Assemblage and Différance: an Institutional Theory and Methodology

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Abstract

This thesis develops a postmodernist theory of institution, Discursive Organisation Theory (DOT), by building on elements of the work of Jacques Derrida and Giles Deleuze. One aspect of the theory is demonstrated by analysing transcriptions of eight focus groups composed of students studying in the field of business and management studies in universities in London.

Postmodernists have so far eschewed theory development of this type but this study explicitly argues for the legitimacy of the project. The version of postmodernism to be used is carefully defined and takes as its central feature arguments from Derrida's "Structure, Sign and Play in the Discourse of the Human Sciences". Derrida's "absence of presence" is taken as the defining characteristic of this version of postmodernism. Its epistemology is developed from Derrida's notion of *différance*. Its ontology is based on the realist ontology of Deleuze and places emphasis on the notion of assemblage (*agencement*).

The theory assumes that the physical world is only knowable through the mediation of a system that is symbolic in nature which processes sense data. Since organisation of action is the ultimate purpose of this processing system, and is more fundamental than perception or cognition, it is necessary to build a model of this processing system in order to arrive at an understanding of institution, which is taken as the ultimate manifestation of organisation. This processing system is labelled as "discourse" in this thesis and includes all human symbolic systems and chiefly, but not limited to, language (Iedema 2007).

The theory is developed by constructing a series of mutually dependent assemblages beginning with discourse itself, then the institution assemblage, then the organisation assemblage and ultimately the assemblage of everyday life, or society as a whole. These assemblages are fictions, reality is itself a continuum, but they are convenient for understanding the nature of the phenomena included at these levels and how they are interrelated. These phenomena traditionally come under the headings of subjectivity, identity, communication, conversation, power, institution, bureaucracy (Weber, 1964), culture, organisation and many others.

Derrida's concept of *deconstruction* is used as a method to analyse the processes of constructing and maintaining organisation. Bureaucracy is taken to be a *diagram* (Deleuze) belonging to the assemblage of everyday life and generates the only legitimate form of organisation in the fields of government and private enterprise that can be used today. Grid-Group Cultural Theory, as developed by Mary Douglas, Michael Thompson and others, is reinterpreted and used to analyse institutional construction. This part of the theory is tested empirically.

The data gathered from the focus groups is analysed using Grid-Group Cultural Theory as a typology of thought styles. The analysis shows that the thought styles interact with each other both antagonistically and co-operatively in a way that confirms the contention that Grid-Group Cultural Theory may be used to deconstruct bureaucracy.

This study makes several theoretical contributions by developing theory in an area where little has been done before. It makes a practical contribution by demonstrating how practitioners may be helped to make more effective decisions. It points the way to further development and applications of the theory.

Dedication

To my patient and long-suffering wife, Amanda Bradbury, and in loving memory of my mother and father, Alwyn and Barbara Atkinson.

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I would like to thank all those who made this possible:

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Also, Dr. Jill Collis and Fintan Clear for their practical advice and moral support, my friends Rick Martin and Dr Alireza Nazarian for their support and feedback, and finally, Professor Ashley Braganza who persuaded me to undertake this study in the first place.

Declarations

I declare that, to the best of my knowledge, no portion of the work referred to in this thesis has been submitted in support of an application for another degree, or qualification, to any other university, or institute of learning. The following publications have been produced as direct or indirect results of the research discussed in this thesis.

Conferences

BAM 2012, Cardiff. The Utility of Discourse Theory in Organisational Change.

BAM 2014, Belfast. Assemblage and Institution.

MB Academy 2015, London. Recent Developments in Organisation Studies.

Table of Abbreviations

| ANT | Actor-Network Theory |
|------|--------------------------------|
| GGCT | Grid-Group Cultural theory |
| DOT | Discursive Organisation Theory |
| HRM | Human Resource Management |

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Section 1 Introduction

Chapter 1. Purpose and Scope

1.1. Introduction

This study develops a postmodernist theory for the study of organisations. It is postmodernist in that it is built on assumptions which differ from modernist theory. These assumptions are that:

- 1. the ultimate explanation for social phenomena lies in discourse
- 2. the social world is ever changing and fundamentally chaotic
- 3. the physical world is not directly knowable
- 4. the self is a product of discourse and, therefore, not fully present to itself

The central idea of this theory is that organisation is a product of discourse, and only of discourse. Therefore, if we wish to understand organisations and how they work, they must be understood in terms of discourse.

A theory of organisation, *Discursive Organisation Theory (DOT)*, is developed using components from different sources. The main components are the differential ontologies of Derrida and Deleuze. It will be seen that by interpreting Derrida's *différance* (Derrida 1976) as a "condition of interiority" of a Deleuzian assemblage (Deleuze & Guattari 1987), the relationship between certain aspects of social assemblages can be readily seen. Chiefly these aspects are: institution, power and subjectivity. By deconstructing the social assemblage using two binaries, four institutional voices are articulated which correspond to the four voices of Grid-Group Cultural Theory (Thompson 2008).

Despite the declared theoretical intention of this work, its aim is ultimately practical. There is, as Kurt Lewin has told us, "nothing more practical than a good theory" (Lewin 1945; van de Ven 1989). Therefore, this thesis develops DOT not just as a theory but also as a research methodology. This researcher believes that a theory must continually withstand two tests according to the values of the context in which it is applied: firstly the test of attempted falsification and, after that, the test of utility. In this study, the theory is demonstrated as a methodology by analysing empirical data from discussion groups composed of managers currently studying on business courses to discover something about the working of bureaucratic institutions.

The contribution of DOT is three-fold. For the academic, it provides a way of reinterpreting existing theories so that the relationships between them can be seen and can also be applied in new research. For the consultant, it provides a way of analysing organisations so that problems and solutions can be identified and for the practitioner it provides a way of understanding diverse, changing situations.

DOT is a new theory but it is not a radical departure from the theories of the past; it builds eclectically on the work of several scholars, assembling a new whole, which has new emergent properties, from its several components. The work of these scholars is treated with respect in that concepts created for use in a specific context are not ripped unceremoniously from that context and employed in another, but carefully translated from their original context, accompanied by a considered justification for doing so. Though in the course of laying out this new theory, echoes of many theoretical positions will be heard, it would be beyond the scope of this work to explore these echoes and they will only be alluded to occasionally. The author believes that these echoes tend to confirm the plausibility of the current project.

This chapter provides a broad overview. Firstly, it locates the theory which is being constructed within the postmodernist paradigm, then it describes the ontological and epistemological assumptions being made, and finally it describes the scope and structure of the thesis. The purpose of this work of location is to forestall mistaken analysis of my argument that may arise from confusion between modernist and postmodernist paradigms, since these paradigms make fundamentally different assumptions.

1.2. Background

This study was born in the context of questions about organisational knowledge and organisational change. In order to formulate these questions satisfactorily, it was necessary to ask fundamental questions about the nature of organisation, and a number of possible theoretical positions were examined to find one with the potential to provide new insights.

At first it seemed that the most satisfactory way of approaching the problem might be by using Actor-Network Theory (ANT) (Latour 2005), which sees the world in terms of assemblages rather than structures. Using ANT, an organisation might be seen as being composed of the interaction of diverse factors which include different groups of people within the organisation who have different professional priorities, the different technologies in use, the location, the effects of external events and so on. However, despite its attractions, this type of approach also seemed to leave much out, such as the working of power, the construction of the self and the varieties of organisational culture. Additionally, ANT has an ontology that gives equal significance to human and non-human actors which is counterintuitive and requires justification.

Instead it was decided to take a postmodernist approach and begin from the assumption that discourse is constitutive of organisational phenomena and that the point of view of the organisational actors and the researcher are significant to understanding organisational phenomena. Postmodernism seemed to have a good deal to say about the working of power, the construction of the self and organisational culture, though it also seemed to leave out the very aspects of organisation that made ANT attractive, that is, the notion of assemblage and the role of the non-human.

After examining the questions that might be asked of organisational phenomena the one that seemed most pressing the one which was key to all the others was the question of what an organisation is. Much research assumes tacitly that this matter is unproblematic and this includes work in the postmodernist paradigm, for example, Rasche (2011) and Cooper (1986). Of course, the question has many answers and the answers depend to a great extent on the assumptions which precede the question. The paradigm used here demands that the answer must ultimately be given in terms of discourse and here there is a surprising lack of well-developed theory; that is, there is much postmodernist theory which accounts for various organisational phenomena but none that attempts to account for the phenomenon of the organisation as a whole.

This lack of postmodernist theory (Hassard 1999) might be ascribed to a number of problems. Firstly, postmodernism is seen as having no answer to the charges of relativism and a lack of an adequate account of agency. Secondly, it is seen as having a problem with accessibility since postmodernist theory is assumed to be profoundly difficult to understand and, therefore, beyond the grasp of practitioners. And thirdly, there is a problem created by postmodernists themselves who, because they perceive the construction of "grand theories" as being a form of intellectual colonisation, find it safer to confine themselves to the analysis of localised phenomena. In reply to the first of

these problems, this research aims to solve the problems of relativism and agency. It rejects the notion that postmodernist theory is necessarily obscure or difficult to grasp and aims to explain clearly the theory and its consequences for practice. And, finally it rejects the charge of colonialism on the grounds that this charge is only valid where the theory claims the status of absolute truth and this claim is not being made here. Instead the theory is offered as a "useful fiction", as Vaihinger describes the theory of gravity (Vaihinger 1968), which only valid as far as it proves to be useful.

It might be argued that this is as a fruitless project on the grounds that there are already more than enough theories of organisation to choose from. However, this is a spurious objection since a large number is no guarantee of quality. In fact, though there have been a number of theoretical perspectives that have borne fruit, such as the trend of studying organisational culture, there has been little in the way of new ideas for the past thirty years and most recent research recycles earlier ideas. If the emphasis is placed on gathering empirical data at the expense of developing new theory research tends to concentrate on improving existing answers rather than on asking more meaningful questions. This researcher suggests that it is time to develop new theoretical tools to gain fresh insights. It is to be hoped that this study contributes to improving the answers to research questions by helping to improve the quality of the questions.

1.3. Problem

This research, then, addresses the problem of the absence of a postmodernist theory of organisation which is sufficiently broad to provide a research methodology to help scholars, consultants and practitioners to analyse disparate organisational phenomena and help practitioners with problems such as how to "improve performance" or "improve effectiveness" or "bring about organisational change".

1.4. Aim and Objectives

The aim of this study is to build a discursive theory of organisation with a broad application so that it can be used in academic and practitioner enquiry.

Specifically, this study has two objectives: firstly, to formulate the theory which has been developed so that it can be easily grasped by academics and practitioners alike (Section 2), and secondly, to demonstrate the theory as a methodology using empirical data (Section 3).

1.5. Paradigms and Theories

This study deals with assumptions fundamental to enquiry but, as organisations are the focus of this discussion of underlying paradigms, it is limited to an overview. This discussion is necessary in order to clarify the paradigmatic assumptions to avoid confusion over its scope.

1.5.1. Point of View

It is firstly necessary to clarify the differences between modernism and postmodernism. Analysis of postmodernism from within modernism is like shadow boxing; it is frustrating and ultimately fruitless. A recent example is the debate about the significance of discourse in organisation studies that took place in *Human Relations* in 2011 and 2012 (Alvesson & Karreman, 2011; Mumby, 2011; Hardy & Grant, 2012), in which prominent discourse scholars working in the modernist paradigm, Matts Alveson and Dan Karreman, upset other scholars in the postmodernist paradigm by attacking what they see as mistaken tendency to analyse everything in terms of discourse. Another similar exchange took place in *Organization Science* in 2000 (Weiss 2000; Deetz 2000).

An example of a paradigm clash might go as follows. In 1937 the economist Ronald Coase published a momentous article "The Nature of the Firm" in which he argues (a priori) that the formation of commercial organisations occurs when the costs of doing business in the market place, transaction costs, exceed the cost of carrying out the same activities within an organisation, agency costs (Coase 1937). Coase was working within the economics flavour of a modernist paradigm in which it is assumed that people are rational actors and that society is a stable, self-regulating system¹. In this work it will be shown that people create organisations because it is in their nature to do so. Thus, from within the paradigm of this work, to argue that people create organisations because it

¹ This matter is discussed in Scott (2014, p.33).

reduces costs is a little like arguing that fish choose to live in water because the effort required for them to live out of water would be too great, and because they do not do this it demonstrates that fish are rational actors. It is unlikely that a researcher would be able to obtain funding to investigate this hypothesis. Thus, the assumptions and research questions which are eminently sensible in one paradigm can seem trivial or absurd from within another paradigm.

1.5.2. The Research Paradigm

Customarily, theses in the field of business and management studies begin with the received wisdom that there are two main paradigms which are usually identified as "positivism" and "interpretivism" (Bryman & Bell 2003; Saunders et al. 2003; Collis & Hussey 2014). Positivism is identified with a functionalist ontology and an empiricist epistemology while interpretivism is identified with a constructionist epistemology and a variety of ontologies including functionalism or ontologies of social conflict such as class-struggle. A simple formulation is then produced which connects positivism with deduction, objectivity and the gathering and analysis of numerical data and another formulation which connects interpretivism with induction, subjectivity and the gathering and analysis of qualitative data (eg. Collis & Hussey 2009). These formulations are simplistic and rejected for the purposes of this study on the grounds that they neglect the multiplicity of research paradigms that are available to researchers and that these simplistic formulae lead to unimaginative and trivial research (Sandberg & Alvesson 2011).

Most of the research which takes place in the business and management field is within the modernist master paradigm. In the model of paradigms proposed in this thesis positivism and interpretivism are sub-paradigms within this master paradigm, and there are many other sub-paradigms. This study is located in the postmodernist master paradigm and therefore looks at its research question from a different perspective. However, as Popper remarks, a new theory should not just provide a better explanation of a phenomenon but should also explain the old theory (Popper 1979) and this challenge will be addressed.

1.5.3. Master Paradigms

In this study a paradigm will be taken to mean the set of assumptions, tacit or explicit, from which an investigation begins and the consequences of those assumptions for such matters as what is allowed as legitimate evidence, what methodologies may be employed or what authorities may be appealed to and in what way. No investigation can take place without making assumptions and it is an assumption of this study that this is so.

A paradigm may be thought of as a position on which to stand. To use a spatial metaphor, if you stand on a hill, the landscape is organised around you in a particular sequence and if you stand on another hill you may see some of the same landmarks but they will be arranged in a different order. From your position the only thing in the landscape that you cannot see is the ground on which you are standing. In the same way, when you are working within a paradigm is it difficult to be aware of the assumptions which you are making and impossible to question them (Popper, 1979, p.198). In historical times in the west there have been three main paradigms, though there is no fixed list of possible paradigms.

The first of these master paradigms is the theocentric paradigm which assumes that there is a deity who has created the world. In this paradigm the ultimate explanation for all things is supernatural; the universe has been designed as a whole and has an underlying order to it and some people have been given more insight into the divine order than others and can speak with more authority about it. Augustine's *City of God* published in 427, an enquiry into the question raised by Pagan critics as to why the Christian god allowed the sack of Rome in 410, falls into this paradigm as does Aquinas's *Summa Contra Gentiles* published in 1264, which was an enquiry into the truths of Christianity. Both of these works made a significant contribution to Western learning and are still studied in universities today (Russell 1971) though their methods would no longer be regarded as valid.

The second paradigm is a humanistic one and includes modernism. In this paradigm the measure of all things is mankind; the ultimate explanation for all things is scientific materialism; individuals only have limited authority since the ultimate arbiter of truth is empirical evidence; communication is a way of conveying knowledge from one person

to another and consciousness resides inside the heads of individuals. As Cooper and Burrell (1988) express it, "modernism [believes] in the essential capacity of humanity to perfect itself through the power of rational thought" (p.92). The present day institution of the university functions largely within this paradigm along with most academically respectable philosophical and scientific enquiry.

The third main paradigm is postmodernism. In this paradigm discourse is the central truth in which consciousness and perception are created; hidden assumptions are to be exposed and questioned and truth and meaning are relative.

Chia (2005) has listed the key assumptions of organisation theory created within the modernist paradigm as:

objectivity – organisations are concrete phenomena with definite fixed locations and identifies with identifiable characteristics;

self-identity – organisations have visible characteristics that are distinctive to itself and these characteristics are often thought of as having been developed through economic rational self-interest to make the organisation fit to survive in its environment;

individual intentionality – for constructionists the organisation is the sum of the conscious actions of individual actors;

local causality – emphasis on the agency of managers rather than wider ranging influences so, using the Aristotelian schema, efficient cause (the agent) is emphasised at the expense of formal cause (the plan), the material cause (the entities being organised) or the final cause (the purpose), giving the impression that managers have more control than they really do;

homeostatic change – structure and stability is the normal state of things and change has to be externally induced and

linguistic adequacy –linguistic truth approximates to the real world (Chia 2005).

Chia goes on to describe postmodernist organisation theory as an examination of the way that organisation is imposed by people on a chaotic reality which is unpredictable and constantly in flux. Progress is never linear but "rhizomatic", where unpredictable connections between diverse entities appear unexpectedly. Organisation is necessary for people to be able to act upon the world and survive in it but, without the ability to

question the deepest assumptions, organisations fast become obsolete and ineffective (Chia 2005).

Much has been written on the nature of postmodernism in various fields and on postmodernism as a supposed phase of history. In this study postmodernism is taken strictly as a way of looking at the world and it will not be concerned with the version of postmodernism which describes a state of the world or as an identification of historical trends (Chan & Garrick 2002; Alvesson & Deetz 2006 p.256). These different uses of the term "postmodernism" have caused much confusion; for example, Mats Alvesson uses it in an attempt to show that postmodernism is, in itself, fundamentally confused (Alvesson 1995).²

The project of this thesis is complicated by the fact that from within the modernist paradigm it appears that paradigms, in the sense that the term is used in this thesis do not exist. Since the modernist paradigm is in the ascendancy – has power – in the academic institution, this situation causes problems for scholars who wish to work in a different paradigm. A version of paradigm does exist in modernism which refers to different methodologies but since they are all based on the assumption that people are rational, autonomous individuals - though various interpretations may be placed on "rational", "autonomous" and "individuals" – there is no room for the proposition that groups of people may have radically different views of the world with no overlap in fundamental assumptions without some of them being in error in some way.

1.5.4. Paradigm Shift

In this research an assumption is made that there is no neutral, paradigm free vantage point from which to adjudicate between paradigms but that it is possible to translate research between paradigms providing that it is done so with an understanding of the

 $^{^{2}}$ In my opinion it is useful to regard postmodernism in the business and management literature as falling into three categories: (1) philosophical - which is purely a way of looking at the world, eg. Derrida, (2) critical - which assumes an axiological position of the primary importance of liberty as a transcendental value eg. Althusser and much postmodernist feminist literature eg Martin (1990) and (3) historical which emphasises postmodernism as a historically specific phenomenon eg. Lyotard. This thesis is only concerned with the first of these.

paradigms involved and an acceptance that there is no neutral, paradigm free point of view.

At the beginning of *The Order of Things*, Foucault describes a classification system in a passage by Jorge Louis Borges:

This passage quotes a "certain Chinese encyclopaedia" in which it is written that "animals are divided into: (a) belonging to the Emperor, (b) embalmed, (c) tame, (d) sucking pigs, (e) sirens, (f) fabulous, (g) stray dogs, (h) included in the present classification, (i) frenzied, (j) innumerable, (k) drawn with a very fine camelhair brush, (l) et cetera, (m) having just broken the water pitcher, (n) that from a long way off" look like flies". In the wonderment of this taxonomy, the thing we apprehend in one great leap, the thing that, by means of the fable, is demonstrated as the exotic charm of another system of thought, is the limitation of our own, the stark impossibility of thinking that.

(Foucault, 2002, p. xvi)

This passage not only gives a subjective impression of how thinking in one paradigm appears from a viewpoint in another paradigm but it also argues for the relative nature of truth by showing that truth is historically and geographically variable and, therefore, the way that we look at the world is just one among many that are possible. Another tacit message in this passage is that if the way we look at things is one among a limitless variety of choices, it is open to us to try different viewpoints and perhaps find more fruitful ones than presently employed. In other words, it is possible for us to expose and question our assumptions and this impetus lies at the heart of postmodernism.

Arguably the first postmodernist was the philosopher Friedrich Nietzsche. In his essay "On Truth and Lies in a Non-moral Sense", he captures the postmodernist point of view on point of view:

> ...how miserable, how shadowy and transient, how aimless and arbitrary the human intellect looks within nature. There were eternities during which it did not exist. And when it is all over

with the human intellect, nothing will have happened. For this intellect has no additional mission which would lead it beyond human life. Rather, it is human, and only its possessor and begetter takes it so solemnly-as though the world's axis turned within it. But if we could communicate with the gnat, we would learn that he likewise flies through the air with the same solemnity, that he feels the flying centre of the universe within himself.

(Nietzsche, 1873, p. xx)

Here Nietzsche is contextualising academic enquiry and he suggests that its progress and achievements only have significance within a finite context. He is arguing against the modernist assumption that it is always possible to have one value-free point-of-view that everyone can agree on because there is always some other point-of-view like the gnat's which is possible. The local nature of truth and meaning is a principle central to postmodernist enquiry.

The assumption in postmodernism that truth is not fixed but relative to the observer is a key departure from modernism. It is an assumption which appears to undermine the possibility of what is understood as "scientific enquiry". This paradox will be discussed in Chapter 3, as part of what DOT has to say about institution, and its consequences form an important part of DOT.

Postmodernism also makes a different assumption to modernism about the process of acquisition of knowledge. The model which is usually relied upon in academic research assumes that progress is made one step at a time by an army of scholars who all depend on the work of their predecessors and thus, they follow a straight path towards the truth (Latour & Woolgar 1979). Postmodernists believe that knowledge only exists in a context and associated with power (eg. Foucault 1972b). Although it may be true that an army of scholars, all with roughly the same system of beliefs about the world, may advance each other's work it is also true that this knowledge may have little or no validity to people who are inhabited by a different set of beliefs.

It may be objected that this mismatch between belief systems is becoming increasingly irrelevant since there is growing consensus in the world about which kinds of thinking

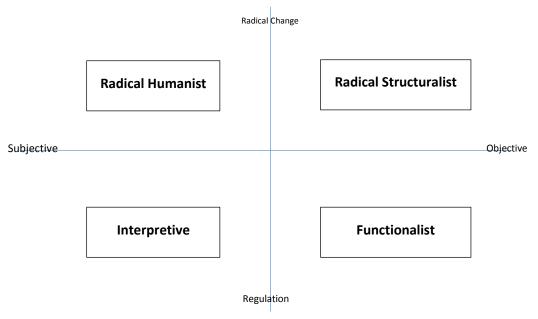
are productive and which are not. However, Foucault (2002), Kuhn (1970) and Popper (1979), among others, have shown that significant progress is made by radical departures from previous ways of thinking. If we find by consensus one best way of thinking, we cut ourselves off from possibilities of significant progress at the same time.

In his book *The Structure of Scientific Revolutions*, Kuhn also explores the concept of the paradigm (Kuhn 1970) which is a body of "law, theory, application and instrumentation" (Kuhn 1970, p.10) that is characteristic of a particular tradition of scientific research. Kuhn argues that scientists are initiated into the current tradition, or paradigm, of scientific research in their particular field by their education in which textbooks play an influential part. They then bolster this paradigm by a "mopping-up operation" (Kuhn 1970, p.24) in which they conduct research into problems which the paradigm has been shown to be particularly illuminating, by conducting research where the findings are likely to confirm the paradigm and by conducting research which allows the perfection of the paradigm or its extension into new areas where it has not been previously applied. The scientific community tends to avoid research which challenges the paradigm and discourages others from challenging it. Kuhn refers to this state of affairs as "normal science".

Eventually, normal science is challenged when research in the field produces enough findings which do not fit the paradigm. In this case a revolution takes place, the old paradigm is discarded rapidly and a new paradigm takes its place. The new paradigm introduces a new view of the world to the field and requires the reinterpretation of the findings of previous research as well as the setting of new challenges, particularly new research questions. A new regime of normal science asserts its authority and the same cultural norms of conservatism are established. Khun does not mention it but his model of one paradigm replacing another only holds good in the natural sciences; in the social sciences paradigms often co-exist (Burrell & Morgan 1979; Hatch 1997).

Kuhn's analysis was a departure from the contemporary tendency to see all development in scientific research as a smoothly incremental process proceeding stepby-step from ignorance to enlightenment. However, Kuhn discusses scientific revolutions only in terms of the natural sciences and does not link the paradigm shifts in different fields within the natural sciences, let alone linking them to shifts in thinking and perception taking place more widely in society. Burrell and Morgan, in their influential, *Sociological Paradigms and Organisational Analysis* (1979), applied Kuhn's concept of paradigms in the natural sciences to the social science of organisation studies. They attempted to classify the paradigms used in organisational theory by using two axes to create a quadrant. The horizontal axis is the subjective- objective spectrum. The vertical axis is a spectrum from an approach to sociology which assumes that order and stability are the normal state of things – a sociology of regulation – to an approach to sociology which assumes that conflict between competing groups is the normal state of things – a sociology of radical change. These axes produce a quadrant in which the different sociological paradigms can be located and compared and the quadrants are labelled as in Figure 1.1.





