bias' by considering the global scale alone. In critical realist terms this is acknowledging ontological depth (Bhaskar, 1979).

Power relations between the global and the national scale are not always of a top-down nature, and powerful states can also be promoters of global initiatives and processes as well as being affected by their consequences. Dale (2000, p. 428) claims that there is a 'Globally Structured Agenda for Education' where global events are driven by the changing nature, and the need for profit maximisation, of the capitalist economy. Dale suggests that the act of posing questions itself plays a part in deciding which answers are allowed and which are excluded. Social and economic forces act transnationally to reshape international relations. A 'Structured Agenda' is created, through which a 'systematic set of unavoidable issues' are made to arise for nation states depending upon their position relative to globalisation. Dale claims that the key points to consider about education are

...who gets taught what by whom under what conditions and circumstances' (Dale, 2000, p. 438).

To this we can add, and for what purpose? While Dale puts forward an alternative to the dominant model he still accepts the term 'globalisation' masking the actual forces behind any particular process. The very use of the term globalisation is totally rejected by Bourdieu who denounces the term itself when he refers to what is:

mistakenly called "globalization" and is merely, as American researchers were the first to demonstrate, the imposition on the entire world of the neo-liberal tyranny of the market and the undisputed rule of the economy and economic powers, within which the United States occupies a dominant position (Bourdieu, 2003, p. 9).

This section has shown how acceptance of the term *globalisation* itself draws people into a particular world view that accepts the inevitability of rule by markets and the acceptance of normalised neo-liberal solutions to educational provision. Neither top-down nor bottom-up approaches explain the relationship between the global and the national levels in analysing higher education. For any nation, the nature of its economy, the extent to which it needs markets, whether it is developing or losing its industrial base, the extent of its debts and the degree to which it is dependent upon other nations or is a lender to other nations, all affect its relationship to global structures.

Within Europe the problems of any one country can affect others (Gros and Mayer, 2010). The credit crunch and subsequent on-going economic crises faced by European nations, led some governments to rescue the banks and then reclaim the money by cutting public spending. Insistence on cuts in public sector spending is a requirement of borrowing either from the IMF or the more regionally-based European Development Bank. The loans to financial institutions are paid back by nations backed by their tax payers (Sibert, 2009). These processes were seen vividly in the case of Greece in the first half of 2010, and other countries in Europe are feeling the same pressures which adversely impact on public spending, including spending in the Higher Education sector. Structural adjustment at the hands of the IMF and the World Bank is now increasingly felt in Europe. The notion of some inevitable *globalisation* masks the way that such

processes, which destroy public education provision and create markets, blatantly create inequalities in educational provision.

According to Hickling-Hudson (2004), many of the problems that ex-colonial countries faced when developing their education systems were initially caused by the western models of education adopted, which tended to suffer from favouring the elite. Such inequalities in the education systems are being increased through the normalisation and privatisation of state education systems and the creation of education markets. According to Ball and Youdell:

Privatisation in and of public education can have a significant impact on equality of educational access, experiences and outcomes. Indeed, it can change what 'equality' in education means, with dire consequences for social justice. (Ball and Youdell, 2007, p. 16)

The next section of this chapter is about the redefinition of what is considered to constitute education at the global level. The word 'education' is a nominalisation (Butt *et al.*, 2000) which means that though it is a complex process, it can be used as a discrete noun in a sentence. This makes it possible to treat education as an object rather than the complex process that it is. This allows those who wish to do so to define education as a commodity and talk about buying or selling it as a service. The word education can appear in discourses as a *public* or *private good* or a panacea for an ailing national economy. For those who tie themselves to such an agenda it becomes important to define measureable and comparable markers of *quality*, which can be decontextualized and *kited* marked for sale. Sackmann claims that the extent of commodification of education is much greater in profit-driven private institutions, compared to public or non-profit ones (Sackmann, 2007). In opposition to this view of education, one could choose instead to discuss education as a human right, an aid to the development of individual human potential or the building of agential capacities essential for societal and human flourishing. The nominalisation of education avoids any discussion about the underlying complexity involved in learning, in pedagogical work, different cultural perspectives, vested interests, historical developments

or people's potential within the process of education. Which of these discourses has more currency depends on which powerful interests are at work.

How does the word 'education' occur at the global level, and to what purpose and in whose interests it is being used? What is education? Who is it affecting? Who is not included? What is taught? Which models of pedagogy are involved and why? What aspects of education are easy to commodify and what happens to those that are not? Who should decide what education is and which aspects of it should be developed? All these are important questions. The processes of commodification, the discourses and processes of market building and the notion of educational values which are decontextualized certainly reappear at the national and institutional levels.

The OECD strongly endorses a redefinition of education as a commodity, tradable on the international markets, which will make countries that follow its particular prescriptions about education more competitive in the world economy, while, at the same time, working to alleviate social discontent. The model they promote consists of a form of human capital theory, which is shared with the World Bank. This model is used to create markets in education (Tarabini, 2010). Ball sees two main trends in education via the global arena. The first sees the development of private schools and parental choice as a way of privatising education. This appears in the higher education sector as the development of private higher education institutions and student choice. The second simultaneous trend involves the development of managerialism and entrepreneurial lines as new forms of governance in the state education sector as a way of re-establishing the authority of the state (Ball, 2012).

So far this chapter has shown that at the global level, higher education is under pressure on three main fronts: First, markets are being created across the world where education policies, research, and any aspects of education that lend themselves to being turned into commodities may be sold for private profit. Second, many aspects of education are being repackaged as commodities for

sale in line with marketization. Finally, people are being drawn into activities around this aim, which implicates them in the process, decreases resistance and develops performativity regimes around normative tables made up of markers of excellence in education. These three issues are sharply contested to different degrees in different countries. The next section of this chapter is about higher education at the national level in England.

According to Sackmann (2007), education cannot be commodified unless there is a market for it. The welfare state with free universal, high quality education and higher education for all who qualified does not constitute such a market and so has to be degraded. Marketization of relations between people has affected all aspects of state provision in England. Initially calls for 'effective and efficient use of resources' were used to make structural changes and introduce new simplistic ways to redefine and monitor quality and efficiency markers that could easily be understood by non-academic managers (Broadbent, 2007, p. 195). State provision was slowly 'rolled back' (Ball, 2012, p. 26) and markets and privatisation introduced and promoted as the solution to all ills.

Ball (2009) describes the rollback of state provision in terms of education, research and education policy. Ball and Youndell (2007) show a variety of ways in which a form of creeping privatisation was developed within state-funded education. Bok (2003) claims that higher education was being commercialised. The process of privatisation of higher education occurs throughout Europe to varying extents (Fried, Glass and Baumgartl, 2007). Brown draws upon comparisons between private and public universities in America. He argues that when universities are involved in market competition, diversification turns into stratification, while quality, which is not easy to quantify, is replaced by a rush to invest in those things which please students and funders. Preoccupation turns to maximising profits rather than knowledge in universities (Brown, 2011). Levidow described the effect upon staff as:

...today's neo-liberal project undoes past collective gains, privatizes public goods, uses state expenditure to subsidize profits, weakens

national regulations, removes trade barriers, and so intensifies global market competition. By fragmenting people into individual vendors and purchasers, neoliberalism imposes greater exploitation upon human and natural resources (Levidow, 2002, p. 2).

Ball explains that neo-liberalism is not just about privatisation, but involves the state changing its role to 'market maker and regulator'. He also goes on to point out the development of 'quasi markets, public-private Partnerships' and the 'enterprising up' of public and voluntary bodies and charities. The Blair government's 'third sector' facilitated 'a new governmentality being rolled out' (Ball, 2012, p. 15). The governance of charities and philanthropic organisations was changed to draw them into this process to ameliorate the withdrawal of state provision.

Giddens (1994) uses the term *globalisation* to pave the way for these very forms of new governance. He associates the word 'globalisation' with uncertainty stemming from a dislocation between knowledge and control, pointing out that people may no longer blindly accept traditions now that they have increased access to knowledge. In this situation, former bureaucratic methods which were efficient in the past are no longer effective because states can no longer 'treat their citizens as subjects' (Giddens, 1994, p. 7). He advocates that new demands for political accountability and citizens' disaffection with the political process, a trend which he calls 'social reflexivity', are problematic for governance. Giddens considers the governance of people's feelings, values and subjectivities to be a legitimate way to manage, or 'take account of' their disaffection with the current political process. He also notes that there is a tendency towards an 'irremediably pluralistic universe of values' (Giddens, 1994, p. 20) with the simultaneous suspension of all value judgements apart from those which are contextual or local ones. He claims that 'universal values' (Giddens, 1994, p. 253) are emerging on a global scale, thus reflecting the notion of ideological convergence. Yet all these things are not new. Imperialist adventures have always exerted similar pressures on the colonised, where entire ways of life, let alone people's traditions were wiped out completely, to be replaced by the

universal values of the colonisers. Giddens paints a picture of the seeming inevitability of changes. On closer examination these *universal values* are in the interests of market forces. This is how Giddens's ideological position paves the way for new regimes of accountability which are being used, not to improve the political process, but in ways which undermine the status of professional experience and judgement in all the public services. These work to further degrade public services as part of creating private markets. Giddens's ideas underpinned the Blair government's Third Way which resulted in changes to public services, philanthropic organisations and the state in the UK, and have been instrumental in continuing to open up new markets in parts of the public sector in England. Giddens's view sits easily with what Ball (2012, p. 26) calls the 'rolling back of the welfare state' by making such actions appear to be necessary in the light of the inevitability of marketization.

In the higher education sector, state funding was replaced by student loans in 1998 (Brown and Carasso, 2013). This, combined with a gradual pulling back of public provision, has turned university education, 'overnight', from a publicly funded process to one which is, at least in principle, privately funded. Universities had to find alternative funding via student fees, corporate partnerships with industry or through research funds to make up for the loss of funding. The credit crunch with the subsequent concern that students may become reluctant to take out huge loans led many universities to increase their recruitment in the more lucrative overseas student market. Changes in the state in England have changed methods of governance in higher education with various devolved agencies, such as HEFCE⁷, QCA⁸ and the HEA⁹ being created to govern the areas of funding, quality assurance and research assessment, at a distance. This takes parts of the governance system out of the arena of public accountability altogether. Although the administration of policy has been

⁷ Higher Education Funding Council for England.

⁸ Qualification and Curriculum Authority.

⁹ The Higher Education Academy.

devolved, the government retains control through being one of the biggest customers of higher education (Shelley, 2005).

The UK's export of higher education into the lucrative markets of other GATS and TiSA signatories, as well as English universities' scramble for foreign markets in education is justified on the basis of the 'inevitability of globalisation'. For those opposed to the GATS who may feel that higher education should remain a public good and 'not-for-profit', control over the autonomy of the universities, the design and delivery of the curriculum and the philosophies underpinning the education system are all areas of concern. These are compromised when education is changed from a public good to a commodity. Universities will have to compete with powerful multinational corporations once the domestic market is fully opened up. According to Larsen and Vincent-Lancrin:

Attracted by new sources of profit, new private providers of post-secondary education services are expected to enter the market for educational services and step up competition. (Larsen and Vincent-Lancrin, 2002).

In line with dominant global mechanisms driving towards liberalisation, successive governments in England have committed to opening national education markets to private providers. English commitment to the 'liberalisation of markets' in the EU and globally is quite explicit. One of the key objectives of the Department of Trade and Industry (DTI) in 2006 was to ensure free markets. According to the DTI:

The department has a key role in establishing the UK competition policy framework and promoting the benefits of market liberalisation in the EU and globally... (Department of Trade and Industry, 2006, p. 18).

Material structures changed further when a £449 million cut in state funding for universities was announced in February 2010 to be spread over one year. At the time it was predicted that two hundred and fifty thousand UK students would have no places and fifteen thousand university posts would be lost. Student applications had risen by 12% when compared to the previous year¹⁰. In 2014,

¹⁰ Independent 08/02/2010

the government announced a cut of another £125 million to the higher education sector (Morgan, 2014). Overall there is a continual depletion of state funded resources going into higher education. This is part of the market creation project embraced by successive governments.

Currently, one of the barriers to alternative providers is the teaching grant we pay to publically funded HEI¹¹s. This enables HEIs to charge fees at a level that private providers could not match.....Our funding reforms will remove this barrier, because all HEIs will –in future- receive most of their income from students via fees. This reform, of itself, opens up the system (Willetts, 2011) cited in (Brown and Carasso, 2013, p. 29).

The student loans system combined with withdrawal of state funding to bring an element of artificial competition into higher education and actualise a national mechanism driving higher education institutions to try to dispense with government support (Henkel, 2007). Although money for student loans comes from the state, and they are underwritten by the taxpayer, the system, by which higher education in England is now funded, is causing universities to compete for students and resources. Student loans may now be spent at private higher education institutions. This potentially constitutes a direct transfer of state funding to private companies. At the same time, universities' recruitment is currently controlled by the government, via stipulations about how many students each institution may recruit, with which entrance qualifications and into which disciplines (Brown and Carasso, 2013). This is all part of what Henkel calls a shift towards market governance in the higher education sector (Henkel, 2007). This mechanism operates on all publically-funded universities, but it affects each differently due to differences in the economic health and status of these institutions and the cultures within them. This is a further example of the stratified ontology we are dealing with. Any mechanism at the national level has to contend, at the institutional level, with other mechanisms which ameliorate or enhance its effects, giving rise to different actual situations in each institution. This has led to different reactions by universities in England ranging from the case of one university which resorted to deception, by misreporting student

¹¹ Higher Education Institutions

drop out figures (Brown, 2010), to drastic measures by other universities to cut unprofitable courses. One example was one university's controversial decision to cut its philosophy faculty in an attempt to concentrate on more lucrative courses (Segal, 2010). Increased stratification or the development of different tiers within the higher education sector is being accelerated by this mechanism of withdrawal of public funds as universities react in different ways, looking for how to continue to be viable while becoming less dependent upon government funding (Henkel, 2007). For other universities, the search for alternative funding meant seeking relationships with corporations. Most university websites now contain a section about 'services for businesses'. The new funding mechanism has also led to greater recruitment of higher paying overseas students. Yet other universities are moving to lucrative franchises with overseas governments as well as with private providers. The net result is that education becomes more accessible to those who can pay (Tilak, 2011) and less possible for those who cannot, both on a national and on a global scale (Ball and Youdell, 2007). Inequalities in the take-up of higher education have actually increased over the period of its massification (Blanden and Machin, 2004). Barr et al (2005, p. 32) have argued that:

The need to repay loans, even if repayments are income-related, and even if the loans are available on generous terms to students from poor families, might well increase inequality of university attendance by social class. It requires considerable optimism about one's future to take out a loan which, even if no tuition fees are charged, would amount at least to £7500 for a first degree.

Since then student fees have increased to an average of £9,000 per year in 2014. Metcalf (2003) claims that some students' need to work during term time, which contributes to systemic inequality by leading to differences in the choice of university that students can make; a process which itself exerts a stratifying pressure on higher education institutions.

The neo-liberal marketization discourse, globally espoused by the OECD, was evident in Gordon Brown's 2007 speech at the Lord Mayor's banquet for

Bankers and Merchants of the City of London where he explicitly conflates globalisation with inevitability, and links education with the markets:

Only with investment in education can open markets, free trade and flexibility succeed. And the prize is enormous. If we can show people that by equipping themselves for the future they can be the winners not losers in globalisation, beneficiaries of this era of fast moving change, then people will welcome open, flexible, free trade and pro-competition economies as an emancipating force Brown (2007) cited in (Grant, 2009, p. xv).

It is not investment that Gordon Brown was talking about but marketization. Such discourses pave the way for variants of micro human capital theories of education to be adopted by nations as they develop education policy. Barnett (1999) claims that the 1997 Dearing report attempted to reposition universities as facilitators of economic regeneration. The Dearing report (Dearing, 1997), while still mentioning the need for education to be 'life enriching and desirable in its own right,' links it to economic growth, international competitiveness, new technology, standards and accountability on the basis of 'value for money'. The report follows the assumptions of human capital theories that increasing the number of educated people in society will somehow automatically increase the competitive advantage of the economy (Shelley, 2005, p. 40). Ball (1998) had already pointed out that the trend was to tie education more closely to the national economy while at the same time decoupling it from formal state control.

In line with global pressures, education in England is being reframed as a commodity to be exported. This is justified as bringing in revenue to the national economy. Ball elaborates the commodification of education in general claiming that 'market solutions' are being sought to deal with 'entrenched problems of educational development'. Private providers are being involved both independently and to replace areas as state provision is increasingly degraded. Universities, schools and education services have become assets to be sold to private equity companies. Chains of schools, philanthropically funded, yet run by '*multi-national edu-businesses*' are being set up across the world. 'Store front

schools' are being set up by local enterprises and funded through 'micro loans' (Ball, 2012, p. 2). This process, already established internationally, is now starting to become evident in England too where the supermarket giant Sainsbury's has started a series of shop-front tutorial centres. The replacement of withdrawn state funding with private financing arrangements is being brought into the university sector through what Ball calls the:

...roll-back and roll-out activities of neo-liberalism, that is in both destabilising welfare policies and welfare thinning and creating new spaces for market activity and fostering consent around ideas of choice and market freedom... (Ball, 2012, p. 26)

In 2010, the Department for Schools, Children and Families announced the Prime Minister's Initiative in International Education (Department for Children Schools and Families, 2010). The need for curricular development, that lends itself easily and cheaply to such export, is a further driver for change in the curriculum within the UK as universities look towards this market. The effect of global drivers which open markets in education is evident in the priorities of post 2006 British governments. English universities' high fees are making European universities, with their low or non-existent fees, look attractive to English students (Clark, 2006). According to a press release in 2010, announcing the prime minister's initiative, the aim was to:

'Maintain the UK's position in major education markets....' and '....to help secure the UK's position as a leader in international education' (Department for Children Schools and Families, 2010, pp. 1-3).

According to the DCSF¹², these initiatives are heavily supported by industry and sponsored by BP¹³, BAE¹⁴ Systems, GlaxoSmithKline and Shell as 'Corporate Champions' who are each prepared to give a million pounds each to the initiatives. Overall, £27 million, sourced from the education sector and business, the British Council and the UK government, were committed to the projects. £2 million of this money was to develop the UK's education markets in Russia, £4 million in China, £3 million for Africa and £7.5 million for the research initiative

¹² Department for Children, Schools and Families

¹³ British Petroleum

¹⁴ British Aerospace

in India backed by the powerful Indian Tata group. Hence the opening up of education markets for private profit within England and internationally is an important agenda of successive UK governments.

The next section of this chapter deals with the question of research in universities which is being commodified and marketized while new monitoring regimes are developed to control what is researched (Brown and Carasso, 2013). Robinson (2013) claims that between 1981 and 2003 government funded academic research fell by an average of 10% across OECD countries while corporate financing of research, although still relatively small, doubled, reflecting deepening links between industry and university-based researchers. He goes on to point out a conflict of agenda between academic researchers, who have historically been interested in discovery-driven research, looking to further advances in their discipline, while companies are interested in research to support commercial applications to increase revenue. A similar point was made after a survey of research in the United States (Blumenthal *et al.*, 1996). Thus corporate funding may pose a threat to the independence of academic research.

The encroachment of private interests into universities violates one of the fundamental principles of the Magna Charta Universitatum, created in 1998 in Bologna on the 900th anniversary of the first European University, and signed by 500 rectors of universities across the world. This states that:

The university is an autonomous institution at the heart of societies, differently organised because of geography and historical heritage; it produces, examines, appraises and hands down culture by research and teaching. To meet the needs of the world around it, its research and teaching must be morally and intellectually independent of all political authority and economic power (Magna Charta Observatory, 1988, p. 1).

Government funding of research is also in need of scrutiny (Robinson, 2013). The Haldane principle, established in 1918 declared that government-funded research in the United Kingdom should always be independent of government influence and that decisions about what research should be funded by the

government should be decided upon by academics and not politicians or influenced by governments (Haldane, 1918). Nisbet (2000) traces the systematic erosion of the Haldane principle in England, as new ways of monitoring research serve to control research in universities.

The next section is about changes in language and culture in higher education at the national level in England. The language of the market and competitiveness has entered both national and institutional discourses, filtering down to the course team or academic group level. This process has not been unproblematic. At one time only vice-chancellors and top administrators would have been concerned about managing financial information. Now it is part of the responsibility of all staff in the higher education sector. Financial management is left to those who are not trained, often not particularly good at it, nor resourced to deal with it. Individual faculty members are struggling with marketing and financing issues within schools renamed *Business Units* in an emulation of industry. The notion of a market in higher education in England is not the same as the *free market* it is supposed to copy. Those designated as *consumers*, in other words students, are not in a position to access honest information enabling them to make free choices, neither can the *business units* operate as free agents (Brown and Carasso, 2013). Marketisation processes are more a step towards total privatisation of the higher education sector, and the establishment of performance monitoring regimes, than towards *choice or efficiency*.

The use of marketised discourses within faculty constitutes a move to win staff over to compliance with a market approach. By and large, senior members of staff have accepted this, albeit under pressure, and a sort of pragmatic position that *there is no alternative*, and that *we need to do as we are told* or there is *nothing we can do about it*, is beginning to be seen. Although written about Ireland, Garvin's (2012) amusing remarks about this situation apply equally to the experiences of English faculty. Intimidated by discursive structures with assumptions that globalisation is inevitable and resistance useless, in effect lecturers and tutors are pressured to give up their agency and simply comply.

Shelley (2005) notes that, one of the key features in which marketisation shows up in the UK higher education sector is the acceptance of a competitive environment. Increasingly people are drawn into regimes of self-monitoring, and the management of their own performance assessed against perceived demands of markets or of managers in their institutions. Such regimes of performativity (Lyotard, 1984) are analysed in an educational context by Ball (2012) and described in detail by Shore and Roberts (1993), who take an anthropological approach in a study of systems of regimentation and control in higher education. They claim that there has been a centralisation of power and authority in higher education resulting from reforms of education. This has consisted of streamlining management structures, redefining lecturers' responsibilities, rationalising teaching resources, appraisal, auditing and the use of statistical indices of staff performance, to allocate funding. Shore and Wright (1999, p. 563) claim that the audit culture arising from neo-liberal forms of governance in higher education has 'systematically reconfigured the university sector as a docile auditable body'. Clegg (2008), however, details resistance by faculty to such regimes in her work on academic identities.

Thus to summarise this chapter, three threads can be seen running through higher education at the global, national and institutional levels. First, there is a strong push to open up markets in education everywhere. In countries where education is state funded, free and perceived to be of an adequate quality, such a market does not yet exist. In these countries there is pressure towards the systematic degradation of state-funded higher education systems and the use of state funding to buy in or subsidise private provision.

Second, the commodification of all possible aspects of higher education is taking place. Complex processes such as monitoring quality are being reduced into simplistic one-size-fits-all recipes. Examples are the breaking up of teaching into smaller bite-sized modules to be mixed and matched, advertised and marketed; the alienation of lecturers' work from their own lives by creating decontextualized recorded resources or lectures, which are easy to put on-line

for future recycling, or even sold off. All this is occurring under the pressure to teach students only the *skills* demanded by the market. This process intrudes into the research done in the academy, via funding regimes that make it dependent on external funding and through quality assurance regimes combined with league tables of crude markers of *quality*. The overall effect upon both research and pedagogy is to narrow them in line with the perceived whims of the market.

Third, there are moves to control, or *govern* human agency at all levels via regimes of monitoring and accountability, leading to new regimes of performativity. These operate via appraisal systems, research evaluation frameworks and the persistent demand to score higher in various institutional, national and global league-tables. This process also takes decisions about what constitutes quality, out of academic hands. The overall effect of such systems is to persuade people to shape themselves in line with the latest notions, demands and requirements of a neo-liberal agenda. All three of these issues impinge upon the lives of participants in the three institutions considered in this thesis. Before looking at that however, the methodology used in this research is developed and outlined in the next chapter.

Chapter Six: Methodology

Three epistemological issues stem from taking a critical realist approach and these are drawn together in this chapter. The stratification of the world, and the entities within it, imply that causal mechanisms are not immediately empirically evident and so further work is needed to access them. Additionally, changes in structures and the actions taken by agents need to be considered over time. The third issue is that the reflexivity of social life means that changes in the transitive realm of thoughts and ideas affect the physical and social behaviour of people too. These three issues cause particular epistemological questions about the research process to surface. This chapter details these implications, explains the methodology developed in the light of the above, delineates the precise methods used in developing this thesis and gives an account of what was done. Finally ethical issues are discussed.

A stratified ontology means that phenomena at one level, such as the changes in participants' teaching activities, may be due to processes at an institutional level in response to national and global structures. Alternatively participants' actions may only be possible because they draw upon personal embodied properties they have developed through past experiences. Such changes may be observed empirically (Scott, 2000, p. 33), but the mechanisms by which they take place are not always observable. Methodology which is designed to access changes in phenomena over time and the causal mechanisms at various levels will involve undertaking a retroductive step by asking the question: What must the world be like, or have been like, for the empirical phenomena we are observing to be occurring? This leads to further steps to monitor our interpretation, or theory. The search for causality implies the need for what Harre (1979) and, following him Sayer (1984, p. 221), calls an '*intensive research design*' as opposed to extensive research.

Extensive studies take a representative sample, drawing from groups sharing similar characteristics but which are not necessarily causally connected to each other. The relationships sought are usually of similarity, differences, correlation or of how extensive certain properties are within the sample. Such research looks for regularities and patterns using statistical methods, while minimising the effects of the researcher. The world is studied as if it had a flat, not a stratified ontology. In critical realist terms, the research does not stray beyond the empirical realm to access either the actual or the real realms. A description of the empirical realm makes up the research findings which are then generalised to the whole population. The results of the research are evaluated in terms of how replicable they are.

Intensive research, on the other hand tends to consider groups or situations which are causally related to one another. Causality is analysed through a study of the actual connections between the objects of the research. The preoccupation tends to be with investigating a particular case to shed light on the processes at work. Individuals or groups are studied *in situ*, rather than in isolation, so that the actual processes involved can be accessed. This can include interactive interviews which may involve probing by the researcher or further discussion around a co-constructed discourse based on shared understanding. The researcher has to work to develop this understanding in order to more fully appreciate the participant's situation. In this sense, intensive research involves an ethnographic aspect. A case study approach allows the collection of rich data in order to generate a thick description (Clegg and Stevenson, 2013; Geertz, 1975). Intensive research attempts to seek causal explanations for phenomena, usually observed or otherwise accessed through qualitative methods. Here, information about those aspects of the real and the actual realms, which may not be immediately empirically observable, is sought. The results of the research are evaluated in terms of corroboration of causal explanations. The objects of the research are not assumed to be representative and the concrete conditions need to be considered in each case to see if the same causal powers are present

before the results of the research can be applied outside the originating study (Sayer, 1984, pp. 219-225).

In this study, an intensive design is used in the form of case study research (Bassey, 1999; Hammersley, 1992; Stake, 1995). The accounts of individual lecturers, or groups of individuals working collectively, are used. Each makes up a case which is bounded by the situation, account and activities of that individual or group. There are seven cases in all, chosen across three higher education institutions in England. The three institutions in which the cases are set were chosen to give contrasting settings, and consist of University X which is a distance learning institution; University Y which is a former polytechnic, now known as a post '92 university, and University Z which is a collegiate university in England. There is no claim however, that these three institutions constitute a representative sample of higher education institutions in England. An initial stage of noting phenomena through observations and semi-structured interviews with lecturers at each university was followed by abductive inference (Peirce, 1955; Reichertz, 2007), incorporating moves of induction and retrodiction (Mills, Durepos and Wiebe, 2010), a process called 'conjectured hypothesis' by Bhaskar (1994, p. 18), which asks *what must be going on for these phenomena to appear?* Hypotheses about possible causal mechanisms are produced at the end of this first part of the process after a first consideration of the empirical data. The research design then tests out the ideas gained from the observation of practice or initial interviews to see if the conjecture does indeed provide an explanation of past phenomena. This can take the form of investigating phenomena at a different level, such as at the national or global level. A separate retrodictive move, or a hypothesis about the past, is undertaken to see if the possible causal mechanism is in operation as a result of what may have been part of the historical phenomena. Past phenomena are examined in the light of current events and vice versa. As an example one might predict that when questioned, a particular individual will show signs of having certain personal embodied powers. The conjecture is: *if they are able to act like this now, what past experiences may have equipped them for this situation?* In

this thesis, such a retrodictive step (Bhaskar, 1994) was undertaken after some initial research interviews, and resulted in the choice of particular participants as cases, because of their possible past experiences. Also once participants had been selected, retrodiction was used to develop interview questions about participants' personal embodied properties and past experiences. These were based on their current practices as well as what was known about them from other people's accounts and other contextual information.

An analysis of the ontology of the objects of inquiry has already been reported in chapters three, four and five. Sayer (2000) maintains that abstraction, careful examination and conceptualisation are needed, and these cannot simply be carried out by isolating the objects from the open systems in which they exist because this would separate the objects from their contexts. Avoiding the problems arising if we 'divide what is indivisible and conflate what are different' (Sayer, 1984, p. 82) is important. This means an analytical isolation of entities to consider their ontology is needed, while they are actually *in situ*, so that their interrelationships with their contexts are not forgotten. Such analytical separation takes the form of a thought experiment which carefully distinguishes between features which are internally and externally related to the entities being studied. The structures affecting the pedagogy of the participants in a study such as this, and the agential action taken by them, are often internally related, but analytically separating structures and agency is useful in understanding the nature of the interaction *in situ*.

In order to consider pedagogy one needs to look at the level of the social order, whether at the global, national or the institutional level, the teachers and the students, both individually and in groups, and finally at the structures that make up an individual, their personal embodied properties. The processes that these structures set in motion can be considered at each level as can the interaction between them, so that the real, actual and empirical aspects of what exists at each level can be identified. The experiences and accounts of the participants were studied using forms of interactive semi-structured interview conversations

and through my observations as an invited participant. After data elicited in this way were analysed, a retroductive (Bhaskar, 1994; Mills, Durepos and Wiebe, 2010; Peirce, 1955) step was taken by asking the question: *what must the world be like for these phenomena to be appearing as data?* This led to a consideration of the wider context such as what was going on at the institutional, national or global levels and which of the many mechanisms could be seen to be active or passive in the lives of the participants. This is how the final contents of chapters three, four and five were decided upon. They were written to clarify what was developing from the data retroductively. The process was far from linear.

Critical realists claim that changes to the social realm influence the ontology of the world investigated. Thus not only what people are observed to do but also their interpretations, ideas and reflexive deliberations about what is going on, are all relevant to this research. Additionally researchers have to understand the meanings people ascribe and such understanding cannot come simply from measuring or counting. This leads to the need for a 'hermeneutic element in social science research' (Sayer, 1984, p. 17). Sayer maintains that researchers need to enter the 'hermeneutic circle' of the research participants, leading to a 'double hermeneutic' (Giddens, 1984b), where the interactions between researcher and participants create something which is neither reducible to the interpretation of the researcher nor to the actions and words of the participants alone. This research was designed in order to make the most of the emergent elements of the research relationships, and interviews were designed to be interactive conversations. Clegg and Stevenson (2013) maintain that when people research into their own professions, as is the case in this study, they often fail to recognise their ability to access much thicker descriptions and deeper common ground than they could have if they had been unfamiliar with the practices studied. In higher education, researchers have access to a 'tacit ethnography' by virtue of being 'insiders' (Clegg and Stevenson, 2013, p. 4). This allows for a level of double reflexivity within research interviews, both that of the researcher and of the participant. Both of these issues can be a double edged sword, giving both deeper insights and providing a potential threat to

validity, and as Clegg maintains, the research interview as a method is currently under theorised. Interview techniques were piloted a number of times at my own workplace and this issue of drawing upon shared understandings appeared repeatedly during the interviews. In time I became adept at drawing upon common insights, stemming from shared past experiences, to put the participant at their ease and elicit deeper insights.

Attention had to be paid to material, social and discursive structures. We have access to people's conceptions of their social world because they can tell us these to some extent if they want to do so. Their conceptions are themselves part of the ontology of the objects of our research which includes the social world. At the same time actors' views, concepts and interpretations are bound to be perspectival so people's actions and discourses need to be located at particular contexts, referents and instants of time, in order to be interpreted. Additionally, what participants choose to tell us is not necessarily what they actually feel or think. How much credibility do we give participants' accounts? Too much credibility can lead one to, following Bourdieu (2005, p. 43), 'present a mere ideological screen for a form of practice', too little credibility and we risk not gaining any purchase at all. It is useful to consider the social role played by the account itself and the assumptions, models and cultural aspects implicit within it. The retroductive step gives us useful recourse to the contexts in which the participant's life is lived and from which the account necessarily draws. Retroduction acts as a useful lens which is external to the account given. The form in which the account is presented by participants is in itself useful. Interviews were facilitated by participants' deep interest in the research area, which many of them considered to be of personal importance to them as lecturers in higher education. Many said that they valued the co-constructed interactive space opened up. They saw it as a rare opportunity to speak about pedagogy and their endeavours. The degrees of freedom with which individuals or groups of people operate under different conditions are important for what it tells, not just about what is observed, but also about what might be going on behind the scenes.

Actions always presuppose already existing resources and media many of which have a social dimension that is irreducible to the properties of individuals (Sayer, 2000, p. 18).

As well as what people are observed to do and what they tell us about their perceptions of what is going on, we are also interested in how people behave under different conditions (Scott, 2000, p. 33). This meant that the research design needed ways to access the process by which human agents change, and are changed by, the structures in which they find themselves. This was carried out by using Archer's (2013) morphogenetic cycle adapted at the level of individuals or a single department.

In this thesis humans are considered to be structured beings as outlined in chapter three. They have personal embodied properties which can emerge, in favourable circumstances, as personal emergent powers to act (Archer, 2012). Human interactions develop what Searle (1995) calls 'social facts' which are emergent from, past or current, interactions between people. As this research aims to develop knowledge about the lives and work of staff in higher education, their personal embodied properties and the social arrangements they are involved in, the practices the researcher will need to participate in so as to gain such knowledge have to be identified. According to Sayer (1984) knowledge relates to practice and is not passively acquired. This situated and always contextual nature of knowledge means that a close interaction between the researcher and the practice of participants is developed through the research process. Sayer notes that knowledge about the constantly changing social world emerges through the communicative interaction or discourse through which the social environment is changed. People constantly monitor their interactions with others. This implies that the interaction between researchers and researched is an essential part of the process of finding out. The research process inevitably changes both researchers and participants. Yet because of this double reflexive interaction between researcher and participant, and particularly when researchers study practices similar to their own, it is useful to build some process into the research design that allows researchers to step back from the

data when analysing it. In this study such a process consisted of carrying out open coding and some initial data analysis before a further step of theoretical coding was undertaken. This was followed by the use of a morphogenetic framework and a retroductive step of abductive inference. To consider which institutional, national and global contexts might be impacting upon the case under study at any time, textual data in the form of global, national and institutional documents were used to inform this research. Their analysis played an important part in the retroductive step. The next section discusses the discourse analysis strategy employed.

Hodge and Kress's (1988) social semiotics considers the social aspect of semiotics as a key feature which cannot be reduced to a study of texts alone. The authors maintain that meaning is encoded in much more than simply words and that visual and aural codes, as well as ways of behaving, all contain meaning under the domain of semiotics (Kress and Van-Leeuwen, 2001). In the same vein, Fairclough (2003) maintains that language is an irreducible part of social life. Fairclough maintains that the relationship between language and social life is dialectical. While we may question whether the relationship is actually dialectical or not, the two are nevertheless interactively connected. In order to understand any semiotic system we need to concentrate on what is meant and how the discourse communicates this meaning. All discourses, according to Hodge and Kress, have three indispensable features. They all involve either agents or objects of meaning, which are ideational features, encoded within them and in their production and consumption. They always involve the interaction between social structures and social forces through relationships between social agents, which constitutes their relational features. They all contain some form of written or media text within a larger context, the embodiment in material form of which requires the use of technology in line with the technological development of society. This constitutes the modal features of the discourse. These three characteristics of discourses correspond to the *ideational, relational* and *modal* aspects of a text. (Halliday, 1994; Halliday and Hassan, 1985). In other words 'mode' refers to the physical form in which

the discourse is embodied, spoken, written, e-mailed, constructed as photographs, video and other media etc. The *relational* aspect involves the relations between the individuals within the discourse as well as between any people that the discourse may involve indirectly, while the *ideational* aspect relates to the objects of meaning within the discourse as well as to the intentions of the creator or the subject or agent who creates the discourse. A close analysis of global, national and institutional texts, using these three features as lenses helps to give insights into what influences pedagogical activities in higher education institutions. To analyse the written texts and documents, methods based on functional grammatical analysis (Halliday, 1994; Halliday and Hassan, 1985) have been used within the related methods of critical discourse analysis (Fairclough, 1989; Fairclough, 1995; Fairclough, 2003). Rhetorical devices within national policy texts and institutional documents are also noted when considering the mode (Billig, 1991; Fairclough, 2000).

A template interrogating documents according to ideational, interactional and modal characteristics was designed to facilitate such initial analysis, and is used in analysing the documents in appendices A and B which are included to show how the process works. The template is included as appendix C. This template was used with a variety of documents as necessary. They are not all included as appendices, but the results of the analysis are used as part of the retroductive process in chapters seven, eight and nine. The knowledge sought in this study was outlined in the sub questions in chapter one. The following section details the methods of data collection and analysis which were employed.

Methods employed to elicit the data for this research

First, through a review of the literature, an ontological analysis of structures, agency, knowledge, learning and pedagogy and the structures affecting higher education at global and national levels, was carried out. This constituted chapters three, four and five.

Second, policy documents pertaining to the three institutions, such as strategic plans were analysed using a form of critical discourse analysis. Similarly, global documents, such as documents of the OECD and the World Bank were analysed. At a national level the HEFCE strategic plan and various government statements were analysed. The results of this work have contributed to the analysis in chapter five and a copy of the analytical frame which was used is included as Appendix C.

Third, observations of meetings and networking through friends and contacts as well as an initial set of semi-structured interviews at the three institutions were used to identify potential participants, gather important contextual data and to develop retrodictive conjectures about some of them. This allowed interview questions to be formulated to elicit richer data. At University Z, I was fortunate enough to be invited to attend a series of seminars on pedagogy and current changes in universities, which gave me access to many interesting people to work with. At University Y, I was able to be an observer at three consecutive meetings in one department; events which became one of the cases in the study. Observations were unstructured to start with and a method of progressive focussing was used as the research proceeded and the phenomena under investigation become clearer. In this way the initial inductive aspect of the research had a grounded element to it (Dey, 2006; Glaser and Strauss, 1967) although this was followed by a second phase of theoretical coding of interview data afterwards. Eventually, observations considered the physical setting; the personal setting; the human interactions; the resources used and the interactions between the participants and these; the discursive structures involved; the nature of power relations and how they manifested themselves (Cohen, Manion and Morrison, 2000); the relative degrees of freedom that lecturers seemed to have in the interactions and the nature of and the extent to which the social order might have been influential in pedagogic interactions (Murphy, 2008).