Adapted from Burrell and Morgan (1979 p.22)

Burrell and Morgan acknowledge that the dominant paradigm is functionalism and make a plea for the distinction between the paradigms, going as far as to argue that these paradigms are mutually incomprehensible to their practitioners, thus echoing Khun's point concerning paradigm incommensurability. It can be read also as a plea, or a warning, for not allowing functionalism to colonise the others' spaces (Jackson & Carter 1991).

From the moment this quadrant was suggested, scholars queried why these two dimensions and not two others were applied and, in retrospect, it does seem to betray the political struggles within academia at the time at least as much as it depicts the intrinsic properties of the paradigms. Nevertheless, the binary subjective/objective does seem to be a longstanding feature of the modernist master paradigm. It is slippery and its meaning is not quite clear. The interpretive paradigm seeks to study subjective decisions about the study before the data is gathered and typically remains silent about them. In fact, Burrell and Morgan's model is inadequate for analysing subsequent developments, like critical realism and, because their project remains located within the modernist master paradigm, it is unable to comprehend postmodernist studies, though attempts have been made to modify it to do so (Hassard & Wolfram Cox 2013).

A postmodernist approach to paradigms is historically specific and takes account of their socio-economic context. Foucault's *The Order of Things* (2002) identifies two radical shifts in thinking which took place simultaneously in different areas of enquiry – "living beings" and "language and wealth" – the first in western Europe in the seventeenth century and the second around 1800 creating three historical periods. He refers to the period before the epistemic shift of the seventeenth century as the "Renaissance" age, the period between the two shifts as the "Classical" age and the period after 1800 as the "modern" age. Thus, the natural history of the Classical age is not the same discipline as the nineteenth century biology of the modern age despite ostensibly having the same object of study.

The two radical epistemic shifts mark the divisions between the three ages and each age has its own characteristic assumptions (Foucault 2002). The area of study in each age is coherent in itself and enables understanding in its own terms though to another age the enquiry seems misguided and bizarre – somewhat similar to the fish living on land example above. In the Renaissance age, things were ordered according to resemblance so that there was a chain of resemblances linking different parts of creation and earth to heaven. For example, one of the four principles of resemblance that Foucault identifies, that of "sympathy", causes the sunflower to follow the disk of the sun as it passes across the sky (Foucault, 2002, p.26). In the Classical period things are ordered according to their verbal representation. Although there is a greater tendency towards the use of

mathematics, measurements are made for the purposes of categorisation and it is this focus on discovering the ordered relationships between things which characterises this age. An example of this mode of thinking is the painstaking plant and animals classifications of "natural history". However, when the Classical gives way to the Modern age in the nineteenth century, things instead become ordered by their history or pattern of development; for example, Darwin's theory of evolution.

This study takes seriously the concept of paradigm. It is an assumption of this study that no question can be asked or investigation begun without beginning from a position based on assumptions and that the particular set of assumptions from which a researcher begins amounts to a paradigm. Each paradigm causes those who work within it to see the world in a particular way which influences the questions that can be asked; determines what is acceptable as an answer and creates subjects, objects, concepts and theories which are compatible with that paradigm. It will be suggested in Chapter 3 that research paradigms are a kind of *institution*.

This section has discussed three approaches to the concept of paradigm, that of Kuhn, that of Burrell and Morgan and that of Foucault. Kuhn identified that importance of the concept of paradigm for understanding the history of the natural sciences. Burrell and Morgan picked-up the concept and used it to show how different paradigms in the social sciences have been applied in the study of organisational phenomena. Both of these approaches are modernist in that they omit a *discursive* account of the concepts. It is difficult to say if Foucault was influenced by Kuhn's thinking which first appeared in published form in 1962 since Foucault rarely cites influences. However, Foucault goes several steps further than Kuhn in that he links together epistemic shifts in different subject areas and also to changes in society as a whole. Because Foucault does discuss this topic in terms of "discursive formations", in his work the relationship between the accepted body of knowledge (*episteme*) and power relationships becomes apparent.

1.5.5. Borderlands - Constructionism

To clarify the distinction between the modernist and postmodernist paradigms it is necessary to show how theories which bear some resemblance to postmodernism from within the modernist paradigm nonetheless are different. The term "constructionism" is used to describe theory which assumes that actors construct the social reality which they inhabit and constructionists usually believe that construction is done through linguistic processes. This concept is commonplace in sociology. Though some scholars have taken constructionism and postmodernism to be synonymous (Gergen & Thatchenkery 2004), this study chooses to draw a line through this borderland so as to demarcate modernism from postmodernism more clearly.

Although all postmodernists are constructionists, not all constructionists are postmodernists (Chia 1996 p.16). Constructionists believe that people create their own social reality and that they do so partly, or completely, through discourse. Postmodernists agree but in addition they believe that signifiers only refer to other signifiers, not to ideas or things. It follows that the self is created in discourse by discourse and that social reality is also created by discourse but also that there is no universal point of view or external reference points that exist prior to discourse. Thus, modernist constructionists can believe that social reality is discursively constructed while also believing that signifiers can refer to a reality outside signification and that there is a stable self, prior to discourse, and therefore, that a universal point of view is possible.

If, as constructionists believe, social phenomena are the product of human activity it is only possible to understand them through studying what social phenomena mean to actors who create and recreate them. *The Social Construction of reality: a treatise in the sociology of knowledge* by Peter Berger and Thomas Luckmann (1971) has been a influential text in the modernist constructionist paradigm. It has also been influential in the formation of institutional theories and will be referred to again in Chapter 2 in this connection. Like other constructionists, Berger and Luckmann believe that social norms and institutions are founded on non-discursive elements, primarily by people copying the actions of others and forming social habits.

Berger and Luckmann also see language as having a significant role in their theory of the social construction of reality. However, they think of language as an objective system of signification which represents pre-existing experience which is a modernist model of language. This view is at odds with the postmodernist view adopted here: that language is a part of a discursive system which enables and shapes experience. Thus, when Berger and Luckmann elaborate their theory of institutions, they begin by describing the formation of a pattern of habitual action without any reference to the significance of these actions in *discourse*.

1.5.6. The Paradigm of this Study

A paradigm is a set of assumptions upon which an investigation is built. It is not possible to begin without any assumptions and this study is no different. The main assumptions made in this study are: (1) that the ultimate explanation for social phenomena lies in discourse; (2) that the world is chaotic, constantly changing and largely unpredictable (3) so that people have to impose "useful fictions" upon it in order to interact with it for their own purposes; (4) that the world is only knowable through the senses and the complex nervous system of individual human beings which has discourse as its "software" and (5) is not knowable directly or unproblematically. The purpose of explicitly stating these fundamental assumptions it is to open them to inspection and, therefore, to open an avenue to new questions and perspectives.

1.6. Backgrounds of the Components of the Theory

The theory to be developed in this study is composed of several separable parts from different sources (Table 2.1). These sources are the works of Jacques Derrida, Giles Deleuze, Michel Foucault, Mary Douglas and several scholars working in the fields of institutional theory and cultural theory. Their work is used as sources, and there is no attempt to analyse their work as a whole or to resolve contradictions between one and another. Their work is used to complement each others' and to supply weaknesses in each other, for the purposes of theory development.

The work of these scholars has been chosen because each supplies a component that is useful to the theory as a whole:

- Derrida tells us about the fundamental working of discourse.
- Deleuze tells us about how things work together in combination assemblage.
- Foucault tells us about the discursive nature of institutions and how power works through discourse discursive formation and power.
- Douglas tells us how different voices come together dynamically to form institutions GGCT.

Together these enable the development of a theory of organisation which has explanatory and predictive power.

Each of these components could be separated from this theory and the theory could be supplemented from other sources. In the terminology of Deleuze, this theory is an "assemblage", and the consequences of thinking in terms of assemblages will be explored in Chapter 2. The theory could have been built differently using different components. For example, a serviceable postmodern theory of organisation could be built using the work of Bergson, Wittgenstein, Levinas and Bourdieu. Thus, this theory is not the only possible one and is not pretending to have the last word or to be the all-encompassing grand theory which confounds all others. It is offered in the hope that it may be found useful and it is that test of utility which is the ultimate one (Gergen 1992): if it is useful, it should be used and enhanced and if it is not useful it should be abandoned in favour of something more useful.

The work of these scholars has certain things in common which make them suitable to be brought together. For example, they all occupy the Kantian tradition of thinking in assuming that the reality of experience is socially constructed and that there is another ultimately unknowable reality "out there", and they all, in some way, owe a debt to the linguistic scholar Ferdinand de Saussure in that they assume his structuralist model of signification. Here the background of each component will be explored to show the starting points for the rest of this project.

1.6.1. Derrida, Discourse and Différance

Since this theory is built on the assumption that humans cannot have any knowledge of the material world without discourse, the foundation of the theory must be built upon some concepts of discourse. These foundations are drawn from the philosophy of Derrida whose work influences the entire theory.

Derrida's theory of discourse begins from a close reading of Saussure. In Saussure's model there is a signifier that exists as part of a symbolic system and represents a signified (De Saussure 1959). The signifier may be a spoken or written word and the signified is a concept. For Saussure, the relationship between the concept and the world precedes language and is thus outside the study of linguistics.

Derrida (1976) challenges Saussure's model of language in order to build upon it and offer a more rigorous theory. Derrida argues that the signifier pre-exists the signified, rather than the other way around, and that it is the symbolic system which creates the concepts which it describes. However, Derrida follows Saussure in arguing that language is a system of differences and that meaning is created negatively through what words do not mean. Whereas in Saussure's work it is not clear whether meaning is created by the relationship between signifier and signified or the system of differences between signifiers, Derrida says that the symbolic system is not a system of representation of pre-existent concepts but a system of differences which creates meaning within itself, rather than representing meanings which pre-exist it. Derrida's view is confirmed, though not conclusively, for example, by the fact that different languages divide the colour spectrum differently, thus, where English has the colour blue other languages such as Italian have two separate colours, while old Welsh does not distinguish between blue and green (Deutscher 2011) and Piraha has no words for colours at all (Everett 2009).

While Derrida's "deconstruction" may be described as a method, Derrida himself denied that deconstruction is a "hermeneutic method" (Culler 1983 p.156; Derrida 1982b) but instead is something intrinsic to discourse and always at work in discourse itself, forming one of the possibilities for the existence of discourse. Derrida's method is to read discursive objects (texts) closely enough to be able to see the text deconstructing itself. For the sake of brevity this method of observing deconstruction will be referred to as "deconstruction" since this usage is common among scholars who are influenced by Derrida's work. He draws on Levi-Strauss's notion that texts are structured by binaries (Levi-Strauss 1969). In each case one of the pair is privileged above the other which appears to be dependent on it. In fact, neither member of the pair can exist without the other, so each is simultaneously the origin of the other and is a supplement to it. This contradiction, or *aporia* (gap or silence), forms the foundation upon which the text is built. Thus, the aporias in the text form a condition of possibility of the existence of the text (Derrida 1993). The method of deconstruction consists of finding aporias, observing how the binaries are at work and, rather than simply inverting the binary, holds the binary in view so that new possibilities may be generated.

Derrida uses the neologism, "différance", for the separation between signifiers (Derrida 1982a). He uses this term because in French the pronunciation is the same as the word for difference, and the difference between the two terms can only be seen when it is written. By this move Derrida seeks to emphasise the importance of writing, thus inverting the binary speech/writing, where speech is normally privileged, because he believes that writing is a better starting point for understanding discourse as a whole than is speech. *Différance* is a force that creates meaning. It involves one term being different to all the others which it is not and it also involves the notion of the other terms being delayed or deferred. Thus, when you use a word, its meaning is silently being created by other words which are in varying degrees of proximity to it. Différance, as Derrida says, does not in itself exist but it is the precondition of the existence of meaning. While *différance* is the general concept which he uses for this principle, in the case of a specific word he calls it the "trace". Thus, whereas the word "sheep" has a trace in English, the word "mouton" has a different trace in French for many reasons which include the fact that the meat derived from the animal is the same as the name of the animal whereas in English the two words are different.

Différance forms a major component of the discursive theory of organisation which is developed in this thesis.

1.6.2. Deleuze and Postmodernism

The work of Giles Deleuze is wide ranging and complex. So far, it has been drawn upon little by business and management scholars. This study makes use of his ontological theory of *assemblage (agencement)* which appears in small sections dispersed through a number of his works but which occurs most notably in *A Thousand Plateaus* (Deleuze & Guattari 1987) and *Dialogues II* (Deleuze & Parnet 2007). As a materialist Deleuze emphasises the particularity of things and rejects the notion of essences, Platonic legacy ingrained in Western thinking.

Manuel DeLanda (DeLanda 2006) argues that, although Deleuze's work has superficial similarities with the postmodernists, Deleuze is not a postmodernist but a realist, insisting that these categories are mutually exclusive (ibid). According to the definition of postmodernism offered in this study DeLanda is correct because Deleuze does not place discourse at the centre of his thinking. However, it should be noted that there are

many similarities between Deleuze's thinking and that of Derrida's such as both having a differential ontology. However, this researcher disagrees with DeLanda's statement that by placing discourse at the centre of a philosophical system it cannot be realist. It is part of the argument of this thesis that discourse itself is a wholly materialist entity and that a discursive model of organisation can also be realist (DeLanda 2006).

DeLanda says that Deleuze is a realist because his work is built on the assumption that there is a real world independent of human perception and that human perception should be regarded as unproblematic (DeLanda 2005). He argues that to say that human perception is problematic introduces an element of anthropocentrism because it follows from it that there is no knowledge of anything which is not tainted with a human element. This intrusion of the human, he argues, clouds the study of both the natural and the human sciences and Deleuze discards this distinction (DeLanda 2005).

In the management literature the only theory which shows inspiration taken from Deleuze's work is Actor Network Theory (ANT) which treats social phenomena as *assemblages* (Latour 2005). In Chapter 3 it is explained how the theory developed here differs from ANT and improves upon ANT.

In this study, contrary to ANT (Latour 2005), human perception is regarded as problematic and the illusion of presence to be a significant issue. This position does not affect the use made here of Deleuze's thinking.

1.6.3. Foucault and Postmodernism

Foucault's work has been extremely influential in organisation studies, as shown in Chapter 2, though this influence has been accompanied by criticism, for example, of the depth of his scholarship (Wickham 2008; Rowlinson & Carter 2002), of his rejection of humanist rationalism (Feldman 1997) and of his constructionism (Morrow 1995; Woolgar & Pawluch 1985)

The influence of his work has raised disquiet among some organisation scholars because of Foucault's postmodernist credentials and this disquiet has been greatest among critical realists who would prefer to see Foucault as a kindred spirit. They see Foucault as a genius with a problem, a tendency to overemphasise the importance of discourse, who needs their help. It is a comparatively simple matter, they argue, to reinterpret Foucault's work into the critical realist paradigm (Reed 2000; Marsden 1993; Al-Amoudi 2007). These efforts are good examples of cross-paradigm misunderstanding. For example, these reinterpretations of Foucault begin with the assumption that discourse is entirely linguistic in nature and proceed via the mistaken assumption that postmodernists believe that the material world does not exist beyond linguistic representations of it.

Foucault does not make matters easy by not laying out his ontological assumptions and there are times when his argument assumes that the world may be perceived in full presence without the mediating influence of discourse. This study does not propose to enter into a discussion about what Foucault really meant but intends to use his work without attempting to resolve these ambiguities.

Foucault's work falls into three periods. The earliest period is often referred to as his "archaeological" period and has a discursive focus. The work from this period has had little influence on the business and management literature and is in contrast with the huge influence of his later work. This period ends with the publication of *The Archaeology of Knowledge* (1972b). This period then gave way to a new focus on the topic of power which culminated in *Discipline and Punish* (1979) and is referred to as his "genealogical" period. Finally, the focus on power gave way to a more general focus on ethics and this period is referred to as his "governmentality" period. This study draws on the first two periods of his work (Dreyfus & Rabinow 1982).

It follows from DOT that if Foucault's concepts of *discursive formation* and *power* are used to interpret the literature of institutions, new insights into the nature of real organisations may be gained.

1.6.4. Institutional and Cultural Theories

In the modernist management literature the concepts of institution and culture give rise to many related and overlapping constructs. For example, in the organisational culture literature there are the constructs of Hofstede's dimensions of national culture (Hofstede 2001) and Schein's levels of culture (Schein 2010) which seem different. The relationship between these concepts is clarified through DOT so that the connection between the bodies of literature of culture and institution becomes readily apparent.

1.6.5. Mary Douglas – Modernist Anthropologist

The method of Mary Douglas's work can be described as constructionist. After Durkheim, she draws a distinction between the active construction of society through rituals and the cognitive perception of it in language (Douglas 2002) and argues that it is the non-linguistic activity of ritual that creates institutions. Her work is in the tradition of Durkheim (Durkheim 2001) who suggested that rituals are important in constructing the social sphere and leads to the work of Berger and Luckmann (Berger & Luckmann 1971) which will be discussed in Chapter 2.

Douglas's work might at first sight seem an unlikely component of the theory developed in this study. Douglas's work is located in the modernist anthropological paradigm and draws a significant part of its inspiration from the sociologist Emile Durkheim. However, her work also owes a great deal to the structuralist anthropologist, Claude Levi-Strauss and, therefore, like all the other components of DOT, shares an intellectual lineage with the work of the structuralist linguist Ferdinand de Saussure.

From Saussure, Levi-Strauss took the idea that a society structures its view of the world using binaries, for example, all societies classify things into the categories natural and man-made (Levi-Strauss 1969). This binary translates into the realm of food as *raw* and *cooked*. However, there is another, associated, binary which is to do with the speed of transformation of the food. If it is transformed slowly, and naturally, it becomes rotten whereas if it is transformed quickly, and artificially, it is burnt. Levi-Strauss shows that one side of the binary is considered to be better than the other but which side it is varies from one society to another, since it is a convention.

Douglas's work takes up Levi-Strauss's idea of a society's worldview being based on binary concepts which generate dynamic social structure. For example, in her most acclaimed book *Purity and Danger* (Douglas 2002), she looks at concepts of purity and impurity in various societies and relates these ideas to danger. This book contains an often cited analysis of the food prohibitions of the Old Testament Book of Leviticus. She points out that this is not an arbitrary list of prohibitions but that the reasons given for the prohibitions provide a way to structure a world view in the realm of food and, more generally, the relationship between people and the natural world. For example, she points out that Leviticus's original audience were herdsmen who chiefly ate meat from sheep and goats. These animals have cloven hoofs and chew the cud. The other animals that are mentioned would have been an alternative, or emergency, food supply. These animals are declared *clean* or *unclean* depending on how far they resemble sheep and goats in the important characteristics of having cloven hooves and chewing the cud. Thus, pigs are declared unclean because although they have cloven hooves but do not chew the cud. In Douglas's opinion all societies use the pure/unclean binary, along with the idea that the unclean is dangerous, to structure their worldview and that modern society is no different because we have science based reasoning for the classification.

In an interview about *Purity and Danger* at some time after its publication Douglas commented that she had inadvertently made these binaries the theme of the book when what she really meant to emphasise was that the concepts lead to actions and the actions, in turn, create the concepts (Douglas 2006b). So, in Douglas's theory the relationship between the symbolic system and the social phenomena is a dynamic one whereas in Levi-Strauss it is a static relationship where the conceptual structure determines the worldview and, therefore, the actions based upon it. Like Durkheim, she insists that religious concepts become manifest in ritual and could not survive as concepts alone. Douglas's theory has much in common with Giddens's idea of the duality of structure (Giddens 1979; Giddens 1984) where unconscious social structure only exists at the same time as it is manifested as action but Douglas's theory is firmly rooted in empirical evidence whereas Giddens's is not.

Douglas's institutional model, Grid-Group Cultural Theory is interpreted in Foucauldian terms in the development of DOT in Chapter 7.

1.7. Organisation of Thesis

The main purpose of this thesis is the development of DOT, which is a theoretical undertaking. A grand theory like DOT has two criteria for success: internal consistency and utility. The internal consistency of DOT is demonstrated in Section 2 (Chapters 2 to 7) where the theory is developed.

Since DOT is a grand theory, it could be applied to any problem. In this thesis, the potential utility of the theory is demonstrated through an empirical study described in Section 3 (Chapters 8, 9 and 10), though no empirical study could do more than demonstrate an aspect of the theory. In this study, the text of a discussion of a

management problem is analysed in terms of the DOT interpretation of GGCT revealing how the thought styles of GGCT dynamically construct a bureaucratic institution.

The structure of this thesis is as follows:

1.7.1. Section 1 Introduction - Chapter 1

Chapter 1 describes the problem which the thesis addresses, the paradigm in which the investigation takes place and explains the significance of the work.

The problem which this thesis addresses is: after a flurry of fruitful new ideas in the 1980s slower progress has been made in organisational studies, so this thesis develops a new theory that may help scholars and practitioners gain fresh insights to help with perennial problems, such as maximising effectiveness or successful organisational change, in the future.

The reasons for choosing the bodies of literature to be explored in Section 2, from which the theory is developed, are given and explained.

Finally, the significance of this study is explained in terms of its contribution for scholars, consultants and managers.

1.7.2. Section 2 Literature Review and Theory Development – Chapters 2 to 7

Section 2 develops DOT in six steps, each in its own chapter. These chapters are structured in two parts. The first part contains a review of the relevant literature from which the theory is developed. The second part contains the theory and all the headings in this part begin with "DOT".

- In Chapter 2, the first step is to define the postmodernist paradigm within which the theory is developed by identifying its basic assumptions.
- In Chapter 3, the second step is to identify the characteristics of assemblage theory that is to be used and translate it into the postmodernist paradigm.
- In Chapter 4, the third step is to build the core theory in three stages beginning with the discourse assemblages.
- In Chapter 5, the fourth step is to identify concepts from institutional and cultural theory that may be translated into the DOT theory assemblage.

- In Chapter 6, the fifth step is to identify components of Foucault's theories of power that may be employed in DOT to develop a model of the self.
- In Chapter 7, the sixth step is to identify elements of GGCT that are to be used and translate them into the DOT theory assemblage.

1.7.3. Section 3 Empirical Demonstration - Chapters 8 to 10

The aim of the empirical research in the thesis is stated as: to demonstrate the utility of the DOT methodology through the analysis of discussions within institutions. The method for conducting this research was to create pop-up institutions using unmoderated focus groups tasked with discussing a problem in a fictional case study (Appendix C1). The discussions were recorded and transcribed. The data was then imported into NVivo software for analysis which consisted of close discourse analysis using the GGCT typification of thought styles. Four hypotheses were devised predicting the appearance of the GGCT thought styles in the discussion.

In Chapter 9, the data from the discussion groups were analysed with a view to testing the hypotheses. The codebook for the data analysis was developed iteratively while coding the transcripts (Appendix D).

All four of the hypotheses were confirmed. The analysis also revealed that the thought styles do not interact with each other in simple patterns but are consistent with the notion that GGCT deconstructs bureaucracy. Characteristics of Foucault's disciplinary power were also observed in connection with the hierarchical thought style.

In Chapter 8, the analysis of the findings shows that the four thought styles interract with each other in co-operative as well as antagonistic ways. Although the hierarchical thought style is dominant throughout the discussions it is apparent that it needs to cultivate and make an alliance with the egalitarian thought style and, to a lesser extent, the individualist thought style to solve the problem. Fatalism came into the mix as a brake to stop the solution from attempting to put right things that were not wrong in the first place.

In this chapter the suggestion is made that the GGCT thought styles should be thought of as acting like dyes placed in a water course to track the flow of water and identify leaks. Here the thought styles are used to reveal flows in the discourse which build structure.

1.7.4. Section 4 Concluding Remarks – Chapter 11

This is the conclusion of the thesis. It identifies the main contributions of the theory development and of the empirical research. It also identifies the limitations. Finally, some possibilities for further research are discussed.

Section 2 Theory Development

This section develops DOT in six steps, each in its own chapter. These chapters are structured in two parts. The first part contains a review of the relevant literature from which the theory is developed. The second part contains the theory development and all the headings in this part begin with "DOT". Table 2.0 shows the stages in the development of DOT.

The purpose of the literature review sections in Chapters 2 to 7 is to provide a basis and context in which to develop theory. The literature is of two types: authoritative texts which are the sources of the underlying concepts and peer reviewed journal articles in business and management and related subject areas which show what work has already been done to apply these underlying concepts. Each chapter has sections that review the relevant literature firstly by examining the authoritative texts and, secondly, by critically examining the academic literature on that topic.