Fourth, twenty potential participants were interviewed in depth at their place of work at times chosen by them. Semi-structured interviews were designed to allow participants to use their own words as freely as possible because their ideas, perceptions and understandings of pedagogy with all their cultural nuances were important. Interviews were designed to draw out the plans and aspirations of lecturers and their experiences of the constraints they understood themselves to be working in and the structures they might have developed to enhance their agency. Some questions also probed participants' prior experiences and how they perceived their agency to have developed. These questions were based on initial retrodictive conjectures about participants' possible personal embodied properties which could explain their current actions. There was some use of life history and narrative interview methods (Wengraf, 2001), as well as the use of collage and metaphor to encourage one participant's reflection on her professional trajectory and values (Connelly and Clandinin, 1988). This was because her pedagogic aspirations emerged best via this method. The interesting thing about using collages and metaphor to access this particular participant's endeavours and models of changing pedagogy is that it allowed her to articulate them non-verbally. It helped her to step out of familiar and jargon-loaded language and the turns of phrase used by her much more vocal collaborator and express her own ideas and feelings. It was in the discussion about the collage she had made, that the most interesting insights occurred for the participant as well as for me. Such a method of using collage to elicit concepts, was piloted a number of times at my own university before using it in this interview. As mentioned earlier the very process of participating in the research affects the ideas of the participants, or Bhaskar's (1979, p. 14) 'transitive realm'. For this reason the knowledge gained reflects back upon the ontology of both the people and processes being researched and of the researcher. This was evident at many points throughout the interview process, where both I and the participants had insights which changed our outlook and practices as a result of our conversations. Overall, the process gave a deeper understanding and led to small adjustments in the interview as it was developing. In order to trace this unfolding process in each interview, a precise

record of what was said was kept. To obtain the level of detail needed and to retain exact turns of phrase, all interviews were tape recorded and transcribed verbatim. The tapes were played repeatedly during the analysis process, to achieve familiarity with the data and allow themes to emerge.

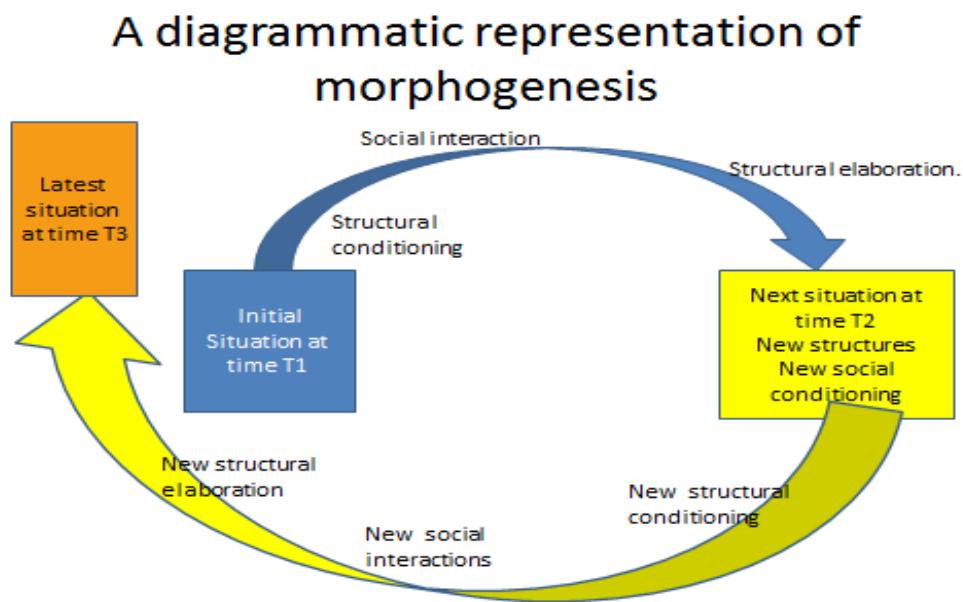
Step five was the choice of a sample of seven individuals as cases out of these twenty participants. One series of departmental staff meetings was also identified as an additional case for this study. This was chosen for the way it highlighted the working of an organisational field (DiMaggio and Powell, 1983) at the level of a single department. The extra interviews were used as contextual material and were interrogated together with the documentary analysis as part of a retroductive analysis of what appeared in the cases. A theoretical sampling strategy was used. Each case was initially chosen because new aspects of pedagogy were either clearly seen to emerge within it or because some aspect of pedagogy, which had been considered useful by participants, was seen to be disappearing. Additionally, if it illustrated an interesting aspect of the structures and agents involved and if some agential activity was traced during the incident, a case was included. Some cases in combination with each other showed up contrasting features at the same institution. This highlighted some interesting aspects of how personal agency, or a particular series of structures, actualised emergent possibilities in one case and not in another. The cases are not envisaged to be representative of the many ways in which structure/agency interactions are played out in England as a whole but each serves to highlight a point of interest.

Sixth, once interviews had been transcribed, open coding (Miles and Huberman, 1994) was used to identify aspects of emerging pedagogy, pedagogic values of the participant, structures and mechanisms that could be identified and changes through time. Agential activity was noted.

Seventh, the same data was coded using a form of theoretical coding based on pedagogic values and the various influences of global, national and institutional processes that might be present.

Eighth, this was followed by using a framework based on Archer's morphogenetic cycles, which were used to analyse the data. This analysis was based on the theoretical concepts of structures, structural conditioning, social interaction and structural elaboration thereby focusing upon processes of

Figure 4 Morphogenetic spiral

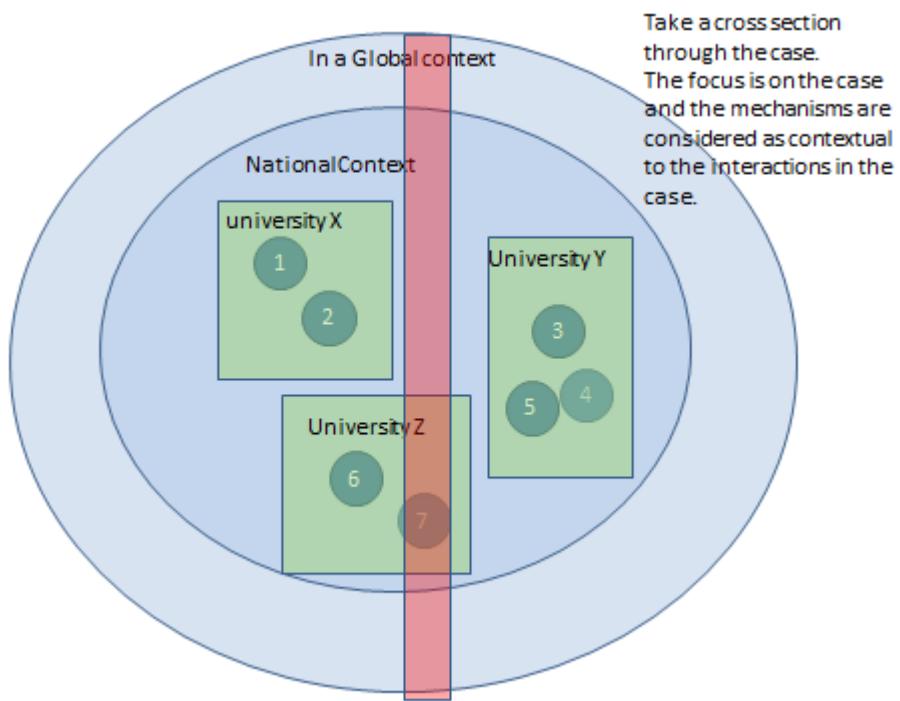


This spiral, first described in chapter three, is reproduced again in figure 4 for ease of reference. Interview data were again considered in the light of how things had changed over time, considering the structural situation at consecutive times together with the structural conditioning, social interaction and structural elaboration that was evident in the account. This process brought the contextual and historical aspects of participants' accounts into focus, and helped to ameliorate some of the insider-like closeness to participants' lives that my own profession as a university lecturer gave me. The precise ways in which this spiral was used will be illustrated using the data in the next three chapters.

Ninth, a retroductive step was taken for each case by asking what the world must be like for the empirical data to be as they appeared. This allowed further insights into the possible causal mechanisms at play, through the identification of relevant institutional, national or global processes, texts and data from other interviews.

As a tenth step, in the data analysis process, data were thematically coded if they were interviews, or analysed using critical discourse analysis to identify possible influential mechanisms. The insights were then brought to bear on the original account. This was useful because as the research progressed, it had quickly become obvious that it would not be possible to analyse all the documents available. The sample of documents that were selected for analysis consisted of those that showed processes that had appeared to be influencing the cases that had been covered. Each of the cases, which are represented by the smallest circles and numbered in figure 5 below, was considered within its context at the different levels, institutional, national and global. These are represented by the concentric circles. The challenge was to choose the key structures at the different levels, whose effects in the shape of mechanisms were evident in each particular case. These ten steps form the methods that were used to collect and to analyse the data in each case.

Figure 5 Cases in institutional, national and global context



All methods were piloted in my own workplace. Observation notes were handwritten in situ and typed up the same evening, as the directional nature of recording equipment made the clarity of the tape recordings unreliable. It took a number of pilot interviews with colleagues before a useful balance between life history and participants' current endeavours was achieved. Each interview was very different and it took time and experience to build up a set of skills which allowed me to maintain a sensitive balance of silence and encouragement to keep the interview moving naturally. The pilots were essential, bringing out the necessity to carry spare batteries for the recorder, to stick to planned timings in interviews and to find ways to put participants at ease. I learned to identify and suppress my own less relevant preoccupations and find ways to be totally responsive to the participant while keeping the interview on track. It was during these pilot interviews that I realised the depth and breadth of pedagogic expertise, much of it tacit, unexpressed, highly contextual and discipline-specific, that exists in the practice of some current university lecturers in England.

Questions of validity and the reliability of research are debated at length in the research methods literature (Atkinson, Delamont and Hammersley, 1988; Cohen, Manion and Morrison, 2000). In this intensive research, validity has been increased by checking interview transcripts with participants, using tape recordings during interviews and when participating in events. The cross-referencing of data obtained by using different methods can offer some degree of methodological triangulation (Cohen, Manion and Morrison, 2000). When the use of one method corresponds to findings from another it reinforces the interpretation of the data. Another form of triangulation involves bringing different perspectives to bear. In this study, often the same phenomenon arises in the data from different participants thus strengthening the veracity of the data. The use of the morphogenetic framework also sheds light upon the plausibility of participants' claims. The retroductive step which led to text analysis of institutional and national documents and a comparison of data from the case with data from other participants at the same institution, was instrumental in increasing the validity of the research. The next section of this chapter discusses the ethical issues involved in this research.

Ethical guidelines provided by the Institute of Education, University of London, were adhered to. The research also complies with guidelines provided by the British Educational Research Association (BERA). Every effort was made that participants in the research should benefit from the self-reflection and deeper insights into practice, which often resulted from discussing their pedagogical experiences and endeavours. Sometimes the research led to the revelation of problems and difficulties that participants faced. For this reason anonymity has been maintained and names and locations have been changed. Data is to be totally destroyed after publication of this work and any further publications stemming from it. In order to guard against the misinterpretations of participants' meanings, interview tape recordings and transcripts were sent back for verification. All participants participated voluntarily in the research, gave their informed consent and had the right to withdraw at any time without needing to give reasons. Any sensitive information as defined by the Data

Protection Act was made anonymous so that it is no longer possible to associate it with any individual. Due to the grounded nature of this research, more data was collected than was finally used. Methods of 'progressive focussing' of data were used to ensure that this was kept to a minimum as the research continued. All data has been kept under lock and key and names were changed from the very beginning to maintain anonymity throughout. All electronic material has been password protected. At the end of the research, electronic files will be electronically deconstructed and not merely deleted.

As the research methods were piloted in my own institution I had to be sensitive to any dangers my insights might bring to my working relationships with my colleagues. Mutually-agreed ground rules were adhered to and additional extra sensitivity needed with regard to confidentiality within the setting. It is intended that the findings of this research will be disseminated via publications after the PhD process is completed. Care will be taken to maintain commitments of anonymity with regard to individuals or institutions in any future publications. Participants will be informed of these. This chapter has outlined the epistemological issues to be overcome, the methodological approach which has been designed in alignment with a critical realist approach and the precise methods used to develop this thesis.

The next three chapters present an analysis of the cases that were selected from the twenty participants in the initial phases of the research. Accessing the data and analysing it, using the steps described in this chapter, unravelled the interaction of structure and agency and revealed changes in pedagogy in each case. The retroductive step contextualised each case in the current conditions of large scale structural change in the global and national economy. Each of the following three chapters takes up the cases within a different university.

Chapter Seven: University X

This chapter contains contrasting accounts of two participants at University X. Nicola Logan is very much in control of her projects and finds ways to drive them ahead in spite of adverse circumstances. Sam Lewis has a deep understanding of the changes and the circumstances within which he is working and yet currently feels totally unable to make significant changes. Although many institutional structures are the same for both of these participants, their personal embodied properties are very different as are the actions they have taken.

Nicola's Story - Distributed Collaboration

Nicola Logan's Geology project facilitates what she calls 'distributed collaboration' in real time, between a group of students doing fieldwork using mobile computer technologies, and another group working at a table top computer with access to libraries and data bases. The project created opportunities for students to gain insights into what it means to be a geologist. How can people within the field out in the muddy, tactile rich, rain sodden world, work in real time with collaborators in a resource and information rich environment of a laboratory cum on-line library? Nicola draws on her considerable personal embodied properties of self-confident personal identity. She also draws on her capacity for reflexive deliberation about her material, social and cultural circumstances (Archer, 2003). This comes from Nicola's previous experiences at five other universities, her numerous successful research grants, her previous employment as an actor, a market researcher and as an educational psychologist. With a PhD in computing, Nicola was well placed to understand the affordances and constraints of technology. She had already worked in the areas of human computer interaction, education, ergonomics, interface design and the use of design systems to support learning. She could confidently establish that pedagogy, not technology, should lead the project.

Nicola's previous work with the HEA¹⁵ funded centres for teaching and learning (CETLs) at various institutions gave her insights into how to get funding by taking advantage of current fashions about how to teach. Nicola's reflexive deliberation upon her experiences was evident throughout the interview and seemed to give her emergent powers of insight into opportunities to keep the project funded.

Nicola's past experiences of working with a range of different people made her a confident social operator allowing her to draw upon the expertise of others as well as to guide their understanding, and to build teams in spite of people's differing approaches to pedagogy. Through working with academics from a range of disciplines across different universities Nicola has become sensitive to what she sees as disciplinary differences in pedagogy.

Science, Maths, Computing and Technology had discipline distinctions ...
I've stood across all of those disciplines, very different approaches to pedagogy... about definitions of scholarship...

It is not just experience but the reflexive deliberation upon it, which allows Nicola to draw on both past theoretical and practical experiences. This has contributed to the strength and consciousness of her capabilities, such as the power to move consciously from the detailed, granular, micro view of a process to the more abstract, theoretical macroscopic perspective, and to do this consciously and repeatedly over the lifetime of a project.

You don't find many people who can... who can jump between ... they can think about the big picture and they can think about what does this mean and applying it, the practicalities...

Nicola is committed to putting pedagogic principles, as opposed to technology, in control. Her expertise in computing allows her to do this.

... what we've concentrated on is not being led by technology... but allowing it to support ...within the context that...you're in...

Past successes and failures in applying for and implementing research bids, in a variety of higher education institutions, allow Nicola to 'play the system' confidently and fund her own projects, while winning institutional support for

¹⁵ Higher Education Academy

them. She has already learned to manoeuvre, and subvert the system effectively, by exceeding the remit of the funded work:

.....this was an RNLS¹⁶ digital economy funded bid. And the *MRSCT* bid [another bid Nicola has in the pipeline] is... another.... so that's very much about developing the technology. What we do is, we subvert it and we look at the knowledge that comes out of it as well, which you can do ... but it's very technically led... we should hear at the beginning of March if we've been shortlisted...

Nicola is prepared to take risks undaunted by failure, which is in fact built into her strategy to keep funding flowing:

We've got to keep pummelling and that's what I'll keep doing. I will keep putting in bids until someone funds something....When I went to a different source and I.... took a different perspective.... I don't know what I'll do if I get them all funded... (Laughs)

Nicola's embodied capacity for reflexive thinking about her past successes and her deliberations on the academic contexts she has worked in, gives rise to emergent powers in the current situation, which help her make changes. These capacities allow Nicola to discern the potential for pedagogic developments, to discriminate between different options and then to actualise some of these. She is determined to bring other people with her in foregrounding pedagogy, as will be seen. In all her complex interactions during the project she makes full use of available embodied cultural resources. She works reflexively to bring future visions to fruition by questioning how they compare with her past experiences, in order to identify any leeway for subversion. Externally Nicola uses parts of the cultural system she is currently immersed in, drawing upon past activities of other people in University X as well as current prevalent ideas in the media. Nicola mentions that the TV series '*treasure hunt*' influenced the project.

...the whole idea of Treasure Hunt.....Anneka Rice going out into a field with a helicopter..... connected to people who were in a library who were ... solving problems,

Nicola's project used a similar idea by placing a group of geology students in a resource rich library with a table top computer linked up with another group

¹⁶ All names have been changed, including names of funding organisations

who were digging rocks and fossils out of a quarry. Nicola uses her previous experiences of computer games design

... bringing a gaming type element so you could bring engagement into the whole learning process between the two [groups].

A third influence was a previous project about collocated collaboration at University X. In it distributed groups of students worked on various different tasks on a particular shared problem. It investigated the ways that students' mutual work was affected by their precise location in space. Nicola had noticed a hierarchy developing between students in the resource rich area and those in the field:

..... what we definitely didn't want to happen was that the people out in the field felt like they were robots being told where to go and what to do ...feeling ... disregarded and that they were having a secondary type experience.

Nicola dealt with this by splitting the process, with one group focussing on tiny details and the others in the lab considering the bigger picture. The process of moving between microscopic and macroscopic viewpoints was found, in discussions with staff, to be part of the very nature of field work.

Well what happens with field trips, which is really expensive and it loses something... is that they go out ... into the actual quarry then they go to the pub, they're obsessed by the pub,... And they reflect on the day.....and they go 'ooh we must get more of this and we must do this' and the next day they go back, but they lose some of the detail, and the alcohol probably... (Laughs) doesn't help..... but that is traditionally what scientists do. They go and collect data, they go back to the lab, they analyse it, reflect on it, go back and collect more data and that's the traditional backwards and forwards...we were trying to ... compress it all by saying, 'Okay, we've got these sets of people...

The group known as 'In Here' have

... got the resources ... information coming from out there, they've got this live-ness, and they can abstract and brainstorm....while the group 'Out There' were going 'oh!' [new discoveries in the field] ...Those 'In Here'...would pass information that would help them reflect back.....and what we found from having the two sets of people using the technology in different ways. 'Out There,' very much to collect information and share it and view some of the information that's coming from 'Out There'. ... 'In Here' to actually do the far more abstract thinking, linking together, synthesising information, bringing it

into the big picture. actually separating them... having different types of information ...but collaborating at key points for ... hypothesis generation... produced a whole set of different reflective learning processes that were valuable to both.

Note the way Nicola's previous interactions with academics from different disciplines, had led to her implicit, understanding of how many scientists operate in practical field activities. This experience was stored away over time, and emerges, in the project, as her ability to locate the opportunities to surface the different types of thinking, make them explicit, and use them to develop reflective learning processes amongst students.

Finally, Nicola felt a need for some kind of 'pedagogic glue' to bind students and the technology and the different influences back together and she decided that this 'glue' was what she called 'enquiry based learning'; a concept from her experiences in health education circles whereby students collaborate on a particular problem; each bringing whatever resources they can garner to solving it.

But we wanted this glue... that would bring them back together and would mean that there was some worth to each group in ... the overall whole... we ended up identifying as this glue that would stick, pedagogically, them all together... would be enquiry based learning...

However, she refines this approach further by splitting students into the two groups. The overall process captures the constant need to move from macroscopic to microscopic views and back. This is something that students need to appreciate is part of being a geologist.

... we wanted to have as the glue, not just general enquiry ... but... actually think what geologists tend to do in their field...

Nicola's experiences in previous projects interact with new ideas from the national and local cultural system resulting in enhanced emergent powers to develop more structures to build this project. These structures in turn actualise new cultural emergent powers that strongly affect students' potential for learning.

Up to this point we have considered Nicola's personal embodied properties. To carry out the project successfully, and enhance her agency still further, Nicola also develops further properties that strengthen agency. These are external collective properties, which emerge during cooperative work with others. In the right circumstances these make up, as Archer puts it, corporate agency (Archer, 2003). These are considered next.

Nicola has selected people with expertise and technical support for the project. She has also developed spaces and times when they could be involved in the project without coming away from their day-to-day work. So a form of corporate agency with collective evaluative and decision-making abilities was created to carry the project through. This was not unproblematic and it took time, as we shall see. Once she had successfully obtained external funding she had the resources to buy in the time of more people with expertise, and develop further technology, as needed. Some of the powers emerged from the combination of people with particular experiences and people with particular technical and design capacities together with the scientists and their desire to build this project. These were external powers which enhanced Nicola's agency, allowing her to pursue her objectives: As corporate or collective powers they became part of the agency of the project team overall.

The next section discusses the operation of the project itself. The project used an interactive table top computer indoors and tablets both indoors and outdoors. Two pilot studies were conducted, in areas which were not Geology, to experiment with some of the ideas in different contexts. Structures were created to facilitate and then study the collaborative activity of students. The physicality of the technology was explored as part of the piloting process.

We did a pilot, 'In Here', with some students going out... we had a laptop that we used Out There, ... you don't realize it but it, laptops aren't very good at sharing... they become very personally owned. I got a brilliant picture of ...one of the students, who's literally holding on to it, and the other person's looking off into space because they're just not engaged in it, and in fact the mobile device became far more collaborative, [but] only between two people...

They discovered that when people huddled over a tablet they engaged in more discussion than when individuals or groups of two used palm top computers:

... It's just the physicality of the technology,... but it was led really by the activity and understanding how the technology enhanced or was a barrier tothe collaboration and then collaborating ... with the people at a different location. ... you have to understand the tasks of that collaboration process...

But for the group 'In Here' collaboration was enhanced by deliberately restricting the number of laptops available.

... within the collocated mission control lab ... when you had laptops that equalled the number of students, they ended up having their own laptop, and so we made an active decision to force collaboration by reducing the number of laptops I think we had about half laptops to the number of people what they ended up doing was ...go to resources table..... Some would search the internet, some would get a book.

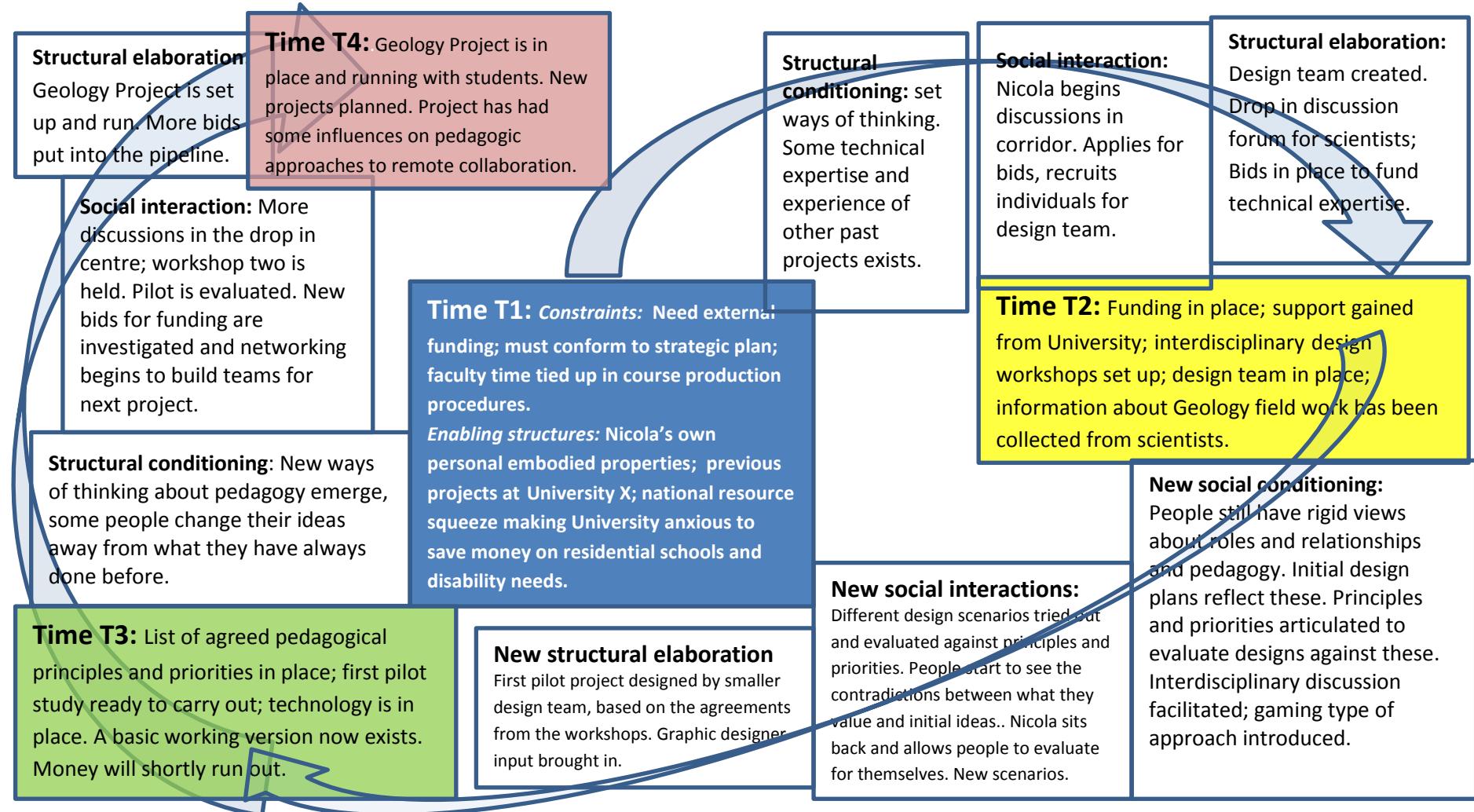
The collaboration became more important to students than just getting knowledge for their own use:

They'd scan a book image, and they wouldn't then go back... They were doing it to provide the information for the people out there. And I thought that they might ... keep going back to the book and going 'oh yeah'and take the book round with them...No, they left the book, and they used the scanned image, and they would share.....

So the pilot showed up interesting issues about how people used the technology and the pedagogical implications of scarcity of equipment. The design team asked questions about how to integrate theory and the knowledge of past practices, with current developments for students. Was the project driven by disability issues? Was the project actually about promoting the use of computers and developing a market for them? Nevertheless the project created a unique, exciting pedagogical space because of the steps that Nicola took, to make sure that the project was driven by pedagogic principles and not technology. She insisted that priorities and principles were established before technology was introduced.

All of Nicola's work had to be externally funded. She used her interdisciplinary history and her experience of winning grant funding, at times having a number of bids in the pipeline in the hope of winning one of them. Nicola manipulated the interests and agenda of various funders to appeal to these in the way she worded her proposals. She carefully avoided allowing the project to be driven by any one funder's agenda. The next section looks at this project in terms of a morphogenetic cycle. It considers the situation over time periods, T1 to T4 analysing structures at each time and how they condition people's possibilities, social interactions and the ensuing structural elaboration. The process is shown in diagrammatic form in figure 6 and it may be helpful to refer to this while reading the next section.

Figure 6 Nicola morphogenesis



At Time T1 the constraining structures were as follows. First, that there was no funding, so external funding in line with the University's strategic plan was needed. Yet the strategic plan can never actually foresee the potential for future innovation. Second, when trying to build an interdisciplinary team for the project, Nicola found that people from different subject specialisms had different ways of thinking about pedagogy, if they thought about it specifically at all. This created a cultural mismatch within the team.

But you have to understand the different skills, that everybody has, and although they may have a different opinion, they come from a different knowledge base, and they have their own skills... the misunderstandings that occur through people coming in from different disciplines is hard... you could be talking at cross purposes it's an absolute nightmare!... the multi-disciplinary aspect was probably one of the hardest in the design process...

This constraint was exacerbated by a lack of time for innovation. People were embroiled in set processes and procedures around day-to-day course production which filled up all the available time. So Nicola selected a team from people who had already worked in useful areas. She also exploited the fact that the resource squeeze on higher education at the national level appeared as a discursive structure at the institutional level, as the desire to cut costs of residential schools.

... And this one actually fitted with those, ticking the boxes nicely because it's what [University X] wants to do, they want to innovate, they want to move things forward. It also ticked another box, that they were worried about the cost of residential and field-trips. I played that card...

Nicola's astute evaluation of University X's preoccupation with cutting costs on residential schools and her use of ideas from a previous project aimed at providing fieldwork experience for disabled students, allowed her to 'sell' the project to University X. This won her some flexibility, a relatively free hand and a space to organise the project.

Social Conditioning as a result of the structures at T1 worked as follows. People tended to have strong feelings about the need for particular forms of roles and relationships in which they felt happier working. Nicola claimed that faculty from different subject specialisms tend to stick to set ways of working and pedagogical approaches. At the same time, some experienced researchers and technical experts have been involved in past innovations and know things can be different.

Social interaction was instigated in the following way. Nicola located people who had the expertise she needed and discussed the project with them. Simultaneously she applied for various bids for money to fund a project. She aligned the project with institutional concerns to cut costs and got university support to approach staff. Nicola investigated what the scientists wanted in terms of pedagogic developments. She asked for ideas which lecturers could write on to a sheet of paper as they passed by it, placing this in a well-used corridor so as not to impinge on their busy lives.

We focussed on what is it about fieldwork? Because we had put things up on notice boards, where they could just throw down the comments we thematically analysed them..... we had a workshop, with the geologists and general scientists... initially ... tried to expand on these key themes and issues ... and identify what is it about field work?

I asked Nicola why she did this on paper in a corridor and not in one of the many on-line discussions at University X. Note the way her answer captures her (possibly fallible) reflexive deliberations about different groups of people:

No, no, no. Because the geologists don't... they don't... no they wouldn't do that...It has to be physical...they just don't... you have to start somewhere and it has to be in their world and it has to be using their language. So that if you actually use that common area which they regularly meet up at and they're very sociable and they all have tea...so they're a very tight-knit group, far more than you'd find in computing They would twitter and do things in a different way and their groups, you know, form in different ways.

In relation to structural elaboration, Nicola sets up a core team of people which allows her to draw upon the abilities and experiences of the following: a Science

professor who had played a leading role in the CETL¹⁷ for Science and computing; two Geologists, one of whom had worked in Science tagging projects; two people who had previously designed a project with disabled students; a researcher with experience of research collaboration and design and a research assistant who had worked on a project about Alzheimer's disease.

The university had just abolished Geology field trips in order to cut costs, replacing them with virtual field trips.

They are actually cutting out field trips because they're too expensive, they're literally getting rid of them... what they're replacing them with is virtual field trips,...and in fact what we were doing was saying not get rid of them but make them more economically viable ... so you get more out of it, you can have more students... because when they generate the hypotheses, everybody [can vote and] can see all the voting. But it allowed for the potential for this to be scalable to a far wider number of people...

Nicola is able to draw fluently on her previous projects in health education and teacher education to see a further opportunity to sell the project to University X for students to learn from practice.

.....or nursing....I was working with lots of people that were doing teacher training and that were doing nursing training, and it's very expensive, and it's very costly, and also students are very much in this academic world, and then plopped into this world out there...And there isn't this sort of... slow introduction. Now if you have a situation where people 'Out There'... and you could collaborate...I'm thinking more that the people who are 'Out There', on training... There could be key points when they're discussing and reflecting and collaborating on practice in a live way, and then you could give students before they go 'Out There' a taster, and you can enhance the 'Out There' in practice ...by them being forced to step back and reflect.

Note also how Nicola exploits a national mechanism; the cut in HEFCE funding of higher education and a resulting institutional preoccupation with cutting the costs of fieldwork. It is in the juxtaposition of these with Nicola's own personal emergent powers as outlined earlier, that morphogenesis becomes much easier.

¹⁷ Centres for Teaching and Learning a national project funded by the higher Education Funding Council HEFCE between 2005 and 2010. <http://www.hefce.ac.uk/whatwedo/lt/enh/cetl/> [accessed 10th June 2014]

Nicola's analysis of the situation is clarified in the extract just quoted. She is looking for opportunities and potentials for future projects. Her reflexivity leads to her close observation of pedagogical needs as well as potential future funders' preoccupations. When Nicola formulates pedagogical problems in teaching nurses and teachers she is thinking of future projects. This is the rich internal space from which projects, like the one she is designing here, emerge and come to fruition. Nicola is capable of setting emergent powers into play given the right circumstances. She is actively deliberating on the possibilities and looking for opportunities.

At this point in Nicola's project regular drop in sessions are started for academic staff from different disciplines. These take place in an open space area, where people get coffee and sandwiches over lunch, as they discuss what might be a useful design for a collaborative project linking geology students doing fieldwork, with those in a lab. This enables scientists to discuss their ideas with Nicola and the design team, again without too much disruption to their lives. After some discussion, Nicola was ready to organise design workshops with academic staff and designers and technical experts.

By time T2 Nicola has changed the structural landscape as follows. Future bids are in the pipeline to finance new phases of the project. An interdisciplinary design team has been set up. Ideas and views have been collected from various scientists, especially geologists, about what fieldwork is all about and what they would like to see happening. Two design workshop meetings are organised between academic staff and designers to discuss pedagogy, which Nicola feels should lead the project design. The team hopes to enhance students' ability to generate hypotheses as a result of the project.

Social conditioning after time T2 is now developed as follows. Although people's pedagogy appears, to Nicola, to be very bound by their disciplinary background and traditions the design team facilitates interdisciplinary discussion about pedagogy. At the same time Nicola notices that some scientists still want a great

deal of structure in the roles and relationships of the different groups of students and tutors using the project.

... I think the sciences are far more structured in their approach. They are moving in their concepts of what pedagogy is, but actually it's far more structured, it's far more historically bound, it's far more outcomes.

Too rigid a structure militates against the gaming elements that could be used in the project and Nicola has already noted the possible problems of hierarchies developing between the different students as occurred in earlier projects. The potential to resolve this issue is there in the structural conditioning after time T2 because the people brought together at the workshop include people who have experience of previous innovative projects.

Social interaction after time T2 took the form of the first workshop for lecturers to articulate and agree their valued pedagogic principles. At workshop discussions a list of pedagogic principles is drawn up and agreed upon, so that pedagogy not technology becomes central to the design of the project. Nicola can already see that the ways people usually work with students will contradict these principles but because people need to see this for themselves, she doesn't intervene. People try out ideas in different scenarios and possible project designs, and evaluate them against the agreed principles. The following excerpt gives a flavour of the discussions:

.....Well the way that the interaction designer led it was very much around thinking about scenarios ... although we were trying to think about specific design approaches... concepts, he kept taking it back to ..'so, who is the user? ... what is it we want to get out...[of] the process?....'. which ended up being the learning process, because that was what was important. And how are we going to get there?... So what are the key principles that are going to guide it?... we ended up ...saying we could go in two different directions.... in fact it would have been a lot easier to have designed it with strict roles and very structured, and sequenced.... at one point ... there was a disagreement about whether we should be structured and role driven or whether we should allow this organic....

Some people had to decide between rigid views about the roles and relationships they wanted to go with on the one hand, and their pedagogic

principles and priorities on the other. To make this choice even sharper the project team initially designed two possible projects:

... two different approaches to the interface, one which was far more structured,..... we came up with brainstorming and designing the structure of it, and the one that was far more structured and role based ended up being far more questions and answers and sequences.....Oh, it was awful....

Nicola deliberately took a step back now to let people see the contradictions between the ways they have always operated in the past and their pedagogic principles, as they tried out the different scenarios in the workshop. This was quite a courageous decision and Nicola talks about her feelings:

But I remember having the feeling that this could literally go completely pear-shaped and we could come out with... (Laughs)...[nothing!].

However, once designed, the highly structured scenario started to look very like the virtual field trips that had already been tried in the past. It obviously contradicted the agreed pedagogic principles.

..... Well then we ... said that actually it loses the value of being in the field, and it could have been a virtual fieldtrip, and in fact one of the research assistants said he had been looking at one of the virtual fieldtrips that had been done for the sciences.....said that is what they'd done... It is the way that you go through a virtual fieldtrip, is that you do go through this sequenced event...

Luckily after some discussion and consideration of the principles, people decided their pedagogic principles were more important.

There was this turning point saying we definitely do need to have that organically aligned and to collaborate and to evolve as they go along, and what we decided was that we would have key interaction points, that would allow, like in a game, when you've got past a flag and you get that to the next stage.

Structural elaboration after time T2 now took place as follows. After the workshop, designers went away to design the first pilot project. They took away some key principles about the learning experiences which contributors felt should be kept in the project as students needed them.

..... the value of it being physical and not to lose that physicality and if we forced them into having to keep adding to online forums, keep

having to do set tasks it would kill the fieldwork experiences, and what was really important to them was the fieldwork experience.....

Then a smaller group worked on the design with specialists and experts, on the basis of the discussions held so far:

and then we had design workshops, which... brought together ... the geology person ... the computer scientist, the researcher, two research assistants, the guy from ...[technical knowledge and media department] who'd done the mobile stuff, me, we all came together in these design workshops and with.... an interactive designer /graphical designer, who worked it through with us.... [we got] concepts of how we could represent this in the technologies.....

By time point T3 a list of agreed pedagogic principles was established, against which the project could be monitored to ensure that it is the pedagogy and not the technology that leads. The designers had put the technology in place and the team was ready to evaluate the operation of the pilot.

Social conditioning as a result of the structures at time T3 developed as follows. New possibilities for discussion and thinking about pedagogy now started to arise. Some people revised their initial ways of thinking about what it is possible to do with students.

...Dean of science was saying, 'I think this is interesting because educational technology and innovation on it is now forcing us to review ... our pedagogical approaches to science the bare bones of it', ... and our approaches to learning, and it's forcing us to go back and going 'oh maybe actually we ought to rethink that'...Because the physical boundaries we're forcing people into and the 'just always did it that way', and now it's sort of jiggling it all up in the air and saying 'oh we could do it a different way'.

The fact that the project was tried out in the field also made it possible for people to become aware of some of the pedagogical implications implicit in the technology which clashed with original pedagogical intentions.

At time T3 social Interaction took the form of discussion about the pilot at a second workshop after a drop-in centre was established. Additionally, new

finance bids were started and social networking for their success begun in order to get money for the project's next stage.

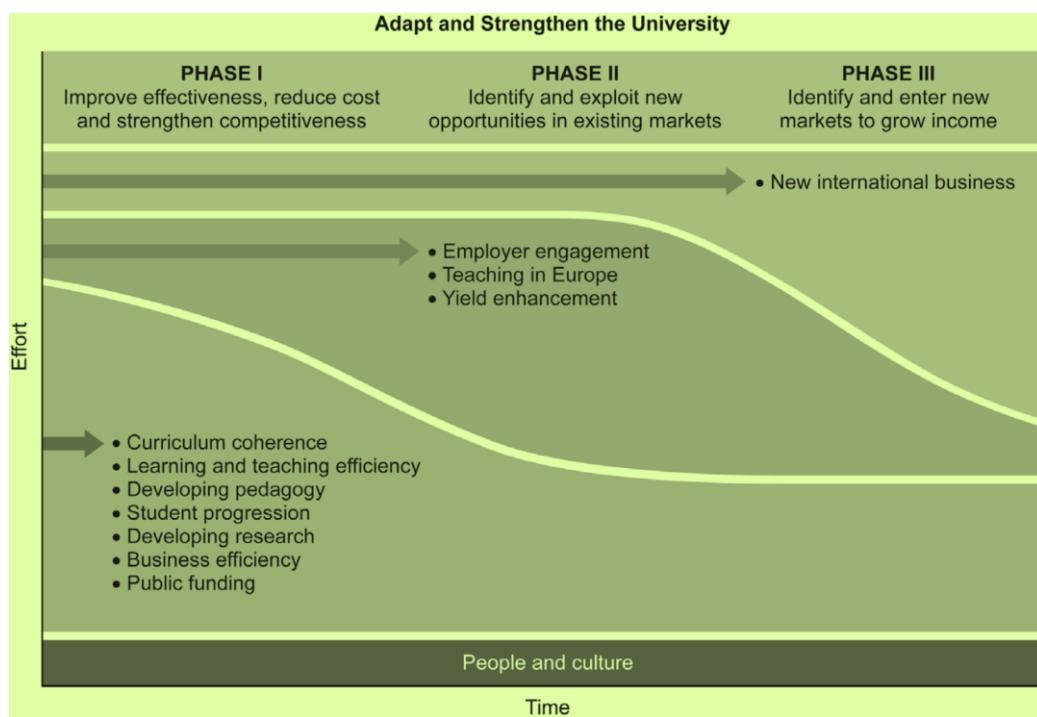
Structural elaboration after time T3 begins to take place when the 'In Here Out There' Geology project is put in place and running with students. According to Nicola:

The money runs out at the end of August, but we've put in further bids.

By time T4 there are more possibilities being investigated for the future development of similar projects. The involvement of many science lecturers has resulted in some new ways of thinking about remote collaboration and their pedagogic approach. These changes in pedagogic approach and the realisation of different ways of working with students within the discipline is one aspect of the whole development which might have a lasting effect once the money for transient projects is gone.

The next section of this chapter is a discussion of Nicola's account. What must the world be like for Nicola to have been able to achieve this project? It is useful to consider Nicola's account in terms of a multi-level analysis. *At an institutional level* such a project needed support, if not actually via funding then through time allocation and personnel to participate in Nicola's workshops. Such support emerged via the interaction of a number of processes. The university needed to save money and stop residential field trips because of cuts in funding at the *national level* and the knowledge that this funding will be further reduced. Both of these are connected with the rolling back of state funding for higher education which is part of a move to degrade state funded higher education as part of the market building activities of the government in England, which University X has embraced, as figure 7, which is based on a diagram in its strategic plan to 2013, illustrates.

Figure 7 University X extract from strategic plan



Faced with an end to field trips, geologists were open to alternatives. Nicola needed to encourage technical staff to get involved in the project. For this to happen there had to be a pool of people who had prior interests and experiences in innovation whether in pedagogy or in the use of technology in assisting people to learn. This is possible because of the nature of University X as a distance learning institution which has large numbers of people working in this area and at least two institutional departments dealing with the use of technology in education. Nicola works in one of them and some of the people working on her project are drawn from the other.

Nicola drew in temporary resources such as research bids for funding from various sources, which are available as a result of the marketization of higher education and the need of computer companies to promote a market for their goods at the *global level*. At the *national level* there was money available in the form of research grants as the government, via HEFCE, made use of such cash to drive staff in higher education institutions to explore and integrate new technology into their pedagogy. This is further enhanced by the UK

government's use of JISC¹⁸ and BECTA¹⁹ organisations to make funds available for experimental projects. It is an example of arms-length governance via agencies that help to implement government policy. Another crucial factor is that a certain computer company was keen to have its table top computers used in successful projects, as this creates a market for such goods within the state funded higher education sector. The granting of short term projects is part of market creation activities as the following extract from the HEFCE²⁰ strategic plan for 2009 shows.

.... Investment by HEFCE – in institutions, in the Academy, and in JISC – has been vital in encouraging developments in e-learning and learning technologies....we emphasise the enhancement of learning and teaching through technology in the context of our existing strategic investments in higher education. We continue to provide core funding to JISC and to ensure that the Academy focuses some of its HEFCE grant on learning technology as part of its overall support to institutions. Previously, we have made available residual capital funding from the e-University initiative to support developments, notably the substantial capital investment in institutional infrastructure and the successful benchmarking and pathfinder programmes facilitated by the Academy (Higher Education Funding Council for England, 2009, pp. 8-9).

Once the funding bids were successful, Nicola's project gained status within the university, giving the institution more reasons to support her. The constant discourse at the *national level* about the so called '*deficit*' in teaching at university level, acts as a driver for material structures of funding experimental projects, to remedy these '*deficits*'. Such a response by the institution serves to show that they are indeed dealing with this assumed problem. University X had set up more than one HEFCE funded 'Centre for Teaching and Learning' which brought in money from HEFCE at a rate per centre ranging from £20,000 and £500,000 per annum for five years (HEFCE, 2011). This deficit discourse helped open a space for Nicola to develop her project, which was designed to innovate in both technology and '*teaching and learning*'.

¹⁸ Joint Information Systems Committee

¹⁹ British Educational Communications and Technology Agency

²⁰ Higher Education Funding Council for England

All these processes helped Nicola's situation. However it was her agency which actualised aspects of each of them to enable her project. Why was her agency so strong? The answer lies partly in her prior experiences which caused her to develop certain embodied capabilities. For example she was able to identify and match technology to pedagogical aims in order to work effectively with people by winning them over through their own experiences. Without these capacities she would not have had the emergent power to actualise the potential mechanisms around her spatially and in terms of timeliness, such as the possibility for funding, the need to save money on summer school field work, the availability of the technological equipment and a computer company's desire for a market.

Nicola's personal embodied properties and consequent emergent powers were crucial in driving her project forward in the face of formidable structural problems such as lack of time, lack of funding and conflicting disciplinary approaches to pedagogy. This illustrates that as humans make changes to their social, physical and cultural environments, as Nicola has done in her past, they also make changes to themselves in the process. During their endeavours they gain what Pierce, considering the cultural realm, calls '*booty*', to be stored away and drawn upon at future times of need (Charles Pierce cited in Archer (2003, p. 69)). This empowers the person, enhancing inner resources which can be drawn upon to enhance their ability to act in the outer world. It is in the very process of interacting with the world and in making changes to it that the agent reformulates and builds up further embodied properties, and hence the potential to give rise to emergent personal powers in favourable material, cultural and social circumstances.

A second point of particular interest in Nicola's work has been the way in which she used a constraining mechanism at the national level, that of a squeeze in resources via the withdrawal of state funding across the higher education sector as an enabling mechanism. The squeeze in funding led to further restraining

mechanisms at the institutional level, i.e. managers' preoccupation with cost cutting. Nicola played on those very anxieties about costs. By arguing that her envisaged project could potentially save money on residential schools, Nicola turned resource pressures to the advantage of the externally funded project and secured the support of the university systems which were then prepared to contribute resources in terms of staff time, technical expertise and so on. In a similar manner Nicola was able to draw upon funding which was designed to promote the use of particular technologies, to design a project which was pedagogically driven not technology driven. A third point of interest is the way in which Nicola drew in other people to build up teams that worked collectively. Thus the corporate agency of the project team allowed new pedagogic possibilities to emerge.

All of these three possibilities have been actualised simply because of Nicola's personal emergent properties, her strong sense of confidence, and her capacity for reflexive deliberations upon her own embodied knowledge and the circumstances she finds around her. Nicola's story contrasts with Sam Lewis also at University X whose account is considered in the next section of this chapter.

Sam Lewis's Account

Sam Lewis is a lecturer in sociology, who sees the erosion of his pedagogic values under the pressure of marketization as insurmountable. His previous experiences of failure to prevent changes in his faculty have left him demoralised, with a sense of depletion of internal resources. He notes a number of developments, namely: changes to the extent that students are allowed to take responsibility for their own learning, a lessening of academic expectation from students, changes in assessment procedures as well as the level of challenge. Sam notes the development of over-prescription in pedagogy with increasing despair. He speaks of tendencies to make courses easier and more popular while the number of vocational or professional course with external

funding is increasing at the expense of more academic ones. He has resisted pressures to replace face-to-face tutorials with supposedly cheaper on-line ones. Marketization mechanisms have led to changes in faculty structure moving power away from academic staff to management. In addition, marketization has affected pedagogic relationships between central course teams and regional tutors. Consequently Sam sees a decline in academic quality in his faculty.

The question of who should take responsibility for learning is important. If markets are allowed to dominate, then the complex issue of learning is reduced to being a mere object to be delivered by the teachers and the institution.

According to Sam:

...the idea that you can '*deliver*' the curriculum, the idea that somehow you could '*deliver*' learning to people is just a fallacy.....I think it's related to the idea of students as customers....

This is an example of the consequences of defining education as a commodity to be branded and sold. As a result the students' responsibility in developing their own learning is diminished.

It's the same sort of idea that ... somehow the responsibility for students' learning is the institution and the teachers' ... rather than the students'. ...It seems to me it is necessarily shared between the two.

Sam claims that expectations of what students should do appear to be diminishing. In the early 1970s, University X was directly state-funded with a remit to provide high quality academic courses for those who had not accessed them in the normal way. Sam feels it was relatively successful in this and expectations of students were high. Compared to what was expected of students and courses then, expectations have dropped even on the question of reading. Sam comments that in the past:

if you just looked at the set readings, for example five set books and that was on top of thirty two units...

Students were expected to take more initiative in terms of selecting what to read, which helped them to develop those tacit skills necessary to grow academically. This allowed them more resources in thinking and applying what

they read to a variety of issues. Assessments are now much more closely related to set readings, leaving little room for challenge or for students to read around the issues for themselves. Now, what students do is much more prescribed and the whole process of doing assignments is increasingly a matter of following a procedure. Students are told to '*read this bit*' and that '*a good answer will look like this*'. Thus students have had the initiative taken away from them and are encouraged to become much more instrumental in their approach. Now, Sam claims, even at

... masters level courses we don't have the thirty two units and we certainly don't have the five set books..... We're not producing the same sort of academic courses that we were... There may be exceptions to that but generally speaking I would say... we're not. In other faculties that may still be fine but certainly within the humanities faculty

Sam maintains that for students to take a critical approach towards what they read in any discipline, they need high quality, challenging academic courses that will give them enough background knowledge of the discipline to understand it deeply. Sam feels that in his faculty such courses are being eroded and yet students need to read around the subject, and often, to go beyond materials provided, so as to develop criticality in the discipline. Students need to be encouraged in this, they will not all find it easy by themselves:

... Able students are able to use that [essay type assignments] in order to... critically engage with a question, but fifty, sixty, seventy percent of the students ... either aren't able to do that or they aren't confident enough ...so they concentrate on basically presenting the material from the course, and of course in the context of University X the danger there is that it just reinforces a tendency that's built in, which is that....there is this core material and this is all you read... whereas ... in my undergraduate course... the people setting the exam questions weren't even the people who were teaching you, there wasn't the same sort of core material, you had to be prepared to read around the area and try and answer questions that might be coming from something that you hadn't actually read, so you had to find a way of actually linking it to it.

In this way students develop various tacit skills such as knowing what is relevant to a particular question; what is essential reading and what is less so; all essential elements of entering a discipline like sociology. The market focussed

delivery model can hamper this development. Sam maintains that too much prescription militates against students developing wider knowledge and applying it on their own.

There has been a move towards proceduralising things to ... the idea of ... delivering the learning if you like...

He points out that it is a mistake to suggest to students that prescription can substitute for their own hard work or that

somehow you can tell them exactly what is required to produce a good answer to this... assignment and you can't do that because a lot of it is tacit knowledge... and skill, it's being able to know what would be relevant, to know how to formulate something, how to write it and I think that we shouldn't give the students the impression that somehow we can get them over that hurdle

Yet commodification of university education appears to promise just that. This is a particularly difficult issue in a discipline like sociology of education, as Sam goes on to illustrate:

As with many other disciplines there was an expansion in sociology of education in the 1970s,... big changes across sociology of education generally. Sociology of education had been and was expanding ...

This led to the development of what was called *the new sociology*. The discipline flourished and many different perspectives were reflected in a diversity of approaches within courses.

The new sociology of education was about teachers in classrooms and the way in which they constructed knowledge and how they assessed learning and student perspectives and ...all that kind of stuff.

The discipline is now vast with many different perspectives for students to understand. In the past students were expected to develop their background knowledge which developed various tacit skills of identifying what to read, how to write and so on over a period of time as they work through a programme of study. Sam felt that as a result students were able to deal with challenging courses in sociology, and could navigate the different positions taken by the course team. Lower expectations of students today militate against them being able to develop such tacit skills as:

...I think one of the problems is going to be for students to work out what the line is, and what can you be critical about and what can't you be critical about, what counts as critical and what doesn't...

The distinctions at undergraduate level are subtle: There are unwritten rules to become aware of as the student enters the discipline. Students find it much harder to develop the tacit skills to navigate this. Sam continues:

...So that although there's an emphasis on being critical there's still an assumption that certain things are patently false or patently wrong, and therefore wouldn't normally be subject to criticism, whereas other things... would be patently okay and good and so on and so you probably wouldn't be critical, and then there's an area in the middle, where, you know, you can engage in debates and so on.

Sam poses the following problem for lecturers and tutors in his discipline when they try to develop levels of critical engagement amongst their students

...you want students to adopt a critical orientation, but generally speaking you don't want them to go off in all directions...particularly in a field like education, where you've got such a range of ideas and approaches being drawn on, that students can't actually have the background knowledge that's required to be able to deal with all of these things.

Even at the best of times, it is difficult for students to reach a level of criticality; particularly if they do not read around the subject, but rely on prescribed sections of readings, they operate without a real depth of knowledge. Students need support in developing the necessary criticality. Sam claims the problem is greater on distance learning courses, which is why face-to-face tutorials are important, allowing tutors to respond contextually and non-verbally to individual students, with opportunities to do things like:

... play devil's advocate ... what we did at summer school was to ... split the student group into two and asked them to do a critique and defence of a particular article.... encouraging them to think about both sides ... so how would they defend it and also how would they criticize it. ... quite effective at developing those skills...

Because tutor interaction with students is so important in developing critical engagement, Sam has resisted pressure to make all tutorials, on-line interactions as a cheaper option.

But there was pressure to set up ... they really wanted the tuition to be on-line and I said no, not for a compulsory first level course... it should be face-to-face. I've no problem with tutors using email or a forum...

Summer residential schools also give opportunities for this sort of interaction with students but they are expensive and University X is looking at cost cutting in response to withdrawal of HEFCE funding.

Assessment is also changing due to management preoccupations with notions of students as 'customers' and Sam points out that

....at master's level exams have completely disappeared...so that's a limitation...the argument is 'it's not appropriate at this level, students don't like it'. It is that sort of argument. And part of the argument is that the people who are students on the course are very often senior teachers or head teachers or inspectors and that somehow it's demeaning for them to do examinations... I mean it's never really spelled out, but the argument is that exams are a bad thing ... on the other hand of course, you could argue that exams are fairly essential for University X as a protection against plagiarism. But there we go!

Marketization pressures do not just end with exams. Management are keen to cut costs and search for new sources of funding, as the extract from the strategic plan in Figure 7 shows. In this situation, Sam claims there is a real preoccupation with increasing student numbers and minimising dropout rates at the expense of academic considerations and pedagogy. Fears that students might find a course too difficult or that they might not do well causes pressure on tutors to tell students just how to do assignments.

Well we've cut down the amount of reading, we set assessment questions which are very closely tied to what they're supposed to have read.....So they should immediately be able to see what this question is asking them about. The pressure is now, something that I try to resist... for providing students with a lot of information for what a good answer would be, what this question is asking for.....writing outlines for the students of what would be a good answer... And the reason I've resisted it is because it gets to the point where there's no point in having the assignment really...

At University X much of the teaching of the course is done by regional tutors. The relationship with these tutors is also changing with more specification of pedagogy.

....within [University X] there's always an issue about what the relationship is between the course team and the tutors and the tutorials and the...[centre]..... when I've been a University X tutor it's been really interesting ...to what extent am I an independent teacher here and to what extent am I some sort of person who has to implement the pedagogy that's specified?

... the move is more and more towards specifying exactly what should be done now..... I'd say it's more central now, there's an assumption that course teams provide materials for tutorials and have a say in how things are going, you know, how tutorials are going to be, though in practice there's no planning of it. But ... thirty years ago if a course team had started saying that, the staff tutor would have said, I'm sorry, that's my area...

Sam considers that too much procedure in this area leads to a certain instrumental approach to pedagogy.

I couldn't say that students have become more instrumental because it's hard to judge that but what I can say is that the pedagogy has become more instrumental...

And when it comes to marking an assignment as a tutor, the detailed prescription about just what makes up a good assignment can be overwhelming:

I taught on a course that was like that and there was so much, you couldn't keep it in your head so it was worse than useless really.

Sam relates this trend towards over-prescription as a form of anti-professionalism on the part of managers and a lack of trust in academic judgement:

I mean it's a form of anti-professionalism really. It's the argument that... we can't trust people to have expertise and exercise their judgment, and what we've got to do is to try and pin them down and make sure they do all the right things, so we identify all the practices and then spell it out in detail so that more people can follow it.

This is an example of the lack of trust in academic judgement over issues of quality and the trend, which goes hand in hand with marketization, of managerial control over every aspect of academic work. This can severely obstruct pedagogy.

Then the trouble with that is that it gets in the way of the people who are capable of doing the job well, they don't do it as well as they would have done because they're busy trying to cope with all these things.

And the people, who can't do it, still can't do it because actually you can't do it by procedures.

In this way the complexities of pedagogy are reduced, decontextualized and turned into detailed procedures, while the role of the tutor is increasingly restricted to following prescription from the centre. This is an example of the regulation of everything, which makes it easier to control people and monitor their activities. It is driven by the commodification of education which demands that such procedures once formulated, be packaged and sold to be used in decontextualized and perhaps inappropriate forms. Such a pedagogical model lends itself to the production of *off the shelf* courses for export, or for the development of cheaply *deliverable* on-line courses.

As government funding is withdrawn there has been a shift in Sam's faculty towards more lucrative professional courses. Here students are being trained directly to join a particular sector of the workforce, often funded by employers or by the government. Such courses often count students' own professional knowledge towards their assessment. This is a complex issue and Sam maintains that between academic and professional courses there

.. isn't a simple dichotomy. But there has certainly been a shift towards professional type courses and an emphasis on students using professional experience in courses which up to a point is fine, but I think there is a real problem because then you're assessing people so what exactly are you assessing?... you're not assessing their academic knowledge anymore, you're assessing their professional development or something. It's a defective model because...we, here, cannot assess the quality of somebody's professional work, or their professional development for that matter...you cannot actually assess their professional performance here.

Sam makes comparisons with an auditing culture which eventually simply teaches people how to become good at being audited:

It exactly mirrors or parallels...the arguments about auditing. That's what auditing measures. It is people's capacity to be audited... It tells you very little about what they actually do on the ground. It tells you about how they can present themselves in an appropriate manner to an auditor, and I think it's the same sort of thing happening here and I just wonder what the value of that is really...

Hence pedagogy is being shifted towards serving the economy through developing skills for work and yet cannot deal cheaply, within the university, with the complexities of judging the actual practice of the students in situ. Resorting to an auditing model simply shifts assessment to measuring, not learning, but something else which may not be relevant. At the same time all the assessment processes serve to train students in subjecting themselves to performativity regimes (Ball, 2012) where they learn to work upon themselves, to adjust themselves to being audited via arbitrary and changing criteria.

All the above changes are taking place in the context of larger changes in the way the university is itself is governed. Sam describes the way decisions about pedagogy in the faculty have changed. In the past all academic staff were affiliated to one of a number of disciplinary groups within the school, but now

...another change has been about where decisions get made about curriculum and pedagogy... what happened was the discipline group would decide when they were going to remake a course or that they wanted to put on a new course ... they would then produce a proposal and ...take it to faculty board and then there would be a discussion and a decision would be made...And the discussion in faculty board would be to start with, about the academic merits there would be something about pedagogy ...and then there would be something about... what would be the student numbers...The main decision was made on 'is this an academically defensible course and does it necessarily fit into our offering?... it's not overlapping with our academic analysis, it's complementing other things'.

But now student numbers, market rating and dropout rates have become more important preoccupations for management. As a result, the basis for deciding has changed away from academic to more mercantile considerations:

What happens now is that decisions about what courses to make are made by committees within the faculty. So they're not made by what is the equivalent of a discipline group, which would be the centres..... it's made on the basis of: is there a market opportunity here, can we get large numbers of students on it?

A significant change affecting these decisions occurred when the institution, like many other universities in England, imported industrial style management

structures and shifted decision-making in the faculty away from academic centres and academic staff. One of the academic centres was closed down altogether in spite of opposition. Additionally, as Sam points out:

Deans are no longer elected. They're appointed by, basically by the Vice-Chancellor.... The shift is... the Dean becomes the representative of the university management and the faculty, not really a representative of the faculty.

This significant structural change gives management perspectives a higher profile than academic issues. Sam observes the effect on discussions of courses at faculty board in more recent times:

The discussion, I don't go to faculty board anymore but when I did the discussion was almost entirely about how many students; will the number of students cover the costs. I mean that was... that's not to say there was no interest in [academic issues]... That's what it's like now.

In terms of resisting such changes Sam appears to have given up altogether and feels bad about doing so.

... it's a terrible thing to do but I'm afraid ... it's partly motivated by the closure of the centre. And we fought, we didn't fight a very good battle there, we could have done it better. We would still have lost anyway. But basically since then ...in terms of the faculty, I'm a time server...I do the things as well as I can but... I do what I'm asked to do...some things that if I don't want to do I say no, I'll do the things that I think are worth doing, and I'll try and do them in a way that I think they should be done, but I will adapt in order to fit with whatever the pressures are.

Fixed term temporary contracts are used more frequently for staff, and in the battle against the closure of the academic centre Sam was in, this was a factor in undermining opposition. Sam explains his feelings after that battle was lost:

what that taught me was that it was a complete waste of time because you couldn't mobilize sufficient support ... across the university in order to resist these things...too many of my colleagues are at least half persuaded by the kind of managerialist ideology which now operates and the ideas about delivery of the curriculum and the emphasis on trying to minimise dropout by trying to specify what's required in answers and all the rest of it. ... And also they're on temporary contracts, they don't want to stick their head above the parapet and I don't blame them for that.

A previous unsuccessful battle has been devastating for Sam who faces demoralising memories of the past. There is a sense of internal resources being depleted. The possibilities for collective agency appear to be blocked off by the large scale use of short term tenure.

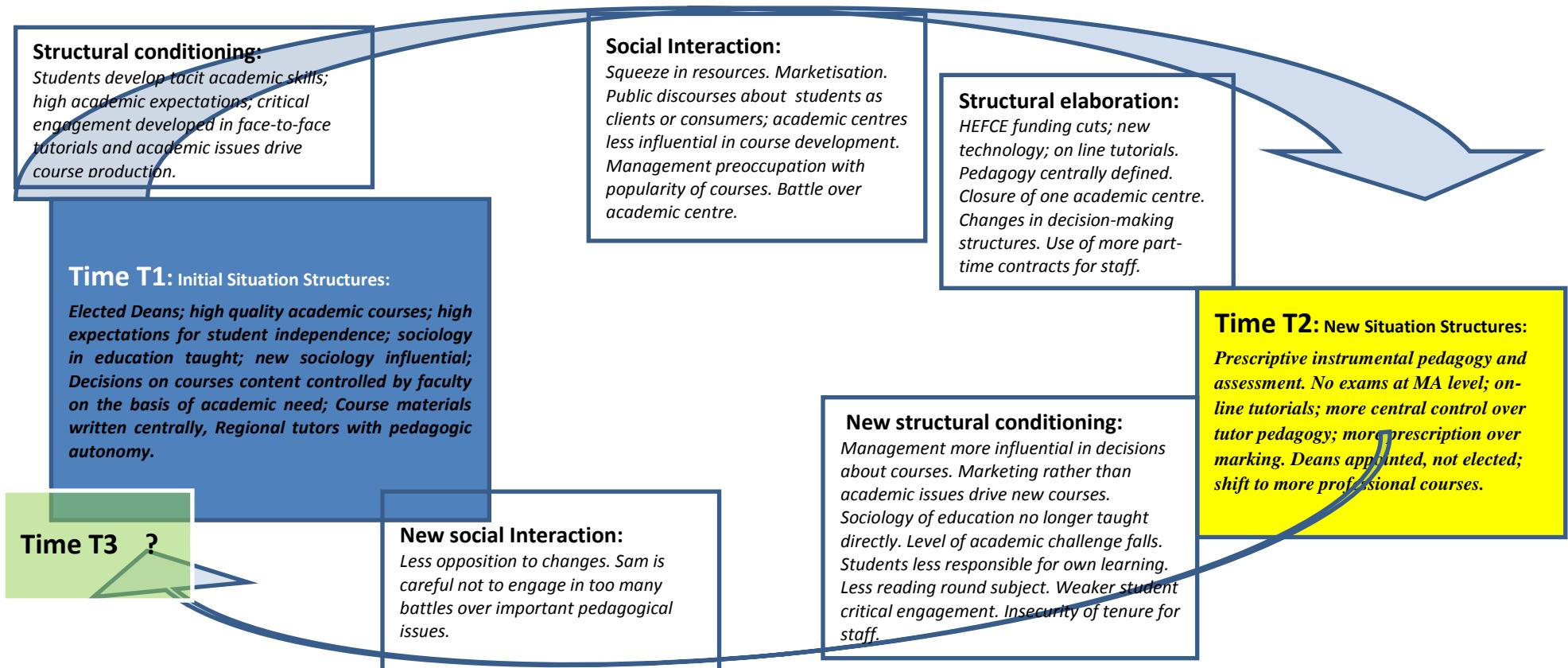
Well there's not much going for mobilisation, I mean things may change with threats to people's pensions and all the rest of it. I think people might become a bit more militant but no, there's not really much scope... I am not a political animal, so I'm not really very good at that... we really didn't do a good job of defending the centre...we'd more or less lost it at the beginning, but there were things we could have done... we needed to engage in more networking..... We didn't really do that. We contacted some people. We got some... outside influential support yes. We even got Bob Raynor [famous influential educationalist] to support us which really incensed people here but ... you weren't going to win because the structure of the place had already changed...

Today Sam is careful to conserve his energy and feels that the problems are insurmountable:

... I choose what battles to fight and what not to and increasingly I don't fight battles because, what you're trying to fight is so... It's not just one thing ... You might have some hope of success but you are actually fighting a sort of multi-headed monster really.

Figure 8 illustrate the way in which pedagogy has changed over a period of time, according to Sam's account.

Figure 8 Sam Lewis morphogenesis



To conclude this section, we can ask: what must the world be like for these things, which Sam outlines to be taking place? The first of these is that whereas in the past students, teachers and the university shared the responsibility for learning, marketization pressures are now redefining learning as something to 'deliver' to students. This is directly connected to the squeeze in resources by cutting direct state funding for universities at the *national level*. The HEFCE strategic plan calls for linking university funding to efficiency (Higher Education Funding Council for England, 2009). [See Appendix 1 for details of the critical discourse analysis template of this plan].

The second change Sam outlines is about expectations of students. High quality academic courses give students enough knowledge of a discipline to enable critical thinking. Yet students need to understand the foundations and hidden rules of the discipline first. Face-to-face interaction with tutors is especially important for this in the first year of a course. However, in a situation where the funding of the institution depends on students paying for courses, both the academic quality and the ensuing depth of knowledge and critical engagement can become eroded. The pressure is to expect less of students in terms of academic challenge, criticality and the ability to read around a subject, select relevant material and apply one's own ideas to new issues within a discipline. Pedagogy is more prescriptive and understanding is replaced by memorising procedures. Two interacting *national* mechanisms; those of marketization discourses of student *clients* or *consumers*, and the shifting of university funding from the state to student loans have caused these emergent changes in pedagogy at an *institutional level*. There has been a move to standardise and to try to fit the complexity of pedagogy into one or two simplified business models of delivery. University X is trialling curriculum business models which would standardise courses across all disciplines. Both of these mechanisms can be traced to the process of market creation, which is dominant at the *global level*,

carried out via the degrading of state higher education nationally and are reflected in the institutional strategic plan (see Figure 7).

Sam's third concern is that too much prescription about what to read, and just what to write in assignments, combined with fewer expectations that students read around the subject, can prevent students from developing their own academic understanding and critical engagement in the discipline. Yet, financial pressures to attract more students can lead to just this sort of over-prescription. This is an example of how a combination of managerialist pressures to control at an *institutional level* and the resource squeeze at a *national level*, as state funding is 'rolled back' can devastate pedagogy.

Fourth, prescription extends to tighter control over just what regional tutors are to do with students, and with excessive decrees as to just how to mark assignments. This militates away from contextual interactions between particular students and their tutors in different circumstances. Here we see an example of performativity regimes at work at an *institutional level*, as both students and tutors learn how to work to arbitrary and sometimes meaningless criteria. This constitutes what is meant by 'learning and teaching efficiency' in the strategic plan as noted in fig 7.

Fifth, examinations, an essential safeguard against plagiarism in a distance learning university, and an opportunity to help students apply their own ideas to important themes in the disciplines, are now under pressure. Worries about student dislike of examinations are making it difficult to keep examinations at Masters Level. Coursework assignments are less challenging and there is concern that students may be being asked to work too hard, as the following extract from a meeting of University Council shows.

Thirty-two courses, covering 33% of the undergraduate population are the subject of Retention Action Plans. Course teams are working to improve their completion rates by:
a) Reducing workload where appropriate;

b) Helping students to plan and manage their workload better;
(Discussion at University X council meeting March 2005)

This reflects what Sam has said about making the work easier and prescribing just what students should do. The reason is analysed in terms of costs in University X's strategic plan.

Our intention is to increase the proportion of students who progress to the achievement of long-term study goals in order to reduce acquisition and support costs and increase student achievement, Focus area 4 (University X strategic plan, 2010-13 p9).

Again here is an example of an *institutional response* to marketisation discourses at a *national level*. It shows how the degrading of state higher education emerges as a result of such combination of processes originating at different levels.

Sam's sixth concern is about a shift towards more work related courses, which bring in funding. In professional type courses there are difficulties in assessment when students' professional knowledge needs to be taken into account and yet it may not be easy, in the university, to assess a student's professional activities, except through some kind of audit. In such cases audits tend only to measure how good someone is at being audited. Yet this can become the basis of pedagogy. Again the *institutional level* response to a *national resource* squeeze also has an interesting side effect. It can train students to operate within performativity regimes which appear as discursive structures at the *individual level*, non-conformance with which could lead to students failing the course.

Seventh, Sam notes that decisions about the development of new courses have shifted from being taken on the basis of academic preoccupations towards more mercantile ones. University X's strategic plan is quite frank about these:

Our intention is to increase academic coherence and reduce the number and complexity of modules and qualifications to increase the attractiveness and financial sustainability of the curriculum and contribute to the improvement of student progression. (University X strategic plan 2010-13 p9)

The structural changes in decision-making and the move from elected Deans representing academic faculty to Deans appointed by the Vice-Chancellor facilitate these changes. This is an example of the development of new managerialism at an *institutional level*. It can be traced to strong discursive structures at a *national level* about how universities should emulate business models of management.

This chapter has considered the accounts given by Nicola Logan and Sam Lewis: two individuals who make very different uses of their personal emergent properties of self-consciousness, personal identity and capacities for reflexive deliberation. Whereas Sam has developed some deep insights into the processes going on around him and is as capable of reflexive deliberation as Nicola, he is not in a position to combine with others to develop forms of corporate agency to elaborate the structures and to resist or control his situation. He is deeply affected by the erosion of his pedagogical values in a discipline which is important to him. He has also experiences of failure to prevent damaging changes. Nicola on the other hand, equally aware of financial pressures on the institution manoeuvres to use them to develop her projects short term though they are. She is unhampered by memories of past failures; indeed she expects failure to be part of the process. Her cynicism has, as it were, led to action; while Sam's considerable reflexive insights enhance his passive feelings.

Nicola and Sam have different commitments to the extent that they will risk personal and professional well-being. University X, according to its strategic plan, embraces markets and marketization, seeing itself as a major player ready to expand further into more markets. The next chapter considers three cases in a contrasting institution, University Y, which was a polytechnic and became a new university in 1992.

Chapter Eight: University Y:

In this chapter the concept of an '*organisational field*' (DiMaggio and Powell, 1983, p. 148) is adapted and applied to one department at University Y, illustrating how a discursive structure can have material and social repercussions. This is followed by an account of two lecturers' collective struggle to overcome resource shortages and timetabling problems at the start of an academic year, resulting in unexpected and exciting pedagogical developments. Finally the chapter ends with an account of the endeavours of a Law lecturer and his colleagues, whose pedagogic choices are being curtailed by changes at the university.

What might DiMaggio and Powell's (1983) organisational field, introduced and discussed in chapter 5, look like at the department level within a university? Drawing upon evidence from three consecutive staff meetings in a particular department, the workings of an organisational field are traced at an institutional level as the university's new strategic plan is introduced. The development of an organisational field, takes four distinct stages. These can be called *Terms*, *Texts*, *Social Fora* and *Procedures*. In the step known as *Terms* new epistemic categories and terms are articulated in line with a particular ideological position and serve to develop a common aim. In the step known as *Texts* a plethora of new texts and resources are created on the basis of the terms. Each carries its own ideological complex around the common aim. In the step known as *Social Fora* both texts and terms are used in various social situations to draw people into work around the common ideological position. Finally, in the step called *Procedures*, procedures are set up to consolidate common ways of acting, and structures are developed to enforce or reward such procedures.

The next section traces these four steps during the introduction of University Y's new strategic plan. The context for the development of new terms was that the current Vice-Chancellor was about to leave at the end of the year. In preparation for this change the Vice-Chancellor decided that those who will be responsible in the future should draw up the new strategic plan. In an interview he explained

...because I am leaving, I didn't want to leave my successor something to sort out. Professionally I can't do that....I have got to leave something that is solid.

And you noticed that the introduction is written by the Chairman [of governors] and not by me and that was important as well because if it was my introduction which the previous one was, it would be viewed as something that is sort of redundant and it is really important for me that... what I hand over to my successor is not only viable but it is consistent, it is sustainableand it is on the professional requirement that I have ethically, to make sure that what I hand over is an on-going concern that is going forward....

The university's new plan to cover 2010 to 2015 is the result of collaboration between governors, the Pro Vice-chancellors and senior managers. The document contains many terms linking education with the economy and business values such as:

'entrepreneurial'; 'new and creative approaches to learning, teaching and research'; 'adding value to students and employers and regional, national and international economies'; 'addressing the economic and social challenges facing the UK in increasingly competitive global markets' (University Y strategic plan 2010-2015)

The terms used to describe the university are indicative of the values imbued in the plan, according to which a university should aspire to be:

'innovative and enterprising'; 'challenging individuals and organisations to excel' and 'business facing' and playing 'a leading role'(University Y strategic plan 2010-2015).

Yet there is no clear definition of what any of these terms mean in practice, leaving the precise meaning of terms like '*entrepreneurial*' open to interpretation. Other similarly empty terms are:

we are an exemplar in the sector.....we play a leading role.

Nevertheless it is clear that the strategic plan envisages education playing a major role in developing or 'rescuing' the economy. Ball (2010) claims this to

be part of the development of the market form within the state sector. At the *global level* this is consistent with the preoccupations of the WTO and the OECD. These phrases are now part of the jargon of the public documentation of many universities at a *national level* across the UK, and can be traced directly to the 2009 strategic plan for HEFCE, the main quango²¹ involved with government steering of higher education at a distance. HEFCE's plan was chosen for critical discourse analysis in this research, to discern what kind of national situation must exist for such terms to be appearing in so many different documents across the country at the same time? [See Appendix B for a critical discourse analysis template of the plan in terms of its ideational, relational and modal aspects.]

Those involved in writing up the University Y strategic plan may not understand these issues, but they do not necessarily question the meaning of these phrases. So the University's strategic plan, 2010-2015, and the discussions around it, acts as a vehicle to set up a process of epistemic categorisation where terms, conflating education with the economy, are elaborated and repeated many times. Their ideological effect is enhanced through such repetition (Billig, 1995), constituting a first step towards the development of an organisational field. This first move sets up a discursive structure containing, as Hodge and Kress (1988) maintain all discourses do, an ideological complex. The university strategic plan is an example of such a discursive structure. It paints a picture of the world in which education is placed non-problematically at the service of big business and has a role to play in rescuing the economy.

The second step in developing an organisational field is to create a number of texts reflecting this common way of viewing the world and common values around the way that people should operate, and to put these into the social arena. A plethora of texts, reflecting the assumptions of the strategic plan, such as discussion documents, e-mails and faculty and departmental plans

²¹ Quasi Autonomous Non-Governmental Organisation: A means to devolve responsibility from government.

accompany the production of the strategic plan. People are often subjected to an increased information load. These texts are then used in social interactions.

The third step is the establishment of social spaces to interact with these texts. By involving people in activity around them, a world view encompassing a common formulation of values and principles, consistent with the assumptions of the plan is promoted. The plan is discussed at different social events, and in every faculty and school, at meetings of staff with one of the Pro Vice-Chancellors involved in its creation.

A letter was e-mailed to all staff by the Vice-Chancellor in Feb 2010 and illustrates how this part of the process was carried out. A marked-up copy constitutes Appendix D. The key values that the hearts and minds of staff are to be united around are extracted and listed below:

leading business facing university... innovation... creativity.... an enterprising mindset.... business units...

The next generation of business facing universities... university is well placed to respond to the demanding economic climate.... a modern university...(Vice-Chancellor's letter to staff Feb 2010)

The plan is categorised as a '*collective view of our future*'

The different social events organised to generate further discussion around the plan are mentioned in it and are listed below:

The plan is launched... significant consultation.... presented yesterday to the Vice-Chancellor's Group.... Cross university management briefing.... Each head of unit will discuss the plan with Strategic business units.... member of the Pro Vice-chancellor team will visit each unit to discuss.... vital that we use the plan in decision-making. (Vice-Chancellor's letter to staff Feb 2010)

So here we have a flurry of activity designed around the plan. People will spend time reading it and be involved in meetings around it. There is an attempt to create a common unity around the ideological position taken in the plan which consists of the preoccupation with 'the needs of industry and business'; the strangely undefined 'key value' of 'entrepreneurialism'; the shift in the funding

base towards companies and the increased demands upon staff with no mention of extra remuneration or changes in conditions to ameliorate these processes. [Appendix B contains the template used for a critical discourse analysis of this strategic plan.]

One characteristic of such meetings around the plan is that discussion is not free. The meeting takes place with powerful people in the chair. Alternative methods of discussion, such as anonymous on-line questionnaires or an invitation for critical analysis, were not employed here.

The fourth and final step to developing an organisational field sets up procedures to consolidate shared values and particular ways of behaving. Structural changes are set in place to enforce or reward these behaviours. People are drawn into actions around common ends which are articulated by the ideological complex of the discourse. In the particular department studied, the strategic plan was discussed at three consecutive meetings, and I was allowed to observe them. The quotes below are from my observation notes of the meeting dated 16/02/2010, where I wrote them as they were spoken.