The dominant view of how a literature review should be done in the business and management field has shifted from the comparatively relaxed approach of the narrative, or traditional, literature review to the systematic literature review. A systematic literature review begins with a search of electronic journal databases using selected keywords (Tranfield et al. 2003). Thus, the systematic review can claim to be "a replicable, scientific and transparent process … that aims to minimize bias through exhaustive literature searches of published and unpublished studies and by providing an audit trail of the reviewer's decisions, procedures and conclusions" (p.209).

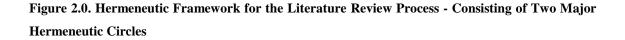
Sandberg and Alvesson examine how organisation studies researchers construct their research questions (Sandberg & Alvesson 2011). Despite the fact that the most interesting and challenging research comes from questioning assumptions, they found that the vast majority of studies were attempting to fill gaps in existing knowledge and that only a few arose by challenging assumptions. They go on to say that it often makes sense to do research that looks for gaps and attempts to fill them but that, additionally, a more disruptive approach is required to generate new interesting and influential theory. Since the systematic literature review method is primarily designed to find gaps in the literature, this suggests that it is a poor way to generate new theory.

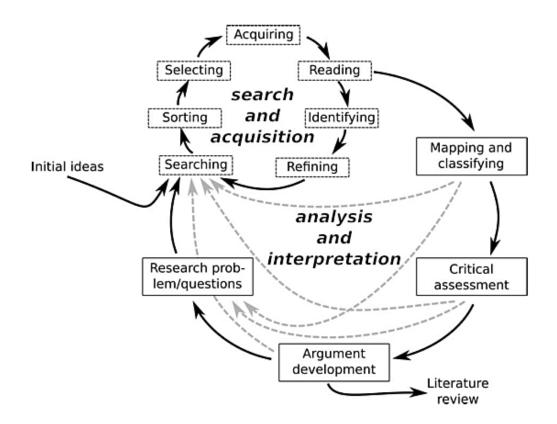
Schultze (2015) proposes that literature reviews might be classified using a continuous spectrum from systematic to interpretive and that literature reviews are mixtures in various proportions of the two according to the purpose of the literature review. Beginning from the systematic end of the spectrum, her suggested classifications are: inform practice; evaluate theory; survey the state of knowledge; develop theory or framework and problematise the existing literature (Schultze, 2015, p.182). Therefore, on Schultze's continuum, the type of review required here is at the interpretive end of the spectrum.

Since the aim of this thesis is to challenge assumptions by developing new theory, the literature review methodology employed is of the interpretive variety and is based on the hermeneutic circle (Gadamer 2013; Heidegger 1962). According to this model the researcher begins reading the material with preconceptions which are modified and extended as he or she reads further. Thus, the mindset of the researcher is not the same at the end of reading a paper as it was at the beginning. So, for example, the researcher reads a paper and gains insight into the topic as he or she does so. If the researcher reads the paper a second time, there will be richer insights to be gained but if the researcher reads another paper on the same topic and returns to the first paper for further reading, it will yield yet deeper insights. And, so the process may continue. Thus, the process is not linear but one of an iterative snowballing effect. This process not only creates a literature review but, at the same time, modifies the researcher's subjectivity.

Boel and Cecez-Kecmanovic (2014) theorise the hermeneutic literature review process in terms of two cycles operating simultaneously, as shown in Figure 2.0.

In the larger circle, the researcher gains understanding and improves his or her analysis and interpretation of the texts for application to the research problem while at the same time in the second circle, as the researcher reads the texts, he or she also identifies patterns and refines the assumptions that he or she began with leading to the discovery of further relevant texts (ibid pp.264-273). There is no defined end to the research process but eventually saturation is achieved where further reading does not significantly add to the researcher's ability to address the research problem.





(Boell & Cecez-Kecmanovic 2014 p.264)

In this thesis, the theory development is in two parts. Firstly, there is the grand theory of DOT, developed in Chapters 2 to 6. However, grand theory is not normally amenable to direct application to data so in middle-range theory has to be developed from the grand theory so that can be empirical application. In Chapter 7, a middle-range theory' Grid-Group Cultural Theory (GGCT), is adapted for the empirical application of DOT. It is envisaged that DOT could work with a variety of different middle-range theories so this example of the adaptation of GGCT and its empirical application is a demonstration of the DOT methodology.

| Theory Component | Role in Theory Development |
|--|--|
| Chapter 2. Post Modernism | Defines the assumptions on which the theory is developed |
| Chapter 3. Assemblage (Deleuze) Chapter 4. Différance (Derrida) | These are the two main components from which DOT is developed. The combination of these two concepts is novel and is the most significant factor in defining the difference between DOT and other theories of organising. From the combination of these concepts comes the concept of <i>Discourse Assemblage.</i> |
| Chapter 5. Institutions and Related Concepts | The <i>Discourse Assemblage</i> is the main component of the <i>Institution Assemblage</i> . This section looks at existing concepts of institution and the related concepts of culture and bureaucracy with a view to reinterpreting them in DOT. |
| Chapter 6. Power and Subjectivity | In DOT power is a condition of interiority of the <i>Discourse</i> <i>Assemblage</i> and is responsible for the formation of institutions. The subject is a condition of interiority of the <i>Institution Assemblage</i> . These concepts are therefore fundamental to the development of the theory. |
| Chapter 7. Grid-Group Cultural Theory | GGCT is one of an infinite number of potential applications of DOT. GGCT is reinterpreted by deriving its dimensions from conditions of interiority of the <i>Discourse Assemblage</i> . |

Table 2.0. Section 2: Stages the Development of DOT

Chapter 2. Postmodernism

DOT is developed within the postmodernist paradigm and, for this reason certain assumptions are made that form a basis upon which the theory is developed. This section reviews the literature of discussions of this master paradigm and identifies the main source of the way in which the paradigm is understood for the development of DOT in Derrida's lecture "Structure, Sign and Play in the Discourse of the Human Sciences" (Derrida 1978).

As stated at the outset, this study is concerned with postmodernism as a system of thought rather than as an historical phenomenon (Hassard 1999; Parker 1992). Postmodernism is a term that can be used to describe artistic movements and social phenomena (eg. Berman 1983; Lyotard 1984). However, this study is not concerned with postmodernism as an historical phenomenon and there will be no talk of the "postmodernist organisation" or "postmodernist era".

Postmodernism is often perceived negatively and associated with the disintegration of social structures, the negation of reason and self-indulgent works of art. Instead, in this study "postmodernism" refers to philosophical discussion which makes a priority of precision and a concern to tackle areas of thought that are difficult because they are so close to home. In fact, postmodernism is concerned with the preconditions of thought itself, specifically in identifying the preconditions for our being able to ask what we may have already thought of as fundamental questions.

Postmodernism has been perceived as a challenge to modernism and modernist scholars have sometimes received it defensively. It has been derided, for example, in the "postmodern generator" which is a computer programme that generates randomly composed pastiches of postmodernist scholarly articles (Bulhak 2000; Sokal 2000; Weiss 2000). It has been treated as a fashion which will fade away (Featherstone 1988; Parker 1992) or as a fashion which has already faded away (Matthewman 2006). It has been accused of being "dangerous" (Parker 1995 p.553) by encouraging people to abandon reason, standards of proof, morality and generally attempting to plunge the world into chaos and irrationality (Dawkins 1998). Kuhn describes the anguish caused among natural scientists when their paradigm is challenged but in the social sciences the pressures which bring about a paradigm shift are different and paradigms can co-exist

(Kuhn 1970). Nevertheless, when scholars accuse their postmodernist colleagues of stupidity or charlatanism (Dawkins 1998), rather than having devised a different, internally coherent and valid point of view, it is perhaps indicative that the detractors feel that they are facing a serious challenge to all the principles and assumptions that they have built their professional expertise upon. In an interview, Derrida comments stoically on the existential disquiet that his work has induced in some of his colleagues while, at the same time, pointing out that it is his scholarly duty to propose new ideas (Derrida 2002).

In this chapter, firstly, in 2.1, the nature of paradigms is described using Derrida's notion of a structure with an external centre which leads to describing postmodernism as a paradigm with its centre in discourse. Then, in 2.2, the business and management literature that deals with postmodernism is reviewed showing that there has been a large amount of misunderstanding of postmodernism on the part of many scholars. In 2.3 the characteristics of the postmodernist paradigm are discussed. The paradigm in which DOT is developed is described in Section 2.4 which looks at the ontological and epistemological assumptions of the paradigm and uses heuristics to describe some of the basic assumptions of the paradigm. Finally, in 2.5 the status of DOT as a grand theory is explained.

2.1. Derrida's Event

In a lecture, "Structure, Sign and Play in the Discourse of the Human Sciences", delivered in 1966 on the subject of the structuralist anthropology of Levi-Strauss, Derrida exposes some contradictions at the heart of structuralism (Derrida 1978). Derrida uses a deconstructive approach, that is, by closely reading Levi-Strauss's words he shows contradictions which reveal the fundamental assumptions behind the text. In the course of discussing the contradictions of structuralism, which is a modernist paradigm, he also defines the nature of postmodernism as it is understood here.

Derrida argues that any text, including social theory, uses a structure which must be anchored or centred, somehow, in reality. The point at which the structure is anchored cannot be inside the structure, but outside it and is not a part of it. He says through the history of Western thought, since the ancient Greeks, this central point has moved from one concept to another: "... essence, existence, substance, subject ...transcendentality, consciousness, God, man, and so forth ..." (Derrida 1978a p.280). However, there has been an event which does not have a fixed date but is rather a trend which has been growing since the beginning of Western thinking. This trend is exemplified by aspects of the work of Nietzsche, Freud and Heidegger and has been growing in momentum in recent years. As an event, it disrupts the procession of structural centres and has a disruptive effect on the notion of structure.

The event to which Derrida is referring is the placing of discourse at the centre of structure. The traditional view of language is that there is a phenomenon apparent to the senses in the real world which is represented in the human mind by a concept which, in turn, is represented by a word or phrase. The structuralist linguist Saussure closely examines this model of language and uses the term "signified" for the concept and "signifier" for its representation in language. Levi-Strauss's work is influenced by Saussure and Levi-Strauss argues that the mythology of a society is structured like a language. However, Derrida shows that signifiers do not have a fixed relationship with signifieds and that signifiers can only be defined in relation to each other. Thus, language is not anchored in anything outside itself and, when looked at this way, the structure is free to play. By anchoring structure in something which is itself indeterminate, the whole notion of structure is transformed. Derrida calls this transformation the end of "the metaphysics of presence" (Derrida 1978a p.281).

The metaphysics of presence is exemplified by Descartes's *cogito ergo sum*, "I think therefore I am" (Descartes 1968/1637). If the "I" who is doing the thinking is an effect of language, a position from which to speak, then "I" is not anchored in an individual organism but only in the system of differences of discourse itself. Thus, when Descartes's says "I", this subject is not fully present. Descartes's makes the assumption that because there is a subject in the sentence "I think therefore I am" that this subject must be present but this is not so and all that can be inferred from the sentence is that there is thinking going on.

Descartes's assumption of presence in the *cogito* is fundamental to all of western thinking before postmodernism, which Derrida terms "the metaphysics of presence" or, in later works, "logocentrism" (Derrida 1976 p.3). Whereas in modernism reality is fully present in consciousness, in postmodernism there is a gap because reality must be mediated by an always already existent symbolic system, or discourse, and this includes

consciousness itself where there is a gap between corporal sensations and their interpretation. Thus, consciousness becomes in postmodernism the "decentred self" (Linstead 1993).

Derrida's theory of the nature of structure is a theory which explains the concept of master paradigm as described in Chapter 1. Thus, the modernist master paradigm is centred on the concept of man and all the sub-paradigms of modernism, positivism, interpretivism, critical realism, actor-network theory, structuration theory, pragmatism and so on, are also centred on man. However, postmodernism is centred on discourse and, therefore, requires the rethinking of theories and methodologies.

2.2. Postmodernism in the Business and Management Literature

Despite a barrage of criticism, interest in postmodernism in the field of business and management has grown steadily. The graph at B.1.2. shows the results of a Scopus search for articles published in the business and related literature between 1980 and 2013. The trendline on this graph shows a steady increase. Because the total volume of articles published has also steadily increased, the increase in articles which mention postmodernism does not necessarily indicate an increase in the proportion of all articles, nevertheless it suggests that postmodernism is not a passing fad and is unlikely to disappear soon.

In the postmodernist business and management literature there is an additional trend. Before about 2000 there were articles which dealt with postmodernism in general, explained it and argued a case for its use (eg. Cooper & Burrell 1988; Chia 1995) while other articles attacked its perceived weaknesses (Featherstone 1988; Parker 1992; Thompson 1993). Since then there has been little general discussion of postmodernism which, in any case, generated parallel polemics rather than real debate. Instead there has been work which focuses on specific studies rather than broad perspectives. This section reviews the literature of the broad perspective.

Cooper and Burrell (1988) compare modernism and postmodernism in organisation studies. They characterise modernism as concerned with progress and reason. In modernism, knowledge is knowledge of fixed objects and events in the world. Human agency is given a central role and it orders the world rationally to bring it under human control. Modernism makes two assumptions: that there is an ordered world "out there" and that there are rational human subjects who are capable of understanding and ordering this world. On the other hand, postmodernism sees the world as full of paradox and indeterminacy. Postmodernists place discourse at the centre of their viewpoint and Cooper and Burrell cite Derrida's position on the self-referentiality and indeterminacy of discourse and, therefore, of all social structure including organisations. Knowledge can only be the knowledge of the differences and relationships between entities, like objects and events, because the world is always in a state of change and these things are not fixed, so it is preferable to direct our attention to processes. Organisation is created by forces that we never fully understand and organisations acquire a life of their own which is never fully under human control. Modernists seek to understand organisations in terms of their formal ordering by looking at structures, their unity and their identity whereas postmodernism seeks to *deconstruct* organisations, that is, to analyse their self-referential nature and process of their structuring.

Whereas modernism looks at the world as static with fixed objects of study, entities such as individual, organisation or culture, postmodernism looks at the world as dynamic and in a continuous process of *becoming* so the objects of study are processes and the relationships between things (Chia 1995; Tsoukas & Chia 2002). Chia (1995) describes the difference between modernism and postmodernism as being a distinction between two thought styles. He cites Whitehead's idea of the "Fallacy of Misplaced Concreteness" (Chia 1995; Whitehead 1929) which includes the notion that it is an illusion that states, attributes and events are fixed entities when they are really stages in concurrent, overlapping processes. He also points out that the entities that we deal with appear to have unity and solidity but when they malfunction it often becomes apparent that they are composed of networks and processes. He suggests the entities that are the commonplace objects of study in organisation studies are "epiphenomena of implicit assemblages of organizational actions and interactions" (Chia 1995 p.601), in other words, the temporary coming together of activities which create the effect of organisation.

Objections to postmodernism tend to arise because of the lack of comprehension of the paradigm as a paradigm; examples of this phenomenon are Featherstone (1988), Thompson (1993) and Parker (1993) who judge postmodernist assertions by the principles of modernism. The main objections are that in postmodernism there is too

much emphasis on discourse or power (Alvesson & Kärreman 2011); that postmodernists do not believe in human agency so it is deterministic; that postmodernists believe that the world can be any way that you choose to believe it to be (Parker 1995); that because postmodernists believe that truth is relative there is no point in attempting to discover general regularities as science does and that postmodernists are only able to focus on phenomena which are temporary and local because they do not have a position from which to generalise (Calas & Smircich 1999).

First, there is the objection that discourse is overemphasised by postmodernists (DeLanda 2006) and that this supposed obsession needs to be counterbalanced (Alvesson & Kärreman 2011) by not allowing non-discursive factors to be underrated. For example, Reed complains that for Foucault "there is nothing outside discourse but more discourse" (Reed 2000 p.525). Alvesson and Karreman (2011) suggest that discourse should be counterbalanced by also considering social norms and institutions (Maguire & Hardy 2006) which, like many constructionists, they believe to be founded on habitual action rather than discourse (Berger & Luckmann 1971). They also recommend culture as another counterbalance believing that culture precedes discourse (Alvesson 2004).

Since postmodernists see power as an intrinsic attribute of discourse, there is also the similar allegation that power is overemphasised. Thompson argues against this emphasis on power using an example from his experience (Thompson 1993): the bad behaviour of a lazy employee is tolerated by his employer until the conditions in the employment market change and it becomes easier to find a more hard-working replacement at which time the lazy employee is dismissed. Thompson argues that the shift in power from the employee to the employer was due to the market and not to discourse.

These two closely related objections arise from the difference between the modernist and postmodernist paradigms. For postmodernists there is nothing outside discourse because it is only through concepts, organised for us in discourse, that we are able to be conscious of anything. For the modernist, discourse is just another phenomenon in the landscape, perhaps an important one but no more important than others. For the postmodernist, however, discourse is of central importance so the counterbalances offered by Alvesson and Thompson also have their own discursive foundations and, therefore, are not counterbalances in the sense intended.

Second, there is the objection that postmodernism is deterministic and denies that people have any agency (Reed 2000). The assumption that there are such things as rational human beings who can exercise free will is fundamental to the modernist paradigm; however, no such thing exists in postmodernism. However, the issue of the agency of the subject is an important one in DOT and it will be discussed in section 6.4.

Third, there is the objection that postmodernists mistakenly believe that the world can be any way that they want it to be based on the poststructuralist contention that signifiers only have meaning in relation to each other and not because they represent reality. This leads to comments such as, "just because someone claims that the moon is made of green cheese does not mean that, to all intents and purposes it is" (Parker 1993 p.207) and "physical, biological and social constraints exist outside of whether I want them to or not" (Parker 1993 p.207). This objection is a confusion based on a misunderstanding: just because postmodernist epistemology asserts that everything that we perceive is concept does not mean that postmodernist ontology asserts that only concepts exist or that all of these concepts can be anything that we - individually or collectively - want them to be. It is an elementary confusion, but common even among distinguished scholars.

Fourth, it follows from the second objection that any kind of truth cannot be absolute in postmodernism and that truth is a matter of opinion. Parker (1995) compares Lyotard, as his representative postmodernist, with Habermas, his representative modernist, and finds that, whereas both are sceptical that truth can be achieved, the difference is that Habermas gives hope that it is worth trying whereas Lyotard does not. Therefore, Parker argues, Lyotard's position gives no motivation for any kind of enquiry³. Significantly, he explicitly aims his criticisms at Lyotard and Baudrillard and exonerates Derrida and Foucault. This is a significant distinction because Derrida gives the clearest explanation for believing that truth is relative (see 4.1.). Parker concentrates his attention on what he perceives to be the undesirable consequences of adopting a relativist position, in terms

³ Dreyfus and Rabinow (1982) make the same objection to Foucault's archaeological methodology.

of the difficulty in debating ethical matters, rather than examining the reasons that postmodernists give for advocating relativism. Thus, Parker's argument is subjective and open to the same criticisms as the argument he is attacking (Clegg 1995). Willmott addresses Parker's central concern, which is the problem of ethical judgements that are called for when not all the actors participate in the same institution and, therefore, do not have the same values, arguing that, though there are weaknesses in Parker's argument, the value in what he is saying is that he is discussing the problem (Willmott 1997).

In postmodernism truth is relative to an institutional perspective and there are no absolute truths. This does not mean that one person's opinion is as good as another's. The unit of analysis here is not the individual but the institution. For example, postmodernism is not an attack on the institution of science because that institution creates its own value system but it is an attack on the notion that the scientific view is the only one that is able to evaluate truth. Additionally, this relativism does mean that from a postmodernist perspective ethical decision making does seem more difficult than it does from a modernist perspective, since it cannot be assumed that all the parties affected by a decision can find common ground. This is not, however, a problem with the paradigm but is, instead, a problem that the paradigm finds in its object of analysis.

Fifth, there is the objection that postmodernism is incapable of creating grand theory and is of little use to practitioners who require theories which are transferrable from one context to another. This view is seen as an objection by modernists but it is accepted by some postmodernists who see it as a legitimate limitation to their activities (Hassard 1999). In fact, there is a belief among postmodernists generally, which seems to follow from the third objection in this list that postmodernism is relativistic, that it is a waste of effort to create grand theory which is mere fiction, and that theory should be confined to the local and small scale. These postmodernists argue that if theory is mere fiction, it is of limited value, and, since the creation of theory has power effects, it is more moral not to create it. Hassard comments that, "The dominant knowledge bases of social theory ... rest on logocentric foundations. Given these assumptions, it seems that postmodernism must reject the idea of theory construction at the institutional level." (Hassard 1999 p.189) The literature shows a surprising lack of postmodernist theory at the institutional level. A lonely voice arguing against the reluctance of postmodernists to create grand theory is Gergen who does so in rather feeble terms by advocating playfulness (Gergen 1992). This reluctance, however, is based on a non-sequitur. It might seem reasonable from a modernist perspective that, if there is no absolute truth, postmodernist theory building is fruitless but from a postmodernist perspective lack of absolute truth is part of the ontology and does not logically have any necessary consequences for the researcher. If theory is a tool, a useful fiction, it follows that people need theory and, therefore, there is no good reason not to create it.

Some confusion has also arisen because some postmodernist theory has been translated into the modernist paradigm and used in that context. Foucault's work has been particularly vulnerable to this treatment. Reed sets out to "repair" Foucault's "weaknesses" (2000 p.524) so that his later work may be used within the critical realist paradigm (a sub-paradigm of modernism). Al-Amoudi, on the other hand, sets out to show that Foucault's work is compatible with a critical realist meta-theory and, therefore, can be used by critical realists (Al-Amoudi 2007). In these cases, the writer acknowledges that the theory under discussion originated in another paradigm but in many cases the translation of the theory from postmodernism to a modernist context is done without acknowledgment. An example of this phenomenon is Hardy's proposal that large institutional assemblages (Discourses, in her terminology) "bear down" on local instances of organisational behaviour while enlisting Foucault in the construction of the argument but ignoring the fact that Foucault does not see power or discourse as just variables among many but sees them as fundamentally generative (Hardy 2004; Hardy & Thomas 2014).

2.3. Postmodernism as a Paradigm

The version of postmodernism that is used in this thesis is based on Derrida's "Structure, Sign and Play in the Discourse of the Human Sciences" (Derrida 1978). It is a philosophy which places discourse at the centre of all structure and this view has a number of consequences which include that experience is not immediate but mediated by a pre-existent filter and that the self is a discursive construct. Another significant aspect of postmodernism is an ontology of process and flow which sees fixed entities

such as organisation and self as fictional but necessary for human comprehension because fixed entities simplify our view of the world sufficiently for us to arrive at an understanding of it on which we can act.

On the whole, the objections to postmodernism that were discussed in the previous section arise from the attempt to understand research and discussion conducted within the postmodernist paradigm and from a position within the modernist paradigm.⁴

The most damaging of these objections is the one with which postmodernists themselves seem to collude. This is the objection that postmodernism cannot create theory. However, this spurious objection has had a more damaging effect on the ability of postmodernism to fulfil its potential than any inherent flaw.

In postmodernism, no theory can be true so the best that a theory can do is to be a useful fiction. In this spirit, DOT as developed in this thesis is offered as a potentially useful fiction, no more and no less.

2.4. DOT: The Paradigm

This theory development takes place within the postmodernist paradigm. I define the postmodernist paradigm as a paradigm centred on discourse, as described by Derrida in his lecture "Structure, Sign and Play in the Discourse of the Human Sciences" (Derrida 1978). Derrida uses the metaphor of structure having a centre outside itself. Metaphors will be used a lot in the explanation of this theory though metaphors should always be treated with caution since the idea of metaphor includes difference as well as similarity (Lakoff & Johnson 1980). Because this centre is not part of the structure it is like an anchor being outside the ship but able to constrain the movements of the whole ship.

⁴ The criticisms made by Habermas of Derrida's philosophy (1987), which are discussed by Norris (1990), fall into this category. These criticisms pivot on what Derrida and Habermas mean by "literary use of language". There is not sufficient space to go into this question in this thesis but it is the author's belief that these criticisms are based on a misunderstanding of Derrida the nature of which would be apparent if there had been an adequate postmodernist theory of institution available. It is my intention to develop such a theory in the form of DOT.

Because discourse is at the centre of the paradigm, all explanations for phenomena must ultimately refer to discourse or be incomplete. There is an ambiguity about what is meant by "discourse" which will be explored in section 4.5 but it must be emphasised that it does not mean the same as "language". Discourse is generative of consciousness. Therefore, the centre of this paradigm is the precondition for the generation of consciousness and our explanations for phenomena must include an account of the means by which we know about them.

In addition to this central assumption, this paradigm includes ontological assumptions and epistemological assumptions, which are closely related to each other since the paradigm, as I have defined it, requires that we cannot speak about how the world is, ontology, without speaking about how we know it is like that, epistemology. A paradigm can also be conceived as a set of assumptions. The assumptions of the version of postmodernism in which DOT is built are shown in Table 2.1.