At the first meeting in February the Head of School made quite some effort to prettify the plan to staff as '*much better than other universities' plans'* characterising its mention of '*people and culture*' as '*unique*'. He is, of course wrong about this, as exactly the same phrase occurs in the strategic plan of University X (see figure 7). He also confided that he has been under pressure from above to monitor people's activities, saying:

There is pressure on me from elsewhere in the university that I should know where everyone is at every point in time. This is not how we operate. In some departments people have to get prior permission to work at home and in some people are not allowed to do so. So we are quite lucky.

This was greeted in silence. With such statements, he is setting up a discourse of solidarity with faculty, of being their protector; a discursive structure which develops common aims for the school. Even though not explicitly discussing the

strategic plan, he is inviting them to identify with the strategic plan of this university as being superior to others, and to appreciate how well off they are compared to others, even in the same institution.

Following the speech, people were divided into small groups to discuss each of the plan's 'drivers' and how to implement the plan, but not its substance. People could have commented, but no time was given to any discussion of the actual content of the plan. The purpose of the exercise was to involve people in activity around the texts rather than to seek their views. My notes record that:

The meeting now continued with people working in small groups discussing and recording their ideas about each of the 5 strategic drivers and the 5 enabling areas outlined in the strategic plan.

The tightness of the discourse was made particularly sharp when a person tried to bring up a previously contested issue about marking times. The Head of School sharply said 'I am not opening up the subject here.'

This overall discursive structure of the staff meeting has some implicit rules that are worth noting. According to the rules of the logonomic system set up it is the Head of School who speaks to the whole group and there is the definite message that some subjects are out of bounds. The rest of the people present may speak in their small groups but the result of their discussion does not reach the whole group. This opportunity to question the content of the strategic plan publically was lost.

Common aims and a discursive structure are emergent factors in the creation of an organisational field (DiMaggio and Powell, 1983). The first discursive move is the presentation of the strategic plan which recipients were requested to have read in advance of the meeting. This is followed by an input of information about it and the context. Within this, people were invited to rely upon information from, and the experience of, others. At one point the Head of School repeated once again:

My acquaintance, with much experience of looking at university strategic documents, thinks this is very good; some people elsewhere in the university are having a difficult time; I am under pressure to account for your movements.....

The strategic plan had already been sent to each member of staff with the request that it be read prior to the meeting, and this could be considered to be an increase in information load. The overall discourse in the meeting itself is not about the plan itself. Instead it is about positioning the school, and its staff, within a university under pressure to embrace a common need. It positions and invites staff to defend a slightly privileged position and to engage creatively with the strategic plan through discussions about how to implement it. This is followed by the establishment of another social structure within the meeting; the division into small groups in order to discuss how the school can best implement the plan. In this way individuals are drawn into interactional activities around the strategic plan, already discussing implementation without ever having agreed to the plan itself. In effect they are drawn into making common statements about future activities. Their ideas are scribed by one member of each group and are collected in, and could be used in a sanitised way as the basis of possible future discursive or social structures to start the implementation of the plan by the head of school. They were not made available to all. This enhances the rise of mutual awareness by the staff, that they are engaged in the common enterprise of implementing the plan. At no point has anyone been asked to comment upon the plan, in spite of its prior circulation.

As people get caught up in the common goal, they get tied into the intra-institutional power relationships that are involved in implementing the strategic plan. They begin to be bound to one another and to the Head of School, all within a discourse of *getting on with it*. Thus the policy enclosed in the strategic plan does not actually come under critical scrutiny and it does not appear to be imposed as yet.

The process described above is typical of how the sociological concept of an organisational field works, even though I am using it here to describe the situation within one department, as opposed to Jakobi's application to a nation. The key features of interaction, patterns of coalition, increase in information load and common enterprise (Jakobi, 2007, pp. 41-42) are all visible in the interaction within the meeting described above. Overall, the process diminishes the agency of the individuals at the meeting except in the one area of discussing how to implement the plan.

After the meeting resistance begins to surface as people expressed private anger at the fact that, in spite of all the rhetoric about consultation, none of them had in fact been consulted about the content of this strategic plan. My notes written that evening state:

As the group were finishing their discussion, one member of staff said that she actually felt sick on reading the empty jargon in the strategic plan. What did the words 'innovation, creativity and an enterprising mind set' on the second page under the heading 'our vision'... actually mean? There was some discussion about how to prevent ourselves from becoming paralyzed when reading the jargon.

Such a strong emotional response, where a person feels physically sick at reading a document, shows the need to understand the connection between a discursive structure such as the text of the strategic document, the social structure in which it was contextualised and the physiological effect that a person can experience as a result of emotions arising from the interaction. Is it possible that a discursive structure can contribute to ill health? It is an illustration of the stratified ontology of human beings and the fact that one level can contribute to phenomena at another.

Later on that evening, another individual remarked to a group of people in his office that it was interesting the way in which the fact that we had been engaged in the discussion was being taken as automatic agreement with the strategic plan (notes after meeting 16/02/2010).

Yet this person did not raise his concerns in the meeting in front of everyone. As Archer (2012) points out, it takes structures of power for people to accept nonsense as truth.

Over the next two and a half months there must have been some developments amongst the staff because in the next meeting resistance to the strategic plan was evident and showed some evidence of preparedness. Questions were well thought out and clearly articulated exploiting well studied contradictions within the text of the strategic plan. A second meeting followed in the same school in April of the same year, and here the strategic plan was explicitly discussed with a Pro Vice-Chancellor present as promised in the Vice-Chancellor's e-mail cited above. At this meeting, some preparation had obviously taken place and resistance was more strongly voiced by individuals. Questions focussed on contradictions in the strategic plan. How would 'well-being for all', sit with the anticipation of resource cuts for example? Another question was about the way in which university systems got in the way of parts of the strategic plan about integrity and trust, and the speaker gave detailed examples. The quotes below are from observation notes taken during this meeting dated 20/04/2010.

The speaker then went on to the second question elaborating on the theme that some parts of the strategic plan are in tension with other parts. The systems and structures of this university do not help with 'integrity and trust' She then gave examples to do with the admissions procedures for overseas students, problems with working across faculties and numerous others where systems are problematic.

The PVC responded by saying:

...the strategic business model leads to all the money being devolved and this system makes it difficult. (There was no indication, however, that there was any thought of changing the model).

The following extract starts with the contribution made by one of the lecturers, after a small group discussion on the tables people were seated at. Her imminent critique of the strategic plan shows a level of prior preparation:

'Our table was really positive about the plan but ...there was the tension of the reality of the short term against the long term plans. if staff cuts were going to take place, then we would lose staff and that this would clash with thinking in the long term about being creative and so on.' (She cites figures from the PVC's hand out to the meeting).

The PVC responded that the minus one figure did not mean there would be a reduction in costs, but instead it was an indicator that the university was below other universities in the area of staff costs. To this

the questioner responded 'so does that mean that we can recruit more staff then?' and there was laughter. The PVC responded by discussing the possibility of 'being creative with heating bills rather than saving from staff budgets'.

A third point was made by another speaker about the systems of the university not being conducive to the 'integrity and trust' ... mentioned in the plan; she went on to give examples. The PVC responded with a call to get rid of bureaucracy and said it was the 'dawning of a new age' but not explaining how such problems could be solved.

A question about the envisaged increase in distance learning (by 25%) being unpopular with students and thus contradicting the strategic plan's aim to please students was similarly sidestepped with a comment that our full-time students were really more like part-time students. A person who called out to say:

yes we know their employers want them to study in the evenings and at night!

was ignored but the pressure on the PVC built up and he back-tracked and actually admitted that the strategic plan was meaningless...

It really is just a glossy piece of paper with words on it so it is quite meaningless unless you know where it comes from...

At another point the PVC conceded that staff development could be enhanced through a 'partnership' with the gym. This was actually taken up later and resulted in free health checks for all staff over the next year. However, and unexpectedly, a new development in this meeting was the announcement that the governors had developed a set of Key Performance Indicators (KPI) to monitor the implementation of the strategic plan. They were introduced in quite an offhand manner, with the following comments:

PVC :(quite off hand as he gave these out) 'the Board of Governors have just lashed this together. You will develop your own Key Performance Indicators. This is a big culture change. No longer is success going to be measured by process, success is going to be an outcome-based measurement. We are going to try and be transparent and clear about these KPIs. Please note that the table of KPIs is just the governors' first go at this so if you would like to just put them in the bin or add things to them that is alright. The board of Governors will ask us to show that we are moving the way we want to be going.'

Although this last statement trivialises the importance of the Key Performance Indicators, the fact is that they have now been introduced in principle. This move takes the process of building the organisational field beyond the area of texts with social activities to do ideological work in support of making certain aims common. With the use of these Key Performance Indicators the process now binds people into stronger processes and structures. The gaze of the governors is to be aimed at the staff, whose performance is to be monitored according to these indicators. In this way the possibility of consequences, should the plan not be seen to be implemented, is brought in. The move is from the use of a few nebulous statements about being 'business facing' in public documents, to an outcome-based monitoring system around the equally nebulous issues of being 'innovative, enterprising and creative'. This is how the PVC described the move in his talk:

PVC: People find it difficult to answer how they were actually business facing in their work. Business facing is more an outlook. A way of doing things. As an ethos- not as an output. So in the plan Business Facing appears in the vision but not in the rest. Innovative, creative, enterprising is what we do.

And so '*Innovation, creativity and enterprise*', whatever these might be, are to be the outputs. They have been made into categories against which to measure staff activities.

The discussion about these indicators took a very small amount of time and the people present, who were still elated at having been allowed to ask questions and to expose the contradictions in the strategic plan, did not comment on the KPIs either in the meeting or outside of it (notes from meeting 20/04/2010).

The next meeting on the strategic plan in this school took place on the 10th of June almost two months later. Here there was simply an announcement from the Head of School to the effect that in this school the work on the plan has led to the development of steering groups organised around each of the strategic drivers of the plan. [Quotes are from observation notes of the meeting on 10/06/2010 and written up that night in full].

All members of academic staff have been told that they must be on one of these steering groups and in this particular school, no choice was

given to the staff about which group they should be on. The groups are to meet a specified 6 times a year and the production of documents, plans and actions are to be monitored.

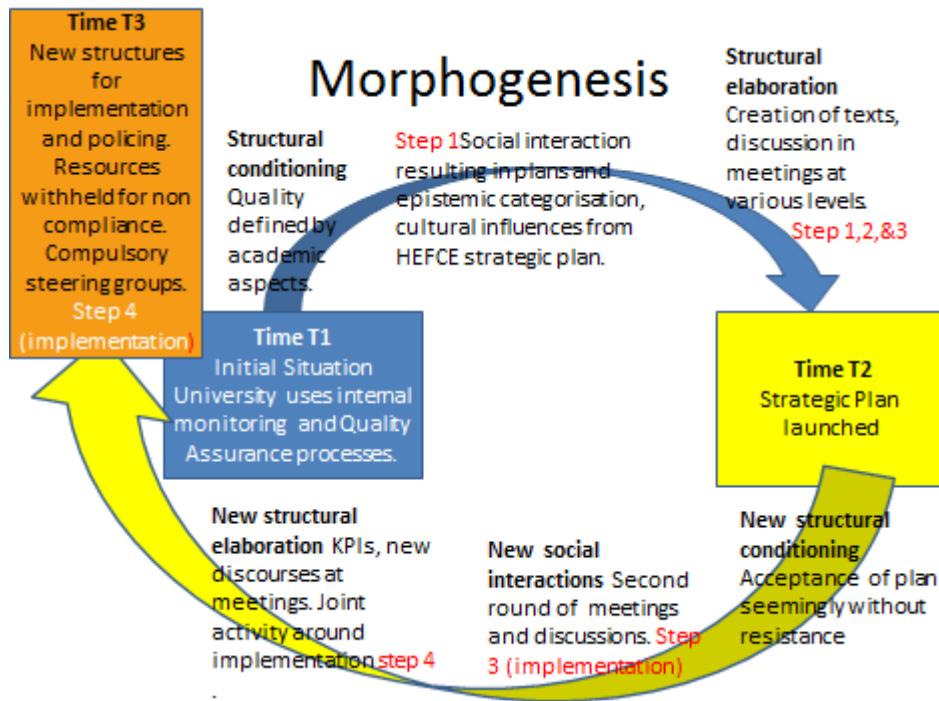
In fact the Key Performance Indicators have not so far been monitored in connection with the work of these groups.

Steering Groups: The task is to... analyse by picking out the drivers from the university's strategic plan and picking out what to do and how to drive forward and so on. Thus the groups are to ensure the actions required by the department go ahead. There was a group per KPI. The groups are to use the knowledge and expertise of each person who is in the department to share the load. Meetings - 6 times per year for 2 hours. This is a public agenda so that people can give ideas. (Names of who was to be in each group had been pre-prepared and read out). People were not given a choice about which group to be in.

At this stage, in line with steps three and four of developing an organisational field, everyone is to engage in some sort of work around the strategic plan and the indicators. Application forms in use for staff attendance at conferences or courses now contain a section asking the applicant to link the intended activity with the drivers of the strategic plan. This is another structure which involves all members of staff engaging with the strategic plan in order to justify all their research work in terms of it. The school strategic plan will have to explain how every single activity of the school feeds into the strategic plan. Both of these structures can be monitored, presumably at some point through the Key Performance Indicators once they are finalised. It is even possible that the steering groups will be asked to develop these. There has been no overt resistance to these moves in recent months. The final part of the development of an organisational field is complete and the process has moved beyond just an organisational field and on into the development of rigid social and discursive structures with consequences for non-compliance. The opposition in the meeting that highlighted the contradictions in the strategic plan appears to have been diffused. It is not clear whether the plan has been embraced, or is being quietly subverted, but a culture of performativity has developed around the actions that are being required.

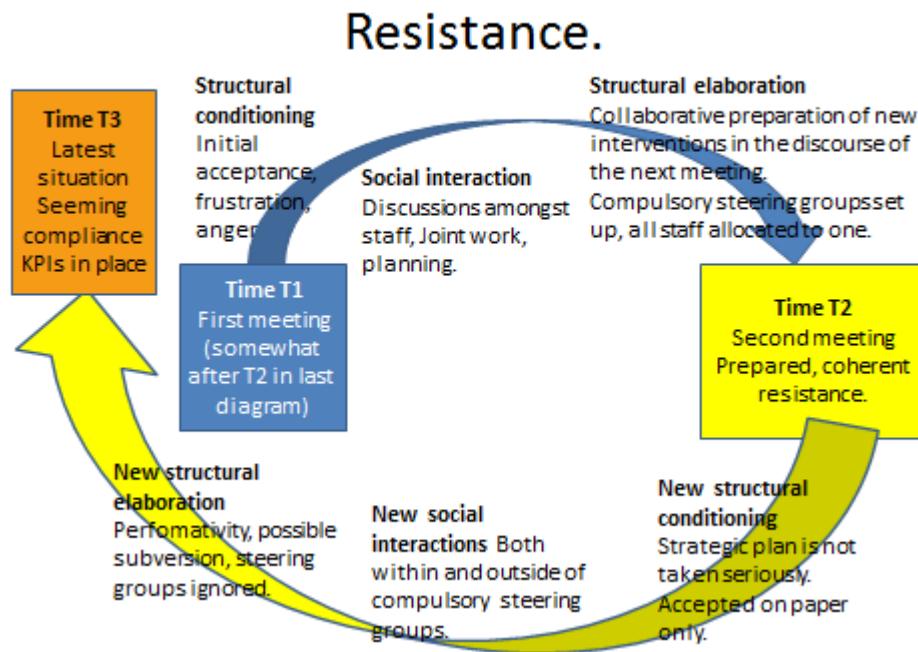
The processes could be interpreted as two processes going on at the same time and Figures 9 and 10 below, capture these. From the point of view of the governors and the Pro Vice-Chancellor overseeing the implementation of the strategic plan it would appear to coincide with Figure 9. The steps refer to the four steps involved in creating an organisational field.

Figure 9 Building an organisational field. University Y strategic plan



The other parallel process that has taken place from the point of view of staff resistance which has appeared throughout the discussion could be summarised on the diagram below. Note that this diagram is shifted in time and starts later than the one above:

Figure 10 Strategic plan University Y staff perspective



Very little had changed as a result of the bold challenges to the Pro Vice-Chancellor at the June meeting and within two months, of the initial discussion with the Pro-Vice-Chancellor, some staff had already decided that their involvement was not important and their input was irrelevant while work pressure was cited as a reason to drop out of the compulsory steering groups.

Oh I wouldn't worry too much about these groups. I was put into the international one together with the Head of School. He said he would not be coming any more. After a while I started going to the programme director's groups and then I did not really have time so I just told them and stopped going and that was ok. (Discussion with lecturer at University Y on 07/06/2011)

The double-sided nature of the morphogenic cycles is not a surprise in situations where there are conflicts of power between forces that are doing things to people and the people to whom things are being done. At the same time the strategic plan and the drivers are built into department planning documents and, for example any application to go to a conference has to be mapped against the strategic plan before permission is granted, an easy enough, but somewhat meaningless task. Although people may not take it too seriously this is typical of

what Ball (2012) calls performativity because it causes people to constantly define and redefine themselves and their activity in terms of the latest demands of the market.

Stepping back from this data we could ask what the world must be like for these things to be going on. We find that key performance indicators are a *national* initiative by HEFCE. The HEFCE strategic plan links efficiency with funding, and models the introduction of what it calls Key Performance Targets:

KPT: key performance target. These targets will allow us to measure progress in some critical aspects of this plan (Higher Education Funding Council for England, 2009, p. 2).

HEFCE was in the process of developing such targets across the country at the time of the meetings detailed above. One of my interviewees at the national level, Michelle Saunders was involved in the process and described her participation in the discussions on the national HEFCE committee to develop such indicators. She made two points. Firstly that the object was to allow comparison across universities:

[The key information set]... is actually is not very meaningful but it is comparable.... Their only benefit compared to all the information we can get from any other source, is that they are, as much as you can believe the data collection, directly comparable.....And that seems to me ... the only point of it.

The second point is that, even by those consulted, whom HEFCE later referred to as *experts*, the indicators were considered totally inadequate to describe the variety across the higher education sector:

yes... And I mean to be honest, the people from HEFCE were going... You know 'we're trying to explain to ministers what the problems are...' And then somebody would have a big rant or something and they'd write it down and they'd say 'oh we'll take that back...(laughter)'...(Interview with Michelle Saunders on 23rd May 2012)

The indicators set up a flexible set of drivers at the national level for whatever the latest fashion in what constitutes 'quality' in a university to shape performance. It allows the definition of quality to be removed from academic

control, both nationally and in individual universities. The next section of this chapter is concerned with the story of Ann and Mary and their work to deal with resourcing shortages and problems with the availability of rooms to teach students.

Ann and Mary's Story - Nowhere to Teach!

Ann and Mary are two lecturers in the School of Education at university Y. Mary is the course leader on the induction module of the first year of the Bachelors in Education course, which had run before and was planned meticulously in advance. This module runs for the first few weeks of September and students are with Ann and Mary all day every day. When Mary returned from her summer holidays she found that they had not been allocated enough rooms to teach in the way they were used to, which was to have a lecture followed by dividing the group into four small ones each led by a different member of staff. She also found that they had fewer staff allocated to the course, and it was evident that they would not even be able to have the basic resources, such as scissors, coloured pens, paints they had used the year before. This was at the end of August with only a month to go before one hundred and forty students arrived. On querying the situation Ann and Mary were told that there was nothing that anyone could do and that the resources simply were not available. This section tells the story of how they overcame the problems and actually used the situation to innovate pedagogy. They were interviewed at the end of the academic year as they looked back over how they had solved the problems and here discuss their feelings at realising the situation in August:

Ann: The first thing I knew was when Mary came to me looking...not looking like Mary at all...looking worried... upset. Looking like she had not had a good night's sleep.

Ann responded by getting involved to help to solve the problem, which meant that by showing her stress and finding a sympathetic friend Mary had increased her agential powers to act. According to Mary:

It was Ann's influence. I was really worried. She has been really calming... she says come on I will come with you and we will do it now. She never says she doesn't have time....

They assessed the problem and got over their shock at finding themselves in it.

Ann described this rather dramatically as:

We had to do that thing that you do when you have an unexpected change, which was going to despair and then....anger and denial. And we got through those fairly quickly....we said 'right, well we haven't got what we want, we will do something different'.....what we had to do was think differently

When interviewed on her own Ann admitted that she did not feel confident but she has always been good at putting on a front and she felt that Mary needed her to be coping.

Past experience has taught me that there is always a way out and as this is a crucial first module on the degree...I had to believe myself that there was a way forward.

On further investigation they found that the very largest lecture theatres tended to be free first thing in the morning. So they made a list of all the times when they were available, looked for other spaces they could use for teaching, such as the gym, an environmental centre, any open spaces on campus, and decided that instead of finding rooms for the things they were used to doing over the years they were going to adapt the curriculum to the spaces that were available. So they used huge sheets of sugar paper, drew up the sessions they usually had and cut and pasted them onto a framework of rooms and times:

Mary: we had a brown paper for each week.....

Ann: And we cut up what we have to do...we put the rooms on the big sheet and we cut up the things we had to do to fit the rooms that we had.

But they did this very publically, by planning together in the boardroom, where the most important people in the faculty came to get their coffee from the machines.

Ann: but everyone who came in, we asked them. We asked the business school. We asked if there were any other teaching rooms in this University. and they said,' yes we go and teach in the xxx building' or

'we go and teach in the students social forum'. ...'what about the environmental centre?'

Without complaining or moaning they made sure that everybody knew about the problem, making it very public:

Ann: I think everybody was aware that we were working really hard. We didn't keep a low profile! (they both laugh)

When they told the Head of School they were struggling they were offered funding to transport students to the environmental centre and he offered to teach a session for them. Ann observed:

Oh he was very aware. He was aware I think on all sorts of levels.

By making what had originally been a personal problem which one member of staff would normally have absorbed, becoming stressed and perhaps eventually ill, Mary and Ann made it a public problem to be solved. Whether the Head of School was shamed into supporting them or whether he simply felt bad at being helpless in the circumstances was irrelevant. Mary and Anne also recruited people to do guest lectures to make up for a lack of staff resource, which was affecting the curriculum. The interesting thing about deconstructing the established curriculum and putting it together again was that a space for experimentation opened up. Both lecturers had strong ideas about pedagogy. Ann was an experienced teacher, with a background of having been acting head in challenging situations:

I have worked at some tough schools, schools in special measures, rescuing schools in difficulties. I worked as a deputy head for about thirteen years and as an acting head on three different occasionsneeded to raise staff morale and get parents back on board...

Ann brings a rich arsenal of personal embodied properties gathered through her professional life:

When you are leading things you get a new set of skills when you experience these things.

She believes that pedagogy needs to take the learner's pace of development into account. For her the agency of learners is absolutely central if they are to succeed and this is just as true for her students as it is for children.

I have stopped thinking about teaching as teaching at all. Teaching is about giving people the chance to learn...it is about providing the circumstances...resources ...theories/legislative frameworks to get them to share experiences. When they are ready they can learn.

For this reason she feels that as she teaches she needs to match activities to the students. She also feels:

Learning is not just subject knowledge, it is not all in the head but approaches, attitudes, values need to be got right at the very beginning.... my concentration is on the process rather than the actual tasks for which there is in fact no right or wrong way.all this about learning aims is less important than for the students to learn how.

Ann is equating learning with the development of personal embodied properties in learners; properties which come from engagement in a process or practice. In the right circumstances these will give the learner emergent powers to make changes to their own situation. Another aspect of pedagogy, which is important to Ann, is that inspirational teachers should model or set examples for students to experience, even if students do not understand the significance of the experience until much later:

Students need to see the place of inspiration....inspirational teachers.

Mary also has strong views about the necessity to build supportive groups amongst the students. She was very reticent in the joint interview, speaking rarely, interjecting only to correct or to agree with Ann.

I interviewed each of these participants separately, and Mary's ideas about pedagogy were elicited at a workshop I ran a few months later at a national conference of teacher educators. Here Mary was asked to create a collage of her endeavours and talk me through it. Through this medium she revealed a depth of passion about creating an environment where students helped each other to learn. It also helped me with a different issue which arose. The original interview

was at times hindered by much of the jargon that is currently prevalent in *how to* teaching texts. Phrases such as: *learning communities, resilience or inclusive yet challenging learning environment*, tended to creep into the discussion and it interested me to investigate what some of this actually meant in her practice by changing the form of the conversation via a collage.

A photograph of Mary's collage is reproduced below in figure 11. She explains that she likes to get students to collaborate with each other as a community of learners. The description has been reproduced in full as the use of metaphor has helped to articulate her pedagogic moves, in a way that frees her from jargon.

Mary describes the collage:

Some students are a lot more receptive to this than others. Some see this as a waste of time, and actually 'we don't want to build a learning community, we want you to tell us what this is all about and just have a lecture style input'.

The circle of stars is the students in the class (sweeps hand over the circle).

Figure 11 Mary's collage showing her pedagogical approach

1



community. So there are many ways of doing that. So we start by having discussions, by getting to know each other and forming learning buddies or little groups and that is what I represent here (points to two

stars with purple pipe-cleaner next to them), so actually you can all be part of the larger group, but that is not helpful to everybody, so actually you can just create one buddy and this is signified by the pipe cleaner which actually joins these two together. You might be part of a bigger group (circles hand over the objects on the green net background) which might invite somebody else in to support you (points to the red polystyrene blob on the green net). The net is actually supporting this little group. It is not that people can be put out of the circle (the group is within the circle), but pulled in in a different way.

And these...(points to the drinking straw and the green pipe cleaner) are different ways of joining people, different ways of connecting with someone else, whoever it might be. These little bits in the middle (points to the shell and the brown sphere) are just ideas that might get you to link with somebody else, so not necessarily anything brilliant or something you didn't know, but... 'I have learned something from you and I can now go and tell that to somebody else'.

And the significance of this part here (Moves hands to the purple glitter and the stretched spring)...this is the success story... when actually you get one of the nuts and bolts people (points to the small group of nuts and bolts) thinking 'actually that is quite relevant' and sort of getting drawn back in.

Ann and Mary deconstructed the course and put it together around certain themes, leaving the exact details of how to present these themes rather loose, which allowed them a lot of leeway to bring their pedagogic ideas to life.

Mary also wants to use the affordances that were opened up by the changes, to teach them something deeper about what it is like to be a teacher and how people learn.

.... here the opportunities to do team teaching gives you a great chance to show other people how you do things.

The other people Mary refers to were also the students, who were after all aspiring teachers at the start of their course. Mary who had a background in early primary classrooms brought in many of the things that she did in these classrooms and used them playfully with the students. These activities played the dual role of modelling what could be done and allowing students to be legitimate peripheral participants (Lave and Wenger, 1991), as both teachers and students. When I asked if the students were specialising in early years education Ann replied that they were not but:

Well the brief is that we have to produce flexible teachers so that's what we are doing (laughter).

Mary brought in puppets, imaginary objects, and a ball that lights up when you throw it, to designate who speaks in a discussion. Students were involved in activities which were sometimes child-like. She provided popcorn for 'going to the cinema' in a lecture theatre to watch videos about inspiring teachers. The activity built around the film, challenged students to interrogate their own history of learning experiences and to try and formulate what makes a good teacher for a display and evaluation of a variety of teachers they had watched on video. The harder the activity, the more playfully it was presented.

Ann organised activities that seemed to be impossible and perhaps pointless, such as asking students to work in groups and build a three dimensional map of the campus to be displayed to the whole department. She then handed them a blank piece of paper and said that was all the resource provided. When they were shocked she said

I told them if they've come preparing to be a teacher and they haven't got a pair of scissors between them...colour pens...well that is their own problem...

They were then sent off for three hours. The purpose of the activity was to help students negotiate their way round a campus new to them, to work with a group of relatively new people, with a task to do under some pressure and so to start to understand how everyday objects could become sources of metaphor, which could be used to put across difficult concepts.

Anne: and the bottom line was... they'd say things like 'if we're going to display these then we'll need glue'... So I said '... 'just place it on the floor'. And this was a revelation for them. They said 'oh, okay' and you know,...it's just getting them to think. So when they said 'what are we going to use?' I said 'there's recycle bins all over this place' ... You know... Actually they didn't know because it was only their second day... But I said 'be resourceful, go and ask questions, go and talk to people'... So they did.

Figure 12 Student map of University Y: map 1



The stunning results surprised the lecturers.

Ann: And they had done the swimming pools...little cards and they'd filled them with water. They were so resourceful I can't tell you...

Mary: they had a toy car in one of the car parks...so you can find anything.

Figure 13 Students' map of University Y: map 2



The stickers on the maps are comments from staff throughout the school of education who were invited to come and comment upon the students' work. The purpose of this was to raise the status of the students' work in their own eyes and in the eyes of the department. The very next day the students came back to university for the next session to see a photo display of all their work and the comments made about them. Ann's strategy of giving them no resources eventually convinced her that 'less is more' as far as students are concerned and this theme kept coming up in the interviews. However it was a strategy stumbled upon through lack of alternatives. Ann explained:

...because we couldn't make another decision...because there weren't going to be any resource packs made up....

At the start of term they had been told as much and this is an example of how Ann and Mary simply refused to be at the mercy of the constraints that the university had imposed upon them. It indicates the strong personal embodied properties built up over a life time of teaching and which gave rise to emergent powers of discernment and innovation. Referring to the difficulties they had found themselves facing Ann said:

We read the underlying message which is no resources.

Less experienced lecturers might have found it hard to get around both the emotional stress of facing one hundred and forty new students with neither room nor resources to hand. It had been a risky endeavour. As they got to know their students they were able to let go, and challenge students in different ways expecting more and more from them with less and less resource. Ann explained that she wants to:

Encourage them to develop their own practice....It is always about modelling...always act and put it out. Model and make it explicit. But some things were implicit too.

Figure 14 Patterns from nature 1



Problematic trips to the science museum which they could no longer do with students were replaced with work at the university's environmental centre.

Some of the students' work is captured in figures 14, 15 and 16.

Figure 15 Patterns from nature 2



Mary: ...So much happened on that day and we can't believe... How that change was forced on us, and how big the impact actually was. ...I did a session on using nature, so I introduced them to Andy Goldworthy's pictures, collecting stones shells... And I talked to them about it and I gave them the theme of circles, and I sent them outside to create their own circles... with cameras... Because like children, they want to keep

what they've created. And it was a perfect time of year, because of the colour of the leaves, the conkers and acorns the petals.....Ann did a session on mini beasts and there were people saying 'Oh will there be spiders, will have to touch them?'. And it was just a pile of leaf mould, magnifying glasses, and they.....

Figure 16 Patterns from nature 3



...were the children. Really fascinated by what you can find. And at the end, it was interesting I went back for Anne's group because they were the last to come home, and Anne was saying to them 'so what did you all think about today?' and the chap who said, 'well you showed us how to make something out of nothing'.

Figure 14 illustrates how Mary's idea of getting students to actually feel what any children they taught might feel, when doing activities, was implemented. Students went on a nature trail which had some adult questions but also some very child-like questions.

Ann considers that by experiencing these things as learners themselves, students will be more able to use such ideas with the children they go on to teach.

Ann: and it was just a pile of leaf mould and they were the children.

Every activity was photographed and students would return the next day to a display of themselves at work. This was done deliberately as it played a quadruple role of documenting the course, increasing the visibility of the students' ideas beyond a small group and raising the status of their achievements while at the same time, modelling the use of photos of achievement as a pedagogical activity:

Ann:... What we've been doing is ... taking photos and the presentation the next morning has pictures of yesterday on it. So it is very immediate, they can see themselves working, we make sure that everybody's on a picture somewhere... and then we took photos of us looking at them and then that was good for the students the fact that we'd been looking at them, and put feedback on so that worked quite well.

The photos also helped to consolidate the group.

Mary:.....it's the wholeness isn't it? You can actually feel part of a much larger group. They also very quickly settled into parts of the seminar group, so they like each other. So they got a big group, a smaller group, and then they've got this small group of friends so they really are in three lots already aren't they?

As the course developed students became more confident and attempted more and more adventurous things. This is consistent with Ann's ideas about learning being connected to personal embodied properties, although she does not use this term:

Ann: Learning is about who you are, what you do and as a becoming teacher you need to develop your identity.

So when students were asked to make a film to illustrate 3 principles of learning they were ready for it. Paradoxically in a department which could not easily provide scissors and pens, hand held flip cameras were readily available as the university is keen to promote the use of technology in teaching as we shall see later in this chapter. Once again the results were spectacular. As Ann put it:

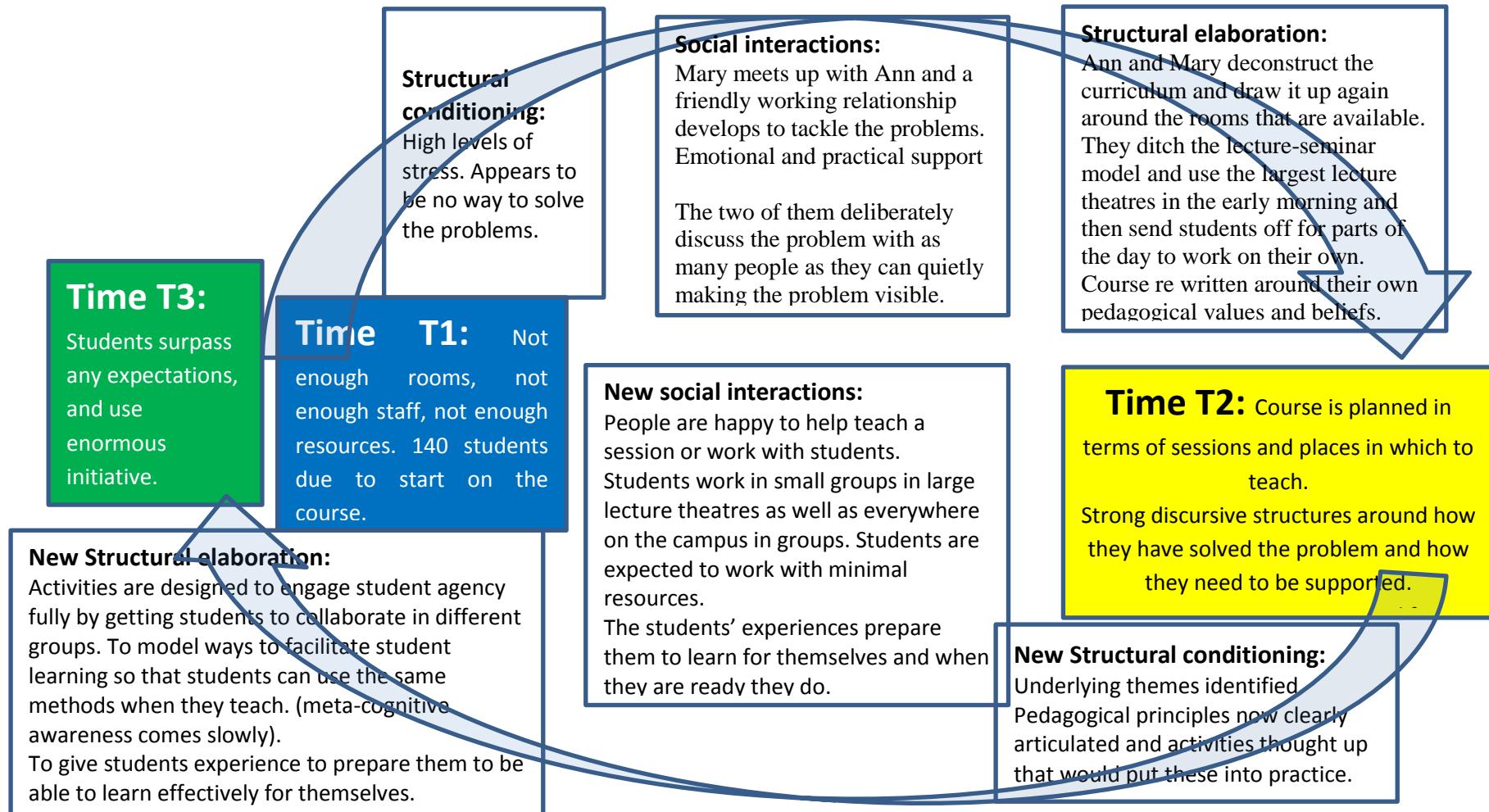
We built the group ... I think we have got the old gestalt thing going. The group can do far more than the sum of the parts. I think that is very clear.....you set them huge challenges but they exceed them every time. Every time!

The films parodied well known films or television programs, used extremely high technical skills and made a reasonable analysis of learning for first year

undergraduates in their first few weeks at university. They also reflected the pedagogical techniques modelled by Mary and Ann during the module.

Figure 17 shows a morphogenetic spiral summarising aspects of structural conditioning, social interaction and structural elaboration as well as changes over time in the story of Ann and Mary:

Figure 17 Ann and Mary morphogenesis



What must the situation be like for these events to have shown up in the empirical data from Ann and Mary? There has been a resource squeeze in higher education at a *national and institutional* level which is a response to a *global* pressure for markets in education leading at a *national* level to cuts in direct funding to higher education institutions and degrading the state funded sector as a preparation for privatisation. At an *institutional* level, financial management is often in the hands of inexperienced people. The pressure to save money on resources led to the lack of resources Ann and Mary faced at the start of term. Often there is a danger that when such situations occur they are absorbed by the staff involved working long hours with the risk of high levels of stress, perhaps illness. In this case the outcome was different, facilitated by both lecturers' formidable personal embodied properties; the result of long years of having been school teachers in testing circumstances. In situations of adversity they found they had a range of resources a secret store of Pierce's 'booty', which equipped them with emergent powers of discernment, discrimination, reflexivity to bring to bear upon the situation.

Paradoxically, as will be seen in the account of the next participant, the resource squeeze does not include resources to use technology, which is another aspect of the *institutional* response to *national* level directives to increase the use of technological devices. At the global level this is part of market creation for the computer multinationals within higher education. The flip cameras which Ann and Mary gave their students to use to make their videos were readily available on request at the time of this interview.

The pedagogy that emerged resulted from a particular interaction of all the above processes might not be possible today. University Y has since moved to a new centrally controlled timetabling system. University Y has adopted new *agile* changes in staff management which make the kind of free flow of people and

the innovative use of space that Ann and Mary achieved, impossible, as the account of Jim Hope two years later in a different department shows below.

Jim Hope - Pedagogy confined and restricted.

Jim Hope and his colleagues teach on the undergraduate Law programme at University Y. Over the years they had developed a variety of techniques to bring their students to an understanding of what it is like to work as a lawyer. For many students from working class backgrounds, this developed cultural capital. Staff organised field trips and mooting sessions. Mooting is a form of role play situated in a courtroom. Students participated in the real work a lawyer would do, such as reading through a whole case for themselves. Detailed and conscious attention was given to making dress codes, deportment, and gesture and voice expectations within the legal profession, explicit for students. This was combined with sensitive and timely work on ethical principles and values. Three major changes in the institution drastically changed the environment: First, the Law school moved to modern offices on the main campus. Second, University Y adopted a new management initiative called '*Agile*', which collapsed the original faculty structure and created a series of small units each with its line manager. Third, there was a decision that all undergraduate lectures in Law were to be given on-line, combined with a strict timetabling system. What follows is Jim's account of the situation before and after the changes:

In terms of pedagogy, Jim is concerned that students should actually gain some experience of what it is like to be a lawyer. Students need to move beyond learning a series of facts, to some form of legitimate peripheral participation (Lave and Wenger, 1991), in the practices that go on, in order to witness and imbibe the atmosphere in which lawyers work.

...if you simply slot somebody down in a court they will have a vague idea what's happening but not much. They'll probably pick up somebody's in charge and that will be the judge. Somebody's talking on behalf of that guy over there and somebody is against him. We don't know what those twelve guys over there are doing...we're not sure who he is...he's writing something down...

To facilitate such legitimate peripheral participation, Jim and his colleagues organised field trips with students to relevant places in London; they went to the Inns of Court and Law Society:

They were able to see the Inns of Court....see barristers at work.... to the Law Society...where you can go on and see the headquarters of the Law Society... you sit down with solicitors around you...you imbibe if you like the atmosphere of the solicitor as opposed to the temples, which are ...very very different beasts.... you are ... being allowed behind the closed doors. Certainly if you wander in and say 'hello can I come in and have a look at the Inner Temple?' the answer will be 'no!'... 'can I come in and have a cup of tea in the Law Society?' No! you can't!.

Students get to see, hear, be immersed in and absorb the atmosphere in which lawyers work:

..... the library in the Law Society is the most beautiful and wonderful thing. I mean tiered steel ...It looks like a film set of what a superb library ought to be...And again that's good for the students and they can say 'wow! This is what happens...this is what we should be doing'...it is very important to get them ready for that.

Students got to see the different courts in action and imagine how they might feel if they worked there:

...then we also take them along to the Royal Courts of Justice, where they can see a civil case in the High Court. ... to The Old Bailey where they can see some criminal courts. ...

Not only did students get to see what happened; they also complied with expectations of dress code and behaviour, which is a necessary part of the experience:

...we had to explain to them that they had to turn up at a certain place. ... that a suit and tie would do them good.....And they all did, they behaved beautifully ...

'you *will* wear a suit and tie, you *will* behave yourselves, you *will* shine your shoes, you *will* look good'... bring along a note book, bring along....this sort of thing. And they invariably didn't let us down. They were superlative.

In addition to the field trips, designed to allow students to imbibe the atmosphere and watch lawyers at work, Jim and colleagues organised mooting; a form of role play:

Mooting was, historically, two people, who were taking the part of senior council and often with a junior counsel as well, who would argue a fictitious case in front of a judge and possibly in an appellant court as well... So you would not be trying to persuade a jury... A different set of skills are required for that... You are trying to argue the finer points of law with a judge and against opposition.

This gives the students rare opportunities to try something out in a safe environment. The moot is false and hence safe. They can experience acting as barristers in a court of appeal in a supportive atmosphere where mistakes may be made without severe consequences. This is a form of scaffolding which takes the benefits of legitimate peripheral participation a step further and is a unique opportunity for students.

... one of the interesting things ... is the fact ... that is it useful because it is false?....You get two students here who are mooting at the moment, as an Appellant Court. Once they qualify they will then go through a junior barrister stage. The chances of them ... actually appearing before an Appellant Court, the High court or the Court of Appeal or a Supreme Court.... The chances are they are not going to do that for fifteen perhaps twenty years after they have graduated.

In addition Jim and colleagues designed other activities for the students to gain insight into what it is that lawyers experience in the course of practicing the discipline.

We had lessons on how to moot, how to speak, how to stand, how to dress... what we'll be expecting of you... Court etiquette which is quite complex; to learn how to address people... Do you address them as your lordship or your Lord or my Lord. They find it quite difficult sometimes to understand... 'My Lord will know'... No!... No! It's 'your lordship understands'"... Yeah right... But once they get it it's fine.

Jim points out that this is particularly important for his working class students, who may be unaware of the sorts of ways of being that other students have already absorbed from their own backgrounds.

... I had to learn it... I'm the first person in my family to go to University....We were Glaswegian key kids... That's what we were... Nothing special about my family oh yes if I can do it... Anybody can do it They need a push...

Drawing upon experience of having come from a working class background himself, Jim has developed personal embodied properties which have allowed

him to be successful in law. Jim maintains that students can and will learn how to do things effectively.

You would always [say] 'your'....it is always a third party thing because you are addressing the office. It is the same in a magistrate's court...you would say 'your worship' or 'your honour'... and again you are addressing the office not the person.... So going back to what I do, I usually just point out to what I do and say 'let's try that again' and then I say...'and here's a little trick'. So...If they are swaying on their feet or jumping about... or fiddling...there are various physical tricks that you can do to keep steady and once they get that it's fine....you can point out things that are happening...'do you know you keep putting your hand in your pocket and fiddling with yourself?' and they go...' Oh!' And I say 'no no don't worry...it just doesn't look too good'

Due to University Y having been a polytechnic with students from a variety of backgrounds, its lecturers have much experience at explicitly working with students in this way. Jim continues:

Susan and I did a video... about how not to present.... and we ...simply got a script which was dire... true to life..... we did ten minutes....literally ...took a film of ourselves fidgeting....picking at our nails...rattling jewellery....going'...uhmmm...'. Ten minutes...and it turned out to be a real hit with students....I mean it really made a difference.

In addition to giving students the actual experience of being with lawyers at work, Jim and his colleagues are concerned with question of imbuing students with ethical values. Jim aspires to do more than simply teach the students facts about ethics. He wants students to leave with a sense of ethical standards to abide by:

I would like to say that the students who came through... the best of us would have some knowledge of where Law is in the pantheon of social values.... some idea of the ethical context of law, and hopefully would have some personal ethics about how law is done. This is something that the Law Commission has been pushing for a little while.

In making ethical decisions about difficult cases, the students need to understand how the judge is positioned. Decisions have to be made. This is part of understanding what it is like to be a practitioner.

And you ask the students... What do you do when a case like this? ...and the first initial opening is always 'oh I don't know'.... And you say 'that's not allowed Sir!... You can't have court which says 'I don't know'. You have to have a decision.you can't say 'oh I can't make my mind up'....

I say 'It is not possible, you are going to be a lawyer; you have to have the right to argue... But there's got to be a decision'.

Students need to put aside their personal feelings and preferences and consider the legal positions and arguments:

Your personal feelings to a large extent are not in there. But the evaluation must be there.... And you know I think that's one of the things that we try to teach our students. Because they tend to think... 'I don't like that' or 'I don't think that should happen' or 'I don't understand that'... Of course you say that's the interaction, that's when the law comes in... What you like or don't like isn't really relevant at all.

Jim uses strategies to get students to actually engage with the law in his classes:

... make them work in pairs, pyramid them and so on... especially if it's an ethical-moral question. Or sometimes split them into half and half and have one half offer the defence and the other half is the prosecution for claimant... And then they can argue that out as they go.

Role plays around set scenarios based on real cases are used to help them to engage:

Here's the situation, here is the law pertaining to it now, what are you going to do about it? You're the person in charge, you're the person in charge of your learning you're the person in charge of your case now what are you personally going to do?

You're going to find something? You're going to not find something? You going to wing it? What are you going to do?

It is mandatory to engage in Jim's classes:

...go round and say 'how would you like to tell us about this'... 'what do you think of that?... What do you think of this?'... Not in an intimidatory fashion I don't think... But the expectation is that they will talk... I talk first, and then you talk!...[points round the room] You talk!... You talk! and eventually they get the idea...

Jim monitors students' level of engagement:

Then when they come back you can quite simply find out, just by asking a few questions who was engaged with the question? Who has not engaged with the question? ...What didn't you understand? What was the problem? Try and work on that with them as far as you can...

So we can see a rich pedagogical tapestry in the teaching of Law at University Y. Unfortunately a number of changes have affected the Law school in recent times and these have worked their way through, indirectly or directly affecting pedagogy as we shall see. As part of its response to a perceived need to become

competitive in the market, the university decided to make wide-ranging changes in the management structures. These were referred to as '*Agile*' changes. They have led to the removal of the earlier faculty structure replacing it with a new line management structure based around smaller *strategic business units*. But with such changes Jim notes that there has been intensification in problematic relationships between management and many academic staff within the school.

Agile... Yes ...there's a....cronyism. That is the problem. You don't get anywhere unless you are a crony....Say yes to everything

Jim states that people are being treated very unfairly:

...the complete lack of progression for anyone who isn't a friend. We have got five people on 'lecturer' who should be on 'senior lecturer' [grade] without a shadow of a doubt. The reason one of them was told that she wasn't suitable, was although she had done everything she could... but the module didn't and I quote 'sing'.

Jim describes an atmosphere where people seem cowed and unhappy.

We've got four assistant deans of whom one is capable....

...The assistant deans were put up under Agile...nobody else changed even slightly and if they try they are knocked back for it. You know 'it doesn't sing' or 'just because you are capable of leading a module doesn't mean that you can lead a module'... words are twisted round and although there is a possibility for appeals nobody has yet had the courage

Communication is a problem which is undermining relationships and staff confidence:

We are not told anything.....there is no encouragement ...there is no communication of anything. Lip service is all...

The lack of collaboration and communication was evident when a new Law degree was brought in:

It was all done very much on the quiet by Jenny, Brian and David [sub Deans]. And the first anyone knew about it was, 'here is our new Law Degree, this is what you will be doing'. Module leaders were not consulted and in fact the review hammered the fact that nobody had been consulted and said there should be more communication.

Management in the Law school decided that all undergraduate teaching was to be done by on-line lectures followed by a group work session and a workshop.

...like we've got this new degree thing come in... where we don't actually lecture to students, we just video it and put that out.

When asked how this degree works Jim explained:

Okay you have what is called the KBL [Knowledge Based Lecture] which is approximately an hour's worth of recorded lecture. Then we have what are called 'workshops' where we have two hours with a group of people. Usually there's fourteen to eighteen people. That is every other week.... And in between weeks you have what is called a..... A one hour session of..... we are not allowed to say seminar ..that's banned...that is an old fashioned word...And the essence is that you have the lecture which tells them something, the one hour session which tells them how to do it....and then you have the two hour workshop where they learn how to do it themselves..... So as a triumvirate it is not too bad.

There is a very long wait between the timetabling of the lecture and the workshop about it and students will have had lectures on other modules in the intervening time.

...but what it means, unfortunately is that you have the lecture...then you have the one hour session and then a fortnight later you have the two hour workshop....So you are a fortnight between watching the thing and doing the workshop session....

So students are often confused for a while about where they should be and what they are doing and what week it is and where we are and....

Not only is it confusing for some students, but it seems to have a detrimental effect on staff-student relationships too:

And since you only see them once a fortnight.... you don't really get to know them you don't really get to know names as well..... so none of us really like that very much....

When questioned about the system's potential for students to watch the lecture many times in their own time, Jim said:

The reality of it is that...about half of them don't listen to it at all... Many just tend to use the power point slides. When we actually monitor what is happening, four or five weeks in, very few are actually watching it.

Lectures are given at one's desk in front of a camera and students can see the power-point presentation together with a voice over.

...some people record themselves on videos...some people use the camera on the computer, with a head mike So the quality varies...

Some lecturers try to make the lectures more interesting to get students to interact but you have to master the software for that:

. If you take Sarah for instance, she does a very interesting snazzy slide with things slipping about here and there and up and about.... She's pretty savvy on that..... In terms of the talking heads. I have bits that slide in and out and so on and so forth. But the majority of people, it's just a straight forward.....

Jim explains why people are dissatisfied with the new system, which enforces a straightjacket of top down transmission and knowledge delivery. There is a substantial barrier to spontaneous and student orientated engagement in lectures.

...our main complaint about this is not whether or not the students particularly like it or not, some do some don't.....it's the fact that we can't see what they are doing, and as you know yourself, in a live lecture.... 'They don't get that... 'let me go through that again'... 'I need to go slower'.... 'no, they haven't quite grasped...let's go a different way round'... and of course you can't do that and so you just end up just giving all this stuff out ...

This issue that people objected to was not the on-line nature of the KBL, but the fact that they were not live. Jim points out that a live lecture can be recorded:

The KBLs are not good...I think the lack of live lectures....we used to have live lectures which could then be recorded.

For students who have not watched the lecture, and there is no attendance sheet to check, the next session can become difficult to follow and lecturers are under pressure to simply repeat the lecture:

So the one hour sessions which should have been actually showing them how to do it...sometimes turn into mini lectures, ...again, because people have not seen it. I...and quite a few of my colleagues simply say 'no that's not what we are here for...we have to do this and try to get to show you'....you know '.if you want to write a client letter, this is how you have got to do it. I have told you about it. I need to show you how to do it. If I don't show you how to do it then I haven't any way to do the workshop session as you won't have learned it'.

However, the new on-line materials, once created, can be separated from the people who created them. The copyright belongs to the university who may use the on-line lectures on other campuses or indeed sell them abroad:

The law department has also moved to a new building, with newly designed offices and corridor spaces. When Jim was asked if this made a difference, he said:

Oh yes oh God did it ever...yes ...the difference is that Brian [Dean of School] just hides in his office all the time. He's got mirror glass on the windows and blinds inside the glass.

The field trips and the mooting have now ended altogether.

We stopped doing that when Michael took over [the module]...I stopped doing it in 2008, I think ... I was taken off it... to make room for Michael, who was a favourite at the time... But that's....that's up to the management... They made this decision.

At one of the last faculty meeting before faculty structures were disbanded, the issue of the unpopular Knowledge Based Lecture was raised publically by the Law school staff. The Vice-Chancellor, at that meeting, promised to look into things and eventually there was an investigation and an independent report into the situation.

So we had a review...Janice Brown did that. And it came out slamming the management for no communication....

Well if he [Dean of School] hadn't got a skin made of iron he would have resigned. Instead of which they gave him a professorship. ...how does that work?But It is a shambles...recruitment is going down. Student numbers are going down.

In spite of the findings of the report the system of on-line lectures remains and there are still big divisions within the school.

After the review we managed to get a concession in that we could have live lectures which were called 'master classes'....but we are constrained as to when we can do those and we can only do a maximum of four a piece.

These master classes have to be done outside people's official workload in their own time:

....there was talk of them being on the work programme this year. It was certainly not last year. But it is difficult... I can only do two on human rights...because I have got two placed elsewhere...I have got four over allSo that is a concession of sorts. And the curious thing is

that they are very well attended and the students enjoy them very much. But then again it doesn't fit in with the way the thing is constructed....

Thus the review brought concessions but no actual change:

I think the idea was that this would be a big telling off and then things would change.The big thing was that there was no communication. So now we have the assistant deans doing, not drop in sessions, it's more a kind of study session...but nothing happens.

...so David who is the dean for learning and teaching and who knows nothing at all about learning or teaching, really doesn't!...passes that on and we get to talk about the modules are going to be run. But then an edict comes back and we get told. 'This is how the modules will be run!' So lip service is paid.[to communication].

But a lot of people are very frightened of the vindictive nature of the whole thing. They won't say anything and won't tell anyone....even colleagueswho have got a lot of integrity.... have got slapped down and threatened and told...'well if you do this...it is a disciplinary offence'.....anything you want to call a disciplinary offence...you know a poster on a wall!.

When asked about how they continued on a day-to-day basis Jim expressed the feeling that they had no resources left to draw upon except to support one another:

We try to ... support each other...I mean it sounds a silly thing. I bought a big cafetiere and a grinder and I make coffee.... and we have coffee together and we have a bit of a chat and a bit of a whine and we try to make the world a better place...and it makes your job easier....but again we have management up at the end when we are having coffee..... they'll never come down and join us. In fact Brian never comes out of his office. We will never see him...I mean literally never.. Door closed, blinds, window up... that's it....

In spite of the difficulties, Jim and his colleagues continue to try to carry on teaching. In the following extract Jim explains some difficulties in teaching on his Human Rights module and suggests possible solutions within the current system:

Now the problem with Human rights is that it is kind of cart and horse. Unless you understand how the European Convention works, it is very difficult to actually say anything sensible about the articles within it. So you can say ok article 3 says there shouldn't be any torture or discrimination... But unless you say, well how does that work? Where does that come from? Who does that apply to? How can I use it? How can I actually take someone to court? ... It kind of sits there in a vague fashion ...now what I would like to do is to put two KBLs up in the first

week...one of which is on UNHCR²² one of which is on article 3 and I would like to do a master class [live lecture] on article 3 at the same time, so that you can see, here is how UNHCR works and we do a workshop on that and then here is how article 3 works and a master class and you give them a lecture on that ...and then they can get on and do it. So I said can I have my master class at the beginning for this reason. 'No we can't do that until you have got a timetable'.

Well can I have two lectures there?'

'No because we have set that in stone. Because you are a week two starter you can only have one lecture there, whereas the week one starters....'

...So in that sense we have a lot of talk about 'you run your module the way you want to...'

'right, well I would like my master class...'

'no you can't do that...'

..... Well you can't go to Brian because he says that is a matter for the assistant deans. The assistant deans can't do anything because they keep going back to Brian.

So in spite of attempts to deal with the situation to solve a problem, Jim finds himself blocked by a timetabling issue which perhaps no one, in the new small 'agile' 'strategic business unit,' can actually tackle. The timetable is now handled by a new university-wide computer system which appears inflexible.

For a while the trips to London and the Inns of Court continued but eventually these have now stopped:

The Legal London walks are now defunct because they are not prepared to put the money and the time into.....we tried to do it.... The ending point for that wasyear before last, where we had an opportunity to take a bunch of about 20 students to the International Criminal Court at the Hague; ...sit in on one of the hearings at the International Criminal Court..... there were three of us Sally, myself and Andy and we rang up Brian and said 'this is what we would like to do. Any chance of fares being paid?....' 'No..we haven't got any money for that sort of thing'

'Oh Right....Well is it alright to go?'

'yes but you will have to take holiday'

So we took students to the Hague...but we had to take holiday time to do it. It wasn't part of our scholarly brief as part of the law school. And after that people said ... 'we are not doing that again...sorry! But there are limits!'

²² United Nations High Commissioner for Refugees.

Nevertheless when it comes to teaching, people still put in a lot of their own time to make things work out for the students:

I am just going to do ...the best I can for the students...And I think that is true of my colleagues....I always make a point of saying... 'If you haven't done the work don't bother with me...But if you have done the work, if you have come and if you have done the work...you have done all the three sessions...the KBL...and so on and you still don't get it, come and find me... and we will go through it'

....And I am not alone in this, loads of my colleagues do exactly the same thing.

When asked how they can manage this in the time they are given Jim conceded:

... it becomes problematical and if you have a couple of needy students it is going to take a long time.....

Staff find that this increased their workload substantially:

... longer and longer [hours], because your time is taken up with students during the day. If it is only six, or about half six o'clock then you can do and get to do whatever you need to do in terms of work or prep or whatever you need to. And so yes that is a problem...

Jim himself continues to teach students how to speak up and stand and act as expected, although the mooting sessions and the field trips have stopped. However, even without the field trips and mooting, Jim still carries out as much interaction with students as possible, teaching his students tricks of the trade:

But initially I would say to students...'look, see here,... you are standing like this...stand like *this*' you know and you won't sway...or if you are going to gesture... what kind of gestures are you going to use.... Think where do you need the emphasis, where do you need the emphasis gesture...and most of all, I think, it is how to speak properly, how to emphasise what you are saying, when to use pauses, how to use, you now, a little rhetoric where it is needed, and all these little tricks if you like.....I call them tricks...

...of course if you give them the little trick or the little habit or whatever, that's brilliant, because they have learned something; they have got something out of it.....

Jim has made students read through a complete case with him. This was a difficult exercise, but an authentic activity, which gives them insights into the real life practices of solicitors and barristers, in the real world.

...And I said, now... We're going to read a case. And we sat down and we read through a case... the whole thing....with all the legal jargon...saying who is this? What is this name at the top? What is this reference for?...what does this mean?...Where is this court? in the hierarchy? Where is it situated? Why is he saying that? Who is this speaking? ... Is this reporter? Is this junior counsel? Is this leading counsel? Is this judge? Going through it...and how do you know these? This is how you work it. And how is the case constructed?....and at the end of all this I say...'because that is your stock in trade... If you were a painter you would have your brushes.... Your stock in trade is first of all English and second of all, cases. That is what you must read that is what you must do. Your voice...whether written or oral is your paintbrush. That is what you have. You advocate on behalf of your client....whether you do it in a written instruction or whatever'. And this got through to them....and they went at it in a big way. Having been shown, interestingly, how to read a case, the majority of them then went and downloaded entire cases and looked at them....Instead of getting them from a text book for instance..

Jim goes on to explain his rationale for this activity.

In my opinion if you don't teach them to read a case and appreciate how it works..., they won't actually engage with cases. They'll read little headnotes, little potted versions... it's like anything....you will get bydoing your degree on that.[but]...it won't work in court because they are concentrating on the facts of the case, rather than the reasoning of the judges.

Lecturers, in the law school at university X, continue to support each other:

We try and look after each other.... We look at ...what can we do? What can we have a go at? What's a good thing? What is a bad thing? What are we trying to do? Mike and Michelle and Anne and myself, we try to put things on and say 'look this is available here and there' ..

Nevertheless the situation, inevitably takes a toll:

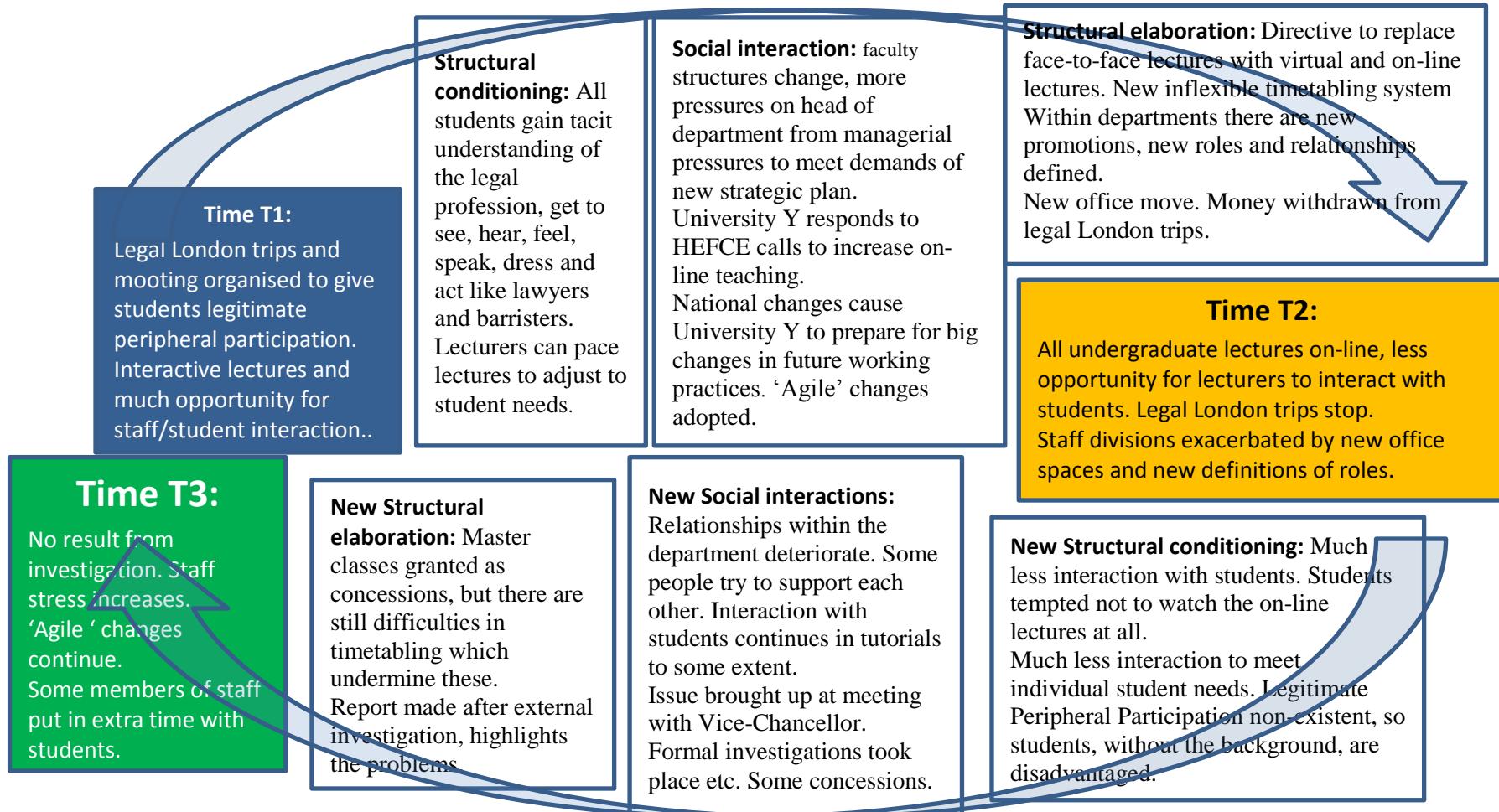
Stress is....there's an awful number of people going off with stress for a week, two weeks at a time....and of course the sickness rate has gone up...

At the same time, in terms of marketing and on paper, it is possible to paint a rosy picture to prospective students:

If you look at the literature for the Law School, it says 'oh yes we have this innovative thing whereby lectures are recorded and so on you will learn through KBLs, workshops etc. It never says you will ONLY have and it is quite misleading.

Figure 18 shows an analysis of Jim's account of changes that have occurred in terms of two time intervals T1 to T2 and T2, to T3, with a summary of structural conditioning, social interactions and structural elaboration during each.

Figure 18 Jim Hope morphogenesis



What must the world be like for all this to be appearing in the data? Where has this issue about on-line lectures come from? At an *institutional* level University Y is trying to increase its on-line provision, in keeping with calls to do this from HEFCE at the *national level*:

the internet and other new technologies, many arising out of HE, give us new opportunities to compete and connect across the world. (Higher Education Funding Council for England, 2009, p. 5).

This mechanism feeds in to University Y's own strategic plan as:

A key aspiration is that by 2015 at least 25% of our learning and teaching will be through distance learning.'(University Y strategic plan 2010-2015:p8)

Such processes work in tandem with changes in the management structure which go under the name of 'agile'. At an *institutional level*:

'...agile' changes has removed the faculty structure and replaced it with management groups of no more than 15 staff. And '4 (sic) line management statements will be part of the job description of all managers (anyone with people management responsibilities). Aimed (sic) at maintaining a 'clear line of sight' between a manager and a member of staff' (University Y, 2012, p. 16).

The change enhances *visibility* and the term 'clear line of sight' is intimidating. This is an institutional response to something which, according to Universities Human Resources, the professional organisation in the UK for HR personnel, is connected with the *global and national* levels. Under a heading 'Challenges with becoming agile' which would indicate that the term is now common parlance in HR national discourse they say:

Similarly, the nature of the reforms - in the context of on-going neo-liberal restructuring within the global economy - compounds the difficulties since they may represent a clash at values level with what many employees believe they are there to do. The challenge then is to mobilise people for on-going change, without causing them to 'disengage' (Holbeche, 2012, p. 10).

The exacerbation of previously existing rifts at *departmental* level, would appear to be emergent from *institutional* responses of these two *national* mechanisms interacting with each other and a Head of School who appears, for whatever

reason, to be unable to deal with the situation. The move to a new physical environment has allowed the distance between different groups of people to increase.

This chapter has outlined two contrasting cases of emergent pedagogy in changing circumstances at University Y, under pressure of marketization. The next chapter considers a completely different type of university. University Z is an ancient collegiate university in England.

Chapter Nine: University Z

This chapter is about the accounts of two participants at University Z, Hassan Sharif and Margaret Hastings. In both cases the participants express the tension between two types of pedagogic practices, those where students authentically engage in the practices of the relevant discipline at some appropriate level, and those in which students learn sets of facts and procedures which have been reduced and recorded from the study of the past practices of others.

Hassan, as a young lecturer was involved in the process of developing alternative pedagogies of resistance, to those of the vestiges of the colonial education system in post-colonial India. This was a system designed to produce bureaucrats for the colonial administration system. Resistance involves engagement in authentic practices which can lead to the enhancement of student agency in the world giving students greater embodied personal properties to draw upon. Hassan's experiences put him in a strong position to analyse the current situation facing pedagogy at University Z under the pressures of marketization, where the purpose of education is once again being redefined. His past experience has given Hassan considerable powers of discernment, discrimination and reflexivity. Hassan analyses the relationship between education and citizenship and the purpose of education as well as whom it serves. In this chapter Hassan's story is traced by outlining morphogenetic developments both in his early experiences of innovating the teaching of sociology in Delhi and in his current experiences of developing his students' engagement with the subject at University Z. Hassan's deeply held pedagogic principles are revealed and discussed during the process. The central question for him is whose interests does pedagogy serve in any society?

The second part of this chapter takes up Margaret Hastings' story. Margaret is concerned that the fast changing nature of her discipline, zoology, means that previous pedagogical methods involving simple rote learning of facts is

inadequate for her students to become effective zoologists, capable of gaining a broad understanding as well as an in-depth knowledge of chosen areas. Their involvement requires a deeper engagement with overarching themes and the practices that make up the discipline, than was traditionally facilitated. Students have to follow their own interests and, in doing so, can be led to tackle increasingly complex and challenging areas of the discipline. In this way students can understand more of what it is to be zoologists. Margaret's pedagogic values are explored and her attempts to make changes to the way in which her subject is taught are followed over a morphogenetic spiral. The current national trend towards a research/teaching divide and the resulting pressures on pedagogy are sharply outlined in Margaret's account. Both participants' accounts are followed by a retroductive analysis of their contexts at University Z. This analysis was instrumental in deciding which mechanisms were chosen to focus on in chapter five of this thesis.

Hassan Sharif's Story.

Hassan Sharif started his academic career in Delhi in India, bringing a lifetime of experience of teaching sociology to his current post at University Z, where he teaches social anthropology. His background has given him certain personal embodied properties, such as a capacity for discernment, discrimination and reflexivity, which emerge powerfully in his analysis of pedagogy and give him sharp insights into current developments in higher education in England.

Hassan's story is followed in two phases, firstly across his past experiences of developing a course of 'participatory sociology' in Delhi, India. Here he found that within a few years of graduating, his ex-students' understanding of life appeared to be altogether devoid of sociology. The focus then shifts to Hassan's current work with some 'very polished' postgraduate students of University Z who are capable of regurgitating textual knowledge in beautiful essays, without engaging deeply with the content. The high status degree is gained but authentic engagement in sociology is shallow. Hassan acts to deepen their authentic involvement.

Hassan's deeply held pedagogic principles were evident throughout the interview. In the first place, Hassan claims that both pedagogy and curriculum in the colonial education system aimed to provide training for bureaucrats running the empire, leaving students with nothing for themselves. Hassan draws upon Urdu poetry to express this dilemma and to critique narrow human capital models of education.

Akbar Illahabadi tried to sum up the trajectory of an educated person who also got into colonial bureaucracy. It's a loose translation*Kya kehen ahbab, kya kare-i-numayan kar gaye, B.A. huay, naukar huay, pension mili aur mar gaye...*
[translates as] 'What glorious deed our fellows have performed! Passed B.A. took up a government job, received a pension and died'.

Hassan raises such issues such as: What is the point of education? What are the outcomes of education? Who uses these outcomes? How do education and its outcomes fit in with the wider society? How does the act of citizenship fit in with creating the wider society? What part does education play in the making of the commons? Some of these current issues were contemporary preoccupations of the anti-colonial movement in India, and led to the formulation of an alternative pedagogy.

Now how does one come out of the grip? Is education really meant [only] for getting a job and getting your salary and pension? And I think these people raised a more profound question of how to relate to the outcomes with the wider society, and in some sense the produce of the act of citizenship and how it inserts into the making of the wider society ... and I think this is part of that critique of colonial pedagogy.

Hassan elaborates upon the relationship between education and citizenship as follows:

So basically active learner and active citizenship, I feel are co-related. The produce of active learning is directed towards exchange value but also to a very salient use value as well. To[wards] both privatised appropriation but also to[wards] the making of the commons. We don't always associate citizenship with critical questioning. [We] leave the matter to those who are officeholders, in authority.

In linking the agency of the learner with the act of citizenship, Hassan raises the issue of critical engagement in learning, and links this with resistance and making changes to society.

... if one could imagine the entire system to be some imaginary whole, then life as it exists within the rubric of the state is just half of it. And the other half actually emerges in your critical engagement, in resistance.

Having built up his understanding of pedagogy in the wake of the anti-colonial movement in India, the idea that society might be split and the interests of the commons²³ might be different from the interests of those controlling education, is not new to him. Critical questioning, crucial to the development of the commons, becomes eroded in conditions where degrees are for sale and education itself is defined as a commodity as is increasingly the case in England today.

The first pedagogic principle for Hassan is that one must ask the key question: in whose interests is pedagogy operating? Connected with this, it is important that students engage in learning in order to enhance their own agency to influence their society. This point was made famously by Freire (1972) and is equally valid today. The second pedagogic principle raised by Hassan is that the learner needs to apply the knowledge gained to her or his own experiences of the world. The medium of instruction, if it is in the learner's mother tongue, can allow her or him to apply such knowledge more directly. The use of only one language as a medium of instruction restricts the possibilities, categories and ways of thinking. Hassan cites a conversation had by Abdul Rahman Bijnori, a graduate from Aligarh university.

English or mother tongue? Here is a conversation between Abdul Rahman Bijnori, who met a German scholar probably in 1914, or 1912. The question he [this scholar who was a priest] raised was: 'what is the medium of instruction in your educational institutions?' [on hearing that it was English he] says 'I swear by Jesus, you wouldn't see the face

²³ The term 'commons, refers to resources belonging to the whole of a community- Oxford English Dictionary

of progress even in a thousand years if you have English as your ...'
[laughter].

The language of instruction was contested by the Indian anti-colonial resistance in formulating an alternative pedagogy because of students' needs to draw upon and articulate their experiences fluently:

Bijnori clarifies that the use of Urdu as the language of teaching and learning was not to roll backwards in time and to take up the Madrassa as a curriculum or syllabus, but basically to use the mother tongue in understanding the experiences of the learners.

In a world where most people are multilingual, restriction to one language of instruction is neither necessary nor desirable. This question of the domination of the English language is still a problem today because the language of instruction determines the extent to which students' own lives and experiences are expressed in formulating and reformulating knowledge. Although many speakers of different mother tongues may come to read and write in English extremely well, access to some of their own experiences are harder to reframe in this medium of instruction and much of their potential knowledge is not drawn upon and actualised when writing is restricted to English. We can only speculate upon the loss to the human cultural system that results from the worldwide domination of English. This is a factor to consider in developing an effective pedagogy. The importance of giving a high status to the learners' prior experiences runs through Hassan's approach to pedagogy and emerges in his work at University Z today, where he encourages students to draw upon their own life experiences to make sense of what they are trying to learn. In his work with students, Hassan explains:

I will also say 'look you're coming from a context. It could be a region; it could be a set of readings which form part of your passion. It is your passion which you reconfirm in your readings; something that is part of your discussion'. So [to] the students, who for one or other reasons have been in China or Bangladesh or North Africa or the Middle East or Southeast Asia, I will say 'well. Bring that experience.' Recently we were discussing the transmission of knowledge in families in extreme contexts of war and/or fascism or state oppression and there was a student who said 'I learned about Islam from my grandmother and not from books.' So I said 'how did this happen?' She explained the whole manner in which, in the pre-perestroika, pre-Cold War situation in

Azerbaijan, she learned Islam from her grandmother and it was very covert. And that was an interesting story and I said 'this story should be part of your passion.'

So the second thread through Hassan's approach to pedagogy is that the student needs to be able to relate her or his own experiences and passions, in the course of learning new things. The language of instruction can restrict or enable this process. This resonates with much of the content of chapter four in this thesis.

A third valued pedagogic principle for Hassan is that doing needs to be linked with learning and thinking, and vice versa. The colonial education system, in India, which was detached from the lives of the majority of the people, did the opposite as Hassan explains:

The broad scenario was that doing was unlinked with thinking and thinking was unlinked with doing. What was an example of doing unlinked with thinking? This was all the crafts, all the occupations. People were doers...menial it was considered menial ... and there was no reflection.

However even amongst the so called educated class, critical reflection was not considered necessary in an education system that was designed to produce administrators for the British Empire. Their job after all, was simply to be record keepers or accountants not to evaluate thoughts against deeds.

...thinking that had no connection with doing...There was no need to [reflect] ... just in the head ... and write it ... be a record-keeper for example.

Thus even for the 'thinkers' the learning of the more educated, within the colonial system, was still simply to learn how to do what they were told without connecting it with 'doing'. The sad thing was that this educated class, through the colonial education system, had in fact lost the ability to fend for themselves independently of the colonial administration. This led to a division or isolation for this group of educated people from the mass of artisans and craftsmen.

Hassan again cites Urdu poet Akbar Illahabadi:

...there's a beautiful couplet that actually explains this ..'Na Purhthe to sou tarhan khate kama kur. ...' this is the plight of the unemployed educated. I mean you've got the degree, but now you're good for

nothing.... '*Na Purhthe to sou tarhan kha te kama kur*' and '*sou tarhan...*' is you know, weaving and carpentry and metalwork and ... 'Yeh'... meaning all this.. '*Kho geyi taaleem pa ker.* ...'.

[This translates to] ...'if I did not study I would have had a hundred ways to earn my living and eat. All this I have lost by gaining an education.'

Now this divide between thinking and doing and learning and doing is something that this alternative education pedagogy wanted to overcome.

That is how Hassan illustrated his third pedagogic principle that thinking and doing must be linked. Fourth, Hassan claims that effective pedagogy pays attention to the fact that the world is changing. What was exciting and new and useful in the past, can become canonised and applied out of context, lose its cutting edge, and be in need of reframing to be useful. According to Hassan all learning must be accompanied by unlearning to be useful. He explains that after the initial input comes from the pedagogical authority, the students have to go through a moment of unlearning in order to reformulate the knowledge in terms of their own contexts.

I strongly believe that learning must be accompanied by unlearning. Now the moment of learning would be a stage of the learner's reception of knowledge bearing the stamp of the pedagogical authority. The moment of unlearning becomes learners' reconfiguration of what is transmitted pedagogically. So what is given in the classroom needs to be reconfigured by the student.

The student needs to reconfigure the knowledge in order to make it useful in the world. After all, the conditions in which knowledge is applied are often different from those in which the knowledge arose because the world has moved on. Hassan goes on to say that in addition to unlearning, the learners also need to be motivated to make use of the knowledge:

And why should they reconfigure? What's the impulse? So there could be many sources of that reconfiguration. In the instant of reconfiguration, the learner's relationship to knowledge may involve forgetting, radical rethinking, or just minor revisions. In unlearning, the process entails interplay of learner's curiosities and questions around the knowledge obtained.

The simple transmission of knowledge may lead to higher exam marks, but will not challenge students in the way that trying to write about their actual

authentic experiences would challenge them. Here a deeper reconfiguration of knowledge would be required. However, if the actual authority over knowledge pursuit is transferred to the learners, then they may make their own decisions about what knowledge is valid. Such decisions can be made in the context in which the student has to apply it and why it is useful. In this case there has to be a serious reconfiguration of the knowledge, so that it can enhance the student's own agency to make changes within the world. This whole issue is in effect about power in the pedagogic relationship.