2.4.1. DOT: Ontological Assumptions

The chief ontological assumptions that are made in this paradigm are: that the world is purely material, that it is in a state of flux, that it has regularities but is largely unpredictable and that it may be understood in terms of assemblages, an idea which connects with the epistemological assumptions.

An ontological assumption of this theory is materialism, that is, it is assumed that the world consists of matter and energy as studied by physicists, and nothing else. This assumption is consistent with another assumption of this theory which is Deleuze's idea of difference and repetition which holds that the world consists of unique objects and events (Deleuze, 1994/1968). Discourse seeks to generalise and categorise, for example, by giving rise to the concept of essences where the essences are attributed to the objects themselves rather than to the concepts which manipulate them. An example which illustrates what this means is the concept of a species of living things. The species does not exist except as a concept, in the material world there are only unique individuals, which are said to represent the species, but the population of individuals is constantly changing with members dying and new members being born, so over a period of time characteristics of the population can change. It follows from this that it is a mistake to believe that the individuals represent the species because the reality is the reverse. Thus,

just as the individual is in a constant state of becoming as it passes through a maturing and ageing process so also the species is in a constant state of becoming and it only makes sense to define it in terms of its history - how it evolved to be how it is at this instant (DeLanda 2005). It also follows that the reality of what people think of as a fixed entity is not fixed at all but a snapshot of a moment in the flow of time (DeLanda, 2006). Deleuze's ontology might be described as "differential" since he believes that the world is composed of unique entities whose identity can only be defined by the differences between them (DeLanda 2005).

DOT takes a view of time as uninterrupted flow and consciousness as something that turns processes into things as described by Chia (2002). Our minds organise experience by filtering it so as to focus our attention on those aspects of experience that require our immediate attention and are productive for us. This view of consciousness is action orientated rather than cognition orientated: the main purpose is to act not to understand. Our minds are not able to process experience as it really is, as flow, but instead represent it for processing into seemingly stable and concrete entities such as individuals and organisations, which are really "temporarily stabilised event clusters" (ibid p.866). Thus, we think of change as being something that happens to things whereas the reality is the other way around and things are the ephemeral results of change. Because experience is a flow, the past is always imminent in the present and memory has a more significant role of selective forgetting than of storing. This is an ontology of "chaos, formlessness, nothingness, ambiguity, surprise and otherness" where organisations are "'islands' of fabricated coherence in a sea of chaos and change" (ibid p.866). The ontology of DOT includes the principle that the world is unpredictable and events are largely unforeseeable (Taleb 2007).

While the ontological conception of DOT is consistent with the ontology of flow, it is easier and more convenient to talk about things than processes and the development of the theory will proceed by talking about things, with the caveat that this is just a way of talking "because it's nice to talk like everybody else" (Deleuze & Guattari 1987 p.3).

Assemblages are loose, temporary collections of components which exercise each other's properties, which might otherwise be dormant, so that the assemblage has properties which the components do not have on their own (Deleuze & Parnet 2007; DeLanda 2006). In DOT the ontological model of assemblage is used to build a model

of organisation. In fact, DOT is itself an assemblage, a coming together of theoretical components at a particular point in history.

2.4.2. DOT: Discourse and Epistemological Assumptions

The epistemological assumptions of DOT are listed in Table 2.1.

The epistemology of DOT assumes that sense experience is filterd and interpreted by discourse. The word "discourse" has been used with a vast range of meanings and purposes. For the purposes of this study it is necessary to take a view on a definition of discourse in the interests of clarity.

Even in the business and management literature (Alvesson & Karreman 2000) "discourse" has had a wide range of meanings. For example, it might refer to a method of communication (Ford & Ford 1995) to researchers working in the positivist paradigm or it might refer to a method of constructing social reality (Ford 1999) to researchers working in the interpretivist paradigm.

Alvesson and Karreman (2000) have made a distinction between two uses of the term. In the first type of usage, which the authors refer to as discourse with a lower-case "d" it means spoken and written texts within a social context and is often associated with communication. In the second type of usage, which the authors refer to as Discourse with an upper-case "D" it means the social structures that are constructed through the power/knowledge relationships implicit in a field of linguistic usage (Alvesson & Karreman 2000 pp.1126-1127). The small-d discourse approach often relies on close analysis of the words used by the actors, sometimes accompanied by a close analysis of the context (e.g. van Dijk 2006). The big-D Discourse approach usually relies on the use of Foucault's theory of power/knowledge and attributes properties to discourse which include not only the creation of meaning and perception but authority as well (Foucault 1980a).

Some authors have used the term "discourse" to mean "... an extended expression of thought or knowledge on a topic that happens in a disciplined way" (Boje 1994 p.435). This use of the term will be avoided in this thesis. The author believes that this use of the term causes confusion between something that is merely a topic and something that is better treated as an institution, which is a more substantial entity (section 3.4.).

For the most part, "discourse" has been taken to mean something purely linguistic (Alvesson & Kärreman 2000) as it is in everyday usage but this assumption is rejected here. Instead, discourse will be taken to refer to any human symbolic system which includes mathematics, music, ritual, architecture (Benito 2003; Iedema 2007), written and spoken language, mathematical and chemical notation, ritual, visual representation of all kinds, computer programming code (Derrida 1974/1967) and so on, though discourse is dominated by language.

Additionally, discourse has been associated with the purely cognitive and this assumption is also rejected here. DOT adopts Austin's position that language (and the rest of discourse) is performative, that is, that its purpose is chiefly to get something done rather than assert or describe (Austin 1962).

An epistemological assumption of this theory is that the human organism can only experience the physical world through sensory data which is subject to the limitations of the senses and further limited by the processing power of the human nervous system then filtered by pre-existent knowledge. People have an illusion that they perceive the world immediately and as it is when, in fact, sensory data can only be interpreted and acted upon once it has been turned into concepts which are themselves based on pre-existent concepts (Derrida 1974/1967). This epistemology has a long pedigree in continental philosophy, for example, the physical world in Kant's work is *noumenon*, that is unknowable (Kant 2007/1787). Because of the limited nature of the human nervous system, reality cannot be experienced as a chaotic and constantly changing flux; instead we reduce it to static entities and closed systems so that it is easier for us to comprehend (Shotter 1993).

2.4.3. DOT: Desktop Computer Heuristic

To explain the relationship between the sensory input data and consciousness, I shall use the heuristic of the human organism resembling a desktop computer. Just as the computer can only receive input from the input devices that are plugged into it - keyboard, mouse and so on - the human organism can only receive input data from its five senses. Just as the computer can only receive the kind of data that the input devices are equipped to receive, the human organism can only receive the kind of data that the senses are equipped to receive. Similarly, just as the computer can only process the data

in the way that its software is programmed to process them, the human organism can only process data in the way that its symbolic systems are able to process them. The software is not specific to that specific computer but is common to many computers so that, if they are linked together, they can exchange information. The name which is given to the software of this metaphor in this thesis is "discourse". That is, discourse is not just a collection of signifiers but also a system that processes sensory data and constructs consciousness and enables communication. In Derrida's terms, it is "writing" or "arche-writing" (Derrida 1974/1967). The primary role of discourse is to facilitate communal action before it is to facilitate representation or cognition.

In other words, I am proposing that the software of humanity is the mode of operation of the symbolic systems that it uses. I am further suggesting that the purpose of discourse, in terms of its role in enabling human survival, is organising and that the effect of discourse is organisation. Thus, discourse creates organisation at different levels, at the level of the individual and at the level of the group; it creates subjects, groups, professions, organisations and nations.

2.4.4. DOT: Bag of Limpets Vignette

This vignette illustrates the postmodernist epistemology which is being used in this thesis. There has been much misunderstanding among critics of postmodernism of the relationship between discourse and physical reality and this vignette is designed to clarify the matter.

This vignette is an extended simile, or heuristic, in which signifiers are represented by small shellfish called limpets which fix themselves onto rocks by means of suction and they move by releasing the suction. In this case, the limpets are contained in a bag of thin plastic which has a smooth surface so the limpets cannot stick to it. The bag is being dragged over the surface of a rough rock which represents the physical world and the dragging represents the passage of time.

In this heuristic, the limpets cannot stick to any point on the rock in the same way that there can be no transcendental signifiers, that is, no direct relationship between signifiers and the physical world. They can stick to each other and move around relative to each other so any limpet can, potentially, be anywhere in the bag though they can move only slowly and only when they must. However, the mass of limpets is being continuously being shaped by the rocky surface over which it is being dragged so the limpets are perpetually in motion relative to each other.

This metaphor represents the relationship between discourse and physical reality. There is no fixed correspondence between a signifier (limpet) and part of reality (point on the rock surface). The position of each limpet (meaning) is only defined by its position relative to the other limpets. However, though the limpets are free to move around they cannot be just anywhere because they must stay in the mass of limpets and this is shaped by its interaction with the underlying rock surface. In the same way, the potential free play of signifiers is limited by the indirectly sensed reality that they represent. To put it another way, signifiers cannot mean just anything but their meaning is circumscribed by the context, social and physical, in which they are used (Gergen 1992 p.220). The rock surface and the movement are continuous and this constant motion is represented in the bag by the movement of discrete items in the same way that discrete signifiers represent the world in discourse. Thus, in the version of postmodernism being advocated in this thesis, though meaning is relative to other signifiers and not to the physical world, it does not follow that meaning has no relationship with the physical world, that all truth claims are purely a matter of opinion or that the epistemology is purely idealist (Weiss 2000). In fact, the epistemology advocated here is, on the contrary, purely materialist⁵.

Derrida is often quoted as saying "*il n'y a pas de hors-texte*" (usually translated into English as "there is nothing outside the text" but more accurately translated as "there is no outside-text") (Derrida 1976 p.158) and this statement has been widely misunderstood, for example, in the acrimonious debate between Derrida and the British philosopher, John Searle (1995). In terms of the limpets heuristic it can be seen that the bag of limpets contains signifiers which compose concepts and that the particular nature of consciousness is a matter of how the limpets position themselves relative to each other inside the bag. A consequence of this epistemology is a rejection of realism which

⁵ The terms "idealist" and "materialist" have many shades of meaning and it is beyond the scope of this thesis to discuss them, or to attempt definitions. Here 'idealist' means that there is no physical world and often includes some role for the supernatural (for example, Berkeley 1972). Here 'materialist' means that there is only a physical world and there is no supernatural (for example, Marx 1976).

assumes that reality can be directly known. In the limpets heuristic, the bag cannot be burst and in terms of the human as computer heuristic (2.4.3) it is not possible to attach an object to an email but only a representation of an object. In other words, Derrida's "*il n'y a pas de hors-texte*" could be formulated as "there is nothing in consciousness that is not a concept". This statement does not represent an empirical discovery or the conclusion of an argument; it is one of the assumptions defining the research paradigm.

| Assumption | Description | |
|----------------------------------|---|--|
| ONTOLOGICAL ASSUMPTIONS | | |
| discourse | Consciousness is dynamically created by différance and so is organisation, the individual, communication and all other structure. The ultimate explanation for all phenomena must be in terms of discourse. Discourse is the centre of the structure of the paradigm which constrains it, like the anchor of a ship. It fulfils the same role as the rational, autonomous individual in modernism. | |
| materialism | Everything, including discourse consists of matter and energy. The universe is the same one as is studied by physicists and there are no spiritual (non- material) forces or entities. | |
| flux | The world is always changing: it is in a continuous state of becoming. | |
| unpredictability | The world is unpredictable – the future is unknowable. | |
| uniqueness of objects and events | Every instance of matter and energy and every combination of these is unique. There are no essences. | |
| people and things | Sociology tends to make a simple distinction between social phenomena and the physical world. Despite the fact that in DOT the physical world is only knowable through discourse, DOT accords the physical world a significant role in the construction of social assemblages. | |
| the individual | The human individual is composed of two entities: the physical entity (the animal) and the social entity which is a discursive construction. | |
| EPISTEMOLOGICAL ASSUMPTIONS | | |
| il n'y a pas de hors-texte | Conscious perception is always through conceptualisation which is always already constructed in discourse. | |
| discursive construction | Since the world can only be known through the mediation and interpretation of discourse it is important to identify the characteristics of how discourse works. These characteristics include: i) Breaking the flow of sensual experience into discreet, static chunks | |
| | ii) Concealing its own working, including its component of power | |

Table 2.1. Assumptions of the Postmodernist Paradigm of DOT

2.5. DOT: Postmodernism and Grand Theory

In the past, there has been no attempt by postmodernists to create a grand theory of organisation. Grand theories are also referred to as "totalitarian theories" and "meta narratives" (Jorgensen 2002). There are two closely related reasons for this reluctance. The first is that in postmodernism power is conceived as acting locally, in a specific place and at a specific time, therefore, there can be no grand theories of its operation. This is Foucault's genealogical theory of power, yet genealogy is, in itself, a grand theory: it is a meta-narrative that tells us about the limitations of generalising narratives. The second is that postmodernists have argued that the creation of theory has power effects and is a colonising activity, and that the creation of grand theory would amount to a shameless attempt to usurp power and establish yet another regime of truth (Hassard 1999). For many postmodernists, the point of postmodernism is to reveal power effects for what they are and by doing so liberate people from them (Foucault 1980c). This is a fallacious argument for two reasons: firstly, it is contrary to the precepts of postmodernism since this argument assumes that there is a transcendental value, liberty, which lies outside of discourse and, secondly, if theory is a necessary prerequisite for action, and theory has power effects, then it follows that there is no escape from power effects, so we might as well evaluate new theory on the basis of its utility and accept the resulting power effects as unavoidable. Given that the world is in any case in a state of flux, our endeavours may alter the status quo, though probably in ways that we cannot foresee positively or negatively from our present points of view, and that is something for which we must accept responsibility.

DOT is a "grand theory" (Merton 1967) of organisation, or "meta narrative" (Lyotard 1984), which is, in itself, an assemblage bringing together components that have been gathered from a variety of sources. The two main components are Deleuze's concept of assemblage and Derrida's concept of différance. To develop the theory certain concepts must be defined for their specific use in this context. The most significant of these are assemblage, discourse, institution, culture, power and subject. These will be defined as they are employed.

It must be stressed that DOT is indeed a grand theory. That is, it is a viewpoint from which anything may be observed and analysed from a conspiracy theory to a mathematical constant, from a galaxy to a microbe.

As Merton (1967) observes, grand theory does not necessarily facilitate empirical research and, in this case, it is operationalised for empirical enquiry by adapting a middle-range modernist theory, which is GGCT, so that it is compatible with DOT. In the author's opinion there are many "middle-range theories" (Merton 1967) which could be utilised by similar adaptation giving DOT a wide range of application, though this aspect of the theory is beyond the scope of this thesis.

Postmodernist philosophy is notoriously difficult to elucidate and this difficulty has often led to unintentional vagueness. In order to make clear some of the aspects of DOT I have employed vignettes, which are extended metaphors, and heuristics to illustrate key aspects of it.

Chapter 3. Assemblages

The concept of *assemblage* (*agencement*) in Deleuze's thought is the first of the two main foundations of DOT. It is used in the later writings of Manuel DeLanda, who simplifies it with the intention of making it more easily useful, and in the writings of Bruno Latour and other Actor-Network Theory (ANT) writers, who tend to use the word "network" for a closely related concept.

Interest in the concept of assemblage among scholars has increased in recent years (B.3.2), however, little in the field of "Business, Management and Accounting" as defined by Scopus. Only 3.2% of a Scopus search for the keyword "Deleuze" in the Abstract field between 1989 and 2013 contained the word "assemblage" compared with 62.6% for Social Sciences. This is surprising given the potential utility of this concept for business and management research to be demonstrated in this thesis.

There are several versions of assemblage theory which are broadly associated with Deleuze and his followers and with Latour and proponents of Actor-Network Theory (ANT) (Anderson & McFarlane 2011; Palmas 2007). These versions of assemblage theory each have a different version of what an assemblage is. Whereas in the ANT approach 'assemblage' describes a loose association of interacting entities, or network (Latour 2005), and the emphasis is on the interaction rather than the entities, in Deleuze and his followers assemblage is something more specific in that it has dimensions of *territoriality* and *expressivity* (Deleuze & Guattari 1987).

In both variants, an assemblage is a coming together of components which has properties that the components do not have individually, and yet which does not involve the alteration of any of the components or their properties, because the assemblage makes actual the potential properties that the components have. An assemblage is not structure - it is not fixed - it is an event and is continuously in the process of becoming so that the emergent properties of the assemblage are dynamic and temporary (Marcus & Saka 2006).

Assemblages can involve human and non-human actors. An example of an assemblage involving only non-human actors might be a planetary system or a human body whereas an example of an assemblage involving human actors (social assemblage) might be a city or a corporation though in social assemblages there are always non-human as well as human actors. The advocates of assemblage theories prefer to do away with distinctions between human and non-human actors and attribute agency to both types of actor. In an assemblage no one actor is in control: actors are only able to act because of their effect on the other components which, in turn, they are affected by. Thus, in an assemblage power and agency are distributed (Anderson & McFarlane 2011).

In this chapter, firstly, the Deleuzian approach to assemblages is described in 3.1. Next, DeLanda's interpretation and extension of Deleuze's approach is discussed in 3.2. Then, the ANT version will be described in 3.3. The relevant literature is reviewed in 3.4. In 3.5, the strengths and weaknesses of these assemblage theories will be discussed in relation to the problem being addressed in this thesis. Finally, in 3.6 the relevance of these assemblage theories to DOT is discussed.

3.1. Deleuzian Assemblages

The main source for the concept of *assemblage* is the book which Deleuze co-authored with Guattari, *A Thousand Plateaus* (1987). In an interview Deleuze said that it is the most important concept in the book (Deleuze 2008 p.176).

Assemblages are collections of components that realise each others' potential properties. They are composed of multiplicities; that is, of unique entities specific in time and place and, therefore, each assemblage itself is a unique entity. In Deleuze's ontology everything is unique in itself and with a unique history rather than an example of a predefined essence (1.6.2.). In an assemblage nothing acts alone to produce an effect but relies on the other members of the assemblage so causation is distributed and, therefore, agency is also distributed. Assemblages never contain only human components but always contain non-human components as well.

Deleuze's concept of assemblage is part of a system of thought which includes a number of interconnected concepts. Some of these will be presented so that assemblage may be described fully: *rhizome, tree, territorialisation, order-word, assemblage of enunciation, abstract machine* and *diagram*.

In *A Thousand Plateaus* several examples are given of assemblages, one of which is the book itself and another is the orchid and the wasp. The book is an assemblage because it brings together a number of different voices which articulate the two writer's various

points of view as well as those generated by their collaboration. Additionally, it brings together a wide variety of subject matter where the different topics generate different relationships between them and which will be perceived differently in the course of time. Thus, the book has "neither object nor subject" (ibid 1987 p.4) and only has any meaning or significance in relation to other assemblages. The other example contains no human element because it is from the natural world, that of the orchid and the wasp where the coming together of the two components is part of the reproductive process of the plant. Deleuze refers to this combination as a *rhizome* (ibid 1987 p.11) but he also thinks that assemblages are not isolated but are endlessly interconnected in both the natural and the human worlds. Rhizomes may be thought of as chains of interconnected assemblages.

The concept of *rhizome* arises from Deleuze's ontology of chaos and this can be seen in the way that he describes systems of knowledge. The world is chaotic and the systems of knowledge which we impose upon it are fictitious approximations. These systems can be disrupted and non-obvious connections made, "... any point of a rhizome can be connected to anything other, and must be" (ibid 1987 p.7). Deleuze makes a distinction between two types of system of knowledge: the *tree* and the *rhizome*. The *tree* is orderly and hierarchical (stratified), and might be thought of as representing Kuhn's "normal science" (Kuhn 1970), whereas the *rhizome* obeys no structural principle and, often out of sight, connects entities in an anarchic way.

The branches of the *rhizome* reach into discourse - there is no barrier between what is inside discourse and what is outside it. Here no distinction is made between human language and the genetic code of the DNA molecule which is not trying to communicate anything and is just part of a chemical process, another example of a category mistake. Reality is knowable and it is known. Thus, Deleuze's epistemology is completely contradictory to Derrida's. Nevertheless, often Deleuze's statements about language are consistent with Derrida's, for example, in the statement, "Writing has nothing to do with signifying. It has to do with surveying, mapping, even realms that are yet to come" (Deleuze & Guattari 1987 p.5) there is nothing that is inconsistent with Derrida's thinking.

Since assemblages are dynamic and temporary and always link to other assemblages rhizomicaly, it follows that the concept of assemblage itself and the division of the

world, which really consists of anarchically and endlessly interconnecting *rhizomes*, into assemblages is an effect of *order-words* which territorialise the assemblage to form *trees* of knowledge that stabilise it.

Deleuze is not interested in how language represents reality but in how it affects action. The primary function of language is not to communicate information, or cognition, but to get things done so, "Language is a map not a tracing" (1987 p.85); thus, language consists of *order-words*. The first example given is the teacher who appears to be imparting knowledge but is actually giving orders to the children about how they should behave, think and be as people (1987 p.84). Thus, order-words include not only explicit imperatives but also statements that appear only to convey information. Each *order-word* is a *statement*, Deleuze's smallest unit of language, which emanates from "collective *assemblages of enunciation*" (1987 p.87). A collective *assemblage of enunciation* controls the people who are involved in it through *order-words*. *Statements* are the smallest unit of meaning in a collective *assemblage of enunciation* and these are the order-words which are endlessly repeated forming a subtext to the *utterances* - what is actually said or written.

The collective *assemblage of enunciation* creates subjects through statements which indicate what they should do and these statements command obedience. Thus, the subject is created by a continuous process of subjection. There is no individual subject because the subject can only be created by a dominant process of subjectification in a collective *assemblage of enunciation*. The collective assemblage produces an indirect discourse of *order-words* and the language which people use, a direct discourse, articulates the *order-words* of the indirect discourse so there is always an *order-word* within people's *utterances*.

Deleuze says that the nature of an assemblage may be specified using two dimensions:

On a first, horizontal axis, an assemblage comprises two segments, one of content, the other of expression. On the one hand it is a machinic assemblage of bodies, of actions and passions, an intermingling of bodies reacting to one another; on the other hand it is a collective assemblage of enunciation, of acts and statements, of incorporeal transformations attributed to bodies. Then on a vertical axis, the assemblage has both territorial sides, or reterritorialized sides, which stabilize it, and cutting edges of deterritorialization, which carry it away.

(Deleuze & Guattari 1987)

The horizontal axis is to do with the *material* content of the assemblage which is the way that the components of the assemblage act upon each other and the *expression* of the assemblage which is the way that the assemblage connects with other assemblages. This means that content and expression are fundamentally different kinds of things.

The vertical axis is to do with the degree to which the assemblage is formalised. *Territorialization* is characterised by strict rules and rigid boundaries and is a force which tends to stabilise the assemblage. On the other hand, *deterritorialization* is flexibility, but also vagueness, and is a force which tends to disrupt the assemblage or causes it to fade away.

It is in the description of the horizontal axis that a weakness may be seen in Deleuze's version of the assemblage, from the viewpoint of DOT's postmodernism. If there is no fundamental difference between the non-human and the human components of the assemblage, then an assemblage may contain no human components, in which case the introduction of "collective *assemblage of enunciation*" is meaningless. For example, a star with a planetary system might be an assemblage, in which case, it is difficult to see what "collective" or "enunciation" could mean in this context. However, if the planetary system is being observed by a human actor, then the human actor becomes part of the assemblage by perceiving it, thinking about it or describing it and "expression" as used in this text becomes meaningful. This will be discussed in Section 4.5.3.

A *diagram* is a representation, or abstraction, of what a certain kind of assemblage, an *abstract machine*, can make. The *abstract machine* is an assemblage that creates other assemblages. Thus, a paradigm is a type of *diagram*. However, each *abstract machine* is a unique assemblage despite being based on the same *diagram* as other *abstract machines*. It follows that the assemblages produced by *abstract machines* are also unique. For example, human beings might be thought of as being built to the same plan but the parent is unique and so are the children. Although there are similarities between individuals that make it possible to identify individuals as part of the same species, the

species itself is a convenient fiction and the *diagram* itself is in a state of flux. Thus, an *abstract machine* is the *territorialising* impulse of the assemblage which creates isomorphic systems. It "does not function to represent, even something real, but rather constructs a real that is yet to come, a new kind of reality" (1987 p.157). An assemblage of a *diagram* and a force which causes it to make assemblages is an *abstract machine*.

An example of a *diagram* is the panopticon in Foucault's *Discipline and Punish* (Foucault 1979). The panopticon is a general plan for the physical layout of a prison but Foucault points out that its principles have permeated modern society and apply not just to prisons and other public institutions but also to other apparently unrelated spheres such as panoptic surveillance principles in management (Deleuze 2006; Deleuze 1992) (6.1).