A contrasting aspect refers to the case of transmission of knowledge that also involves a transfer of authority of knowledge pursuit. The transfer from the pedagogic authority to the learner to the authority of the learner.

In such a case, learners need to become proficient in what is taught and to go further to become discriminating and critical thinkers. They will need a desire or a motivation to follow some interest or curiosity of their own, which would act as an engine for their reworking, unlearning and then reconfiguring in a way that is useful to them, of the knowledge. Critical thinking is needed for an active citizenship and is the product of active learning. This is a completely different approach to pedagogy from the simple, faithful reproduction of transmitted knowledge. And at the heart of it lies the whole question that we started with: what is education for? Who makes use of it? Whom does it serve?

To illustrate the point further, Hassan points to his current experiences of teaching:

..... and here [at University Z] I notice that students are very clever. A meritorious student would draw upon the textual knowledge and in fact write a brilliant essay and that means nothing...In such a situation it is possible to appear meritorious through a clever strategy used in writing weekly summary essays or answering exam questions. It is possible for a clever student to learn, in no time, how to assemble relevant material in response to an essay question entirely for show. A hypothetical, excellent answer may on occasions parade the regurgitated knowledge of the already established masters of the discipline rather than the analytical abilities of the student. A sincere student, who for some reason, fails to fit into with the hasty rhythms of deadlines, compares poorly with another student who conforms to all deadlines without

being motivated by the spirit of the discipline. Being fully adapted to the demands of formulas and norms, in this case, provides a recipe for higher grades.

This is not a new issue and Hassan cites Mark Pattison [1813-1884], rector of Lincoln College, Oxford describing this exact phenomenon:

‘A clever youth, trained by a skilful private tutor can discuss with a masterly air, as many of the questions noted by the paper as three hours of rapid penmanship allows’. [cited by Hassan in interview]

Hassan maintains that this kind of learning, which simply regurgitates textual knowledge is seen everywhere nowadays. It makes learners passive. When asked about constraints in pedagogy in his current work Hassan states

Well first of all the felt need for an active learner is nowhere to be found.

The demand for learning to be a simple reproduction of the knowledge handed down, reflects pedagogical authorities who are satisfied that learners receive knowledge which is unchanged and un-reformulated. This is not consistent with learners’ needs to reconfigure past knowledge in a fast changing world so as to keep it useful. It is however quite consistent with a view of education as a commodity to be bought and sold for money. It is the piece of paper itself, the degree, which is of value, not the process of becoming an active learner with enhanced capabilities and agency to develop their own practices in the discipline they are entering.

Hassan pointed out earlier that he sees engagement in resistance as fundamental to the process of learning. Perhaps it is in resistance to an established order that people actually make changes to their environment, and so the need for the reconfiguration of past knowledge becomes most urgent. In the course of such reconfiguration and use of knowledge in their own practices, students also change themselves. The development of personal embodied properties within the students during the process of making change requires the reconfiguration of handed-down knowledge as part of the process of learning. Such embodied properties can then give rise to personal emergent powers in

appropriate circumstances, allowing the student to apply the knowledge acquired in new situations. The important question is who has authority in the pedagogic interaction? In other words who is to decide what should be learnt? Who decides what knowledge is valid in the contexts in which the students have to apply it? In the case of the transmission of unquestioned knowledge skilful techniques are often employed by the pedagogical authority involving students in various activities around the points to be learned. These serve to smooth out the contradictions in the process of the faithful reproduction of received wisdom.

In the domain of pedagogic authority there are rituals and strategies employed for a smooth transmission of knowledge. The pedagogic devices ensure delivery of textual knowledge with high fidelity, or else the devices give broad leeway to the trajectory of transmission but curiously, turn the received knowledge in favour of what was originally transmitted.... So there you give a long rope ... and then pull it back. This is most evident in the learners' onward reproduction of knowledge and its further replication in various expressions and articulations.

It is possible to give the student a great deal of leeway, and allow different trajectories by which the knowledge can be transmitted to them. Sometimes this can involve twists and changes in direction, giving the students activities which appear to move away from that which was originally transmitted. But eventually all the threads are drawn back and the 'right way' of reworking the knowledge is decided upon by the pedagogical authority. This is still different from authentic encounters where students can develop and actually use the knowledge. The pedagogic authorities are still the ones

who would decide that this particular piece of knowledge is valid in the context of its application by the student?

Hassan points out that the model of top-down knowledge transmission has its sources in religious authorities for whom an unadulterated form of 'truth' was to be handed down to the unquestioning faithful.

we have all inherited a past. ... a religious past... a religious instruction, where the pedagogic authority's persona was top-down transmission of knowledge. That was the principle at work and this somehow has its continuity even in the teaching of sociology and social anthropology and somehow it hasn't been questioned....

The role of pedagogy under such traditions, both eastern and western, is reduced to the faithful reproduction of what has already been given. Interestingly the term *knowledge transfer* is rife in discourses about teaching in current English higher education. It implies untransformed transmission and is fully in keeping with narrowing redefinitions of education harnessed to serve the economic well-being of business. There is no room in this view for critical reflection and reframing in line with student agency. The term *knowledge transfer* is also at the heart of rhetoric about education being 'private' goods to be paid for by individual students. Knowledge is turned into 'goods' to be traded. Hassan observes:

And this whole business of commodifying education does not take into account the fact that the consumer of education or, put simply, their degree is not the student alone. In fact I would even say that the student is not the consumer of the degree. A student is the consumer of the salary... the degree is consumed by mega institutions for their produce or goods. They are employed by the institution and their capacity is used... consumed by the transnational corporations.

When education is reformed around the interests of business profitability then it is business that finally gains from the students' education. In such conditions only the exchange value of education is counted so that the students use it to sell their labour at a higher price. In such a system, passive uncritical learners would suffice, they would be compliant. The content of education in such a context would necessarily be dictated by the interest of the corporations which are the consumers.

Considering the use value as well as the exchange value of education helps to analyse the question of whether education is a private or a public good. Education is being exchanged; but also the student is a product, whose labour power has enhanced exchange value and whose time and labour power is bought by the corporation through paying a salary. More active learners, on the other hand, who critically evaluate the knowledge gains, and apply them, are interested in the use value of the education to change aspects of the world for themselves and perhaps for the *commons* too. Such learners may be interested

in both the use value and the exchange value of knowledge which may allow them to gain a salary by selling their labour power while also making their own use of the knowledge gained.

The produce of active learning is directed towards exchange value but also to a very salient use value as well. To both privatised appropriation but also commons ... to the making of the commons...

This point is often ignored amidst the rhetoric about 'public' and 'private' goods. These terms have become part of the public discussion connected with the question of whether or not students should be charged fees, a position rejected in the Robbins Report (Robbins, 1963), on the basis that university education leads to significant public goods (Holmwood and Bhambra, 2012).

For Hassan it is crucial to think about:

How to actually break the grip of this top down transmission of knowledge where knowledge is not allowed to reconfigure? Of course there could be many ways I'm not suggesting any formula. But I think some systematic encounter in the field is really the answer. Students should be allowed to go to and be pushed into applying their ... I understand there is a lot of diffidence and is it is not an easy thing, but perhaps it is there that students realise that they have to make observations and that's the skill they have to develop... acquire in the social sciences.

This will give rise to the interaction between the learners' curiosity and the knowledge they are gaining, which can motivate learners to reconfigure what is transmitted pedagogically, to make it useful in their own lives.

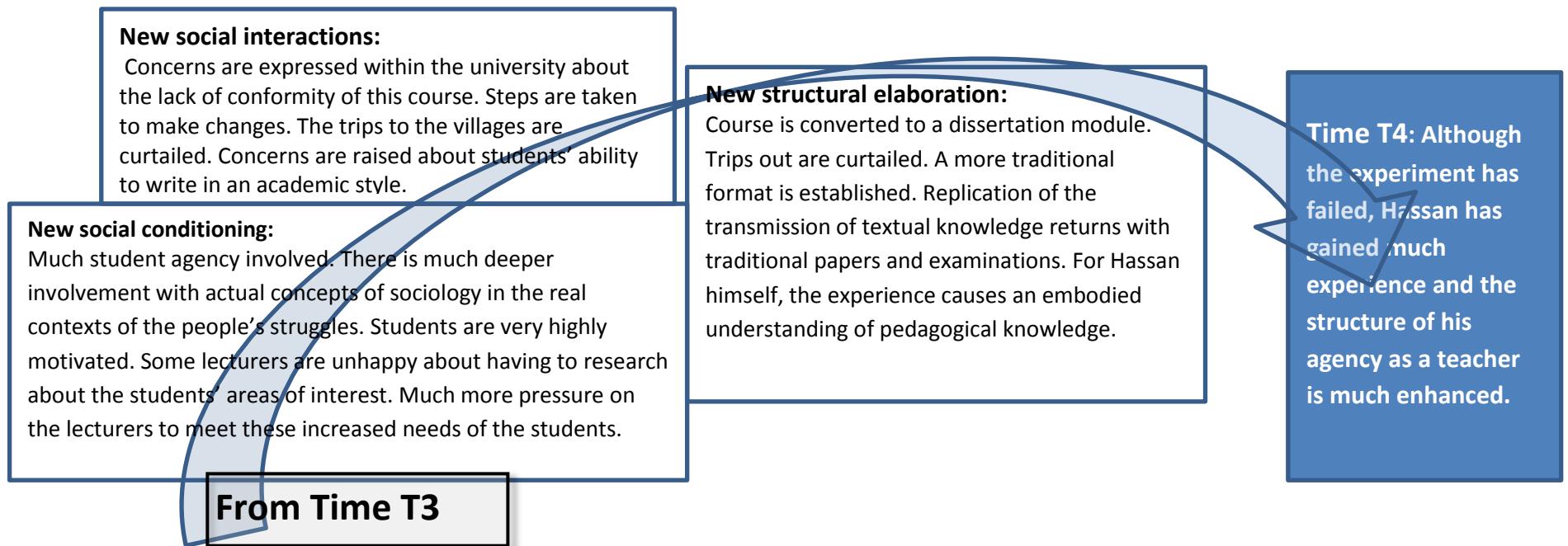
Hassan also lived through the time when the movements for alternative pedagogy as an oppositional movement within the anti-colonial struggle in India were eventually incorporated into the newly developed Indian state. The institutions at the heart of innovations in this alternative pedagogy ended up replicating aspects of the very system that they had been set up to oppose.

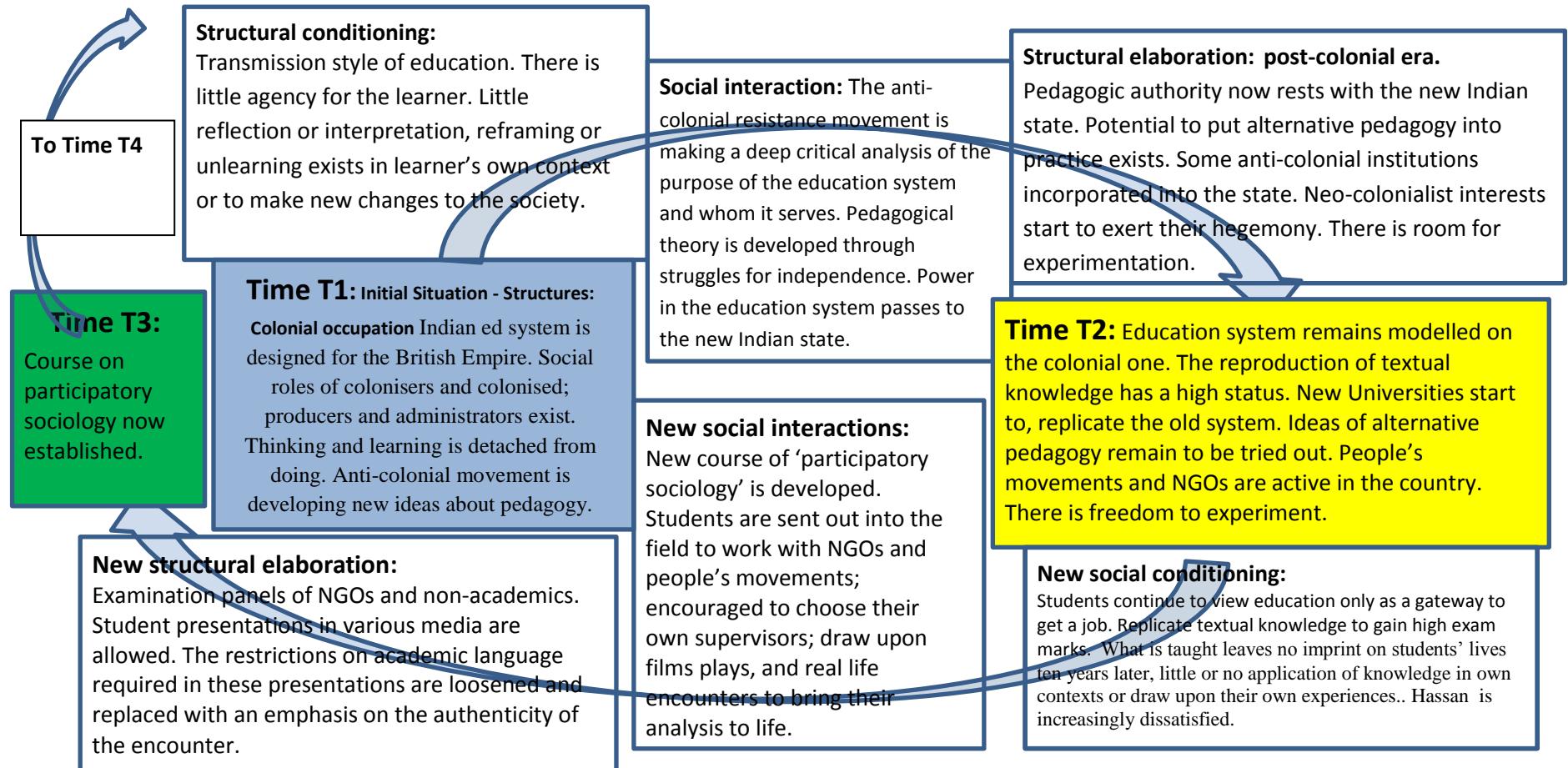
The university [Hassan's University in India] was soon to be massively co-opted into the state ... 'you've done great work in this nationalist sort of thing ... and now we will turn you into a university' and when that whole experiment turns into a university. It becomes [like] any

other university in fact it replicates the entire thing which it was opposing prior to 1947."

It was in this situation that Hassan worked to develop his early innovations in pedagogy in sociology. His experimentation with what he called participatory sociology is discussed in terms of a morphogenetic cycle, and the process is summarised in figure 19 below. The two pages should be read as a single diagram. The first cycle in India starts right back at the time of the colonial occupation of India and the establishment of an education system for this purpose at time point T1. The following section discusses the stages of the morphogenesis.

Figure 19 Hassan Sharif morphogenesis India





At time T1 during the colonial occupation of India, the colonial education system was designed to produce administrators for the British Empire. At this point social structures included the roles of colonisers and colonised; producers (menial doers) and educated administrators. Administrative jobs were obtained through gaining an education. Culturally speaking, pedagogy was organised within a conceptual frame which reflected the detachment of learning and thinking from practice/doing. There was a vibrant anti-colonial movement questioning the nature of pedagogy and whom it serves.

The resulting structural conditioning meant that there was an emphasis on the transmission of facts with very little agency for the learner in either the choice of what to learn, or what use the learning should be put to, leaving little room for reflection, interpretation, unlearning or reframing in the learner's own contexts to reshape society in their own interests.

With regards to social interactions, a vibrant anti-colonial resistance movement using, poetry, drama, theory began to develop through discussions, and access to and interaction with other forms of the human cultural system. Struggles for independence are also going on at this time. New alternative pedagogies are advocated and are influential as power passes to the new Indian state.

In the structural elaboration phase that follows, pedagogic authority now rests with the new Indian state. The potential to implement alternative pedagogy is established. However, some of the anti-colonial institutions now start to be incorporated into the state. New economic and political interests of a neo-colonialist nature have now arisen and begin to exert their hegemony, but there is still a lot of room for experimentation.

At time T2, thirty years have passed since the end of direct colonial rule in India. Yet, students were still following mainly textual based curricula which had a high status, as had the English language, academic traditions of writing etc. This is the

situation in which Hassan as a lecturer, found himself dissatisfied with the students who graduated and yet ten years on:

... there was absolutely no print of sociology [on them] when I would meet my old students.

Although new ideas had been developed influenced by alternative pedagogy, much remained to be tried. The university Hassan worked in had considerable authority and there were opportunities to experiment. The people's movements were active with the work of Non-Governmental Organisations and peoples' struggles in the field. New structures developed as the new Indian education system was built. Oppositional institutions were incorporated into the system and, in many cases, started to replicate the same structures that they opposed. Nevertheless, all the poetry and other forms of articulation of alternative pedagogy remained accessible in the cultural domain.

The resulting new social conditioning phase was one where students continued to view degrees simply as a gateway to finding a job and remained untouched by sociology. Some practices and movements still did not touch students' lives; academic encounters were still text based. Students replicated what was in the text books rather than applying the knowledge in their own lives and drawing upon their own experiences. Hassan found himself increasingly dissatisfied.

A new Social interaction phase entailed Hassan developing his 'participatory sociology' module. Students are sent out into the field to work with NGOs²⁴ and people's movements. Students are encouraged to choose their own supervisors, draw upon all sorts of media texts, films, plays, encounters within their families in real life and so on in order to apply some of the concepts of sociology and bring their analysis to life. Students were encouraged to develop their agency as learners in real contexts.

They [students] do the homeworkselect the topic and ... rather than expecting them to do a full library survey ... we expected students to select an idea, some theme, some question and weave it around four

²⁴ Non-governmental organisations

textual exercises ... textual in the broad sense ... a book review ... four article reviews ... attend any lecture they liked andlink it up with the theme ... a story or a film that you have seen around that theme or any other creative idea that you wish to associate with it.... it could be theatre or drama. We would tie them up with some field where there is also an NGO working or ... Something is going on ... and the idea of picking up an NGO was not really to confirm what the NGO was doing but basically ...they are already present in the field, they have an on-going, enduring presence and so we'll just sort of hop onto their structure and then do some close quarter observations for three weeks...

This led to new structural elaboration where Hassan and his colleagues designed examination panels to include members of NGOs and non-academics. Student presentations of many sorts were allowed. There was a deliberate loosening of restrictions on the actual academic language required in these presentations and an expanding of the assessment procedure.

..... the high point of the course is because we felt that we would have our own examiners and examiners from other universities as is the pattern. But we would also invite some actors from the field ...Including the NGOs perhaps or some actor from the village, or somebody who feels comfortable coming to Delhi... So ...the student's viva was converted into a panel, the student became a resource person; NGO, somebody from the field and so on. We as examiners sat as an intelligent audience ... or unintelligent audience.....!

The emphasis was on the authenticity of the encounter. This takes us to time point T3 at which Hassan's course on participatory sociology was established quite firmly with the structures consolidated.

The resulting social conditioning meant that students became more deeply involved with actual concepts of sociology in the real contexts of the people's struggles. Students became very highly motivated and student agency was evident in the work. Some lecturers began to be unhappy about the hard work involved in following students' areas of interest as there was now more pressure on lecturers to meet students' varied needs.

In the ensuing social interaction, concerns were expressed about the lack of conformity of this course. Hassan reads the points of complaint (in quotes) and comments on them as follows:

'The students chose their own supervisors ...' that was great!
'....and brought before them questions that did not always match or conform to the specialisation of staff members'. I still remember ... a student who came and said, 'I want to study headhunting in Nagaland'... the general consensus was that a student could come with any topic on earth so we will try and convert the research problem into a research question. And this would be a very self-conscious graduation from one point to the other. Because the student has to focus, operationalize, they could say 'I want to study happiness!' for example ... so what do you mean by it? And what should you observe [that is] tangible and can be observed and documented. This led to the usual,... breaking concepts into operational indices and all the rest of it.

This process was actually more challenging for students who had to bring the research process to life and to reconfigure the textbook knowledge into reality in their projects. However it also challenged staff.

Some of the staff members ... who actually felt ... How can they give extra energy to all this nonsense ...they said 'no it is not part of our specialisation ... I haven't done any study of Nagaland'♦... 'I don't want to go.... be part of this'.

The students also found that the expression of their own ideas in a second language was more difficult than to repeat transmitted ideas copied from textbook based templates.

The second objection was, that ... students for whom English was not their first language, wrote course assignments in non-standard English which matched poorly with valued texts in the discipline.

And the difference was obvious... memorisation of rote learning ... they would write beautiful language, but when it came to describing a particular situation then they were ... pushed... and when you are pushed you can't just copy.... they were given the choice to explore their initial question by conducting a library exercise prior to their preliminary fieldwork, they reviewed articles, books, illustrations from works of fiction, drama, film, documentary and cinema. And the resulting product of such exercise always turned out to be a loose collage, without the usual gloss of competent writing ... Now if the students are writing bad reports of their observations and reallystruggling hard to describe ... I thought this was better than you know, copying things second-hand.

Eventually, under such pressure, the trips to the villages were curtailed.

At Time Point T4, the course was reframed by the university as a dissertation module. The trips out were cancelled and the course reverted to rewarding the replication of textual knowledge. Traditional papers and examinations returned, and all that enthusiasm was gone! For Hassan himself the experience, and his reflections upon it, led to a deep embedding of pedagogical knowledge committing him to advocate the learners' need for 'unlearning' described earlier.

Hassan's teaching at University Z, today draws upon considerable personal embodied properties, cultural or ideational resources, experiences of prior social encounters and his training in the discipline which he has taught for a long time. He makes use of these to analyse the present situation and discern the power relations within it. When social relationships change and there is a different configuration of power, then different parts of the cultural system can come to the fore. The structures that exist at any one point in time are often useful to some sections of society and a hindrance to the interests of others. For this reason the processes of morphogenesis are shot through with questions of power and are heavily contested. Archer points out how contradictory notions can be accepted by people when accompanied by powerful interests (Archer, 1988). The more personal emergent powers a person can draw upon, the more they can discern some of these interests and hence the greater their agency. Hassan was able to bring his rich experiences of the social movements and ideas about alternative pedagogies, from early neo-colonial India to help him to analyse the power dynamics unfolding in England today.

Hassan used the new affordances available to him when invited to speak at a series of seminars on pedagogy and current changes in higher education, held at University Z. In this forum, Hassan challenged ideas of commodification and marketization of education in higher education.

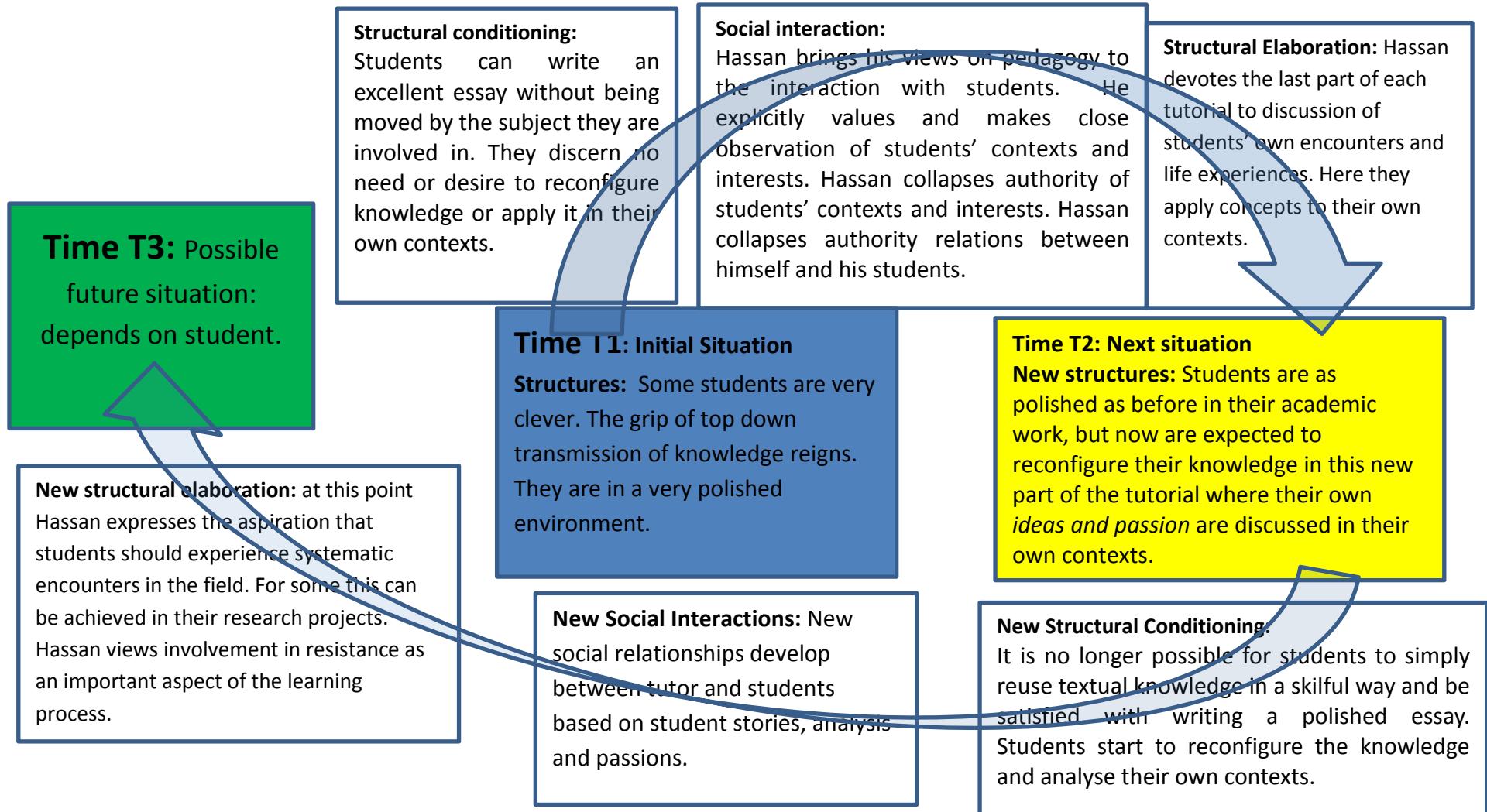
Some of the audience took the policy perspective very seriously and didn't want to opt out of that whole framework in a radical way.... 'We are living with this'. 'This is a fait accompli and you can't just be going in with the radical.'

In his presentation at the seminar Hassan articulated his analysis of the situation in higher education. He claimed that pedagogy was connected to the type of citizen that emerges through education.

I firmly believe that students have to become active citizens. If they were active learners they would be active citizens. And the meaning of that would be that... the fruits of their endeavour ... must be shared by a large number of... other people.... who are not part of their specialised domain. If students are part of a research organisation or a universitythat learning must disseminate...

Figure 20 illustrates Hassan's current work with graduate students at University Z which shows the insights emerging from his past experiences. The changes Hassan is able to implement at University Z are summarised in Figure 20 and *Time T3* refers to sometime in the future.

Figure 20 Hassan Sharif England



We start at Time Point T1. Students, in this very polished environment are very clever and come to Hassan already well trained in writing essays and assimilating top down transmission of knowledge at undergraduate level. The resulting structural conditioning means that students can write an excellent essay without being moved by the subject they are involved in. They seem to feel no need or desire to reconfigure knowledge or apply it in their own contexts. In the social interaction that follows Hassan brings his views about the need for students to be active learners. This is not just so that they understand the principles of sociology, but in the wider context of their becoming active citizens. He makes close observation of students' contexts, interests and backgrounds with a view to uncovering what they might be passionate about. He takes great care not to overemphasise his authority. As a form of structural elaboration, Hassan establishes a discursive structure within his tutorials when he asks students to discuss their own ideas. By doing this Hassan establishes a space for students to practice the application of their ideas within their own contexts. He explores the passion behind, or encapsulated in, the things that students have chosen to read, with them. Hassan gets students to tell him their stories, talk about their families, their travels and so on. This discursive space is over and above the standard discussion of students' essays.

At time T2, new structures have been developed. Space has been created in tutorials for the discussion of students' own ideas in context and in line with their passions. Students are encouraged to bring their own experiences to their learning, as a vehicle to reconfigure what they have learned in their academic work and apply it to their own contexts. This results in new structural conditioning which is that the simple regurgitation of textual knowledge, no matter how skilfully developed as 'academic argument', becomes insufficient. Reconfiguration is demanded. Learning is accompanied by that moment of unlearning that Hassan articulated. The conditions to break with the grid of top-down transmission start to be developed. Students bring their own stories, their own analyses and their own passions, encounters and experiences and analyse them in terms of what they have studied. New social interactions occur. Hassan

strongly believes that there is a need for some systematic encounters in the field. There is, in theory, the possibility that this will occur as a result of a student's involvement in their research project. The second point that Hassan makes in the interview is the need for some involvement in resistance. This is less likely to be the case for students in a polished environment like University Z where:

But my experience of students. Here are the ones who will be spreading hegemony in the world. They will be ruling the world....the makers of the world. how does this whole situation change? Are [they] really an authority in their own right? ... What happens to the authority of learners in such a polished environment?

Hassan cites Gerald Graaf's 'Clueless in Academe' (Graff, 2003) to illustrate the problems students face:

... in University Z we continuously say 'There are no right answers, only endless questions'. But some of the answers are better than others and some don't even qualify to get on the map. 'Important issues are endlessly important and debatable'. But we also say you need expertise to get into the debate. Academia wants to hear your ideas and arguments not a mere rehearsal of what others have said, that's one part ... but your ideas and arguments won't be taken seriously unless you take others' views into account. Challenge authority; don't just write down what teachers say. But you can't challenge authority unless you know the moves of the game...so there is a kind of a circle.....

It is interesting that when Hassan started as a young lecturer in India his students could be inspired to follow their passion, but sometimes lacked the 'moves of the game'; a point used, by the authorities, to suppress Hassan's innovations. Ironically, today his students are polished users of the 'rules of the game' while needing help to develop an authentic passion.

In discussing the future of pedagogy at University Z and the constraints on innovation, Hassan points out that the pressures on younger members of staff are immense:

...they are within the rack of the RAE²⁵, they have to produce a book in five years' time and they can't be original thinkers, obviously because

they must churn out something ... and articles, and they have to earn money.

I was lucky in the sense that my prime was spent in Delhi.where there was no RAE and people were pretty relaxed. That gave me a lot of space to sort of remanufacture myself. But a young lecturer coming in now... to let's say in a developed situation like University Z. Forget it! It'll take some 20 or 30 years before that person will realise what is the damage done?

Hassan's experiences of developing alternative pedagogies and his participatory sociology course are examples of personal embodied properties which give him the personal emergent powers to discern similar problems as they appear in current developments in higher education in England, even in as polished an environment as University Z. As we have seen, he has responded by bringing authenticity into his graduate students' encounters with his discipline. Hassan has highlighted the importance of the social, political and economic environment to the pedagogic possibilities that face lecturers and tutors. He recognises the constraints he works under:

I mean it actually makes my life a little harder, so to speak, I have to satisfy the RAE but I also have to keep my dreams alive!

Now in some way I am reconciled to the fact that I am really not a normal person. My Saturdays and Sundays are spent in a very very different way.... People have sort of reconciled with me and Iin some sense ... also feel quite happy about it. But that entails a cost that many of us can't afford. It requires a massive overhaul in thinking and ideology.

So keeping dreams alive comes at a considerable cost. Hassan's story reminds us of the importance of considering the past when analysing the present. There is a history behind current developments in the *global and national* changes in education, which needs to be considered to understand what is going on now. At the global level, the effects of Britain's colonial activities were experienced by academic intellectuals like Hassan. Hassan brings personal embodied experiences from these to bear on current *national* discursive structures in higher education in England, such as the debates on whether education is a *private* or a *public good*. Strong powers of insight emerge, and Hassan questions the commodification of education at an open forum at University Z. For this to happen there had to be wide-ranging discussions on this issue at an *institutional*

level. This was provided by a series of seminars organised by the university assessor throughout the year. The debate was further fired by an issue of the University Z magazine which developed a bitingly critical discussion of current *national* developments in higher education in England. Out of the three institutions in this research it was only at University Z that this level of *institution wide* academic debate on the issues was evident.

Looking retroactively at the situation at University Z in the light of the participants' accounts, it became evident that the effect of the monitoring and control of research at the *national level* in the form of Research Evaluation Exercises and Frameworks were seen to take their toll at an *individual level*, both in terms of damage done to individual lecturers and to their ability to teach. This is confirmed in other interviews carried out at University Z. Languages Professor Michael Clarke puts it thus:

Well okay the long-term pressure is simply the incentives attached to research. And as you know of course... those incentives are coming.... ultimately from the government but certainly from HEFCE..... which over a number of years, decades now, have given universities incentives to focus on their, and put resources into their research effort. And that has slowly worked its way through the system as the implications of that are worked out. And though no one would ever say that they intended teaching to be downgraded. They would hotly deny it. In effect, inevitably that's what's happened.

Similarly Mark Burns professor of physics at University Z assesses the situation regarding research and teaching in the following way

But the sort of tutor who taught me, who taught during term and did their research during vacations and whose total research output was quite small. Those sorts of people do not exist anymore.... so the people who get the posts are the people who can organise a research group. That's what they're selected to do ...is to organise a research group to get a self-sustaining group... of postdocs around them ... who will keep on doing it while they're doing their necessary teaching activities and the whole thing is humming along so that they're also managers of research groups and are very competitive and very focused on grant applications and good at doing it. That's the essential skill now and the pedagogy can add to that but it can't exchange for that. I think that was a perfectly valid description of the way the system is operating and the

role in academic recruitment that pedagogy plays. I think that's an entirely correct analysis.

Michael Clarke identified the national pressures and Mark Burns traced how these exert a pressure at institutional level. This detriment to pedagogy resulting from research and teaching being placed in contradiction will be taken up again later in this chapter in Margaret's story.

When education is treated as a commodity at the *global, national and institutional* levels, pedagogy fails to develop learners as capable practitioners with enhanced agency to make changes to their world. Prescriptive practices tend to teach people certain things, without giving them a deep enough disciplinary understanding to engage in authentic disciplinary practice. The degree becomes a status symbol at a *global level*, while obsolescence is built into the commodity itself. In spite of all this, Hassan works at an *individual level* to develop his students' authentic encounters with sociology by helping them articulate and analyse their own experiences.

The next participant, Zoologist, Margaret Hastings, is also concerned with the paucity of authentic engagement that her students experience. She shares a desire that students should analyse for themselves and follow their own passions, with Hassan.

Margaret's Story - Zoology in this fact-rich world

Margaret Hastings describes her work to develop new ways of teaching that might facilitate a more authentic involvement for her students, as novice zoologists. Margaret is concerned with the accelerating pace of advancement of the field, coupled with the problematic secondary education with which many students enter university. Students need to follow their interests and engage in authentic zoology at some level, critically develop models, theories and frameworks, and apply them in the fact-rich environment of today's world. Margaret discusses changes she succeeded in making at a faculty wide level and

also outlines some of the ways the struggle to balance research and teaching is affecting pedagogy.

Developments in technology are accelerating discoveries in Zoology by facilitating greater understanding about animals, both holistically and at a cellular and atomic level. The human cultural system is expanding exponentially in this area, while the discipline itself fragments. This happens, according to Archer (1988), whenever new areas of knowledge are broken into and developed. Margaret describes the situation:

I think there's definitely a greater fragmentation of the subject ... clearly the subject is explosive ... biology in particular ...some physicists turn to biology and say physics is boring because it's only got one, or rather few cutting edges...e.g. The Higgs Boson particle... whereas biology has cutting edges on the entire surface. And of course it's getting more and more detailed and ... technological ... And so ... more fragmentedon a narrow front.

Top researchers can have a deep knowledge about their narrow specialist area yet, in order to teach and induct new students into the discipline, a broad perspective and a general understanding of the entire discipline and its overarching themes is needed. Margaret considers some pedagogical difficulties arising from a research-teaching divide:

... students could be experiencing a lot of very deep but narrow questions in their learning experiences... Whereas in the past people ... would know more across the whole board. ... I can think of ... examples of people who do very high-powered computer-based analysis of... of parasites for example..... I set a question for an exam ... one of the general questions in biology, which basically go across the board. And he [a colleague] said 'what do you mean?' ... he was obviously so deep in just one thing he never really even considered that they [parasites] play a role in say evolutionary behaviour, ecology the lot. I would not like to see that adversely affecting the learning experience of the students.

Margaret maintains that new tutors need time to build up an ability to operate confidently with students outside their own narrow specialism.

..... if you are a PhD student or a post-doc, you know a lot about one subject but have you had the experience ... when you're at the university you are rubbing shoulders with people from different

disciplines all the time so you are challenged. You should have a broad view even if you don't agree. But have you got that at the teaching level? No it takes time ... you acquire these skills ... You don't have them to start with...

In other words, tutors need to develop experiences to build up personal embodied properties they can draw upon, to be able to teach. In addition to their own research area and their own practices as zoologists, they also need to be able to reflect upon these practices and find appropriate ways to bring the students, via well thought through activities, to develop their own practices.

Margaret outlines some of these processes:

....you have to decide on a question, furnish it with reading material. It is highly contextual. What for? What's the purpose? I mean you ask a question, it's not the only question you can ask. It's certainly not comprehensive, so what's the point? What does that particular question elicit? It's got to be broad and also detailed. It's got to be answerable in five or six or ten different ways by the students. And this takes time. If people aren't prepared to commit that time to doing it then they're not going to do it right.

Yet time is now under pressure through the marketization of research, which needs to be paid for through the time consuming process of making external bids for research funding. At a *global and national* level research is being redefined as a commodity to be bought and sold. National and institutional funding mechanisms cause contradictions between lecturers' roles as researchers and as teachers. In the following extracts, Margaret describes how the joint effect of two mechanisms, the marketization of research, with its attendant need for people to chase research funding, and the shrinking funding of teaching in higher education combine to affect pedagogy:

it's a pincer movement. We've almost stopped saying it because we have been saying it for so long ... but it's true ... the double pressure... there's only 24 hours in the day and people make their name ... glamour and all the rest of it and get their status by research...that's what counts.

This pincer movement leads to stress for staff:

....what's frustration? Frustration is when you are supposed to do one thing and you want to do something else so if you're sitting there thinking 'I've taken on this job and I've got to do it but I really want to

be getting on and writing a paper'. But if, on the other hand, you see it as part of the job, you know 'what did you do today?' 'oh nothing I was just teaching'.

That's your job! (Laughs) that's what you're here for, partly, so 'well ... you earned your salary today well done!' As opposed to 'I didn't discover anything today' because we are in the wonderful position where we are discovering new things, with any luck, occasionally.

The frustration is accentuated further when the hours given for teaching are not sufficient to meet student needs:

But the vast majority of people in actual scientific position are obliged to do six hours teaching, weighted for group size, a week in term [time] that is the stint. So if you work it out there is probably not enough hours. Six hours of tutorial are not enough for the students' needs.