Although Deleuze built his earlier theory of the subject on Humean empiricism (Deleuze 2001), in *A Thousand Plateaus* the theory of the subject looks decidedly discursive. In *A Thousand Plateaus*, he says that the subject is preceded by the collective assemblages of enunciation which form the necessary precondition for subjectivity and meaning.

Deleuze's concept of assemblage is a powerful one. It allows the analysis of social phenomena in terms of a dynamic, ever-changing and anarchically connected ontology. It allows the evaluation of the effects of human and non-human factors in the production of social phenomena. It is all the more powerful for being part of a large system of interrelated concepts. Its weakness is the relationship it posits between the human and non-human factors and this relationship is problematic because it does not allow for the role of the means by which we process sense data in shaping human actions. However, DeLanda and Latour have taken up the concept of assemblage and interpreted it in their own ways.

3.2. DeLanda's Social Assemblages

DeLanda's book *A New Philosophy of Society – Assemblage Theory and Social Complexity* (DeLanda 2006) states explicitly that he is not trying to reformulate Deleuze's ideas precisely; for example, he elides Delueuze's concepts of assemblage and *strata* (ibid p.121). In Deleuze's work there is no assemblage theory as such because the concept of assemblage is part of a system of interlinking concepts which

form a *diagram* at a high level of abstraction. DeLanda offers a simplified version of Deleuze's concept so that it can act as a theory for analysing social phenomena.

Here assemblages are contrasted with totalities which also consist of collections of components but where the components have a different kind of relationship. An example of a totality might be a car engine. The parts of an engine have a meaningful existence only as parts of the whole. Once a part is taken out of the whole it becomes useless and so does the rest of the collection. Thus, a totality has properties arising from *relations of interiority* (ibid p.9), that is, the relationships between the parts only arise from them being a part of this particular whole and do not have any other relationships with each other or with entities exterior to the collection. On the other hand, assemblages have *relations of exteriority* (ibid p.10). That is, the components have relationships between them because they actualise each others' potential properties but each component can have relationships with entities outside of the assemblage as well. Two consequences follow from this model: firstly, a component of an assemblage may be simultaneously a component in other assemblages and, secondly, it follows that assemblages may be interlinked.

DeLanda cites functionalism as a sociological theory which relies on totalities (ibid pp.8-9). Functionalism depends on the metaphor of society being like an organism where each component contributes to the functioning of the whole. Since functionalism depends, often unconsciously, on the metaphor of society being like an organism it excludes the possibility of looking at social phenomena as temporary conjunctions. Functionalist thinking persists in seeing combinations of objects as totalities. It is characteristic of his style of thinking that he then sets up a straw man to do battle with and takes his point too far by insisting that even organisms should be seen as assemblages and not as totalities (ibid p.12). This argument blurs a useful distinction; the organs in an animal's body, like the parts of a car engine, have no purpose if separated from the whole, unlike the parts in the examples of assemblages described by Deleuze. However, the concept of totality has its place as a special type of assemblage.

DeLanda refers to Deleuze's concept of *diagram* which he describes as something that "would structure the space of possibilities" (ibid p.30) in an assemblage. Thus, diagram is an abstract formulation that applies to many assemblages. For example, DeLanda equates Deleuze's diagram with Weber's ideal type (5.3.) so the diagram of bureaucracy

would be the same for all contemporary organisations. The diagram is unlike essence in that it is grounded in specific geo-temporal situations, bureaucratic organisations are only possible during certain historical periods and in certain places. The diagram is a formulation of how characteristics of the combination between components of the assemblage and the environment of the assemblage affect its conditions of interiority.

DeLanda adopts Deleuze's concept of the assemblage having two dimensions that form two continua that describe the roles of the assemblage as a whole. As in Deleuze, these dimensions are: *material/ expressive* and *territorializing/ deterritorializing*. Any component may take part in any combination of these continua.

The material/expressive dimension is concerned with the degree to which the assemblage has a material orientation so, presumably, the car engine would be largely material whereas a book would be largely expressive. The term 'expressive', as DeLanda (and Deleuze) use it, causes confusion. In his concern to do battle, under the banner of realism, against another of his straw men, postmodernism, he wishes to argue that something can be expressive without taking part in a symbolic system. It is difficult to construe his meaning. Light spectra and DNA sequences are given as examples of modes of expression. The difficulty is to see what "expression" might mean in the absence of interpretation. Although he explicitly denies that expression has anything to do with language (ibid p.12) nevertheless this seems to be the underlying metaphor. Thus, his argument is mistaken in two ways: it implies that language expresses pre-existing concepts and it implies that natural phenomena, like DNA sequences and light spectra, communicate anything unless a human scientist imposes his or her symbolic system upon them in the act of interpreting them.

Thus, DeLanda's account of the concept of assemblage stays close to Deleuze's with only minor differences. DeLanda implies Deleuze's principle of multiplicity (1.6.2) though he does not discuss it. Thus, he emphasises that Deleuze's ontology, being realist, denies the principle of essences. This leads to the point that each assemblage is ephemeral and unique and that it is an ephemeral stage in the unique history of each of its components.

Since DeLanda's work is in the realist paradigm, one of his main assumptions is that there is a reality which exists independently of people's beliefs about it. At first, this point is puzzling since there are few sociologists or organisational theorists who would want to deny the existence of a mind-independent reality and it looks as though DeLanda is again constructing a fictitious adversary. He says that he does not want to deny that social phenomena would vanish if there were no people. However, he denies that social phenomena are constructed purely in the realm of discourse because he wants to include non-human components. He adds that discourse is an important element in social assemblages but not primary. This argument is confused: because there are other elements at work as well as the human, it does not follow that discourse cannot be primary in this case. Also, it is not contradictory to propose that discourse is primary and that there is a mind-independent reality.

The main assumption on which DeLanda's assemblage theory is built is the modernist assumption that discourse is no more significant in social phenomena than anything else. Instead, social phenomena are perceived to be chiefly founded on customary patterns of action, and in this way DeLanda's thinking is the same as that of the work of the other modernists which is reviewed in this section: Berger and Luckmann (5.1), Anthony Giddens (5.3) and Mary Douglas (7.1).

In DeLanda's case this assumption is part of an ideology. He sets realism up as the true belief hinting that postmodernism with its primary emphasis on discourse is the ultimate heresy. In his book, *Intensive Science and Virtual Philosophy*, he warns against confusing Deleuze with, "books belonging to what has come to be known as the 'post-modern' tradition" (DeLanda 2005 p.xi). His attacks on postmodernism and postmodernist thinkers are gratuitous, poorly argued and detract from his own argument. For example, there is such an attack on Bourdieu, "One may wonder why a theorist of the stature of Pierre Bourdieu can commit himself to the existence of such an unlikely master process like the habitus", and so it goes on (DeLanda 2006 p.65-6).

DeLanda's attack on Giddens's is also symptomatic. His criticism is that he, like functionalist sociologists such as Parsons, sees social phenomena of all kinds as indivisible wholes instead of the loose coupling of components which is found in assemblage theory. Giddens's structuration theory (1979, 1984) posits that structure and agency are mutually constructed in a continuous process of action producing structure, which exists nowhere else but in its production, and structure enabling action which otherwise would be haphazard or impossible. DeLanda says that, in structuration theory,

the actions which are following the rules of the structure are a continuous flow, and he quotes Giddens, "not composed of an aggregate or series of separate intentions, reasons and motives" (DeLanda 2006 p.10-11; Giddens 1984 p.3). Here Giddens is talking about how actors perceive the world as a continuous flow of events, or *durée*, and he says in the paragraph following DeLanda's quotation, "... action [cannot] be discussed in separation from the body, its mediations with the surrounding world and the coherence of an acting self" (Giddens 1984 p.3). It seems that DeLanda presents assemblage theory and structuration theory as further apart than they really are. The difference at stake here is not Giddens trying to make totalities where they are not warranted but the status of the human actor. Whereas Giddens builds everything around the human actor, DeLanda wants to make human actors no more significant than non-human ones. Without much justification, Giddens's thinking is lumped together willy-nilly with others who DeLanda does not agree with.

In fact, one of the problems that DeLanda's version of assemblage theory faces is that though assemblages can consist of only natural world components, DeLanda's examples are all from the social realm and therefore always include human components as well as non-human ones.

The epistemology described by DeLanda is an explicit restatement of Deleuze's Humean position. He says that ideas express sense impressions directly and that there is no mediating symbolic system (ibid p.50). The subject is an assemblage composed of the individual organism along with the principle of association and the principle of passion, both of which are influenced by sense impressions. Associations are of three types: groupings of ideas, comparison of ideas and the linking of cause and effect. Passions are concerned with the desires of the individual. The subject assemblage is territorialised by "habitual repetition" (ibid p.50) or deterritorialised by circumstances that disrupt these habits such as madness, intoxication or the acquisition of new skills.

DeLanda points out that sociologists have tended to focus on the micro level where they look at the interactions between individuals and small groups and on the macro level where they look at society as a whole but their efforts at analysing the intermediate level have been less successful (ibid pp.5-6). This, he argues, is where the assemblage model plays its part because it is possible to have assemblages on different scales. Thus, individuals interact together forming network assemblages and more deliberate and

formal assemblages which are institutions and organisations; a collection of organisational assemblages forms a government and a city is an assemblage consisting of networks of individuals and organisations as well as physical components such as location and the weather. Much of the book is a demonstration of his sociological theory that interlocks assemblages on different scales.

Despite the obvious weaknesses in DeLanda's argument, his theory of assemblage has much to recommend it. It is consistent with DOT because of its dynamic ontology, its differential ontology (everything is unique with its own unique history and there are no essences) and its insistence that social theory must be anchored in materiality. Though DeLanda's materiality/ expressivity dimension seems to be erroneous, the territorialising/ deterritorializing dimension seems the most useful. However, it is difficult to see why there should only be these two dimensions and not a multiplicity of them. The concept of assemblages having relations of exteriority and, therefore, being able to link with other assemblages along with the related conception of assemblages of different scales amounts to a potentially fruitful model and it is surprising that it has not been taken up by business and management researchers to date.

3.3. ANT and Assemblage

Latour's ANT has its foundations in Deleuze's thinking, particularly in his assemblage theory. However, Latour rarely refers to assemblages, preferring instead the term 'network'. ANT emerges in papers and books by Latour, Callon and others in the 1980s and 1990s, notably Callon and Latour's "Unscrewing the Big Leviathan" (1981), Callon's "Mapping the Dynamics of Science and Technology" (1986), Latour's *Pandora's Hope* (1999) which examines the ontology of ANT and Callon's "Some elements in the sociology of translation: domestication of the scallops and the fishermen of St. Brieuc Bay" (Callon 1986a).

The ontology and epistemology of ANT is identical with that of Deleuze and DeLanda. The world is chaotic and perceived as a continuous flow so assemblage, or network, is "a tool to help describe something, not what is being described" (Latour 2005 p.131). The physical world is perceived directly without the mediation of language or any other symbolic system (Latour 1999). Latour's networks have a good deal in common with Deleuze's assemblages: they are both loose, ephemeral associations of diverse human and non-human components. However, instead of emphasising the properties latent in the components of the assemblage that are realised by their proximity as does Deleuze, Latour emphasises how the network mediates action.

According to ANT, agency is distributed throughout the network and no distinction is made between the human and non-human actors. The fact that human actors have intention whereas the non-human actors do not is beside the point since neither kind of actor only acts but is simultaneously acted upon. Human actors may act with the intention of having certain effects but the consequences of their actions are unknowable since they affect both components of the network that are known and unknown to the actor in ways that are known and unknown to them. Thus, people and non-human objects act without knowledge of either the effect of their actions or of how they have been acted upon. Similarly, each individual should also be seen as a network since the causes of their actions are the coincidental result of the many forces with which they are connected (Callon & Latour 1981 p.280).

Latour contrasts groups formed by baboons with groups formed by humans. Both species form complex group dynamics based on close interdependence between individuals who make alliances and find a place in the group hierarchy. However, the difference between them is that the baboons only have their social relationships to maintain their network and these can be made and broken quickly giving the individual baboon little stability whereas humans bring objects into the network such as "walls and written contracts, the ranks with uniforms and tattoos and reversible friendships with names and signs" (ibid p.284). These objects have a stabilising effect that gives human institutions stability and longevity.

According to Latour the relationship between the real world and the symbolic systems that humans use to apprehend and act upon it is one of endless interaction which he terms "circulating reference" (Latour 1999b). The world enters consciousness through a continuous process of transformations that are mediated at each stage, that is, representations that are formed by the representational media as well as by the data. He gives an example of soil scientists gathering data in the Amazon, who collect soil samples, organise the samples in a grid structure, analyse the samples according to colour, chemical analysis and so on. The end product is a diagram based on numerical data which, he argues, simultaneously represents both a discovery about the real world and a constructed version of it (Latour 1999 p.67).

The process of *circulating reference* which through an endless chain of *transformations* of matter and form both connects consciousness to the world and constructs a representation of it (Latour 1999 p. 70) is similar to the process of *translation* through which groups are created. *Translation* is

... all the negotiations, intrigues, calculations, acts of persuasion and violence, thanks to which an actor or force takes, or causes to be conferred on itself, authority to speak or act on behalf of another actor or force.

(Latour 1981 p.279)

and

... a definition of roles, a distribution of roles and the delineation of a scenario. It speaks for others but in its own language.

(Callon 1986b)

Translation is a kind of summary of the state of the network, its needs, desires and identity. It creates a scenario or *actor-world* which is a particular assemblage specifying the components that take part in it and the identities of individuals (Callon 1986b). It is a contested, or "monstrous" (Callon & Latour 1981 p.294), version of the network since it confers power on forces and individuals who become its *spokesmen*.

Thus, individuals become *spokesmen* for a group by *translating* and articulating its needs and consciousness. The spokesmen, the other members of the group and the group itself can be seen as isomorphic since they are all aspects of the same network (Callon & Latour 1981). *Translation* involves not only summary and simplification of sense data but also the creation of what Latour terms *black boxes* which are assumptions that can be treated as no longer in need of examination or discussion. He argues that people are able to build large scale social structures because they can build them on large numbers of *black boxes* (ibid p.285). Because a leader is able to use a number of *black boxes* the work of the leader is no greater in scale or difficulty than that of any

other member of the group. These large-scale structures are institutions which Latour terms *Leviathans* borrowing the term from Hobbes.

In a later work, *Reassembling the Social: An Introduction to Actor Network Theory*, Latour gives an overview of ANT and defines what ANT is and what it is not (Latour 2005). He explains that ANT was developed in response to dissatisfaction with sociology. He felt that the social was a reification of processes that need to be explained rather than being, in themselves, an explanation. By the use of such terms as "society', 'power', 'structure', 'context'" (ibid p.22) or "individuals', 'cultures', 'nation states'" (ibid p.24) sociologists, he argues, impose an artificial stability and their preconceptions on the actors they are studying.

Instead, Latour recommends, firstly, a different conception of the object of study: that the world should be conceived as being composed of a dynamic network of actors rather than static collections of objects. Then, he proposes what amounts to a methodology.

All actors are part of a network so they not only act but are acted upon. He prefers the term *actant* to indicate that he means something different to the commonplace usage of "actor". In this network, there are both human actants and non-human ones and he feels that it is important to give the non-human actants as much status as the human ones. Sociology, he complains, ignores the non-human element and this is a major shortcoming. "After all," he asks, "which air traveller would know the gate to go to without looking anxiously and repeatedly at the number printed on her boarding pass and circled in red by the airline attendant?" (ibid p.7). Thus, the airline ticket is just as much an actant in this assemblage as the nervous passenger.

The methodology he recommends bears some resemblance to ethnomethodology (Garfinkel 1967). Whereas in ethnomethodology the emphasis is on observing the banal and the routine, Latour recommends that the researcher approaches actants without any particular theory in mind (Latour 2005 p.29). Instead the researcher should listen to what the human actors have to say expressed in their own terms to find out what their theories are and to look for the controversies in which they are involved. The point here is not to resolve controversies but to see the relationships between them.

Latour structures the first part of the book around the controversies of sociology itself and he identifies five categories of problem faced by the researcher: groups, or unit of analysis; actions; objects; facts and interpretation.

The first category of problem concerns groups. Groups are everywhere and everyone belongs to many. He asks what the researcher should take social groups to be composed of, "individuals', of 'organisations', of 'classes', of 'roles', of 'life trajectories', of 'discursive fields', of 'selfish genes', of 'forms of life', of 'social networks'" (ibid p.28). Latour does not apologise for not being able to give a clear definition of group, claiming that its vagueness is its strength because it is undesirable for the researcher to approach phenomena with rigid concepts but instead allow respondents to form the models used. In this way, Latour rejects pre-defined menus of social entities for the researcher to choose from.

They are dynamic entities which need to be continuously created by their members and those outside who interact with it. Groups have spokespersons who justify the existence of the group, remind people of the experience of the group and describe its principles and rules. Boundaries are drawn by groups indicating who and what are within the group and who and what are outside. This boundary making is also aided by there being anti-groups which illustrate what the group is by representing what it is not. Additionally, according to Latour all groups are maintained to some degree through some sort of sociological theory being attached to them (ibid pp.33-34). Through these activities groups are created and maintained; therefore, dynamism and change are the norm and stability the exception.

The second category of controversy concerns action. When people act, they act as part of a network and are as much acted upon as acting. Consequently, there is no simple relationship between cause and effect and many unpredictable events may result from an action. Similarly, it is no simple matter to identify what causes someone to act in a certain way. Latour suggests that every action is part of an "account" by which he means both a narrative and a kind of reckoning (a usage borrowed from ethnomethodology): actions are linked to effects. The *actant* acts in a world which is already shaped by concepts and roles and the account is expressed relative to these. He calls this process "figuration" (p.53). But, in the process of drawing up the account, actants include some agencies and exclude others; so, for example, a psychiatrist

explaining a patient's behaviour might include an imbalance in the patient's chemical makeup but exclude the phases of the moon. Additionally, he suggests, respondents have their own theories of action which should be respected by the researcher without being reinterpreted within the researcher's frame of reference.

He explains that a consequence of seeing actors as actants is that people can no longer be seen as having simple cause and effect relationships in "social phenomena". Instead actors are not only acting but are also being acted upon by many other different actors and different types of actor. This view disrupts notions of simple cause and effect drawing attention to the unpredictability, and specificity, of these phenomena. He refers to this kind of relationship as being a *mediator* (ibid p.58).

The third category of controversy concerns the role of objects. Latour, like Deleuze, argues that objects should not be seen as less significant in a network, since they also have their roles to play. According to him, objects are actants in the same way that people are, acting and being acted upon in complex ways. He argues that purely human interactions produce short-lived phenomena such as brief alliances whereas the addition of objects to the assemblage has a stabilising effect making the assemblage more durable and substantial. He points out that the importance of objects becomes apparent when something goes wrong such as in the Columbia space shuttle disaster (ibid p.81), when a complex piece of technology ceased to be an intermediary of human purpose and became a mass of mediating components each acting and acting upon other components of the assemblage, human and non-human, in unpredictable ways.

The fourth category of controversy is characterised by Latour as 'matters of fact' in contrast with 'matters of concern'. Latour has written a good deal about the split in Western thinking between empiricist epistemology where facts are out there to be discovered and constructionist epistemology where facts are created in human symbolic systems to represent a real world that is unknowable. He sees his early work as an attempt to overcome this dichotomy while under attack from empiricists, incorrectly believing that he was claiming that scientific facts are fictions, and who saw him as an apologist for constructionism, while at the same time he was being traduced by constructionists who believed he was an apologist for empiricism. His book *Pandora's Hope* (1999) addresses empiricists to whom he hopes to show that he is on their side though they must accept that their epistemology is too simplistic. He also deals with the

topic in a journal article, "Why Has Critique Run out of Steam? From Matters of Fact to Matters of Concern" (Latour 2004). His argument is that the mistake made by empiricist and constructionist epistemologies is to think that the point of scientific or social enquiry is to discover facts about a world that is separate from the enquirer. Instead of a world full of objects waiting to be discovered by objective enquiry, we should see the world as a network of actants, that is, entities that act on each other with unpredictable results. When scientists "discover" a fact they do so by creating a way of representing it and thereby create a new actant in a network of which they are a part and thus the facts which they discover/create in turn act on them and other actants in their networks, such as funding bodies, previously discovered facts, members of their families, research methods and so on. It follows from Latour's reframing of the epistemological dichotomy that we should think of scientific and social enquiry as being about matters that concern us whether they are what we construct as, for example, microbes or what we construct as, for example, class conflict. Despite Latour's avowed contempt (1999 p.5) for the whole tradition of philosophy, of which Derrida is a part, what he is doing is a Derridean deconstruction of the concept of fact and a thorough, competent and illuminating deconstruction it is.

The fifth category of controversy concerns how social phenomena are described. According to Latour sociologists have seen the world as a collection of inert actors who act upon the world. ANT's departure is to perceive actants acting upon each other and none acting without, simultaneously, being acted upon. The most important activity of sociologists must be to observe and record this multiplicity of interactions (Latour 2005).

A great deal of what Latour has to say about ANT in *Reassembling the Social* concerns the principle of treating all actors on the same level without privileging any. This principle is one that he calls *flatness* using the symbolism of larger concepts of context and structure as a third dimension added to the two dimensions of the observable (ibid pp. 165-172). Although he admits that interactions between actors are influenced by pre-existing forces from other times and places, the ANT researcher ignores these because the penalty would be to be led into hopeless abstraction. The ANT researcher must be disciplined and focus on the here and now.

Latour says that there are two opposing tendencies at work in sociology. One of these leads from the particular to the general. This tendency has been present in Western thinking since Plato's *Republic* where the argument relies on three large generalised concepts: the *Body Politic*, the *Society* and the *Collective* (ibid p.171). However, there is a second tendency that questions generalisations about context and structure and leads to the specifics of observable practice. By eschewing the shortcuts offered to researchers by generalisations, the ANT researcher is able to describe actual relationships between actors.

Despite Latour's protestations that ANT is not a theory (1999a p.19), ANT contains propositions about the world. It implies an ontology and an epistemology and it takes a position on where other theories are mistaken. It also has a methodology that is described by Callon as having three principles: *agnosticism, generalised symmetry* and *free association* (1986 p.199-200). Agnosticism means that the researcher should accept at face-value the beliefs of the participants about the world they inhabit. Generalised symmetry means that the researcher should explain the different views in a controversy in the same terms. Free association is the principle that the researcher should treat human and non-human actors in the same way.

3.4. Assemblage in the Peer-Reviewed Literature

Jane Bennett attempts, in a footnote, a definition of the term:

An assemblage is, first, an ad hoc grouping, a collectivity whose origins are historical and circumstantial, though its contingent status says nothing about its efficacy, which can be quite strong. An assemblage is, second, a living, throbbing grouping whose coherence coexists with energies and countercultures that exceed and confound it. An assemblage is, third, a web with an uneven topography: some of the points at which the trajectories of actants cross each other are more heavily trafficked than others, and thus power is not equally distributed across the assemblage. An assemblage is, fourth, not governed by a central power: no one member has sufficient competence to fully determine the consequences of the activities of the assemblage. An assemblage, finally, is made up of many types of actants: humans and nonhumans; animals, vegetables, and minerals; nature, culture, and technology.

(Bennett 2004 p.445)

This definition covers much of the meaning of the term as it has been used by researchers, though it also leaves out much of its meaning as it is used by Deleuze whose work remains a largely un-mined seam. An exception to this neglect is Curtis's study of the aftermath of hurricane Katrina (Curtis 2008) which looks at the hurricane as a *nomad war-machine*⁶ that smooths the striations of the state assemblage. Curtis suggests that looking at disasters as sites of conflict between two different kinds of organisational principles might lead to a different way of dealing with disasters which is not exclusively dependent on government based solutions, though he does not mention any specific examples of what he means.

Assemblage theory has had little impact on organisation studies; however, it has a noticeable presence in politics, geography and anthropology. It is not necessary to review these bodies of literature here; however, some examples illustrate how the concept of assemblage might be applied.

Marcus and Saka comment that the concept of assemblage has proved to be useful in anthropology since it brings together two sides of a dichotomy with the heterogeneous and the ephemeral on one side and structure and stability on the other (Marcus & Saka 2006). A good example is Ong and Collier's collection of essays on globalisation where globalisation is seen as various collections of heterogeneous forces (Ong & Collier 2004). This approach indicates how the concept could be applied in business and management studies.

⁶ In Deleuze's writing, *nomadicism* is the supplemental term to *state*, so the binary nomadic/ state is analogous to the binary rhizome/ tree, where the nomadic is not orderly but reactive and impulsive. A war machine is similar to "will-to-power" in Nietzsche; it is the force which opposes and seeks to destroy its supplement. Thus a nomad war machine seeks to destroy state organisation (Colebrook 2010; Deleuze & Guattari 1987).