In such a context, when powerful heads of department respond to research pressures by publically undervaluing teaching, it can make a lot of difference to pedagogy at the *institutional level*. Margaret describes the situation, against a context of resource pressures on teaching:

We all do it [teach] in different ways. We all have our different personalities anyway. Of course the students are all different. Each student needs something a bit different and when you do teach them one-to-one it's completely different. I mean that's what we used to do. But then pressure and time... it changed. The message from the top [generally] was 'don't waste your time teaching'. Specially, you know to PhDs and post docs that one relies on...

The pressures, resulting from the research agenda itself, are painful. Huge personal resources have to be expended just to put in bids to finance research:

... getting a grant If you don't put 200% effort into it there's no chance ... you can't do it half-heartedly ...it takes a lot of effort.....and it takes you a huge amount of time. You put it off. And then it comes back three or four months down the line. You may have been alpha four rated, but only alpha fives were funded because they haven't got enough money.

Margaret expresses relief that when she retires in a month after 40 years she will be leaving grant proposals behind.

well thank goodness no more for me. I feel that, because it was such a nightmare...is a nightmare ... well obviously we're relatively successful in this department...and in this university yes that's fine. On the other hand of course, that means that we are entirely on our own there

isn't any in-house ...no corporate money for additional posts or research students. It all has to be funded externally.

Margaret's teaching is underpinned by some very definite pedagogic principles. Students need to make sense of the information-rich world around them, by developing frameworks to help them discriminate which information is important to them and why.

We live in a an information-rich, or a fact-rich, or a fact-accessible society but nobody is asking them [students] to understand. So if they need to know anything they... they just Google it. You know they take the thing out of their pockets and they can say 'this is a fact'. It's a framework for asking why do you want to know that fact? [that is important]

For Margaret the key questions are: What are they learning? Why? It is here that the organisation of the teaching can hold back learning, or overemphasise certain areas at the expense of others. According to Margaret, fast expanding, high status and newer parts of the subject can tend to dominate, making it harder to build on students' own enquiry and interests, thus affecting the authenticity of the student encounter and losing valuable opportunities for motivating students.

[We] start them off with lectures on cells and biological chemistry.fancy coming up and you want to save the world ... conservation obviously ... and you get faced with biological chemistry...first lecture. No! Don't do this!

Instead Margaret advocates a different approach:

...But give them something that will really grab their imagination; give them animal behaviour ecology or whatever...get halfway through term ... and say 'yeah... this is a fantastic question you know we've built it up, we've reached this point here and now we're so lucky we've got all this new technology to answer that question. We have molecular genetics, we have cell biology that will give us the answers. That's why we need to do it' ...

Margaret says that students' areas of interest could easily be connected with the difficult things in the curriculum and illustrates this point:

...we need to define the question from what they're interested in and then show them it's worth doing. Not saying 'learn this because in the future you will find it useful... it's good for you' (laughs) but ... it's

difficult... especially when you're talking with your colleagues who are giving their lectures in biological chemistry who think it's the best subject on earth (laughs).

There is no doubt that students need to become proficient in all areas of the discipline. Margaret's concern however, is that the student's own preoccupations can become submerged before they understand how these advanced areas relate to their own area of interest.

.... it's absolutely not unconnected. But the students are busy learning about how ... the cells and genes and things work in many of their courses. And they will go on to appreciate the connections... in the first year..... So whole organism biology has been under pressure for a long long time, probably since the 1950s actually ... everyone complains about it... all the time taken over by molecular stuff. Which is of course incredibly important but many of the students who are coming really love animals and they really want ... to do the whole animal studies, the whole organism studies. But it's a decreasing part, of the course because you have to fit in all the genetics. And all the exciting work in genetics and the molecular biology that is moving fast. And of course good people here are using molecular genetics to answer organismal questions.

When there is a massive curriculum to be covered, in an environment which is already extremely fact-rich, Margaret considers that graduates need a general understanding of broad issues, so they can contextualise any area in which they decide to specialise. They also need to be led into zoology via their own interests and ideas. Margaret uses Socratic methods in tutorials to facilitate this.

I suppose I picked it up from my father who was a maths teacher and used the Socratic method.

This early influence of her father's teaching methods is an example of personal embodied properties which contribute to Margaret's agency, becoming a source of emergent powers in circumstances where such methods are possible. When tutorial numbers are increased, these embodied properties lead to personal emergent powers of critical discernment and dissatisfaction. Hitherto, the very small student-tutor ratio in tutorials at University Z facilitated the use of Socratic dialogue on an individual basis with students; presupposing that the student has something to say; there has to be a stance taken, and ideas put forward and defended. In other words there is an active engagement of a thinking and

knowledgeable learner in the dialogue. This requires great sensitivity to the student's confidence:

.... Thou shalt never say no to a student... thou shalt never demoralise the student.

Margaret constantly refers back and draws upon students' contributions in the discussion. During tutorials Margaret consciously puts herself into an 'entirely responsive mode':

Of course I don't go through all the essays in detail in the discussions. I have already written all over them and given them feedback,... I might pick up a point or whatever and I'm very careful if someone says something ... we talk and talk and then, a few minutes later, I say 'what you said was a very important point' and draw in what they've said. I'm really very conscious of that, especially if they are not very talkative, to say... 'yes you have made a contribution' and give them some sort of confidence that actually that's worth doing more of, referring back. One is entirely in responsive mode like that, that's important.

You can see Margaret's desire to engage the student's agency, and her gentle care for the student's morale and confidence in the extract above. In individual tutorials this is easy. Similarly, you can be more frank about students' shortcomings individually than you can in a larger tutorial group where it is harder to challenge sensitively.

... you can imagine ... when you've got two or three as opposed to...[one].. if their essay is not very good you can't possibly, I don't think you can point out... 'well it sounded a bit muddled' you can imply it and that's bad enough and they go away feeling, you know all kind of deflated and 'this person was good and I can't write like that'....whereas if it's one-to-one, you can really do that in a much more constructive way ...

Margaret emphasises the need for students to develop metacognitive processes about becoming scientists. She sets the scene by asking discerning questions

... personally I am more and more teaching them the structure of learning... I think self-cognition in your learning process is hugely important. So I ask them when they first come to me ... when you're writing an essay what do you think you're doing and ... you know ... think carefully ...think about it... I think it's more necessary now....what are you thinking? What are you doing? So the structure of learning, or the structure of learning to be a scientist, the structure of how you think now...

For Margaret exams are secondary to students' own wider education.

At the same time one uses a body of information in biology that they are ... crudely ... they are going to be examined on. And I tell them 'forget exams until the end. If you educate yourself; you're here to be educated or to educate yourself, not to be examined. If you do the former you will come out with good exam grades. If you just do the latter you'll come out ill-educated'... I passionately believe that.

Margaret goes on to describe the dilemma posed by taking this stance:

But at the same time of course it is a body of information they've got to understand. I've got to teach this subject, so we've got to understand that so in one hour you want to get across a model of a way of thinking about things using real information, because it is not abstract. And an hour is not long enough really..... and you leave them half informed and they go away and fill in the gaps or not depending on their own motivation.

Once again Margaret develops the student's own agency here. But for students to develop themselves they need to make use of resources and university Z has excellent libraries. However University Z's many museum facilities, rich resources to stimulate student enquiry, are also falling foul of market forces. It is hard to integrate such resources into pedagogy if they have to become money-making enterprises.

... the museum side of it gets a bit squeezed out. ...I know they're not [museums] used nearly as much as they ought to be ... they are side lined. There are various hard-nosed people who say the museum should be run as a research institute and you have to bring in grant money and otherwise we can't afford it..... a hard-nosed view ... that the most important thing is to balance the books and basically you've got to get research grants in..... the museum ... houses these amazing collections. It has...an obligation ... to maintain these collections. It costs money and this is not money that any research council is going to give a grant for.

In tutorials students can learn how to write good essays, develop a reasoned argument; read published material critically; debate and present their work. Margaret considers that lectures, practical sessions and the tutorial system together make up a holistic approach to students' needs.

... the lecture is clearly to give a selection of the ideas/facts ready-made; the practical is giving them hands on experience. ... a colleague of mine talked about the three legged school and I agree with him here.

So what are the tutorials doing? ... they're not remedial teaching they're not giving more facts, they are actually ... giving skills and one of the major skills is clearly essay writing ... in a way that's what they learn all the way through here ... and eventually they can learn to write a reasoned argument. ... start with a hypothesis, test it by presenting relevant and critical facts; that's a skill. But the other skills we have to talk about; skills in verbal debating... we have to talk about skills in presentations. Can you actually extract information? I also give tutorials on critical evaluations of journal articles ...it is assumed that you do it while you do your essay ...actually ... they don't yet. I commonly have to ask the questions 'Did you actually read that article? Did you find it convincing? In that case why have you cited it without criticising?' (Laughs) ...

Margaret notes the increasing paucity of engagement in students' school backgrounds. Margaret would like more of the students to think deeply about what the important questions to ask are, rather than simply learning a list of facts.

... they come from schools where more and more the A-level structure, yes even A-levels let alone GCSE, is ticking the boxes, learning the right answers. There is no right answer! Instead it should be 'what is the right question to ask?' But the good ones of course, and they are mostly good ones, by comparison with other universities they are stellar!... they have, read spontaneously ...widely. They are familiar with things, they don't wait to be told what to do every day, they just do it..

Thus, at the *national level*, the school system, according to Margaret, militates against authentic enquiry and depletes students' capacity to learn. By developing metacognitive strategies and using the one-to-one tutorials to individualise the teaching Margaret is working to develop her learners' personal embodied properties to increase their agency. This is something that will remain with them long after completing university.

Although Margaret speaks articulately about the problems that the research-teaching divide causes for pedagogy, her opposition remains at the level of having a passionate belief in a good system that is under threat. She is engaged in what Archer calls 'social quietism' (1988, p. 214) on this front. In other words, faced with the imposition of totally contradictory and illogical positions on the issue of research, Margaret is not about to challenge the current social order by

publically denouncing the government's and the funding agencies' current attitudes towards research. Her views remain personal as expressed in the interview and she has continued to spend time and energy pursuing research grants. She sees no viable alternatives. At the same time as the following excerpt shows, there is opposition brewing in the land, although she is not active in it.

...This very day... there's an open letter in the Telegraph from 10 Nobel laureates saying the research councils are completely failing because... the impact factor ..., apparently one of the criteria for getting a grant is to foresee the impact this will have... in 50 years' time! ... This is what the guy calls clairvoyance.... I mean you can't do that, by definition! If they'd done that for lasers, basically lasers would be constrained to go down that narrow route...

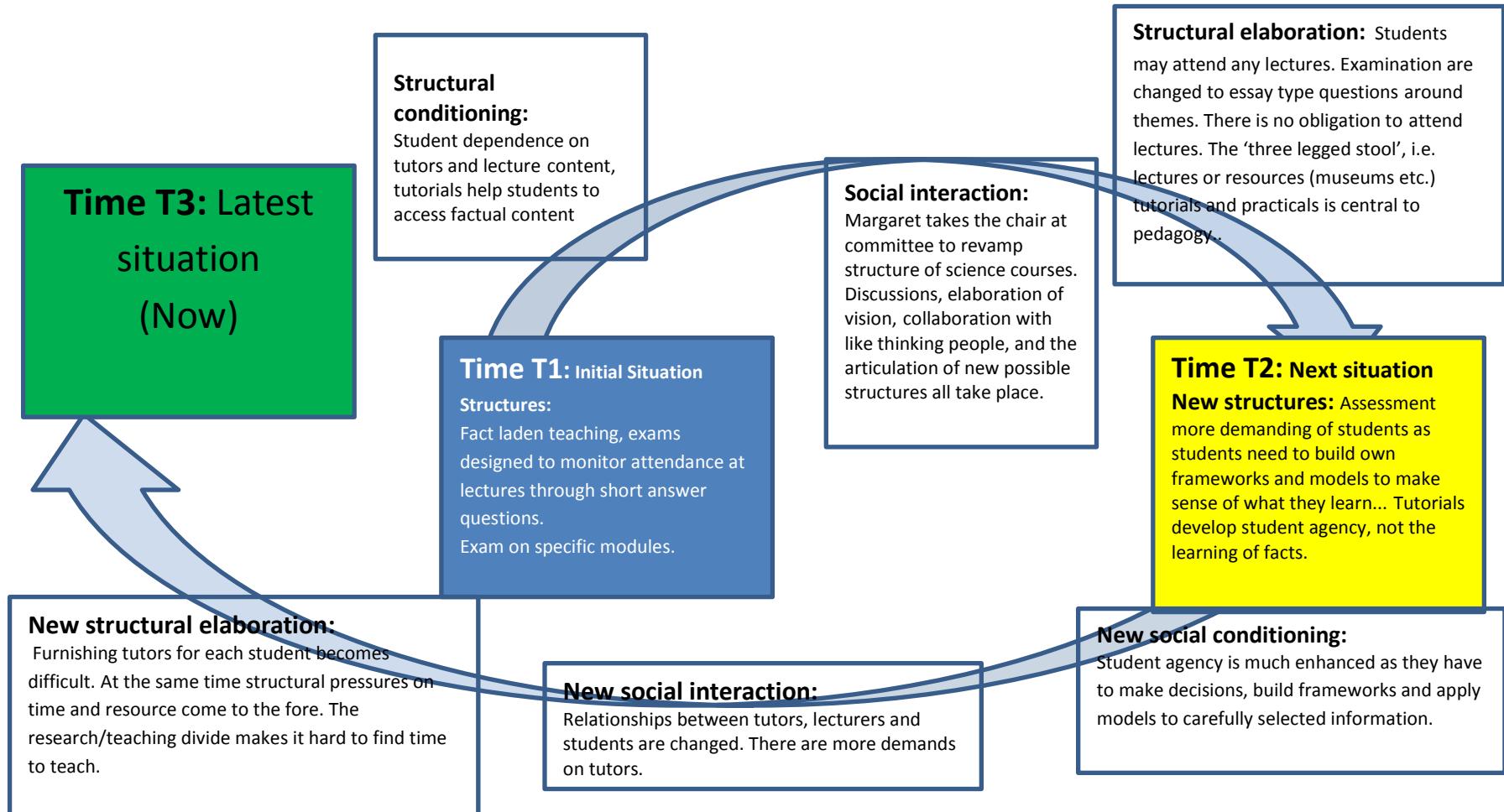
To sum up, Margaret's pedagogic values are that students need to develop their own agency as scientists to make sense of the information-rich world around them. Their own interests and enquiries are important motivating factors in their learning while Socratic dialogue, lectures, tutorials, practical sessions and library and museum resources, act as scaffolding for them. Examinations are secondary to students' own wider education, and students need to develop metacognition about the process of becoming scientists.

When the opportunity arose to take up a position that had some power associated with it, Margaret seized the situation and used it to make changes, in the way that zoology was taught, at University Z.

...actually I chaired a committee that reviewed the structure of one of the degrees in science.... I actually put some of my vision into place, and tried to right some of the wrongs as I see them

The events are outlined below as a morphogenetic cycle (Archer, 1998b). The process is summarised pictorially in fig 22.

Figure 21 Margaret Hastings morphogenesis



At Time Point T1, Margaret points out that teaching was very fact laden. Short answer questions in exams served to monitor attendance at lectures.

.....in the old system as it is still going through, in their exams they have short answer questions. The point of that, and it was explicitly put in place in the early 1990s... to ensure that they [students] went to lectures. How dumb is that? There is absolutely no obligation to go to a lecture. If the lecture is good, that's fine, if it's useless otherwise you'll have to go to the library and do it yourself... I mean, do you want a nicely prepared meal given to you by a lecturer or do you want to go and get the raw ingredients. ..That's your choice, the only thing you have to do is pass the exam.

Students would be examined on particular modules, with a set content of facts to be learned.

But then everything got very deeply bitty, bitty bitty... you know there was this module, or this course and there would be exams there would be lectures...

Structural conditioning as a result of the situation at T1 meant that students were very dependent on tutors and lecture content for factual information, while tutorials were supposed to help students to access factual content and address areas of difficulty. The expansion and fragmentation of the subject in recent years makes deeper demands on pedagogy as discussed earlier.

Social interaction now took the following form. In the 1990s, as the chair of a committee to revamp the structure of science courses, Margaret collaborated with like-thinking people, to articulate new possible structures. This forum drew up new ideas about how teaching could be reorganised. New models of pedagogy were introduced. Here we have an example where new areas of the cultural system are drawn upon and used to challenge old ways of doing things with a view to bringing about change within socio-cultural interactions. It is an example of the cultural system exerting an influence on socio-cultural interaction (Archer, 1988), as a result of the efforts of a group of people who are seeking to make changes to the way in which the system is organised. Access to new ideas about pedagogy, together with Margaret's own experience as a Zoologist, develops the personal emergent powers (Archer, 2003) she can bring

to bear. They make her dissatisfied with students' experiences because she knows they can be better. She is more capable of reflexive evaluation of the situation because of her past experiences. In addition, the social power involved in being the chair of the committee, allowed Margaret greater external powers, by involving others in a collective agency to actualise the changes she envisaged.

She says:

So our vision was to open the whole thing up back in my day.

After the ideas had been discussed, and agreement established, the committee made use of their new power to change the structures for how science was taught. Margaret put the following structures in place as part of a structural elaboration phase. Initially, instead of students having to choose a set number of modules, they were given a free choice to follow their own interests.

... you could go to all lectures ...timetable-wise there were some commitments... obviously ...you would choose to specialise in what interested you. Much more cross-fertilisation... and you might want to mix that with lectures from another course, but at the end you either are going to hand in your exam questions that come out of this theme or that option... and you would have the choice to answer that more. But it's going to be completely open. It is not 'you are now going to do an exam on ecology' and if you don't choose ecology you don't do that exam ... 'you are now going to do your essay question' is okay ...

So the structural elaboration was to open up all the lectures to anyone who wished to attend and to change fact-based examinations, to essay-type questions on various overarching themes. Students were under no obligation to attend a particular lecture. Students were supported through the use of the 'three legged stool' of lectures, tutorials and practical work. These structures were already in place and so this whole experiment was really the actualisation of a potential that had already been possible. The facts to be studied were chosen by the students for themselves. Pedagogy shifted to become more challenging and to address deeper questions and overarching themes within the discipline. As a result, students' agency in learning increased. Students' engagement with the facts allowed them to follow their own interests, motivating them to take on challenging work.

This structural elaboration led to the new situation. At Time point T2 assessment structures are more demanding, as students have to build their own frameworks and models to make sense of what they learn. The discursive structure within tutorials changes to concentrate on facilitating, guiding and deepening students' chosen paths, with less emphasis on factual recall. Essay writing, and understanding what it is to be a scientist become more important than simple factual recall. As a consequence, students change themselves. They are structured beings after all, and they develop their own embodied capacities to move independently within the discipline, scaffolded by their tutors' guidance, building their own practices as developing scientists. As Margaret illustrates, the resulting demands on tutors are much greater than they were before.

... by the time they get to the third year, they [students] know so much more than me and that's ok too, that's great..... but getting them to think in terms of questions to be asked rather than facts to be known is ... that's what I try and do ... (laughs).

New social conditioning develops as follows as a result of the changed situation at time T2. Student agency is enhanced as students take more control of how they learn and make their own choices and decisions; build frameworks and apply models to information that they select themselves. These new social conditions give rise to a shift in social relations.

There are now changed relationships between tutors, lecturers and students at time point T2. Students take more responsibility as they learn and this leads to new social interactions at this time. The role of the tutor becomes more demanding needing a deeper understanding of the overarching themes, models and frameworks involved in zoology, over and above their own specialism. Socratic teaching methods which challenge students more, deepens in the tutorials. The process also gives tutors experience to develop the personal embodied properties needed to teach as time goes on, but for this very reason it is demanding and requires more time.

New structural elaboration takes place as a result; for example furnishing suitable tutors for each student is now especially important and there are some moves afoot to make use of technology to help to organise the matching of students to tutors efficiently. These structures are not fully in place but are potentially fruitful. At the same time, as a result of changes in HEFCE²⁶ funding, some structural pressures on time and resource come to the fore. Economies of time and effort mean less time is being given to tutors to meet students' needs. With the various new changes in the way research is measured and funded, new pressures arising from the research agenda, take staff time away from teaching priorities. This brings us to time T3 which is when the interview with Margaret Hastings took place on the eve of her retirement.

Time point T3 describes the latest situation. Difficulties are beginning to be felt in persuading staff to commit time to teaching in the way that they used to.

....in the past I used to end up writing letters to individual tutors saying could you please give a series of... 40 [tutorials to] second year students. But as everyone did, it usually worked ... it just took time.... now it's kind of ... much more loose and ... you feel you're asking people to do a favour much more ...

Division between research and teaching roles is exacerbated and tends to cause frustration for staff under pressure to develop high quality research, while still teaching to their ideals. Economic pressures are eroding the 1:1 tutorial system making it difficult to meet individual student needs. Levels of frustration and stress are pernicious, affecting tutors and lecturers at a physiological level as well as at a social one and hence eroding their agency as pedagogues i.e. their capacity to pursue pedagogic strategies effectively. This can result in some individual lecturers feeling negatively about teaching.

... and there's so many people... who would do everything they can to escape the responsibility of teaching. ... the job is ... University lectureship ... and all the security and privileges that go with that and they do the absolute utmost to get somebody else to do their teaching for them.

²⁶ Higher Education Funding Council for England

At time T3, the effects of market forces are evident in the research agenda, as well as affecting resources like the museums. In the light of such pressures, it is possible that there might eventually be a reversal of the gains at time T2 in the future.

What must the world be like for these things to be appearing in the discussion with Margaret? At the *global level*, there is an explosive expansion in the discipline, caused by technology and the sheer number of researchers. This leads to the inadequacy, for new zoologists, of learning by rote, or learning a fixed set of facts or procedures. Instead, there is need for a greater engagement of student reflexive agency, in this fast moving discipline. At the *institutional level*, Margaret recognises the need for changes to pedagogy and takes advantage of the existing *institutional* structures of lectures, tutorials and practical sessions, as well as the excellent library and museum resources of university Z to actualise potential affordances of these to put together a dynamic approach to learning in science which has emerged as a result.

This process coexists with a different process stemming from the *national* drive to commodify, control and monitor research. At an *institutional* level, lecturers and tutors have to find external research funders, putting severe pressures on their time and impacting upon pedagogy. Recruitment of new faculty is carried out under pressure to recruit specialist researchers, as opposed to generalists with teaching experience. Margaret is not alone in noting this trend. According to Michael Clarke also lecturing at University Z:

And it's not just that group sizes or number of contact hours has declined. The whole relationship has changed as well because if your priority is to get top researchers in..... you tend to go with the specialists rather than generalists. The whole University Z system depends on there being a large population of generalists who are willing to teach and are able to teach across a wide range of subjects.

A third process that comes into play, stems from the *global* search for markets for private higher education as outlined in chapter five. At the *national* level, this has developed into a resource squeeze and a marketization of higher education

management and discourse. At an *institutional* level, University Z, though much better off than the other two institutions in this study, is looking to make cuts in resources where possible and the one-to-one tutorial system is perceived to be under threat of erosion. Given this combination of processes, the pedagogical developments that Margaret and her colleagues achieved, is threatened by pressures on tutors' time and highly specialised researchers' lack of generalised experience.

Both participants in this chapter have had considerable autonomy and scope for innovation in their pedagogy. Each of them values ways of teaching that allow students to develop their own disciplinary practice as they learn. The pressure to increase student to tutor ratios in tutorials is felt at undergraduate level at University Z. The national changes in research evaluation can be detected in terms of increased stress on teaching time. When Hassan looks at current developments in higher education in England he sees the narrow and potentially damaging effects of human capital approaches to the purpose of education.

Hassan sees a strong relationship between citizenship and education. He considers the act of citizenship as educational in itself and vice versa. Critical questioning of society and critical engagement in resistance or in making changes to society are themselves educative. According to Hassan, this is conducive to the development of the commons. When the interests in a society are split, the question of who pedagogy serves comes to the fore. In colonial India pedagogy was developed to create a class of record keepers and bureaucrats to serve the British Empire. In current conditions of marketized higher education in England, pedagogy is shifting to fit a commodified model of education where degrees are for sale. Pedagogy serves those who gain from a marketized higher education system.

For Hassan, students' involvement in reformulating and applying knowledge in contexts of their own is an essential aspect of critical pedagogy. For this the students' use of their own mother tongue to facilitate their use of their own

experiences as they learn, are important aspects of authentic learning. For Hassan the separation of thinking from doing, of the work of the head from the work of the hand militates against genuine, authentic involvement in learning. This is because such separation prevents students from reconfiguring what they have been taught in their own contexts. It is through such reconfiguration that students develop embodied personal properties as a result of their education. These are properties which can give rise to emergent powers to enhance students' agency in favourable circumstances. However, separation of thinking from doing does serve a system where knowledge is commodified, packaged and sold. A system in which it is the exchange value of knowledge that counts, not its use. Such an education system becomes a game in which competent students can be trained to excel. But all students are then left with is the exchange value of their education. They may not be all that competent at making use of it. For Margaret, in a world where new discoveries are being made very fast, it is no longer possible to rely on learning and a body of facts and procedures for all eventualities. The landscape changes very fast and students have got to develop their reflexive powers in order to discern and evaluate what is important in this fact-rich environment. A subject like zoology begins to fragment into many subsections and it is not possible to learn it all through facts and prescriptions and still be able to keep up with new developments. Students' agency in the learning process becomes essential. They need to be able to follow their own interests and develop models to start to understand overarching themes and practices within the discipline. The research/teaching divide takes staff resource away from the kind of generalist teaching that can equip students to cope with such a fast changing environment. New staff are recruited to follow a very narrow research interest and do not have the time or resource to develop the intricate pedagogic skills that undergraduate students need. For Margaret examinations are secondary to the students' wider education. Margaret has made significant changes to the way her subject is taught at University Z; however the pressures of marketization are leading to resource constraints and a research/teaching divide which may well reverse her achievements. This

chapter ends the presentation of empirical data and the next chapter concludes and draws the research to a close.

Chapter Ten: Conclusions

This thesis is a testament to the power of human agency when it comes to acting in line with deeply held pedagogic values. In this chapter, insights into emergent pedagogy in higher education in England are outlined, and implications stemming from this research are drawn out. The methodological issues outlined in chapter six have been effective in opening up the data to reveal aspects of emergent pedagogy and changing structures. Morphogenesis has proved to be a lens through which to start to unravel the extremely complex interplay of various physical, social and discursive structures, both within human beings and in the contexts in which they live and work.

This research has given some insights into the effects of the way higher education is becoming marketised (Ball, 2009; Ball, 2012) and education itself is being viewed as a commodity for sale. At the global level, universities are subject to comparison across the world (Henry *et al.*, 2001) and there is the constant pressure to score highly in international league tables. A narrow but dominant view of the purpose of universities as tied to economic development (Levidow, 2002; World Bank, 2011) appears to have been accepted (Shelley, 2005) at universities X and Y. This is reflected in their governance and strategic plans, while at University Z, which has a collegiate federal structure, it remains a question for public debate.

At a national level, the withdrawal of government funding (Henkel, 2007) leads to pressure on pedagogy, either in the form of a lack of resources, which means tutorial numbers increase, or because it is difficult to fund teaching accommodation and materials. Universities find themselves competing with each other at a national level. There are pressures on staff time from the growing research-teaching divide, and from the constantly changing goalposts of the research evaluation frameworks.

As state provision is rolled back (Ball, 2012) and the higher education system becomes dependent on student fees or private partnerships, managers become preoccupied with marketization (Broadbent, 2007). Rather simplistic 'performance indicators' are starting to be used to compare courses. This takes decisions about what counts as academic quality further out of academic control.

At institutional levels, the same global and national mechanisms have been seen to have varying effects across the cases studied. In all of them, there is some effect of the resource squeeze. In terms of governance, staff at the high status collegiate University Z retain a high degree of autonomy over academic issues and cuts in funding can be ameliorated by the fact that colleges have some autonomy and private resources. However tutorial numbers are creeping up as the research teaching divide cuts into teaching time. At the distance learning Institution University X, there are changes in the governance structure at faculty level to give more power over academic decisions to management, as opposed to academic staff. Here there is some evidence of financing pressures, and the university embraces the market as part of its strategy. At the post '92 University Y, power was always with the governing body and their preoccupation with key performance indicators and new forms of 'agile' managerialism are affecting pedagogy as Jim Hope's account traces. Within these contexts the following insights into pedagogy were gained.

Insights into Pedagogy

Every participant's account contained a tremendous depth and richness about their pedagogy. This was particularly evident in the interviews with more experienced lecturers, even when there were numerous structural constraints developing. High levels of agency were in evidence in the cases studied where people had greater resources, in the form of personal embodied properties

(Archer, 2012), to draw upon. They found themselves with particular emergent powers in particular contexts, and constraints gave rise to even more pedagogical developments. In all cases the ability to evaluate, and to stay true to, valued pedagogic principles was related to reflexive deliberations and the courage to act.

One theme that recurred throughout the interviews was participants' desire that students engage in elements of authentic practices as they enter into a discipline. There is more to becoming a sociologist, a teacher, a zoologist or a lawyer, than the simple learning of facts and procedures. Students have to have some actual involvement as new practitioners of the discipline; they need to be able to engage in this at an appropriate level. Students need power to control the way they learn and they have to be inspired to set out on such a trajectory of experiences that will allow them to gain the necessary personal embodied properties, in real contexts of practice. In order for students to understand the world they are entering, they need some experiences to work with. Students who are not born into an environment that is rich with the tacit experiences of the discipline need to gain experiences through such participation, and develop upon them as part of their trajectory of learning.

Nicola, faced with University X's withdrawal of field trips, tries to bring the mud, rain-soaked scrabbling, smells and tastes which make up experiences of the geologist's 'dig' to students in a resource-rich environment who are not out there, while taking the databases, books, on-line resources to students out in the field. In the course of this she investigates the new forms of collaboration that develop. Ann and Mary send their novice teachers out on their own to carry out activities which let them experience life from the learner's point of view, and then use it to develop metacognitive analyses about what the process of learning might be for future pupils they will teach. The experiences are authentic as prospective teachers experience struggle outside their comfort zones in ways that their pupils will often have to. The source of near despair for Sam is that increasing aspects of students' studies are being prescribed, dropping lecturers'

expectations of students to engage in wider reading to gain experiences of academic study, that are so essential to the discipline of sociology. When even what tutors do, is prescribed in minute detail, authentic engagement and the involvement of student agency in learning becomes much more difficult.

The pressure to move away from authentic engagement towards more prescriptive processes is evident at all three universities, but to differing degrees. Participant accounts show how emergent pedagogy is a result of interacting processes, or mechanisms, at global, national and institutional levels which interact with processes put in place by participants, as they draw upon their own embodied properties and make use of the increased emergent powers available in the circumstances.

The case studies have shown how it is possible to move from participants' descriptive accounts, to identify and analyse possible causal mechanisms arising from institutional, national and global structures, using retrodiction. This analysis is combined with evidence of participants' own personal embodied properties, leading to emergent powers in some situations to gain some purchase upon possible causality. Nicola's geology field trip would have been closed down if not for her intervention. Ann and Mary would have ended up with huge packed lectures and passive students, had they not taken action.

The principle that students should engage in their own authentic practices as part of their learning in a variety of disciplines should come as no surprise. If knowledge arises from human practices, then students will eventually have to engage in them to be able to reformulate their own knowledge. Hassan articulates the problems that arise when the work of the head is separated from the work of the hand and Ann takes a similar position. One of the consequences of human ability to articulate and to exteriorise memory (Steigler, 1998) in artefacts has been the emergence of the possibility to separate knowledge gained directly, from knowledge developed by others and recorded in books, films or the web etc. This can be a very good thing as it enables future

generations to learn from past ones. This thesis however has gone some way towards showing how political contexts such as the need of the British Empire for colonial administrators, or the current preoccupations of global capitalist markets with privatisation, can distort learning and pedagogy at the level of lecturer – student interaction. This can take the form of managerial desires for marketable, exteriorised knowledge, being set against students' needs for authentic engagement in practices as agents in their own right. This process can be driven by the commodification of education. In the case of Jim at university Y where lectures were put on-line, we see an interesting case of alienation of the product of lecturers' work from their teaching practices. Such alienation turns complex processes of pedagogy into mere artefacts that could be sold to the highest bidder, as part of a *learning package*, at some future date long after the person who produced them has gone. Jim's account has illustrated the richness and context appropriateness of pedagogy that is lost in such a process.

The pressures towards commodification and markets were also evident in participants' accounts, whether it be Nicola's manipulation of the mechanisms to gain funding for her project; Sam's account of greater prescription and simplification of courses; Hassan's description of staff on the 'rack of the RAE'; the development of monitoring and performativity regimes through key performance indicators in a department at University Y; Margaret's description of 'hard-nosed people' who run museums for profit or her description of the absurdity of the research framework and the constant pressure to pursue research grants. Margaret at University Z and Ann and Mary at university Y have all had to adapt to changes which initially stemmed from resource cuts.

Pedagogic approaches have been rescued, in a number of the cases, through agential action by lecturers. Whether such actions are sustainable over time or not is uncertain. Hassan carries on in spite of the pressures, absorbing the overwork himself and working long hours; Margaret's changes may not survive her retirement in the light of the difficulty in getting enough tutors and given the pressures which are now driving research and teaching apart. Ann and Mary's

project would not be possible now four years later, because the new changes to timetabling structures would not allow any flexibility as Jim's case shows. Nevertheless there is a dogged resistance shown in the depth of passion with which people speak of their pedagogic values.

The desire that students should engage in authentic practices is also connected with the fact that learning itself is a process of laying-in personal embodied properties, via experiences which a well aligned curriculum can give students. This takes us back to the point made in chapter three about the dialectical (Sayers, 1985) nature of human interaction with the world. We change the world and in doing so we change ourselves. To gain the personal embodied properties that will allow students to become proficient in changing the world, they need to reformulate the knowledge acquired through their study, as Hassan pointed out in his discussion of learning and unlearning. They can do this by developing their own practices and testing out, in their own context, what they have learned from the exteriorised knowledge of the past practices of others via books, lectures, the internet, museum artefacts and so on. This has profound implications for the engagement of learners' agency. Each learner's own pace of development has to be taken into account, as participants have pointed out. To facilitate learners' readiness to engage, while at the same time challenging them is an important aspect of pedagogy. Collective collaboration and scaffolding were shown by Ann and Mary to be useful ways of doing this.

At some point the pedagogic authority genuinely needs to let go, as Hassan put it. Ann and Mary discovered that the less they controlled the learning, the richer it became. However, the regimes of performativity, which are born of managerial needs to control pedagogy and simplistic markers of quality, which remove quality from academic control, lead to increased prescription of pedagogy. What constitutes *best practice* becomes located in decontextualized models of what is being called *teaching and learning*. Markets require branding, kite marking, measurement and control and this sits increasingly uneasily with the insights into pedagogy gained from the participants of this project. This is

one way in which the increased marketization of higher education is detrimental to the kind of pedagogic approaches that lead to authentic student involvement.

Sam Lewis claimed that a move away from students' learning about authentic practices towards prescriptive, algorithmic approaches prevented students becoming critical and self-reliant. This may be part of a much bigger and deeper development in modern capitalist society where people are slowly becoming less aware of how to meet their needs for themselves. People may well be less able to formulate, let alone find ways of meeting their own needs in an increasingly complex and fast changing world. Rather than agency being about making changes to one's environment in order to individually or collectively flourish, people are being directed away from exerting agency, remaining unreflexive, uncritical and dependant on others for instructions as to how to live and work.

As Hassan pointed out, a student's degree is actually consumed by employers in the end, not by the student, who only gains the right to be employed for a higher wage. In this regard, knowing how, is being separated from knowing that, and often suppressed. If you know how to do things then you can meet your own needs. If you have simply been guided through the process of obtaining a paper qualification, merely to exchange it for a job, you remain dependent. If proletarianisation means to become totally dependent upon corporations in order to meet every human need, food, shelter, warmth, then this process is being extended to social and cultural human needs too, and to the fulfilment of artificially created longings, cravings and desires. When people's need fulfilment has been totally alienated from them in this way and people have no way of even defining their own needs let alone meeting them, they are totally in the power of those who will offer to meet such needs at a cost. For such a situation to be perpetuated, people have to be made ignorant of even those basic life fulfilling abilities that they still have. The diminishing of the academic independence of universities is part of this spread of ignorant dependence, which is taking place at an unprecedented scale and leaves people disarmed in

the face of a very uncertain future. Reflexive deliberation is even more essential in today's fast changing world and higher education plays an important part in developing this capacity in citizens. If the academy fails to lead to enlightenment, in the Kantian sense of emergence from immaturity (Kant, 1989 [1784]), where else would people find the courage to be wise?

The research - teaching divide

Research can serve many purposes; it can be integrated with teaching most easily when it advances the frontiers of knowledge and there is also an alignment between research interests and teaching. People need the time to allow research to mature, and to enliven their teaching. Research can give prestige and high status, but is dependent on funding. Manipulation of reductionist markers of quality can bring regimes of performativity into the research process. It cannot but accentuate the research-teaching divide, while increasing the hold of managerialist and prescriptive practices. In this way research is at the mercy of factors that may have nothing to do with advancing knowledge, but about scoring in league tables which subject it to market whims, with attendant dangers for the independence of the academy.

As research becomes commodified it shifts away from the preoccupations of the disciplines as such. It slips into being less preoccupied about making advances in knowledge and more about developing cutting edges in areas of high profitability for the funder. This increases the research-teaching divide causing frustration and pressure on academic time which has to be taken away from teaching, rather than research and teaching being integrated as Margaret's account shows. Faculty if recruited on the basis of their research portfolio can severely distort what may be taught in the department, as this sets up a process by which highly specialised people have to churn out papers without time to learn how to teach generally across the discipline and develop the experience, of authentic engagement in practices, of their students, outside of one narrow specialism. Interestingly, this question came up most strongly at University Z

where high level research is expected from each lecturer and tutor. Hassan and Margaret amongst others raise this as a problematic issue. Research is intimately connected with pedagogy and gains from being kept independent of commercial interests and in keeping with the Haldane principles (Haldane, 1918) and the Magna Charta Universitatum of Bologna (Magna Charta Observatory, 1988). The influence of such research on pedagogy could enrich and enhance education for the sake of the commons, instead of simply being a commodity for sale at a profit.

The subject of this thesis has been the emergent pedagogy in higher education in England. The pressures upon pedagogy are evidently great as staff have to respond to global, national and institutional mechanisms towards marketization and commodification of higher education. These mechanisms threaten the very basis of student agency in entering new disciplines. At the same time these mechanisms have to contend with the internal personal embodied properties that contribute to the agency of lecturers to whom the learning of their students is important enough for them to try to control social interactions and structural elaborations to improve learning. Drawing upon such internal resources, some people harness considerable emergent powers to resist and to change the structures around them. What emerges, in terms of pedagogy is neither pre-determined nor easy to predict in each case. What is clear though is that difficulties sometimes give rise to interesting and innovative pedagogy. This research has touched upon a handful of cases each of which reveals its own particular insights into the fascinating mystery of how people learn the various secrets of the human cultural system and, through reformulating this knowledge, use it in a morphogenetic way to change their physical, social and discursive environments and themselves. In this process they create new structures and practices and hence new knowledge.