The geographical journal Area devoted a special issue to assemblage theory in 2011. The editors (Anderson & McFarlane 2011) comment that assemblage theory is useful to geographers because it allows them to look at entities that are composed of human and non-human elements, a way of looking at the world which is fundamental to the discipline. It is also true to say that business and management studies have similar concerns. The authors say that assemblage theory has four characteristics: first, it is concerned with the coming together, interaction and dispersal of the components; second, that it is concerned with human groups and collectivity as well as the distribution of agency; third, it allows us to see power not as centralised control but as plural and dynamic, and fourth, it draws attention to the ephemeral nature of the social world. They conclude that it is useful by allowing researchers to see the world as groupings without fixed boundaries and to be more flexible in their analysis by encouraging them to question their assumptions about "origins, agency, politics and ethics" (ibid p. 126) and attend to the dynamic nature of things. They comment that the danger is that any grouping of components can be seen as an assemblage but this misses the point that assemblages are not entities to be discovered 'out there' but a conceptual tool that helps to break up the complexity of the continuous flow of experience. Examples of the application of assemblage theory the same issue of Area include Dewsbury (2011) which treats the relationship between people and technology as a dynamic interaction between thought and matter and Greenhough (2011) looks at the use of the theory to examine the geography of diseases as assemblages of people, bodies, diagnostic techniques, treatments, geographical spaces, administrative responsibilities and politics and always with characteristics that are peculiar to that assemblage at that time. Greenhough recommends that the same approach be taken to other phenomena such as terrorism and climate change. These examples, exhibit patterns of concern that they might well share with areas of research in the business and management field in, for example, information systems and marketing.

Some authors have pointed out that because the concept of assemblage treats both human and non-human entities as actors, there is no ethical distinction between the two. Haraway (1990) commented, that according to assemblage theory everyone is now a cyborg. This point illustrates a problem with the ANT approach which does not allow for volition and desire. ANT describes the network but it does not give the observer a place to stand from where to introduce an imperative.

Harrison (2011) comments that the concept of assemblage avoids determinism because assemblages are continuously becoming so are constantly under the influence of changing forces and are, therefore, unpredictable and it follows that so too are the consequences of individual human actions. Since assemblages involve multiple actors, and no actor can ever work alone, agency is always distributed. This leaves an unresolved ethical problem of responsibility for these unforeseen consequences of human action. Bougen and Young (2000) attempts to analyse bank fraud using the concept of assemblage. They succeed in constructing a multi-faceted description of the problem but take us no further forward in the search for solutions. Bennett (2004) explores the relationship between agency and assemblage in her discussion of the 2003 North American power blackout. Her conclusion is that though moral standards might be applied to some of the actors in the assemblage that constituted the incident, the significant part played by non-human actors means that people cannot reasonably be held accountable for all the effects of their actions.

A study by Callon, "Some elements in the sociology of translation: domestication of the scallops and the fishermen of St. Brieuc Bay" is recognised as a classic of the ANT approach (Callon 1986a). The study tells the story of a research project. Three researchers find that in Japan methods for cultivating scallops are being successfully applied. They obtain some funding to find out if the Japanese methods might be used to revive the scallop fishing industry in Normandy which is suffering from overfishing. They enlist the support of the local fishermen of one of the Norman fishing grounds. The scallops in Normandy are a different species to those in Japan and their first research question is whether the Japanese technique, of causing the scallop larvae to attach themselves to collectors which protect them from predators such as starfish until they develop a protecting shell, will work. The results of the researchers' experiments are sufficient to convince conference colleagues that the larvae do attach. However, when they try to use the technique in the Normandy fishing ground the larvae do not attach in sufficient numbers. While the researchers are trying to work out what is going on some of the fishermen deliberately fish out the remaining bed of scallops. In this ANT account, there are four main actants: researchers, the researchers' colleagues, the

fishermen and the scallops and other secondary actants which are the starfish predators and tides.

This is an interesting way of telling the story but it is difficult to see what the advantages of the ANT method might be. It does not, for example, suggest how anyone could have acted differently to bring about a more successful result. In fact, the way the story is told indicates that it could have been more effective to tell it in a different way. It is told wholly from the perspective of the researchers. The scallops are not actors on the same level as the human groups since they have no spokesmen and are not able to alter their behaviour or enter into any negotiations (McLean & Hassard 2004 p.502). The researchers and their colleagues might be more usefully seen as both being a part of an academic institution that is not sufficiently practically-minded to fully appreciate the context of the fishermen and their work. The fishermen are never quoted but are only portrayed as detached and sometimes unhelpful towards the researchers, who are the focus of the narrative. In his effort to stick to the connections, as they were told to him by the researchers, and not to introduce overarching concepts from outside the network, such as institution, Callon has preserved the biases of one of the parties of actors. Perhaps if this point of view were challenged using concepts external to the network under observation, the study may have been more illuminating and instructive.

So far, ANT has had most influence in the business and management field in the discipline of information systems which is constantly faced with the resolution of problems involving people and technology. Referring to the work of Latour and other research informed by ANT, Orlikowski comments on the lack of notice taken of the material world in organisation theory (Orlikowski 2007). She comments that in the study of the adoption and diffusion of information technology it is important to take account of the material factors at play. However, she also believes that information technology is not a special case and that material factors generally play an important part in the formation of organisations. She illustrates the effect of material factors on thoughts and processes by looking at the example of Google which is an integral part of many people's work. She describes Google as a "constitutive entanglement" (ibid p.1438) of the material and the social in which web pages, servers, search algorithms, thousands of people creating and posting web pages and thousands of users using search terms all come together.

McLean and Hassard examine five problems with ANT which these authors think need to be solved in order to make it useful to organisation researchers (McLean & Hassard 2004). The first concerns the size of the network to be studied. They point out that by following ANT principles there is no means of judging where a network ends since there are always more actors that can be identified (Miller 1997; McLean & Hassard 2004 p.500). The second problem concerns the ANT principle that non-human actors should be treated in the same way as the human actors. They point out that non-human actors can only exert their influence through the human ones. They also point out the difficulties of including actors who are widely separated in space or time, or both. For example, it can be difficult to judge how actors from the past should be included (Law 1991; Bowker & Star 1999; McLean & Hassard 2004). The third problem is concerned with the status of actants. The authors point out that in the effort to treat non-human actants in the same way as the human ones the effect can be that the non-human actors add weight to the interests of some of the human ones, without whom they would not be counted as being in the network at all. The fourth problem concerns the relationship between agency and structure. Since ANT specifies that no relationships should be assumed, but only observed, it makes it difficult for the ANT researcher to take account of structure which may be elusive. The fifth problem is concerned with value judgements. The ANT method does not allow for moral or political judgements that arise outside the observable network being described and it may be that some actors are less visible because of a pre-existent power structure that is not seen by the researcher.

On this fourth point, there have been suggestions as to how ANT can overcome its difficulties in dealing with structure. One suggestion has been to build a synthesis with structuration theory (McLean & Hassard 2004; Walsham 1997) another is to build a synthesis with critical realism (Elder-Vass 2014). Neither of these suggestions is viable since it is a fundamental principle of ANT to follow the connections in the network as they are observed by the researcher and both structuration theory and critical realism assume the existence of forces that shape action that are hidden to some extent.

3.5. Assemblage and Discourse

The concept of assemblage is a useful heuristic for understanding organisation. It allows us to see social entities as loose and ephemeral collections of components while, simultaneously, structured and stable. It is one of the two main foundations of DOT. The contribution of DeLanda and Latour, and other ANTs, has been a useful one in that they have illustrated how the concept might be used and also marked out some of the pitfalls.

The ontology of the assemblage theorists is one of chaotic flow. They see the world as a flow of sense data upon which it is difficult for people to impose meaning. Every assemblage and every component of an assemblage is unique in space and time. Everything has its unique *line of flight*, so our attempts to describe the world are always ephemeral and provisional.

The epistemology of the assemblage theorists is realist. They believe that the world is directly knowable and that perception is the result of the relationships between components in assemblages, also that there is no mediating filter of language or culture. However, concepts have to be created so human knowledge of the physical world involves a twin movement of discovery and construction. Latour almost contradicts this position in *Laboratory Life* (Latour & Woolgar 1979), where he compares the process of scientific progress with a game of Go where earlier moves in the game limit the possibilities for later moves, since it is an admission that earlier formulations of concepts influence later ones. DeLanda is not averse to using categories from the mainstream of sociology such as city, organisation and government (DeLanda 2006) but he does emphasise that each assemblage is unique and specific to a time and a place so should be studied as such. Another aspect of the epistemology of these theorists is that they think of assemblages as heuristics, as convenient tools to aid understanding, whereas the real world that they represent is a continuous flow, or are *rhizomic* in Deleuze's terminology.

The methodology of the assemblage theorists is one of pure induction. The ANT researcher must follow the connections between things, look for the controversies that concern the actors and not bring any theory or prejudice into the observation but only to look at the *actor-world* in the terms by which the actors understand it. How the researcher should know what to look at or why the process of observation should begin in the first place are not explained.

DeLanda's version of assemblage theory is a simplification of some of Deleuze's ideas and their application to social research. It shows the utility of the concept in linking together the micro level of analysis, individuals, the meso level, groups and organisations, and the macro level, nations and classes. It also has the advantage of specifying two dimensions of assemblage: the material/expressive dimension and the territorialising/deterritorializing dimension.

Latour's ANT version of assemblage, or network, is also based on Deleuze's idea of assemblage but also on ethnomethodology. As with DeLanda's idea of assemblage, ANT insists that non-human actors be taken into account in the same way as the human ones and suggests that it is the non-human components that make the human social world more stable and with the potential for larger scale than anything in the animal world, like baboon society. What ANT contributes to methodology is an insistence that that the researcher focus on observable network connections and avoids introducing sociological concepts as a shortcut to understanding since these will obscure the object of analysis.

The main problems with the ANT approach are first, that it is not possible to say where the researcher should cut the network and stop observing; second, the way that agency is theorised as distributed in the network with actions giving rise to unpredictable results makes it difficult to use ANT in studies that are anything other than descriptive and most studies are ultimately motivated by a desire to discover how to do things better; third, it is not possible in practice to observe structure since though it might be in continuous creation its causes are often far removed in space or time or both and its effects are often subtle.

From within the paradigm of this thesis despite the many advantages of the three types of assemblage theory discussed in this section, their common weakness is their realist epistemology. All studies are undertaken from an anthropocentric position and therefore it is not possible, or desirable, to try to find a neutral position from where the nonhuman and the human are observed, evaluated or discussed on the same level. Though it is valuable to include the non-human in our research and not exclude it, as Latour correctly accuses mainstream sociology of doing, non-human components can only enter the assemblage via discourse. In DOT structure also enters the assemblage via discourse and DOT suggests clear guidelines about where the network can be cut.

3.5.1. Wasp/ Orchid and other Assemblages

An example of an assemblage that Deleuze employs more than once (Deleuze & Parnet 2007p.2 p.54; Deleuze & Guattari 1987 p.10 p.65 p.90 p. 211 p.260 p.316 p.336) is that of the wasp and the orchid which are organisms that have evolved in parallel by actualising each other's potentials. This is a good example of how the concept of assemblage may be used to analyse and describe social phenomena. The stirrup gives a point of stability for the warrior so that he can deploy his weapon from a moving horse with much more devastating effect than he could while stationary. He goes on to explain that this assemblage is connected to other assemblages. The stirrup is a tool which is the product of a social assemblage and the assemblage of warrior, horse and stirrup is connected through the relationship between the knight and his lord which is tied into arrangements of land use and ownership and agreements about military obligations and so on to other parts of the assemblage of feudalism which connects the diverse components of a whole society.

The orchid seems to form a wasp image, but in fact there is a wasp-becoming of the orchid, an-orchid becoming of the wasp, a double capture since 'what' each becomes changes no less than 'that which' becomes. The wasp becomes part of the orchid's reproductive apparatus at the same time as the orchid becomes the sexual organs of the wasp.

(Deleuze & Parnet 2007 p.2)

At the same time, the flower of the orchid is a part of the orchid plant which is part of an ecosystem. In turn, the wasp is part of a colony of wasps which is also part of an ecosystem. Each component of the assemblage has its own particular line-of-flight and the boundaries of the assemblage can only be set artificially: what seems to be ordered is in a complex state of flux. Deleuze uses this example to explore the nature of assemblages in general.

Assemblages have two dimensions (3.1). One is the territorialise/ deterritorialise dimension which concerns the stability of the assemblage. Deleuze points out that though the orchid deterritorialises itself by representing a wasp on its flower, the wasp

reterritorialises the orchid by participating in its reproductive system and the orchid does the same for the wasp. Thus, the assemblage has stability. The other is the material/expressive dimension which DeLanda (2006 p.12) interprets in a simplistic way compared with Deleuze (Deleuze & Guattari 1987 pp.97-98). In the case of the wasp/ orchid assemblage the expressive element would be the orchid entering into the wasp's symbolic system to encourage it to act in a certain way and the material would be the physical organisms and the pollen.

Another example which Deleuze refers to several times (Deleuze & Parnet 2007 pp.69-72; Deleuze & Guattari 1987 pp.89-90 p.399 pp.405-405) is the stirrup, rider and horse assemblage and he uses this example to explore social assemblages.

Technologists have explained that the stirrup made possible a new military unity in giving the knight lateral stability: the lance could be tucked in under one arm, it benefits from all the horse's speed, acts as a point which is immobile itself but propelled by the gallop. 'The stirrup replaced the energy of man by the power of the animal.' ... Tools always presuppose a machine, and the machine is always a social machine which selects or assigns the technical elements used. ... In the case of the stirrup, it was the grant of land, linked to the beneficiary's obligation to serve on horseback, which was to impose the new cavalry and harness the tool in the complex assemblage of feudalism. ... The feudal machine combines new relationships with the earth, war, the animal, but also with culture and games (tournaments), with women (courtly love): all sorts of fluxes enter into the conjunction.

(Deleuze & Parnet 2007 p.70)

In this case, the outline of the assemblage can be drawn at the technological level, what this piece of technology does, or it can be drawn in different ways at much higher levels, as cultural assemblages of games or the relationship between the sexes, or the assemblage of the whole social system. Where the lines are drawn is determined by what is convenient for the speaker. The objects that we deal with, such as the human organism or a car engine, can, depending on convenience, be thought of as things or as assemblages. The human organism is generally conceived as being a definite entity with definition and outline. Yet biologists tell us that this is not at all the case (Kramer & Bressan 2015). They tell us that viruses and bacteria play a constant and necessary role in the life of the organism and that even its identity is not completely defined, as it is in modern mythology, by its DNA since the DNA of other people, notably mother and siblings, plays a part as well as the DNA from other organisms such as parasites. On closer inspection, the assemblage of a human organism is not as territorialised as might be expected. In the case of the car engine, this is according to DeLanda's model (DeLanda 2006 pp.8-25) be treated as a totality since its components only have relations of exteriority, that is, they can only function with each other and cannot take part in any other assemblage. However, it may be more fruitful to look at totalities as a particular kind of assemblage rather than as something completely different: the parts of the engine each have their own history and line of flight and the engine as a whole can take part in different assemblages.

3.6. DOT: Assemblages

The notion of assemblage is useful in the development of DOT in that it provides a way of looking at the world in a way that is consistent with the paradigmatic assumptions of postmodernism and, as a consequence, also provides some additional useful viewpoints on specific phenomena. Assemblage theory allows us to peer beneath the surface presented to us by discourse through the way that it constructs our worldviews. Instead of the world being represented as composed of fixed entities that reflect transcendental entities, it is instead composed of loose and temporary associations of unique things each with its own individual history and destiny (line of flight). According to Deleuze the purpose of discourse to issue commands to us about what to think and what to do (order word) and this view is consistent with DOT. According to Latour we are all members of several different groups that create our identity. Assemblage theory explains how it is that a person can be the subject of several institutions at the same time, for example, an organisation, a profession, a club and a family without positing that the individual precedes all of them. Discourse works in such a way as to create the illusions of fixed entities; for example, by the use of nouns. Assemblage theory invites us to look at the world, not as a collection of discreet entities but as a collection of assemblages; that is, to see the objects that we are accustomed to seeing as discrete entities differently by seeing them as assemblages but also to see the different objects as not being as separate from each other as we customarily see them but to see them as components of overlapping assemblages in a continuous network of relationships.

It follows from the ontology of DOT that assemblages are discursive conveniences; they are a way of comprehending the flow of events. Assemblages do not exist "out there" in the physical world but are a product of discourse which seeks to put boundaries around sense data so that some things are included and others excluded so that the particular assemblage may be apprehended. In this way discourse simplifies the flux of sense data and makes it amenable to human consciousness. The particular usefulness of looking at the world as a collection of assemblages rather than as a collection of things is that assemblages are not hard-edged and stable like things and this is, therefore, a more flexible concept which more accurately represents DOT's ontology of flux. The whole world is a collection of components - and each component is itself an assemblage - and an assemblage only exists when people put a boundary around the collection and identify it as an entity. There is no intrinsic boundary between assemblage and context and there is no end to context, so assemblages are "rhizomic" (Deleuze & Guattari 1987 p.7). It follows from this ontological principle that it is important to study the relationships between things, which form overlapping and interlocking networks, in order to understand the world.

Realist assemblage theory undermines itself when it accords things the same status as actors as it does to people. From a realist position, there is an objective viewpoint which is external to humanity that can analyse the human and the non-human on the same terms but from this viewpoint only analysis can occur since it does not indicate priorities for action. DOT, therefore, reinterprets assemblage theory from a postmodernist position by seeing assemblages as a discursive constructs rather than as a parts of an objective reality.

DOT takes Deleuze's notion of assemblage and alters it. By moving it from the realist to the postmodernist paradigm the notion of assemblage is altered by the fact that there is now a different relationship between assemblage and discourse. It follows from this that the material/ expressive dimension of the assemblage is also altered. In DOT an assemblage is a discursive construct. All assemblages have an expressive dimension because they exist in discourse, otherwise they could not be known. All assemblages also have a material dimension because discourse itself is material. However, despite this appropriation from one paradigm to another, many of the concepts associated with assemblages and actor–networks, such as the dimensions of assemblages, translation, diagram, may be carried over into DOT and applied as part of DOT.

Because in DOT assemblages are discursive constructs they always have an expressive component whether or not the assemblage as a whole is social. Thus, a planetary system does not immediately appear to be a social phenomenon or have expressive components, yet through the concepts involved it is always already involved in social institutions, for example, the institution of science through the concept of gravity.

In DOT, just as all assemblages have an expressive component, they also have a material component since discourse itself is material. Even the most abstract concept has to exist in some form, perhaps as marks on paper or electrical impulses in the human nervous system and so it has a material component as well.

In Deleuze's conception assemblages have two dimensions: material/ expressive and territorialise/ deterritorialise. The material/ expressive dimension has been analysed here because it is significant for the reinterpretation of assemblage theory from its original, realist, paradigm into the postmodernist paradigm. The territoralise/ deterritorilaise dimension is useful when the reinterpreted assemblage theory is operationalised within the DOT theory assemblage as is the Deleuzian notion of abstract machine/ diagram.

In Deleuze the entitity that creates meaning is the collective assemblage of enunciation, in Latour's ANT the same thing is call a group and in DOT it is an institution. In ANT, the production of meaning is through translation which is a recursive process involving the physical world as well as discourse and producing power effects.

It is a major departure of DOT that discourse itself is assumed to be a wholly material assemblage which is a component of all other assemblages (4.5). Because discourse is a component of all other assemblages, in DOT ontology and epistemology are closely intertwined.

The preconditions for the development of the core theory of DOT have now been laid out. The paradigm has within which the theory will be developed has been specified; that is, its basic assumptions have been identified in Chapter 2 and the notion of assemblage has been explored in this chapter. In Chapter 4, the development of the core theory procedes by treating discourse itself as a material assemblage and Derrida's ismn différance is identified as a condition of interiority of the discourse assemblage. From this a model of instituition will be developed.

Chapter 4. Discourse and Différance

The argument of *Of Grammatology* (Derrida 1976) is central to DOT and it, along with Deleuze's assemblage, is the other of the two main foundations of DOT. Particularly, this study will draw on the concepts which Derrida terms "*différance*" and "*violence*". This section is a reading of the book which extracts these concepts in a form that can be used in developing DOT. Sometimes other texts by Derrida will be referred to if it helps make the point more clearly.

In this book, Derrida discuses certain problems in philosophy and in addressing those problems he builds a philosophical system with its own set of concepts and terminology which amounts to a model, or theory, of discourse. The main points of departure in this system are, first, that there is a gap between human experience and the perception of our experience and, second, that the difference which is perceived in Western thought between speech and writing conceals a fundamental paradox which must be explored in order to understand the related matters of discourse, thought, knowledge, experience, selfhood and power.

In this chapter, first, in 4.1 Derrida's discussion of the relationship between speech and writing is discussed. Derrida uses this binary to reveal a model of discourse. Next, in 4.2 Derrida's method of deconstruction is described and used to analyse bureaucracy. This section shows how in Derrida's model of discourse power effects are produced. Then, in 4.3 the literature of organisation theory which draws on Derrida's work is reviewed. In 4.4 the impact of Derrida's work on organisation studies is discussed. Finally, in 4.5 the core of the DOT theory is developed beginning with the discourse assemblages and then the Institution Assemblage.

4.1. Writing and Speech

The "grammatology" referred to in the title of the book is the science of writing which Derrida first postulates and then shows its impossibility. He begins by showing, that in Western thinking from Plato through all the developments of Western philosophy through the centuries and down to the present time, there has been an assumption that speech precedes writing and that writing is the secondary signification of speech. He points out that this assumption must be a fallacy because of all the counter examples of writing which does not repeat speech such as mathematical symbols, computer programmes and so on.

The difference between speech and writing is one of immediacy. We write because our reader is not present to us either because of distance or because of time. Thus, writing consists of a representation of language using marks on paper or screen. Writing implies absence but it also leaves open several possibilities including the possibility of misunderstanding because the writer is not present to correct the readers' misapprehension and it leaves open the possibility that the message will never reach its intended reader at all perhaps, for example, because the reader has died before the message arrives. However, on closer consideration all the things that can be said to be characteristic of writing are also characteristic of speech which may be seen as an encoding of language in compression waves in the air instead of in marks on a page. Thus, "The sound-image is what is *heard*; not the sound heard but the being-heard of the sound" (Derrida 1976 p.63). In other words, in both speech and writing the signifier is interpreted and the one has no more immediacy than the other. Despite the fact that writing is often the re-encoding of the spoken, speech and writing are not intrinsically different and we might better understand language if we think about the case of writing rather than the case of speech. Derrida argues that behind both speech and writing there is a more fundamental principle which he calls "arche-writing", though often he refers to it as "writing" and it becomes apparent as the argument unfolds that it is the same as something which he calls "différance".

Derrida argues against Saussure's idea of the sign. In Saussure's model, language is a system of signification where the signified is a concept and the signifier is a word or phrase. Derrida argues that the signified is already created by linguistic categories and, therefore, meaning cannot be created by a relationship between signifier and signified. Instead meaning is created by the relationships between signifiers, by the difference between one signifier and another. Signifiers can only mean anything because they are not other signifiers. This point is demonstrated by the dictionary because when we look up a word in a dictionary, all it gives us is other words. Since language can only give us words defined by other words, there can be no relationship between the world and language which is determined by the world. We can only understand the world through language which has no fixed relationship with it. There is, as Derrida puts it, no

"transcendental signified" that is, there is no anchor for any signifier in the real world so there is nothing outside the text – "*il n'y a pas de hors-texte*" (Derrida 1976 p.158). Additionally, because the signifier is not fixed by anything outside of discourse it is free to play and for its meaning to move but only, of course, as far as the other signifiers allow it.

Derrida uses the word *différance* to describe the force which creates meaning. It is a lexical play in French because the French word for difference, *difference*, and his neologism, *différance*, sound identical when spoken, the difference being the substitution of an "a" for an "e" in the middle of the word, so the only way to tell them apart is to see them in written form. *Différance* contains the idea of difference, that is, the meaning of a signifier is defined negatively by what it does not mean, so it refers to the difference of a signifier from the other signifiers or a "spacing" between signifiers (Derrida 1982a p.8), and also the idea of deferment, the delay of the other signifiers which remain at various distances ready to flood-in and create a chaos of associations. Derrida argues that *différance* is not an entity or concept in the ordinary meaning of the word because

... *différance is not*, does not exist, is not present-being (*on*), in any form; and we will be led to delineate also everything *that* it *is not*, that is, *everything*; and consequently, that it has neither existence nor essence. It derives from no category of being, whether present or absent. (Derrida 1982a p.6)

Différance needs to be approached carefully because it is not just another entity in the universe. *Différance* is the principle which creates the world in our discourse - it is the precondition of language, knowledge, understanding, consciousness and everything which we recognise as human.

Différance consists of three factors. First, there is *difference* so the definition of signifiers as the difference between a signifier and the other signifiers. Second, there is *deferment* so that each signifier implies and has a relationship with the other signifiers whose meanings are deferred. Third, there is *deference* so the signifiers often fall into pairs and one of the elements of the pair seems to have dominance over the other one

despite the fact that it depends upon it for its existence. It is this deference which is the basis of all power effects and Derrida refers to it as *"violence"* (Derrida 1976 pp.101-140).

Human beings can only know the world from their sense impressions which consist of transmission from a receptor of electrical impulses through the nervous system to a location where these impulses can be decoded. Derrida's theory amounts to a theory of the software of the decoding system, though he does not put his ideas in these terms. He is proposing that the decoding of the sense impressions is done by a system which can only work with pre-existing categories which are not unique to the individual but are communal categories of a shared symbolic system of discourse. Individuals have experiences which cannot be readily decoded in this way but these are interruptions to the normal flow of experience and cannot be communicated. Since these experiences include experiences of our own physiology, part of our experience is the experience of ourselves as other, or as Derrida also puts it, as the experience of the "animal" (Derrida & Wills 2002).

Human knowledge only exists within a system created by *différance*. Our experience comes to us through a system where our sense experiences have already been interpreted by a symbolic system as they enter into consciousness. Thus, Derrida insists that we should think of this symbolic system as a kind of writing because writing implies distance, delay, the possibility of interrupted communication and misunderstanding.

There are many significant consequences of Derrida's view of consciousness as the result of *différance*. One is that the self is only created in language when a child inserts itself in language by thinking or saying "I". But, this conscious entity is only conscious as the experience of the organism is filtered through discourse and, therefore, not only is the world not fully present to us but also, in the same way, we are not fully present to ourselves.

Part of this world that we think we experience immediately is ourselves and Derrida argues that the assumption that we are immediately present to ourselves is also an illusion. Though we have the illusion that we are masters of the language we use, in fact, to a large extent it is language that creates us. It is language that gives us "I" so we

do not exist before language intervenes and creates us as a subject, which then enables the creation of consciousness and the self.

Derrida calls this illusion of presence in speech "*logocentrism*". It is, "... absolute proximity of voice and being, of voice and the meaning of being, of voice and the ideality of meaning" (Derrida 1976 p.12). Logocentrism is responsible for the illusion that we experience the world as it is rather than as a mental model that represents the world. It also creates the illusion that the self is a discrete autonomous entity rather than a structure created communally in discourse. Logocentrism is so much a part of what we assume to be axiomatic that it prevents us from analysing fundamental concepts like communication which already has built into its meaning the assumption of a subject that has identity and presence before the transmission of a meaning which is not affected by the process (Derrida 2004).

For each unit of meaning, word or utterance, there is a different pattern of deferment of other signifiers. This pattern changes as the language is used in new contexts, new words are added or words change in meaning. Derrida calls this pattern of deferment for a particular unit of meaning the "*trace*". He uses the metaphor of the trace being like a pathway (*un sillage*) through a landscape which we are creating and following at the same time (Derrida 1976 p.62). The trace is not an object which precedes meaning but is a force which creates meaning dynamically so it can be said not to exist, and not to have an origin, but to continuously create meaning.

The trace is a communal phenomenon of discourse. Individuals can only use the words that are available to us which are words that have been used before. Derrida calls this characteristic of language "*itterability*" (Derrida 1988). It means that an individual can never truly communicate an experience because the experience is personal while the words which he or she must use for communication are communal, and this includes communication with the self. Thus, you cannot communicate the experience of a toothache because all you have is a limited range of words like "toothache" and "pain" which are obviously inadequate to the task and some of the most personal and deeply felt emotions can only be expressed as clichés, for example, "I love you". As the trace is the force which creates meaning in the case of a particular signifier so a particular trace is the expression of *différance* for that signifier: "The (pure) trace is *différance*"

(Derrida 1976 p.62). Derrida uses the term "weave" for the way the traces of the signifiers in a text compose the text.

4.2. Deconstruction of Power

Reality is chaotic and it is only by imposing structure upon it that we can describe, understand or act upon it. Therefore, this structure is temporary, imperfect and unstable. Derrida's method of study of a text, which he calls "deconstruction", is to read it closely to find its silences, contradictions and aporia. These reveal the work of binaries in structuring the text which can then be observed closely to see how they do their construction work (Derrida 2004; Norris 1982).

The text does not reveal its secrets easily (Derrida 1981). If the text's workings were obvious, it would be obvious that it is unstable and ephemeral and it would not be able to do its job of structuring the human world. But, Derrida insists, that deconstruction is not something which is done to the text by an outside agency but is something which is always already at work in the text itself which can be observed if the reader pays close enough attention. Thus, deconstruction is not a method in itself, though the use of the concept for the analysis of texts does amount to a method.

In deconstructing a text, the reader must find the binaries which are key to its construction. In each of these binaries there is one term which is in some way deemed in that text to be better than the other, or as Derrida expresses it, one is a supplement to the other. Often the binaries are presented as two independent terms or as the powerful term having no dependence on the inferior term. However, there are often places in the text where the hierarchy of the two terms is inverted and the dependency of the superior term on the inferior one is revealed. So, for example, a text might be about literacy and literacy is presented as something which exists in its own right without dependency on any other term but, at some point, the text reveals that literacy depends on its obverse, illiteracy, and that one is incomprehensible without the other. The point of deconstruction is not to invert the binary in some kind of mischievous manoeuvre but to overturn the hierarchy of the binary so as to bring about "the irruptive emergence of a new 'concept', a concept that can no longer be, and never could be, included in the previous regime" (Derrida 2004 p.39).

Derrida's method of expounding his philosophical system is not to present it as a fixed structure but to reveal it dynamically by deconstructing other works, sometimes philosophical, sometimes literary and sometimes texts from other disciplines entirely.

A good example of deconstruction appears in Derrida's essay "Plato's Pharmacy" (Derrida 1981). Here he reads closely a portion of the Platonic dialogue, *Phaedrus*, that is concerned with a myth that Socrates relates about the invention of writing. Socrates was an illiterate philosopher of ancient Greece who denounced writing, which was a recent invention, as a bad thing. Of course, the modern world only knows what Socrates said because it was written down by his pupil, Plato. Thus, from the beginning Socrates stands contradicted and writing is shown as the necessary supplement to speech.

In the *Phaedrus*, Socrates and Phaedrus take a walk in the countryside and in the course of their conversation, which has a theme of the relative merits of speech and writing, Socrates tells the story of a myth which, though using well-known characters from Egyptian mythology, is a story that is unknown outside this dialogue. In the story a minor god called Theuth presents to the king of the gods, Thamus, some of his inventions which are numbers and calculation, geometry and astronomy, draughts and dice and writing. These inventions are met with approval by Thamus until he reaches writing which Theuth says is "a recipe for memory and wisdom" (Derrida 1981 p.81). Derrida points out that in the original Greek the word that is normally translated as "recipe" is "*pharmakon*" which means both "medicine" and "poison".

Derrida shows that the myth is built on a number of binary oppositions that resonate with each other and which establish a complete impression of the binary speech/writing which places speech in the superior position with writing as the inferior and dispensable supplement. He draws attention to the meanings in Greek of some of the words that Socrates uses and the knowledge that his contemporary audience would have had about the gods who are mentioned in the story and their parallels in Greek mythology. Thamus is associated with several characters who might be identified as the king of the gods. Derrida points out that the king of the gods behaves like a father and that in Greek the same word was used for father as for capital (as in an investment) and for the sun. The spoken word, *logos*, has its father who has ownership and responsibility for it whereas the written word is an abandoned orphan separated and potentially disowned by its father. He draws on other Platonic texts to show that there is an implication here

that the logos owes a debt to its father/capital. He also shows that Thamus is equivalent to the sun god, Ammon-Ra, who delegates another lesser god, Thoth who is a version of Theuth, to stand in for him at night as the moon which merely reflects the light of the sun. Thus, the two gods stand in a relationship to each other as sun to moon or, in the logocentric version of ontology, as speech does to writing.

Thamus judges the other inventions of Theuth favourably but he denounces writing. He says that it is "the very opposite" (Derrida 1981 p.104) of what Theuth claims it is. It is not a remedy/medicine that will increase memory and bring wisdom but only a device to aid remembering and it will give people the false impression that they can become wise by reading a lot because their knowledge will only be superficial. Derrida shows that in other Platonic texts Socrates disparages mnemonics as bringing about a false kind of memory which lacks immediacy. Similarly, Socrates claims that wisdom cannot be gained from books but only from reliving experience with a teacher. Derrida comments that these criticisms are logocentric and that "What Plato dreams of is a memory with no sign" (Derrida 1981 p.112). He says that the sign, or writing, is always already at work in memory and that these distinctions that Socrates makes between memory and remembering and between wisdom gained from books and wisdom gained from conversation are false.

The binaries that Derrida uses for deconstructing texts have implications for an understanding of power. One side of the binary is privileged over the other and sometimes greatly so. In *Of Grammatology*, Derrida talks of the "*violence*" tied up in the binary speech/writing because of the immense power that is attached to one side of the binary (Derrida 1976 pp.101-140). In DOT violence is taken to be the generator of power.

Another binary that Derrida discusses, this time in a lecture on the theme of the animal, is the human/animal binary (Derrida & Wills 2002). By bringing a huge variety of creatures into the category of animal, Derrida argues, people give themselves licence for exploitation and cruelty. However, the main difference between animals and humans is that animals do not have language and, therefore, do not have a voice to be able to define their own identity within discourse. Of course, there is a large part of the human which is also animal, inaccessible to language and people may be deprived of a voice in various ways so that they are incapable of defining themselves and arguing for justice

... no one can deny the unprecedented proportions of this subjection of the animal. Such a subjection, whose history we are attempting to interpret, can be called violence in the most morally neutral sense of the term and even includes a certain interventionist violence that is practiced, as in some very minor and in no way dominant cases, let us never forget, in the service of and for the protection of the animal, most often the human animal.

(Derrida & Wills 2002 p.394)

So, even before the debate about the proper treatment of animals by people, or people by other people, the binary has already introduced a power differential which may be justifiably termed "violent" and assumes a priority of the human over the animal.

To illustrate what Derrida says about the primacy of speech over writing we can apply thinking to Weber's theory of bureaucracy. Weber describes an *ideal type* of legitimacy for authority that underlies most organisations in the modern world: rational-legal authority (Weber 1964; Weber 1968b; Giddens 1971); that is, in rational legal-authority people who have positions of power can expect their commands to be obeyed because the organisation has been structured following certain principles (Weber 1968 pp.212-223). Weber's concept of ideal-type is discussed further in section 5.3.

Officials each have their prescribed place in a prescribed order. It is specified what an official is allowed to say from his or her position, how much power that "I" wields and over what domain. No confusion can occur between the "I" who speaks from the allotted position and any other subject position that person might occupy.

Thus, in a bureaucracy, the spoken word is written in the form of rituals, customs, norms, mores, rules and laws. Then, it is recalled to support power and support of the actions of those who are in a position to wield power. They have legitimacy because the rules were followed when they were appointed and now they follow the written rule book. The person in power cannot be challenged if he or she is able to show that the rules have been followed and the matter of interpretation cannot become an issue for challenge or insubordination because those in power have legitimate authority to make the interpretation. On the whole, people in a position of power prefer to think of the

written document as transparent and not needing interpretation. However, their legitimacy also stands on the rules themselves so the rules give them legitimacy to interpret the rules, though their interpretation must also be recorded in writing and may itself be interpreted at a later date. Thus, the absence in the written text is supplied by the presence of those who have power at the moment it is exercised. The written rules limit the power of those in authority but the same rules also legitimate a range in which power can be wielded arbitrarily.

In describing deconstruction, Derrida says that when examining the role of a particular binary in a text the dominant term should not just be overturned and replaced by the subordinate, nor should we try to find a neutral position "neither this *nor* that" (Derrida 2004 p.39) which would not address the original opposition. In bureaucracy, it is hierarchy which produces organisation. So, it might seem that disorganisation, or chaos, is the suppressed supplement which threatens organisation and which hierarchy must defeat. Yet this simple narrative is silent about another suppressed supplement of hierarchy which is democracy and so bureaucracy is legitimately able to suppress democracy in the interests of suppressing chaos.

In fact, the ideal type of the modern organisation described by Weber's bureaucracy is a template for organisations in any capitalist context. The so-called 'postmodern' organisation is just another version of bureaucracy with which it shares all its hierarchical characteristics (Diefenbach & Sillince 2011). Bureaucracy is discussed further in Section 5.3.

4.3. Derrida's Contribution to Organisation Theory

Derrida's influence on the literature of business and management has been slight. There was a promising start made by Cooper (1989) in an introductory article published in *Organization Studies* which presents Derrida as a theoretician of process but Derrida has proved to be nothing like as fashionable as Foucault among organisation studies scholars with only 45 articles on the Scopus search of relevant journals for Derrida between 1989 and 2015 compared with 340 for Foucault. Weitzner comments that there was a brief flurry of interest in the 1990s. His plea "to give deconstruction a second chance" (2007 p.43) sounds forlorn and lacking in confidence. Nevertheless, he argues a

robust case for applying Derrida's ideas to ethical problems, the main characteristic of an ethical problem being that it is *undecideable*.

Unfortunately, Derrida has been the occasion of some superficial scholarship by both detractors and admirers. There have been many detractors who have not bothered to adequately understand what they are criticising, for example Wicks and Freeman's (1998 p.138), throw-away comment "... deconstruction is empty and meaningless". Another example of detraction is Weiss's "Derridada: A Response to Weitzner" (2007) which makes no attempt to engage with Derrida's work but only discusses what various scholars have said about it. This approach leads to such absurdities as accusing Derrida of "relativism" without explaining what is meant by the term, without explaining why the author thinks it such a bad thing and without explaining the part this concept plays in Derrida's work.

Among his advocates, Derrida's work tends to be cited as characteristic of postmodernism in general. For example, Kilduff and Mehra (1997) describe Derrida's work in glowing terms where deconstruction is held up to be a rigorous method characterised by a focus on marginalia and exploration of the indeterminacies of texts, especially classic texts, which opens them up to being reinterpreted and revived. However, these authors do not engage with Derrida's ideas in any significant way or attempt to apply them to organisational problems.

Some scholars have followed Derrida's own method by deconstructing existing, usually classical, texts in the business and management literature (Calas & Smircich 1991; Mumby & Putnam 1992; Kilduff 1993) but also text books (Summers et al. 1997) and texts from the information systems literature (Beath & Orlikowski 1994). However, these approaches are limited compared to the few that approach the organisation itself as text as in Cooper (1989) or Linstead (1993).

However, here has been a wide range of attempts to apply deconstruction to specific aspects of organisational research. Boje deconstructs the corporate stories of the Disney Corporation (1995) though it might be objected that what Boje does is not quite deconstruction, as Jones remarks

There is a danger of reducing deconstruction to the status of being only a method and failing to take into account the epistemological, ontological, political and ethical aspects of deconstruction, in addition to Derrida's distinctive mode of engagement with texts. There is also a danger that reading might be seen as an application which takes place from a position imagined to be 'outside' the text being read, from a position of safe exteriority, if not objectivity.

(Jones 2004 p.41)

All of these weaknesses are discernible in Boje's approach.

Xu's discussion of TQM (Total Quality Management) relies for the most part on the linguistic theory of de Saussure (Xu 1999). It is not deconstruction because it does not expose binaries or the power structures that they support; however, he does use Derrida's notion of the absent centre of the sign. Xu shows that the concept signified by the sign TQM has changed over a period of time and that the history of that change can be told in different ways according to what is regarded as significant by the teller. At the same time the signifier TQM has taken on a role that is something like a brand name that can be attached to different kinds of approaches to quality management. By exposing the fact that the signifier and the signified of TQM have an indeterminable and fluid relationship Xu is able to expose the assumptions implicit in TQM, for example, in its Japanese versus Western associations.

Linstead and Grafton-Small (1992) draw on Derrida's model of discourse to re-examine the concept of organisational culture. They argue that modernism, either in positivist or interpretivist guises, has run out of scope for providing further insights into organisational culture. Interpretivist views have been prevalent and these have portrayed organisational culture as either, something shared and unifying or, as something riven with multiple perspectives but these views are inadequate because they fail to explain the observed phenomena. They suggest that a postmodernist approach would be more fruitful and this would include approaching culture as the emergent product of process, experienced by actors as everyday life, and best conceptualised as a text where the process also produces subjects and a complex weave of numerous types of text.

More recently, Derrida's work has been cited as though it were a marginal curio as in Griffin et al's (2014) conceptual article that hangs precariously on a chance encounter

between Derrida and the jazz musician Ornette Coleman, which was largely unfruitful, and the personal experience of two of the authors. They take Coleman's approach to jazz which is to do away with the distinction between soloist and accompanist so that, in effect, there are simultaneous solos, and apply it to organisations. The authors argue that this approach, though fraught with risk that the result may be disastrous, is potentially more innovative. They find parallels in Derrida's work where he discusses the inherent uncertainty of the future. This article is based on two unexamined assumptions: firstly, that democracy leads to innovation and, secondly, that innovation is always what an organisation requires.

There have been a small number of substantial contributions including Cooper's 1989 article which contains a lucid and insightful account of différance and deconstruction and is ambitious in scope. Unfortunately, the project creaks in places, for example, he says "Writing, for Derrida, is primarily a form of control ... It is the control aspect of writing that makes it central to organizational analysis" (Cooper 1989 pp.492-3). Here the meaning of the word "writing" has slipped from Derrida's specialist meaning, equivalent to "arche-writing" (Derrida 1974/1967 p.60), of the force which drives discursive creation to the everyday meaning of written documents, which Weber identified as being a means of control in bureaucracies. It is an easy slip to make in a context where theory is being applied without first having developed a theory that accounts for the relationship between arche-writing and institution. The last section of Cooper's article is mainly concerned with a discussion of Latour and Woolgar's Laboratory Life (1979), which examines the creation of scientific facts, and Frug's article "The Ideology of Bureaucracy in American Law" (1984), which looks at the roles of subjectivity and objectivity in modern bureaucracies. This is an illuminating discussion of two illuminating works. However, neither Cooper nor the works which he cites have much to say in answer to the all important question posed by Calas and Smircich, "But, once you've deconstructed, then what?" (1999 p.649). Cooper opens up possibilities for further theorising but not directly for the solution of real life organisational problems.

Linstead (1993) discusses the use of ethnography as a method for postmodernist research. He points out difficulties inherent in ethnography once the existence of multiple points of view has been acknowledged. The ethnographer inevitably introduces

his or her ways of thinking into the interpretation of the data and it is unlikely that the observed social actors would completely endorse the ethnographer's description of them (pp.50-51). A postmodernist ethnographic approach begins by seeing organisations as texts and assumes that there is a dynamic inter-textuality at work in the observation. Linstead refers to Derrida's idea of *supplementarity*, where one side of a binary is only completed by the other side and each term is always informed by its opposite, and refers to Gergen's extension of this idea as "social supplementarity" where one subject's utterance is incomplete without the interpretation of another. Thus, says Linstead, "shared meaning' is impossible" (p.60) meaning that ambiguity is intrinsic to social interaction and that organisations are inherently paradoxical. He goes on to suggest that organisation as other - that is, other to its members - fulfils a desire to remedy a deficiency in the subject which is made apparent by the existence of the other. Thus, organisation produces an unpleasant effect of "sting" (p.61) which is brought about by the restraining effects on the subject of organisational power and also an effect of "desire" (p.61) since the subject experiences a need to belong. Finally, Linstead refers to the knowledge/power effect of organisation as explored by Foucault (6.4).

Chia (1994) uses a deconstructionist approach to analyse decision making. He begins by examining the modernist contributions of March and Simon (1958), Mintzberg and Waters (1990) and Pettigrew (Mintzberg & Waters 1990). March (1978) explained⁷ the notion of "bounded rationality" meaning that organisations attempt to reach rational decisions but are unable to do so because they cannot be in possession of all the facts so they have to make the best approximation that they can. Simon calls this "satisficing" (1957a) and March and Simon (1958) suggest that what organisations do is satisficing rather than maximising their effectiveness (Chia p.782). Mintzberg and Waters (1990) set out to analyse the decision-making event but found that it was elusive and often did not seem to have taken place. They concluded that instead of seeing the strategic process as being one where thought has precedence over action the pair of terms should be inverted and the emphasis put on action rather than thought. Thus, they suggest that instead of seeing strategy as a pattern of decisions it should instead be seen as a pattern

⁷ Simon introduced the term "bounded rationality" in his book *Models of Man* (Simon 1957b).

of actions. Pettigrew agreed that the emphasis should be placed on action rather than thought and suggested that strategy is better understood through change than decision making because he thinks that it enables the researcher to be more aware of context (Mintzberg & Waters 1990; Chia p.789). Chia points out that the weakness of all three arguments is that they stick to the modernist model of the thinking of individuals preceding, and causing, action. Instead, he suggests that decisions are often taken in retrospect and are a means of imposing a rational narrative structure on the flow of events which he calls "micro-incisions" in that flow. He deconstructs decision making using the binary decision/action which is linked to the binary activity/passivity. By deconstructing the concept of decision making Chia arrives at the view that binary decision/action leads to the construction of objects and events that satisfy our need for structured explanations. He suggests that new insights might be had by looking at the matter not as 'decision making' but 'decisional becoming'. However, he ends up empty handed with the statement, "It is not within the scope of this article to elaborate in any great detail what a reconstructed theory of decisional becoming might entail" (p.801). This article is potentially the most useful exercise in deconstruction in the management literature to date but it ends on a cliff-hanger, awaiting someone to pick it up and take it further.

Another substantial contribution is Chia's book *Organizational Analysis as Deconstructive Practice* (1996). Chia begins by making a distinction between "downstream thinking" which goes with the conventional modernist flow and "upstream thinking" which asks fundamental questions about the assumptions which are used in organisational analysis. Though, this book draws together many strands of thinking, for example process thinking, ANT and deconstruction, in an illuminating way and indicates possible avenues of organisational analysis, once again it fails to answer Calas and Smircich's "what's next?" question about the utility of postmodernist analysis.

Jones's (2004) book chapter appears at the point where the tide was turning against postmodernism after a comparative surge of interest among organisation scholars in the late 1980s and 1990s. He reviews the literature and identifies a wide range of applications of Derridean deconstruction to matters of organisational analysis before posing three questions: (1) is deconstruction a method? (2) is deconstruction critical?

And (3) is deconstruction relativistic? (2004 p.36). In addressing the first question he quotes Martin's nine-point deconstruction checklist of "analytic strategies used in deconstruction":

- 1. Dismantling a dichotomy, exposing it as false distinction
- 2. Examining silences what is not said
- 3. Attending to disruptions and contradictions, places where the text fails to make sense
- Focusing on the element that is most alien to a text or a context, as means of deciphering implicit taboos – the limits to what is conceivable or permissible
- 5. Interpreting metaphors as a rich source of multiple meanings
- 6. Analysing 'double-entendres' that may point to an unconscious subtext, often sexual in content
- 7. Separating group-specific and more general sources of bias by 'reconstructing' the text with iterative substitution of phrases
- 8. Exploring, with careful 'reconstructions', the unexpected ramifications and inherent limitations of minor policy changes
- 9. Using the limitations exposed by 'reconstruction' to explain the persistence of the status quo and the need for more ambitious change programmes.

(Jones 2004 p.40; Martin 1990 p.355)

Though this is a useful checklist for training novice deconstructionists, as Jones points out, it is useless to attempt deconstruction without full sensitivity to the ontological and epistemological assumptions that produce the postmodernist paradigm otherwise the analysis is not deconstruction. In addressing the second question, Jones cites Derrida's frequent assertions that deconstruction is a positive, not a negative, analysis. Though deconstruction may be used to produce a critique, it is a process that may be applied to any text and its result is to reveal new possibilities. In addressing the third question, Jones cites different shades of meaning that have been attributed to Derrida's "undecideable". He points out that Derrida does not believe that a text may be interpreted in any way that the reader chooses. The last part of Jones's book chapter is a brief overview of Derrida's later work which has a generally ethical theme and the piece ends with an inconclusive conclusion which might be taken as the epitaph of a short era of Derrida in organisation studies:

> How do we use Derrida in relation to organization and organization studies? But Derrida does not offer us any easy or satisfying answers to questions such as these.

(Jones 2004 p.54)

4.4. Derrida and Organisation

These notions of *writing*, *différance*, *violence* and *deconstruction* are useful foundations for a comprehensive theory of organisation. The concept of différance provides a materialist explanation of meaning and it also provides an explanation of the structuring effects of power. Deconstruction provides an explanation of how and why power conceals itself and how the researcher might observe discourse in the act of constructing our view of the world.

In Derrida's thinking about discourse the term "writing" is not used in the conventional sense of making marks on a surface. It is an organising force which produces texts both in the sense of making them but also, simultaneously, in the metaphorical sense of theatrical production. In other words, writing simultaneously interprets and puts these texts into action. Thus, the term "text" may be applied to any form of social structuring including the self, institution, organisation, culture and so on.