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Appendices

Appendix A: Critical Discourse Analysis of HEFCE Strategic Plan

Hefce strategic plan (Higher Education Funding Council for England, 2009)

TMR is Tim Melville-Ross (TMR), CBE Chair of Hefce

AL is Introduction by Sir Alan Langlands (AL) Chief Executive of Hefce

Colour codes stand for:

Performativity regimes

Commodification and redefinition of what education is and what its aims should be.

Creating markets

All in note form. Analysis has been used to feed into the main thesis and appropriate parts quoted in the main text where needed.

Notes on the Ideational, Relational or Modal aspects	List of the data (quotes from document)	Comment/ discussion
Ideational: what is going on? What is its role in society?		
Links HE with the economy. HE is to serve the needs of	Universities and colleges are shaped by, and themselves shape, our economy and society p4. (in introduction) AL	HEFCE is working strategically to link HE with the economy, providing the needs of 'employers'.

Notes on the Ideational, Relational or Modal aspects	List of the data (quotes from document)	Comment/ discussion
employers who need people with new skills and also need new innovations.	<p>to ensure that higher education enhances our economy and society.p2 TMR</p> <p>We are also investing significantly in developing higher education provision that is responsive to the needs of employers.p2 TMR</p>	<p><i>A mechanism is being put in place to give money to make HE provision 'responsive' to the needs of employers'.</i></p>
Tying HE tightly to industry	<p>This year, we have a fifth core strategic aim – employer engagement and skills.p2 TMR</p> <p>we wish to emphasise further the importance of building strong relationships between higher education institutions and employers.p2 TMR</p> <p><i>and further:</i> In purely economic terms, the role played by higher education</p>	

Notes on the Ideational, Relational or Modal aspects	List of the data (quotes from document)	Comment/ discussion
HE is a panacea to the crisis and the problems of the economy.	<p>institutions (HEIs) as the incubators of new industries and new talent will be especially important in the years to come. (p5)</p> <p>Through world-class teaching, research, and increasingly close interaction with businesses and communities, they are helping to create the conditions which will lead the country out of recession and to full recovery.p3 AL</p>	<p><i>Commodification of HE.</i></p> <p><i>Teaching and research.</i></p> <p><i>Students as market players.</i></p> <p><i>Competition for students (competing with whom?)</i></p>
HE is a global commodity both in terms of teaching and research.	3. Higher education is now a major export industry. Demand for higher learning is escalating across the world, and there has been a dramatic expansion of HE in some other countries, leading to	

Notes on the Ideational, Relational or Modal aspects	List of the data (quotes from document)	Comment/ discussion
There is a need to address the questions arising from the Bologna process and European legislation, on Quality assurance, research and study patterns.	<p>increased competition for students. There is also a global market in the recruitment of leading academics and in the award of research contracts. p5</p> <p>European policies are gaining a higher profile and we must engage with them on, for example, quality assurance, lifelong learning and research p5.</p>	<p><i>This may be connected to the contention between EU and USA and others. England needs to also access the European markets and needs to be able to compete in terms of quality.</i></p>
Relational: Who is involved?	<p>HEIs, FECs, HEFCE, p2</p> <p>Everyone with the potential to benefit from higher education.</p> <p>Employers.p2 TMR</p>	
Who is doing what to whom?	<p>We have already supported higher education institutions to respond to the economic difficulties in the allocation of our Economic Challenge Investment Fund, through which institutions will offer</p>	

Notes on the Ideational, Relational or Modal aspects	List of the data (quotes from document)	Comment/ discussion
<p>Links funding to efficiency and hence sets up the scene for performance management at all levels</p> <p>Followed by a move to model how such performance management should take place in HE institutions.</p>	<p>practical help to 50,000 people and 11,700 businesses.</p> <p>We are also investing significantly in developing higher education provision that is responsive to the needs of employers.p2</p> <p>...public funding cannot be taken for granted. It will depend on being able to show that the public money invested in higher education is used to maximum effect and that we are constantly striving for high standards through these difficult times. AL p3</p> <p>KPT: key performance target. These targets will allow us to measure progress in some critical aspects of this plan. p2</p> <p>the internet and other new</p>	<p><i>There is a driver being created in order to drive 'efficiency' and funds are used to force cash hungry institutions to vie for these. This also has elements of market creation involved as some of this striving for value for money implies devastating the sector as the funding is in the short term only and its later withdrawal will make the sector collapse, making way for privatisation.</i></p>

Notes on the Ideational, Relational or Modal aspects	List of the data (quotes from document)	Comment/ discussion
Markets in the technologies and access to markets through them.	<p>technologies, many arising out of HE, give us new opportunities to compete and connect across the world.(p5)</p>	<p><i>This is mirrored in the way HE institutions now go on to write their strategic plans and their performance management regimes. Leads to things being done 'to' HE institutions and staff.</i></p>
		<p><i>This is about the use of HE to develop new technologies; to access new markets through IT and thus to further serve the needs of industry</i></p>
Also what do objects of meaning tell us about the social relations between people?		

Notes on the Ideational, Relational or Modal aspects	List of the data (quotes from document)	Comment/ discussion
Modal (Material): What are the material forms in which the texts produced in the discourse are embodied?	Electronic document, available on HEFCE website. Gives no author, but has preface by TRM (chair) and an introduction by AL (Chief executive).	<i>On-line document. Set up in a particular way with headings and numbered sections. It appears to have become a template for HE institutions to use in their strategic plans.</i>
What are the constraints of this mode?	Allows statements to be made by faceless entity, not the government, but still playing the role of governance.	
What are the affordances of these modes?		
What other material forms are drawn upon?		

Higher Education Funding Council for England. (2009). 'Strategic plan 2006-11'. [Online], 57. Available at: http://www.hefce.ac.uk/pubs/hefce/2009/09_21/09_21.pdf. [Last accessed 07/08/2010].

Appendix B: Critical Discourse Analysis of University Y's New Strategic Plan 2010-2015

This table is laid out differently from Appendix A due to the greater volume of all the material used.

Evidence from the text is included in **green**. Significant absences are in **red**. Significant economic change is coloured **purple**. The rest is comment upon the document, which develops the analysis which has contributed to the thesis. Significant aspects have been quoted directly in the text where relevant.

Ideational content	Interactional aspects	Mode
<p>Overall: This is a document produced by the institution, the governors in fact, in order to unite all the staff around common aims.</p> <p>Encapsulated in the slogan on the front cover 'Challenging Individuals and Organisations to excel'.</p> <p>It is also a public document claiming to represent the university.</p> <p>Logo at the top left.</p> <p>The document makes various commitments on</p>	<p>Board of Governors document is introduced by the chair of the board of governors whose signature appears on second page.</p>	<p>Colour printed by professional printers. Designed by professional designers. HelveticaNeue-Light font. (this font is not one of the normal ones available on Microsoft office Word thus indicating the professionalism involved.)</p> <p>Much use is made of bullet pointed lists, the reduction of aspects of the document to numbers such as 5 strategic drivers etc, makes for a false simplicity. The document is colourful and illustrated with photographs and many commitments are in the form of captions under</p>

Ideational content	Interactional aspects	Mode
<p>behalf of the staff exceeding their current contractual obligations. It purports to have been the result of extensive consultation, but this fact is contested and the nature of this consultation is not made clear. In fact the document is currently being taken to staff for discussion.</p>		<p>photographs (often without any clear connection between the photograph and the caption).</p> <p>This document is also available electronically.</p> <p>No page numbers, but the document is 28 pages long.</p>
<p>Front Cover: On the front cover there is the claim that the university serves a diverse group of students. It also makes implicit claims about students' use of technology by students. The fact that some students are women is claimed, but the degree of agency of the women is low</p>	<p>Actors in the front cover 2 young women and one young man.</p> <p>Ethnic minority women may make up the majority of 'our' students but their role is essentially passive when compared to men. (see prev column)</p> <p>('white') people are absent altogether. This is unrealistic and significant in that it points to a preoccupation with appearances.</p>	<p>Digitally mastered colour photograph.</p> <p>(both printed on card and in electronic form inserted into a PDF document and downloadable from a website as well as an e-mail attachment)</p>

Ideational content	Interactional aspects	Mode
<p>compared to men.</p> <p>Front cover shows three students, two females and a male, all young, spanning different minority groups. significantly it is the male who has his hands on the keyboard in the role of instructing or showing something on the screen, while one female looks on with an expression of extreme joy, while the other is passive in the background.</p>	<p>Individuals and Organisations are challenged to excel.</p>	
<p>Forward in the form of the Chair of governor's letter:</p> <p>A letter from the chair of governors claims that in considering what the university should be about, the following categories are important:</p>	<p>Actors:</p> <p>The university has positioned itself; has been focussed on developing new approaches; is committed to adding value; will achieve its vision; is well placed to respond to the demanding economic circumstances; is well placed to meet the needs of students, business and the</p>	<p>White text upon blue background is very hard to read electronically. This would appear to contrast with the professional quality, which implies the use of proofreaders and editors. The implication of this glaring oversight may perhaps indicate that the readability was not considered to be important by the professionals who</p>

Ideational content	Interactional aspects	Mode
<p>Adding value</p> <p>Creative approaches to learning teaching and research.</p> <p>Responding to the demanding economic circumstances</p> <p>Be business facing</p> <p>Be innovative and enterprising</p> <p>Challenging individuals and organisations to excel.</p>	<p>community; is a leading business facing university; continues to grow in stature as an innovative and enterprising university; challenges individuals and organisations to excel.</p> <p>Demanding economic circumstances requiring response.</p> <p>The UK location of university</p> <p>The UK's higher education sector to which the university belongs (note the passive formulation of the last 3 actors here)</p> <p>The strategic plan</p> <p>Develops a new model of university.</p> <p>I (name) am chair of the Board of Governors; am confident.</p> <p>Students will have needs met</p> <p>Business is faced by university</p> <p>Community will have its needs met.</p> <p>Reader (implicit although it is not clear who this is envisaged to be)</p>	<p>produced the document; the document being, instead more valuable in its potential to impress by its form rather than its content....an increasingly popular genre, where the content of the document is widely acknowledged to be empty, note that none of the epistemic categories are actually elaborated upon, thus they could mean all things to everyone and different things in different contexts. However they do have a very definite content which is developed over time and in the real contexts in which the activity of the institution takes place.)</p>

Ideational content	Interactional aspects	Mode
	<p>Staff conspicuous by their absence in the chair of governor's introduction. (in fact considerable linguistic feats have been carried out with the use of the passive form in order to exclude this category of people. By whose effort is all this to come about?).</p>	
<p>Context section spells out a shift in direction for the university from establishing itself as a leading business facing university (which is deemed to have been achieved) towards being an innovative and enterprising university. The previous Strategic Plan (2007-12) has been successful in positioning University Y as the UK's leading business-facing University.</p> <p>The 2010-15 Plan builds upon this</p>	<p>Actors:</p> <p>The university acts as an exemplar; shapes; leads; aims to be an innovative and enterprising university.</p> <p>The 2007-12 strategic plan has been successful; positioned the university as UK's leading business facing university.</p> <p>2010-15 Plan builds upon success; presents clear focus for University Y as innovative and enterprising.</p>	

Ideational content	Interactional aspects	Mode
<p>success and presents a clear focus for University Y as an innovative and enterprising university.</p>		
<p>Our Vision section: Here there is some development upon the points in the governor's letter. Again we have the characterisation of the university and the role it is to play in the world. Key epistemic categories here are:</p> <p>To be an exemplar in the sector</p> <p>To play a leading role</p> <p>To shape</p> <p>Address the economic and social challenges facing the UK in increasingly competitive global markets global</p>	<p>Actors: Note that the emphasis now shifts to We and some linguistic efforts have gone into this move as there is a singular/plural mismatch here.</p> <p>We: are an exemplar in the sector; play a leading role; shape; Address the economic and social challenges facing the UK in increasingly competitive global markets global</p> <p>Provide flexible and transformative learning; commit to adding value to our partners and delivering positive and productive engagements with</p> <p>business, industry and the professions. Note that</p>	<p>Photograph in colour (digital)</p> <p>Electronic text and also available in glossy paper copy. Black ink on blue.</p>

Ideational content	Interactional aspects	Mode
<p>markets.</p> <p>Play a central role in the local and regional economy,</p> <p>Contribute positively to the social and economic development of this local and regional economy.</p> <p>Build our international profile and global reputation.</p> <p>(Note all these epistemic categories are consistent with a human capital model of education which can be seen in OECD, World Bank documentation, thus are part of a global neo-liberal agenda). The term business facing is alone a University Y term.</p> <p>It is not clear from the text, who the</p>	<p>these latter are the recipients of goods and the professions is entering here for the first time. Not present in earlier text. (is this a reaction to the discomfort that staff have expressed with universities run solely for the interests of business? Could it be the need for the university to train health and other professionals funded by the state? Could it be to do with the cutting of HEFCE funding which leads to the need for universities to attract students, many of which in the postgraduate sector are professionals? There is something here which could point to a generative mechanism worth exploring.)</p> <p>The shift to 'we', again allows the actual actors to be shrouded in mystery, is 'we' the staff, the governors? The institution (and</p>	

Ideational content	Interactional aspects	Mode
<p>competitors are and what this role of the university means for staff or students, pedagogy or curriculum.</p> <p>The emphasis on challenge and leading is developed further in the photograph of a climber on a climbing wall.</p> <p>Achievement and challenge, fitness (of the athlete).</p> <p>The climber is male.</p>	<p>what is that exactly?)</p> <p>Innovation, creativity and an enterprising mindset</p> <p>now enter the document as actors albeit passive ones and these: are defining characteristics.</p> <p>The university comes back as an actor and is now used synonymously with 'we' in</p> <p>Continue to play a central role in the local and regional economy,</p> <p>Contribute positively to the social and economic development of this local and regional economy.</p> <p>Build our international profile and global reputation.</p> <p>Young male in the photo serves as a metaphor for 'we' and 'the university'(athletic, fit, achieving, intense concentration on challenging environment),</p>	
	<p>Our have a mission.</p> <p>University</p> <p>Individuals</p> <p>Organisations</p>	<p>The words 'our mission' are in HelveticaNeue-Light font at size78, while the slogan is in the same font at</p>

Ideational content	Interactional aspects	Mode
	<p>Business conspicuously absent.</p>	<p>size33. Again electronic and glossy black print on blue background.</p> <p>A blue line separates this from the next section which shares the same page, this is 'Our values' (same size and font as the mission)</p>
<p>Our Values: This section sets out more epistemic categories, this time ones about what should be valued in higher education:</p> <p>Student centeredness</p> <p>Innovation</p> <p>Creativity</p> <p>Enterprising</p> <p>Support of 'our' people</p> <p>Development of 'our' people</p> <p>Achievement of excellence</p> <p>Celebration of excellence</p> <p>Enjoyment in work</p> <p>Enjoyment in learning</p>	<p>Students recipients of student centeredness,</p> <p>People belong to us; are developed; are supported. (By whom? If not themselves)</p> <p>Excellence is achieved, is celebrated.</p> <p>The Individual is respected.</p>	

Ideational content	Interactional aspects	Mode
<p>Respect for the individual</p> <p>Integrity.</p> <p>The following core values will inform and sustain all of our activities.</p> <p>We aspire to be:</p> <ul style="list-style-type: none"> – Student-centred – Innovative, creative and enterprising – Committed to supporting and developing our people – Focused on excellence and its celebration – Dedicated to enjoyment in learning and work – A place of integrity where the individual is respected <p>Note the use of bullet points, thus marking each as a category to be considered an important aspiration. Such</p>		

Ideational content	Interactional aspects	Mode
bulleted lists tend to be exclusive as well as giving the impression of being discreet categories.		
<p>Our strategic Focus: Now the processes for developing the strategic plan are laid out.</p> <p>5 drivers are identified: Once again note use of the bullet pointed list.</p> <p>To be monitored by (note the reduction here) 5 corresponding sets of key performance indicators.</p>	<p>5 Key strategic drivers: will be focused upon to deliver our vision; their delivery will be underpinned by:</p> <p>1 Academic Profile</p> <p>2 People and Culture</p> <p>3 Financial Strength</p> <p>4 Infrastructure and Sustainability</p> <p>5 Community Engagement</p> <p>will all underpin the strategic drivers.</p> <p>A detailed strategy and action plan. Will support the above 5.</p>	<p>Same font size 88</p> <p>White print on blue, which is very difficult to read electronically.</p> <p>There is an image at the bottom of this page of a black girl sitting at a row of computers (mainly not in use) giving the impression of a well resourced university and a high computer to student ratio.</p> <p>The ethnicity of the girl may be supposed to represent people and culture and perhaps community engagement, the computers possibly representing infrastructure and financial strength.</p>
<p>1 Academic Profile</p> <p>2 People and Culture</p> <p>3 Financial Strength</p> <p>4 Infrastructure and Sustainability</p> <p>5 Community Engagement</p>	<p>Key Performance Indicators will help define the future size, shape and profile of the university; will form the basis for monitoring progress. (Note the use of the words 'help' and 'form the basis for' which would imply that something else is in fact also present, that which is helped and that which</p>	<p>There is however nothing to indicate what the image is supposed to be doing on this page.</p>

Ideational content	Interactional aspects	Mode
	<p>develops the monitoring from this 'basis'.</p> <p>The university: whose future size, shape and profile will be determined (partially) by the Key performance indicators.</p> <p>Perfomance: will be monitored.</p>	
<p>The document now considers each of the strategic drivers in turn.</p>		
<p>Strategic Driver 1: Student Experience</p> <p>Two <u>totally new</u> concepts are now introduced indirectly in the captions under the photographs in this section. One is an emphasis on the national student survey and the second is the plan to move at least a quarter of all teaching and learning to distance education by 2015. This reflects a preoccupation with</p>	<p>Students: will be active partners in their learning, which will be transformative. They will be in a supportive educational environment. They will be mentors, ambassadors, communicators and representatives and this will develop the strength of our relationships with them. They will be recipients of best practice and will benefit from the monitoring mentioned in the last section. Their welfare and success will be at the heart of what we do. Their voice will be</p>	<p>This page is followed by photographs which appear to be unconnected with the points made on this page. There is a picture of 3 students walking past a huge, brand new, modern building. The caption under this picture reads: <i>A key aspiration is to deliver an exemplary student experience, placed by our students within the top 40 of all UK universities (National Student Survey).</i> Two blue vertical lines on either side of this statement serve to</p>

Ideational content	Interactional aspects	Mode
<p>the standing of the university in national league tables with all the marketing implications and also out of the blue and without justification or explanation, the preoccupation with distance learning. Apart from these two new concepts being introduced here, there is a move to lay out some epistemic categories for what type of relationships should exist with students.</p> <p>The absence category of staff presumably will need to build these relations, but great linguistic effort has been made to keep this group of people absent from the sentences used.</p> <p>They are subsumed</p>	<p>respected and responded to.</p> <p>We: will be known for: welfare of students first; respecting and responding to student voice; will monitor and evaluate our progress. Note that the strength of our relationship with students is characterised as flowing simply from the student mentor, ambassador, communicator and representative schemes.</p> <p>This would seem to have little to do with teaching and learning relationships.</p> <p>Also note the indirectness of our preoccupation of what we will be known for as opposed to what we will actually do.</p> <p>Exemplary student</p> <p>experience: is placed by our students within the top 40 of all UK universities. (Caption under photo 1 in this section.) This fact is written as an achievement, although it is not</p>	<p>highlight emphasise it.</p> <p>The second picture is one of 4 students looking intently forwards. Their poses are slightly heroic. There is a white female in the background, a brown male at the front (out of focus). Two brown females in the middle. The three females are in focus. The caption reads (again emphasised by two vertical blue lines): <i>A key aspiration is that by 2015 at least 25% of our learning and teaching will be through distance learning.</i></p> <p>There is no explanation of the connection between the photograph and the caption.</p>

Ideational content	Interactional aspects	Mode
<p>within the ubiquitous we and our.</p>	<p>immediately clear what it actually means to be thus rated.</p>	
<p>Strategic Driver 2: Learning and Teaching: In this section staff are mentioned for the first time and it is revealed that in addition to being experts in their fields, they will also be tailoring learning not only to students, but also to cater for the specific needs of unspecified organisations and individuals, they will be experiencing working with industry and the professions too. A variety of provision, with distance learning and non traditional patterns is committed to. Staff will also use technological</p>	<p>Flexibility will be the key characteristic. Our (not clear who this refers to) Provision will be provided flexibly by 'us' The university will be recognised.... Highest quality accredited provision will be provided. We will be known for High quality bespoke learning is what we will be known for (not nse what is provided). Staff experts in their field; will provide engaging and stimulating learning opportunities; have experience of working with business, industry and the professions.(note this is the first mention of staff in the document and the agenda is connected to business, industry and the professions.)</p>	<p>Heading, elaboration followed by bullet pointed list. No photographs in this section.</p>

Ideational content	Interactional aspects	Mode
<p>developments to enhance the learning provision. Not only this but staff will be involved in problem solving, creativity and innovation. This increase in the workload of the staff and perhaps other changes to do with servicing industry is currently not covered by their contracts. It is introduced in this section, buried well into the document. Here we have an example of a move which takes us further than a simple development of epistemic categories. The agreement of staff, to the implementation of this document could be considered to override existing</p>	<p>Variety of provision- will form part of what we will be known for.</p> <p>Traditional full time programmes of study - will be transcended.</p> <p>study patterns and delivery modes, including remote and distance learning. Will be broadened.</p> <p>technological developments- will be embraced (by whom? The passive form is useful here to cover up the increase in workload implied for staff).</p> <p>Learning provision- will be enhanced by technological developments.</p> <p>Timely assessments and feedback- will be meaningful and will support learning.</p> <p>Problem solving, innovation and creativity- will be used by staff. (note, all of the above are added to the list of what staff will do although the use of the passive form allows this commitment to</p>	

Ideational content	Interactional aspects	Mode
<p>contractual arrangements if the majority of staff were to agree to them unquestionably as they could then be considered 'reasonable adjustments' to contractual obligations. There is a connection between the discursive structure in the text and the legal framework within which the staff/university relationship operates.(it does however depend upon the next stage in the development of the organisational field, the activity arranged around the text, such as discussions, consultations and agreement.) In this way this strategic</p>	<p>be hidden). Absent is any mention of staff conditions, pay or contracts. The document does not, for example say that staff will be highly paid. The sacrifice to be made by staff in seeking these ideals is taken for granted.</p>	

Ideational content	Interactional aspects	Mode
<p>plan is a harder discursive structure than may appear upon the surface.</p>		
	<p>We will be recognised as an enterprising and businessfacing university in which our research and knowledge related activities are closely aligned to meet the key future demands of business and society.</p> <p>We will be known for:</p> <ul style="list-style-type: none"> - The 'international excellence' of our research (as recognised by HEFCE through the Research Excellence Framework) in a number of selected areas. - High quality, responsive and impactful research, consultancy and client engagement with demonstrable outputs which meet the needs of partner organisations. 	

Ideational content	Interactional aspects	Mode
	<ul style="list-style-type: none"> - The application of our world-leading research through the development of successful knowledge-transfer partnerships. - The development of postgraduate research through enhanced postgraduate recruitment activity. - University Y Ventures as a profitable and efficient vehicle for the provision of high quality workforce training and CPD. - The breadth, stability and financial contribution of University Y Group companies. 	
Strategic driver 5: International Engagement. From the caption under the photo we can see that the plan includes doubling the number of students studying overseas. University services are also being	Our - international activities will advance our commitment to scholarship and learning Scholarship - our commitment to this will be advanced Learning Educational provision - will be made accessible Individuals and Organisations around the	There is a photograph of flags of many countries with the union jack in the middle. The caption reads ' <i>A key aspiration is to expand the number of students studying University Y degrees overseas from 2000 to 4000 student FTEs</i> '

Ideational content	Interactional aspects	Mode
<p>offered to international business and individuals. Staff and students are being expected to make changes to becoming global citizens.</p>	<p>world- will be given access to ed provision.</p> <p>Global horizons will be widened for:</p> <p>Staff and Students- students will operate as global citizens. Placement and exchange opportunities will exist for them.</p> <p>Cultural diversity- we will be known for this.</p> <p>Curriculum- will be internationalised.</p> <p>International staff and students will have their recruitment developed.</p> <p>International Business and public sector organisations will be engaged with and will be the recipients of:</p> <p>Tailored research</p> <p>Consultancy and CPD services</p> <p>International partnerships -will be engaged with.</p> <p>Joint venture delivery will be developed.</p> <p>High profile brand activities will lead to this.</p> <p>Placement and exchange opportunities will exist for</p>	

Ideational content	Interactional aspects	Mode
	<p>staff</p> <p>Extensive overseas links</p> <p>Global college networks</p> <p>will exist.</p>	
<p>Enabling Areas of Activity</p> <p>In this section 5 areas are outlined.</p> <p>The thesis is that work on these five areas will bring about the strategic goals. The connection between the enabling areas and the strategic drivers is not clear.</p> <p>Again the emphasis is on the reputation of the university the phrase 'we will be known for' recurs all the time in the text on each 'enabler'</p>	<p>5 areas</p> <p>Our- take ownership of the strategic drivers:</p> <p>1 Academic Profile</p> <p>2 People and Culture</p> <p>3 Financial Strength</p> <p>4 Infrastructure and Sustainability</p> <p>5 Community Engagement</p> <p>– are 5 principal areas of activity that will underpin our strategic drivers.</p>	<p>White print.</p>
<p>Enabler 1 Academic Profile</p> <p>Note the use of the language of marketization such as 'portfolio'</p>	<p>We- continue to be recognised; will be known for (various listed below).</p> <p>Our- we have a market portfolio and a range of interdisciplinary</p>	<p>There is a photograph of a woman (pink) teaching another woman. Under this photograph there is the caption that reads:</p> <p><i>'A key aspiration is for more</i></p>

Ideational content	Interactional aspects	Mode
<p>efficiency, quality, programme delivery (as though delivering a product)</p> <p>The business, industry and the professions are to be involved in curriculum development and formal mechanisms are to be set up in order to monitor this. Here staff are absent again in their role of curriculum design.</p> <p>This is a very significant absence in the light of the involvement of business and industry and the professionals in this area. It is in the monitoring that staff is seen to have a role.</p> <p>Staff do appear again in the caption under this section</p>	<p>opportunities, Our ability to innovate and respond rapidly to students and employer demand.</p> <p>Joint honours programmes.- are interdisciplinary opportunities.</p> <p>Market portfolio- belongs to us</p> <p>Academic profile- is distinctive across (areas named include all of university schools)</p> <p>Business, industry and the professions- will be involved in the development of all our programmes.</p> <p>Students and alumni – will be involved in all our programmes.</p> <p>All our programmes – will have their performance monitored</p> <p>Formal curriculum groups will monitor ongoing performance of programmes.</p> <p>Prospective Employer demand will be responded to rapidly.</p> <p>Prospective student</p>	<p><i>than 80% of University Y staff to be undertaking some form of professional development activity.'</i></p>

Ideational content	Interactional aspects	Mode
<p>in the role of being taught, or '<i>undertaking professional development activity</i>'.</p>	<p>demand- will be responded to rapidly.</p> <p>New and flexible programmes will be delivered.</p> <p>Bespoke accreditation services will be delivered in partnership with public and private organisations</p> <p>SME (small and medium enterprises) will be entered into partnership with and involved in delivering bespoke accreditation services.</p> <p>Innovative and responsive delivery models will be created for selected markets.</p> <p>University Y ventures</p> <p>University Y Global</p> <p>Other Group companies</p> <p>Third party partnerships</p> <p>the above 4 will be involved in creating the innovative and responsive delivery models.</p> <p>Whose key aspiration is it to achieve and average tariff of at least 280 points across all undergraduate</p>	

Ideational content	Interactional aspects	Mode
	<p>points? Where does this come from?</p> <p>University Y Staff- 80% of them will undertake CPD</p>	
Enabler 2: People and culture	<p>People- will be valued internally and externally; will be innovative, solution oriented and business-like.</p> <p>Individual and collective achievement-will be respected and this respect will be embedded in our culture.</p> <p>We- will be known for (list)</p> <p>Our- owners of the culture.</p> <p>Culture- will have respect, integrity and the celebration of individual and collective achievement embedded in it; will be one of mutual respect and confidence.</p> <p>Staff- will be proactively involved in all aspects of university development.</p> <p>Students- will be proactively involved in all aspects of university development</p> <p>University-will have staff and students involved in its development; will be a</p>	

Ideational content	Interactional aspects	Mode
	<p>Flexible learning organisation.</p> <p>Individuals-will have their success celebrated; their capabilities (to enhance the university's reputation) will be developed.</p> <p>Capabilities- will be developed and will enhance the university's reputation.</p> <p>University's reputation</p> <p>Individual and team success- will be celebrated.</p> <p>Academic staff- will be externally recognised for expertise, contribution to knowledge and its application.</p> <p>Expertise is possessed by academic staff.</p> <p>Contribution to knowledge and its effective application will cause academic staff to be recognised</p> <p>Key social and economic challenges- will be solved.</p> <p>Creative and efficient contribution- will be made by professional staff.</p> <p>Professional staff – will support the development</p>	

Ideational content	Interactional aspects	Mode
	<p>of the university; will make creative and efficient provision</p> <p>High quality services will be provided by professional staff.</p> <p>Development of the university will be supported by creative and efficient contribution of professional staff; is a flexible learning organisation.</p>	
<p>Enabler 3 :</p> <p>Financial Strength</p> <p>In this section the strategy for how the university should deal with the financial situation over the next few years is outlined.</p>	<p>Income</p> <p>Government</p> <p>Business</p> <p>Philanthropic sources will yield income</p> <p>Single income streams our dependency upon these will be reduced.</p> <p>Financial strategy we will have faith in this; will secure future investment</p> <p>Future investment will be secure; will help to meet our vision; will help to provide discretionary funds</p> <p>Our</p> <p>Vision will be met.</p> <p>Discretionary funds will be provided.</p>	<p>In this section the heading Financial strength is in font size 76. This is followed by the slogan 'Financial planning based on a forward thinking financial Strategy will secure the future success of the University'. In font 16. This font is continued into the phrase: 'We will be known for:' which is followed by a bullet pointed list composed of 5 points.</p> <p>This section is followed by a photograph of a pink male, in shirtsleeves (short hair</p>

Ideational content	Interactional aspects	Mode
	<p>Innovation- is part of our vision; will used discretionary funds.</p> <p>Creativity-- is part of our vision; will used discretionary funds.</p> <p>Our operations- will be managed in a Business like manner.</p> <p>Value for money- will be at the centre of all Our activities</p> <p>Courage-will be necessary to secure our position;</p> <p>Managed risks will be necessary to secure our</p> <p>Our position as An effective and sustainable business</p> <p>Extensive scholarship programme will led to 500 Externally funded scholarships by 2015</p> <p>Key aspiration: (whose?) is to ensure an average surplus of 2.4% of turnover over each three year period.</p> <p>HEFCE indicators-(no subject of sentence) to be in the top half of these related to monitoring of surplus.</p>	<p>and glasses wearing wedding ring, explaining something (hands in air, gesturing) to a black female. On the table next to him is a white teacup, some blue on white spreadsheets and the female is in front of a laptop screen. Behind her head, there is a flipchart diagram of concentric circles and the handwritten word 'purpose' is visible. Below this photograph the caption reads (in italics) '<i>A key aspiration is to ensure an average surplus of 2.5% of turnover over each three year period and to be in the top half of HEFCE indicators related to the monitoring of surplus.</i>' Emphasised by purple vertical lines at either side.</p> <p>This is followed by yet another photograph of a tree growing against a modern university building. Perhaps this is a signifier for sustainability and 'green'</p>

Ideational content	Interactional aspects	Mode
		<p>ness' leading into the next section. The caption under this photograph reads(italics)</p> <p><i>'A key aspiration is to be within the top 20 UK universities in the 'People and Planet' Green league table with at least 85% of University accommodation in Category A or B in terms of condition and fitness for purpose.'</i>(purple vertical lines on either side of this caption serve to emphasise it)</p>
<p>Enabler 4: infrastructure and Sustainability.</p>	<p>We; will be known for (list); will continue to invest in development of physical estate; will maintain our profile as a university with facilities of the highest quality when benchmarked against other UK universities-will operate to minimise environmental impact.; we will seek to promote sustainable development. Our- ownership of the above.</p>	<p>Heading 76 ' infrastructure and sustainability'</p> <p>Heading 16 'We will continue to invest in the development of our physical estate to meet the needs of our students and staff. We will maintain our profile as a university with facilities of the highest quality when benchmarked against any UK university.</p> <p>We will operate to minimise environmental impact and</p>

Ideational content	Interactional aspects	Mode
	<p>Needs of our students will be met.</p> <p>Needs of our staff –will be met</p> <p>Our profile- will be maintained; as a university of the highest quality.</p> <p>Facilities- will be invested in</p> <p>Any UK university- will be benchmarked lower or equal to us for facilities.</p> <p>Our denotes ownership</p> <p>Quality of electronic and web based resources. We will be known for theses.</p> <p>Teaching- will be supported; its quality will enhance our reputation.</p> <p>Investment- will be in the development of our estate, facilities and resources to promote learning, teaching and research.</p> <p>Estate- will be invested in.</p> <p>Facilities and resources- will be invested in.</p> <p>Learning teaching and research- will be promoted</p> <p>Our ownership- of UNO buses</p> <p>Intra and Inter-regional</p>	<p>we will seek to promote sustainable development.'</p> <p>This heading continues into the phrase 'We will be known for:'</p> <p>The font now drops down to size12 for a bullet pointed list comprised of 4 points.</p>

Ideational content	Interactional aspects	Mode
	<p>transport services.- we are committed to their provision.</p> <p>Amenity will be provided.</p> <p>Broader community- will receive amenity.</p> <p>Environmental impact of travel- we will seek to reduce this.</p> <p>Knowledge-transfer activities- we will be known for these in relation to environmental and sustainability issues.</p> <p>Research activities will enhance our reputation (we will be known for); will be into sustainability issues</p> <p>Centre for Sustainable communities- will be developed.</p> <p>Related inter-disciplinary consultancy activities-will be developed.</p> <p>‘Green Potential’- will be developed specifically.</p> <p>UK universities People and Planet Green League – we will be in the top 20 of this.</p> <p>University accommodation- 85% of this will be in category A or B for fitness for purpose or</p>	

Ideational content	Interactional aspects	Mode
	condition.	
Enabler 5: Community Engagement.	Community We Our position Local and regional community Community Engagement Strategy. Social development Economic development Educational development Our region Our extensive interactions Primary and secondary education schools Colleges Educational engagement strategy Our recognition Wide variety of progression routes. Range of services Business organisations professional organisations Our business services Related activities Short courses Consultancy Business start up support Our ownership Examplas Engagement of our staff Engagement of our	(font 76)Community Engagement Followed by the caption (font) 'We will strive to develop and promote our position within the local and regional community through our Community Engagement Strategy. This will help us to underpin the social, economic and educational development of our region.' This font continues into the phrase ' we will be known for' and then drops to size 12 for a bullet point list of 6 bullets. We will be known for: - Our extensive interaction with primary and secondary education schools and colleges through our innovative educational engagement strategy and our recognition of a wide variety of progression routes. - The range of services and level of support we offer for

Ideational content	Interactional aspects	Mode
	students Local community Voluntary work Law Clinic School Governor programme Active involvement Countrywide festivals, Events Environmental activities Links Regular interactions Key community stakeholders Residents Local authorities EEDA University Court members Arts programme University Y Arts umbrella Our support Community-based arts events, activities and organisations Resident de Havilland Philharmonic Orchestra Our activities Health and well-being Local community Education and training Our work NHS Open access	business and professional organisations through our business services and related activities, including short courses, consultancy, business start-up support and our ownership of Exemplas. - The scale and level of the engagement of our staff and students in the local community through voluntary work, including our Law Clinic, our extensive School Governor programme and active involvement in a range of countywide festivals, events and environmental activities. - Our strong and positive links and regular interaction with key community stakeholders, including residents, local authorities, EEDA and members of the University Court. - Our innovative and diverse arts programme, under the University Y Arts umbrella,

Ideational content	Interactional aspects	Mode
	Sports facilities Related activities.	and our support for community-based arts events, activities and organisations including the resident de Havilland Philharmonic Orchestra. - Our activities to promote the health and well-being of the local community through education and training, our work with the NHS and open access to our extensive sports facilities and related activities.
The university In 2015		

Overall, emergent trends in the course of the analysis:

Preoccupation with league tables. (ultimately these will be driving see final section)

Preoccupation with Business, the needs of industry.....

Increasing the commitment of staff without explicitly saying this is what is going on.

Use of marketisation terms, and enabling the shift from governance to management in the institution.

Fundamental change with larger amount of funding coming from other commercial ventures not from teaching or research. University Y group of companies, Local buses and so on.

Appendix C: Template - Initial Text Analysis:

What is happening in the text?	List the evidence	Comment/discussion/
Ideational: what is going on? What is its role in society?		
Relational: Who is involved? Who is doing what to whom? what do significant objects tell us about the social relations between people?		
Material: What are the material forms in which the texts produced in the discourse are embodied? What are the constraints of this mode? What are the affordances of these modes? What other material forms are drawn upon?		

Appendix D Letter to staff from Vice Chancellor of University Y.

Note that events to created activity around the document are highlighted in blue and terms reflecting the ideological stance of the plan are highlighted in yellow.

Dear Colleagues,

*I am pleased to announce the **launch** of our new strategic plan 2010 – 2015.*

*The plan builds on the University's significant success and positioning as the **leading business-facing university** in the UK. The plan clearly articulates the key areas of focus for the future and demonstrates how **innovation, creativity** and an **enterprising mindset** will be the defining characteristics of our university.*

*The plan has taken a year to reach publication. **Significant consultation** has taken place across the University and externally and, as such, the plan represents a **collective view of our future** shape and direction.*

*The strategic plan was **presented yesterday** to the Vice-Chancellor's Group and Heads of Strategic **Business Units** at a cross-University management **briefing**.*

*Each Head will be responsible **for discussing** the application of the plan to strategic business units with their staff. I have asked Professor xxxxxxxx, Deputy Vice-Chancellor, and members of the Pro Vice-Chancellor team **to visit each Strategic Business Unit** over the next couple of months to **discuss the plan** and its impact on individual areas.*

*A strategy is only of value if it is fully adopted and used by an organisation. It is vital that **we use the strategic** plan as a basis to inform decision making and actions over the next period of the University's development.*

*Copies of the plan **will be distributed** to all staff and will be available to download from <http://www.go.Y.ac.uk/strategicplan> with **further detailed** **information** relating to the plan.*

*I am confident that the University will achieve its vision to shape the next **generation of business-facing universities**. The University is well placed to*

respond to the demanding economic climate, to meet the needs of its students, business, research and community, and will continue to be seen as an exemplar of a modern university within the sector.

Professor xxxxxxxxx

Vice-Chancellor"

Appendix E: Ground Rules used in the interviews:

These were elaborated at the start of each interview.

- Do you mind if I tape record this interview? We can switch off the tape recorder at any point if you find you want to. Also if at any point you wish to withdraw, you are perfectly free to do so and there is no need to give a reason.
- All the names of people, departments, faculties and institutions will be changed so that it will not be possible to identify them in the research. My research will span more than one institution.
- If I may, I shall check back any points I use in my research to check their accuracy and to ensure that what I have got is what you meant.
- Is there anything else you think we should have in the ground rules for our interview?