Because writing is a large part of organising, to understand organisation it is necessary to understand how discourse structures texts. The creative principle of discourse is différance which creates meaning dynamically through difference in the meanings attributed to signifiers, in the delay of related meanings and the creation of binary terms with one privileged term.

The structures created by discourse represent the real world but do not have any fixed correspondence with it. The structures created by discourse are inherently self-contradictory and unstable. For this reason, their process of structuring can be observed by paying close attention to the text to find its silences and contradictions, which reveal how the privileging of the binary signifiers create power effects that are the motive

power of a continuous structuring process. This observation may be thought of as an analytical method called deconstruction.

Despite the substantial articles of Cooper (1989) and Linstead (1993) which might have laid the foundations for a postmodern theory of organisation, the Derrida literature of the 1980s and 1990s in organisation studies created the impression that all postmodernism could do was to undermine normal science in interesting and entertaining ways, but without offering any useful alternatives.

This failure, in turn, is linked to postmodernism's failure to produce a discursive theory of institution (Hassard 1999). For example, Linstead and Grafton-Small's discussion of culture (1992) would be clarified if the concept of culture were linked with the concept of institution. The relationship between these concepts in DOT will be discussed in 5.5.

4.5. DOT: Core Theory Development

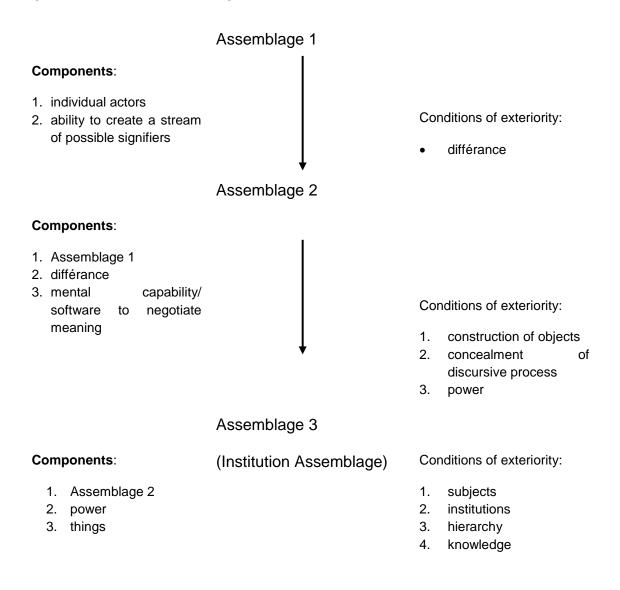
I shall build DOT step-by-step by constructing a series of mutually dependent assemblages. This process does not imply that there is a temporal sequence or that these assemblages can exist independently of each other; the purpose of the steps in the process is merely conceptual clarity. Firstly, Assemblage 1, which is the material assemblage of discourse and which is the pre-condition of discourse, is built. Assemblage 2 is built from Assemblage 1 and its condition of exteriority, *différance*. The means by which Assemblage 2 *produces* organisation (like a play is *produced* in a stage performance) is then considered and in so doing the Institution Assemblage and a condition of exteriority of Assemblage 2, power. The relationships between these assemblages are represented in Figure 4.1.

Two aspects of the Institution Assemblage are then considered because they are relevant to the argument of this thesis; these are the Subject Assemblage (6.5.1) and the Culture Assemblage (6.5.2). The macro structures formed by the interactions of Institution Assemblages which construct the social world, such as organisations, professions and everyday life, are discussed in section 6.5.3.

4.5.1. DOT: Discourse Assemblages 1 and 2

Assemblage 1 and Assemblage 2 are concerned with what has already been referred to in this section, using the heuristic of person as computer, as "the software of the mind". These assemblages are concerned with the way in which discourse itself works. However, the primary purpose of discourse is not the production of meaning but the influencing of action, therefore, it only possible to see how discourse acts on the world when the transition is made from looking at the assemblages that are concerned with discourse itself to looking at the assemblages that are concerned with the interaction between discourse and the world, the Institution Assemblage and it is here that it can be seen how discourse is operationalised.

Figure 4.1 The Discursive Assemblages of DOT



All of the assemblages represented in Figure 4.1. are diagrams and are only operationalised by specific instances of their use; thus, when a person speaks, or writes, he or she is involved in a specific utterance assemblage which includes these abstract machines.

In this way, DOT fulfils the requirement of a grand theory that it answers questions about the pre-conditions for being able to ask its questions until it reaches the bedrock of its declared basic assumptions and is also able to build on these theoretical structures so that it can explain and real-life situations and aid the solution of real-life problems as faced by practitioners.

4.5.2. DOT: Discourse Assemblage 1

The first assemblage is a way of modelling the physical pre-conditions for the existence of discourse. This assemblage consists of three components: a group of individual organisms and a stream of possible signifiers. The individual organism is the locus of action; that is, it is only individuals that can act on their environment. The group of organisms is a group of mutually dependent individuals; that is, the aims of the group cannot be achieved by the organisms working alone on their environment but they work together. The stream of possible signifiers opens the possibility that these signifiers might be used communally for the co-ordination of the actions of members of the group. This model assumes that the primary purpose of signification is to influence action, rather than to convey meaning.

The suggestion that the purpose of discourse is communal action, which may have play a part in the survival of the species, does not imply a functionalist assumption (Burrell & Morgan 1979) in DOT as a whole. I suggest that, perhaps, the minimum purpose of discourse may be survival but it does not follow that all phenomena that are produced by discourse can be explained in this way.

Assemblage 1 is a static model which allows the insight that discourse is a purely material phenomenon. Assemblage 1 gives rise to a condition of exteriority which is *différance* and *différance* is the condition of possibility of discourse.

4.5.3. DOT: Discourse Assemblage 2

Whereas Assemblage 1 brings together the physical components of the discourse assemblage, Assemblage 2 adds processing capacity. In the person as computer heuristic, Assemblage 1 is the hardware and Assemblage 2 is the operating system. With the operating system installed the computer still cannot do anything that the user would regard as useful but it is ready to accept input from the keyboard or other device.

Thus, Assemblage 2 is composed of Assemblage 1 and différance, which is a condition of exteriority of Assemblage 1. The conditions of exteriority of Assemblage 2 are: potential to negotiate differential meaning, potential to produce binaries with privileged terms so producing power, the tendency to create fixed objects, the tendency to conceal power and the potential to create subjects⁸. In the step-by-step development of the DOT model of discourse, Assemblage 1 and Assemblage 2 are static, having potential attributes that are not yet realised. These potential attributes will be realised in Assemblage 3, the Institution Assemblage.

Assemblage 2 is the model of discourse which is found in Derrida's *Of Grammatology*. As described in section 4.1, the basis of this model is *différance* which is the general principle for the creation of meaning. It is particularised as the trace for each component part of an utterance and each trace has its own trace creating an infinite regression of a "sheaf" (Derrida 2004 p.38) of traces which divides each signifier from its other creating "spacing" between them (Derrida 1982a p.9).

As was explained in Chapter 4.1, Derrida coined the term *différance* to conflate the concepts of difference, the signifier being defined by its non-identity with other signifiers, and deferral, the temporal delay of the meanings of the other signifiers which it is not and to make this conflation in a form that can only be recognised when it is written or read and concealed when it is spoken (Derrida 1982a). In English, the word *différance* can be made to bear a further conflation which is that of the concept of

⁸ The author is aware that the precise relationship between différance and all the items in this list is not discussed. This is the relationship between différance and deconstruction in Derrida's thinking. The author is assuming that there is a relationship between these items but leaves discussion of its precise nature beyond the scope of this thesis.

deference, that is, of according more authority to one signifier than another. From the thought of his structuralist antecedents, notably Levi-Strauss, Derrida includes the notion of meaning being structured by binary terms, for example, the raw and the cooked in Levi-Straus's analysis of cultural attitudes towards food and speech and writing in Derrida's analysis of discourse in *Of Grammatology*. He describes the relationship between the two terms in these binaries as one of "violence" (Derrida 1976 p.37), that is, a violent overturning of one term by the other but to see it in the context of other thinkers such as Foucault, the term "power" rather than "violence" will be used in this thesis.

Différance is, therefore, the principle of discourse: because it creates meaning, because it creates truth effects and by privileging one side of binaries it also creates power effects. With the tools of truth and power all other structure is created thus creating human consciousness and interaction. Because Derrida has a method (deconstruction) of building theory by analysing texts, philosophical, literary or sacred for him structure is in the form of texts; however, I propose that the same method can be applied in the analysis of social structures and theories.

Structures are built in discourse as a means for people to work together to act on their physical environment in the interests of their survival and other aims. In doing so, they also create a social world and act on each other. However, these structures are only representations of the world based on incomplete information and incomplete understanding. Thus, these structures are always imperfect and contain contradictions, aporia and silences and they conceal the means by which power forms them. The Derridean method of analysis, deconstruction, involves the detection of the imperfections in the structure which reveal the binaries that are at work in making the structure. These binaries are then treated to a "double gesture" or "double science" (Derrida 2004 p.38-39). The first gesture overturns the hierarchy of the binary. For example, the binary civilization/ barbarism has civilization as its positive term but it depends on the existence of barbarism and has no meaning without it (Cooper 1989 p.483). The binary tends to suppress questions about what groups of people are associated with culture and what groups of people are associated with anarchy and how these terms are used to reinforce power relationships between these groups. Instead of seeing culture as being the superior state it could just as well be argued that anarchy is

the natural, democratic state and culture an artificial imposition upon it which benefits some of people at the expense of others. The second gesture is not slavishly to invert the hierarchy but to hold the two terms in equilibrium to reveal their workings and suggest new possibilities (Derrida 2004).

Discourse works by concealing the fact that it constructs reality. Discourse simplifies the flow of events of sensory data into fixed entities, partly by the use of nouns in language; it also suppresses contradictions in the structures that it produces by means of drawing attention away from the contradictions and by means of silences; it reifies structures making them appear to be natural and inevitable and it suppresses the supplement in binary pairs which has the effect of perpetuating power structures. Derrida's deconstructionist method is mindful of how discourse constructs reality so that it can be analysed for the purpose of revealing new possibilities.

4.5.3.1. Vignette III: Beeping Robots

The second vignette illustrates Assemblage 1, Assemblage 2 and the relationship between them. This vignette is also a heuristic in which individual humans are represented by simple robots.

The robot consists of a small square tray with a wheel at each corner. There is a motor which drives the wheels so that the robot can move around. On the front of the robot is a plunger which is activated when the robot runs into an object. The robot is continuously moving and continuously emitting a steady "beep" sound. When the plunger runs into an obstacle, the steady "beep" changes momentarily to a different "beep-beep" sound. The robot has a sound sensor which picks up the sounds emitted by other robots close by and this sensor is connected to a data processing system attached to the tray.

This assemblage of robots and sounds is analogous to Assemblage 1. The sounds are not yet signifiers because the data processing system has not yet been programmed to do anything with the input data from the sound sensor.

It is unlikely that the data processing system would be programmed to interpret "beep" as another robot moving freely and "beep-beep" as another robot encountering an obstacle since these interpretations do not lead to any response from the data receiving robot and would not be of any use to it. It is more likely that the "beep-beep" would be interpreted by the response "don't come in this direction" and, if this were the case, it is

likely that all the other robots in the vicinity would respond in the same way otherwise chaos would ensue. The programming of the data processing system is analogous to Assemblage 2 in DOT.

Of course, "beep" has no meaning on its own. It can only have meaning – that is, give rise to different responses - when compared to "beep-beep" so "beep" is defined as not being "beep-beep" and vice versa. In this way, *différance* emerges as a property of the assemblage creating meaning. These meanings are purely arbitrary in the sense that there is no direct connection between "beep" and free movement or "beep-beep" and an obstacle. Power merges immediately since "beep-beep", meaning free movement, is preferable to "beep", meaning impeded movement and these evaluations might also become attached to the individual robots, for example, if one robot in a group emits "beep" more often than the others it might come to be perceived as inferior and whose company should be avoided. By this point, an Institution Assemblage would have been formed.

It is possible that robots in one vicinity respond to "beep-beep" as "don't come in this direction" while robots in another vicinity have a completely different, perhaps opposite response. These two different groups of robots would then have formed two different institutional assemblages in the terms of DOT.

These robots have a data processor of limited scope and capacity but it is identical to any other data processor in that it can only work with the input data that it receives. Thus, it would not be possible for these robots to have concepts that correspond to our jam or justice or Jupiter, so the possibilities for their view of the world is circumscribed by this limitation and in the same way human consciousness is limited by our data input and processing power.

4.5.4. DOT: Discourse Assemblage 3 – The Institution Assemblage

Assemblage 3 actualises the potentials of Assemblage 2. It is the discourse assemblage placed into the flux of a geographically and historically specific context. Discourse is a machine: it interrupts flow. It makes the flow of sensory data accessible to the human psyche. It allows a flow of interaction between individuals and it allows that flow to be modified by its interaction with the *noumenal*. Assemblage 3 is a collection of the possibilities of discourse actualised by the physical world.

In Assemblages 1 and 2 the focus is inwards, on how discourse works as the system which interprets our sense data but with the Institution Assemblage the focus moves outwards to how discourse creates organisation, the individual and society, by creating meaning and by creating power relationships and their accompanying truth effects. The Institution Assemblage is the discursive assemblage of the interactions, between individuals and between individuals and the physical world, and is open to dynamic self-modification. It is possible to study Assemblages 1 and 2 in isolation and this study might fall under the rubric of philosophy. It would also be possible to study the Institution Assemblage and related assemblages without reference to Assemblages 1 and 2 and this study might fall under the rubric of sociology. However, a fuller and more fruitful understanding of the Institution Assemblage can be gained through an awareness of Assemblages 1 and 2.

In DOT when a group of people come together for co-operative action the group is called an institution. The foundation components of the Institution Assemblage are Assemblages 1 and 2. The other components of the Institution Assemblage are the components of the context of Assemblages 1 and 2 and must include non-discursive components such as landscape and technology. Discourse is a tool for human interaction which facilitates co-operative action so that people can work together on their environment, social and physical and discourse creates institutions for this purpose.

It is in Assemblage 3, the Institution Assemblage, that meaning and truth, discourse and power, are created. These do not exist in Assemblages 1 and 2. When the abstract machine of the Institution Assemblage creates an institutional assemblage it does so in a specific place and time. Thus, meaning always refers to a specific context and changes as the context changes.

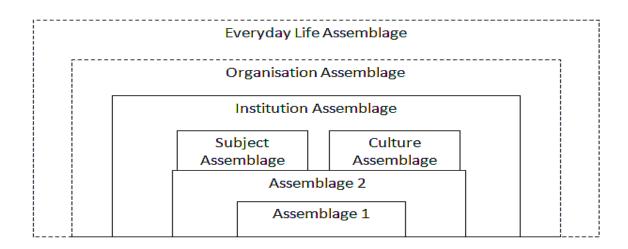
In the DOT model, Assemblages 1, 2 and 3 are all abstract machines. That is, they are abstract entities that create other assemblages: Assemblage 1 creates Assemblage 2 and Assemblage 2 creates Assemblage 3. However, Assemblage 3, the Institution Assemblage, creates assemblages that are located in the real world and based on sense data; they are created from unique componenets and each one is a unique assemblage. To show the distinction between the Institution Assemblage and the institutional assemblages that it creates, in this thesis the abstract machine will be referred to using

intitial capitalisation – Institution Assemblage – whereas its products will be referred to without initial capitals – institutional assemblage.

There cannot be a first institutional assemblage. There must always already be at least one of them so they cannot be created ex nihilo but a new one must be created from an already existing assemblage through a process of inheritance. A new institutional assemblage resembles the one from which it has been created in every attribute except the attributes that necessitated its creation. So, a group of adventurers may leave home and set up a new colony. In doing so, they take with them their institutional assemblage but must adapt it to the new location by changing some of its attributes.

The relationships between the different assemblages of DOT are shown in Figure 4.2. None of these have material existence; they are all abstract machines. Assemblages 1 and 2 are a means to represent the material nature of discourse and the necessity for its presence in the Institution Assemblage. When real objects, including people and things, are added to Assemblage 2, the Institution Assemblage is created which has various characteristics that can be broken into categories of sub-assemblages as desired by the observer: subjects, culture, knowledge, leadership and so on. Two of the most significant that will be discussed here are the Subject Assemblage and the Culture Assemblage. Institution Assemblages may divide and combine to generate social structure of various degrees of complexity. It is conceivable that at, at its simplest, a society could consist of one single enduring institution but an all-encompassing institution of Everyday Life tends to become deterritorialised allowing for the generation of sub-institutions such as professions, organisations, families and so on.

Figure 4.2. The Relationship Between the Component Assemblages of DOT



According to Deleuze, assemblages have two dimensions: territorialise/deterritorialise and material/expressive. The territorialise/ deterritorialise dimension of the Institution Assemblage has to do with the strength of the maintenance of the identity of the assemblage and how much its boundaries are policed. The expressive/ material dimension has to do with the degree to which the Institution Assemblage is composed of things and the degree to which it is composed of discourse, that is, relationships between people.

4.6. DOT: Core Theory

The core theory of DOT consists of the three assemblages each one containing the previous one like three Russian dolls. The first assemblage is a purely material diagram which has *différance* as its condition of interiority. The second one includes *différance* as a component to produce a diagram that has both material and expressive components. This is operationalised as an abstract machine in the third assemblage as institutions which have the capability of creating meaning, subjects and truth effects.

The departure of DOT from previous theory is that it theorises discourse as a material assemblage while, at the same time, placing it at the centre of the paradigm. This creates a paradoxical centre where both discourse (ideas/ideal) and the material are simultaneously of primary importance. This approach is consistent with the ontology and epistemology of DOT. It also collapses the distinction between idealism and realism, seeing them as two sides of the same leaf.

The institutional assemblages created by the Institution Assemblage abstract machine are greatly significant in DOT. It is these assemblages that determine meaning and truth and create subjects and cultures. In this way, DOT could be said to be an institutional theory though, because it is a grand theory, it is also a methodology. Although the objection may be made that in DOT truth is relative, this follows from the assumptions of the paradigm in which DOT is developed and it must be emphasised that truth is relative to an institution, not to an individual.

Chapter 5. Institutions, Cultures and Bureaucracy

DOT emphasises the role of the institutional assemblage in the process of organising. This chapter reviews the literature of the modernist concepts which are relevant to the Institution Assemblage as it is described in DOT which are *institution, ideal-type* and *organisational culture*. It also reviews the literature relevant to Foucault's *archaeology* which is the only attempt so far to develop a postmodernist theory of institution.

"Institution" has been defined in different ways by different researchers. It is not a concern of this literature review to consider these definitions but to focus on concepts that will be used in the development of DOT. An important component of DOT is a particular model of institution extracted from Berger and Luckmann's institutional theory (1971), Foucault's notion of *discursive formation* (1972b) and Latour's *group* (2005). However, this review also draws on literature relevant to a collection of related concepts that overlap with each other: organisation (Silverman 1970), bureaucracy (Weber 1964) and culture (Hofstede et al. 2010; Schein 2010; Cameron & Quinn 2011).

Institutions have been taken to be repeated patterns of action (Berger & Luckmann 1971) such as voting or the limited liability company (Jepperson 1991); they are ways of organising that have gained over a period of time "the moral and ontological status of taken-for-granted facts" (Barley & Tolbert 1997 p.99) and they are conventional ways of doing things that are self-policing (Douglas 1986). Key themes are that they are enduring and generally accepted as having an authoritative status in society as a whole.

Scott (2014) identifies institutional theory as a topic in economics, political science and sociology. In economics, institutional theory was developed at the beginning of the twentieth century as a response to dissatisfaction with some of the assumptions of the discipline, particularly the unit of study being the individual rational actor, and its perceived inability to account for change. Institutional economists have proposed that habit and tradition have a large effect on people's behaviour, and this changes over time; thus, it is preferable to focus on behaviour at the level of the group, or institution, rather than at the level of the individual. In political science, institutionalists emphasise the significance of norms and rules in shaping political behaviour. In sociology, Scott identifies four strands of institutional thinking. One strand which begins with Herbert Spencer is concerned with the phenomenon of different normative orders in the same

society which are built around concepts or functions. Another strand concerns the relationship between the individual and the institution and posits that they are mutually constitutive. A third begins with Marx and is concerned with reification: the phenomenon of institutions taking on the appearance of independent objects that are natural and inevitable although they are created by people. In this strand is included Weber's thinking about the relationships between social structures, rules and behaviour. The fourth strand, beginning with George Herbert Mead is concerned with the role of symbolic systems in creating the social through interaction between individuals rather than through norms and rules. In this thesis, it is the sociological version of institutional theory that is salient.

According to Scott (2014) and Selznick (1996) institutional enquiry took a different turn in the 1980s and this turn is commonly known as "neoinstitutional theory" (Scott 2014 p.30) or "new institutionalism" (Selznick p.270). In the neoinstitutional theory of economics the new approaches include a move away from the assumption that institutional behaviour is determined by rational actors towards the use of the notion of bounded rationality, also an increasing use of game theory to explain organisational phenomena and an increasing use of resource-based theory (Scott 2014 pp.30-43). In the institutional theory of psychology and anthropology there was a move towards emphasising the significance of symbolic systems. In these disciplines there is an acknowledgment of the interdependence of social structure and culture, for example, Scott cites Geertz as saying that "Culture consists of socially established structures of meaning" (Scott 2014 p.45; Geertz 1973 p.12) and Swidler as saying that culture underlies stability and continuity but, when society is under pressure to change, it can become a toolkit to shape new patterns of action (Scott 2014 p.47; Swidler 1986 pp.227-228).

Neoinstitutionalism in sociology has been heavily influenced by psychology and anthropology. There was a move away from thinking of institutionalism as being something that happens in an organisation, that makes its existence a value in itself beyond the value of its declared purpose (ie. an institution is a special kind of organisation and what an organisation might become), towards thinking of institutionalism as being a kind of isomorphism of organisations within a particular field. This new view emphasises legitimacy, processes and shared meanings. Scott claims that neoinstitutionalists in sociology have been influenced by phenomenological thinking about shared symbolism and shared norms and values and also by ethnomethodology which focuses on "common-sense knowledge" (Scott 2008 p.48; Garfinkel 1967 p.76) that is, knowledge held in common by actors in a given domain.

Silverman's "action theory" of organisations is consistent with this approach and he sees organisational meanings, and social reality generally, as being continuously constructed in action (Scott 2014 p.49; Silverman 1970 p.127). Organisational meanings and interpretations are experienced as *social facts*, taking the term from Durkheim (Silverman p.130). In Silverman's terminology, it is when meanings and interpretations become social facts that they are institutionalised. However, this does not imply that institutionalisation guarantees permanence; meanings only persist if they are continuously reaffirmed. Social reality is institutionalised in language, for example in typification, a concept that he takes from Schutz (ibid p.132), which means that language gives us ideal types of roles so that we expect people in those roles to behave in a certain way. If the meanings are not socially sustained, they are socially changed (ibid p.135). In Silverman's schema, much of social phenomena is inherited by the organisation from society at large and the individual is a fixed entity who chooses the extent to which he or she plays his or her organisational role.

This chapter examines the institutional theory literature which will provide components for the construction of DOT and also further contextualise development of this theory. In the first section the work of Berger and Luckmann is reviewed. These authors are working in the modernist paradigm and they do not provide a ready-made theoretical component that covers institution for DOT. In the second section, Weber's concept of ideal types is looked at because of its compatibility with assemblage theory, as noted by DeLanda (2006 p.22). Weber's concept points to one way in which DOT can be operationalised and the underlying concept of ideal type provides a linkage with Deleuze's concept of *abstract machine*. The third section examines the organisational culture literature to the extent that it overlaps with institutional theory. There is no sharp demarcation between the two concepts in the modernist literature whereas in DOT the two terms are distinct but related to each other in a definite way. In the fourth section, the literature of organisational culture is reviewed. The fifth section concerns the relationship between the scholarly concepts of institution and organisational culture through a debate that took place in a special edition of a journal. In the sixth section the only extant postmodernist institution theory, Foucault's notion of *discursive formation*, is examined. In postmodernism, there has been little attempt to develop institutional theory; the only sustained attempt has been Foucault's theory developed in *Archaeology of Knowledge* (1972b) which provides clues as to how a postmodernist institutional theory might look. Then, the literature on the relationship between culture and institution is reviewed. Finally, the relationship between these ideas of institution and the concept of institution, as it is used in DOT, is discussed.

5.1. Berger and Luckmann's Institutional Theory

Berger and Luckmann's *The Social Construction of Reality* (1971/1966) had a major influence on the development of neoinstitutionalist theory (Meyer 2008). Their approach to institutions arises from their discussion of the sociology of knowledge. Their project is to understand how reality is socially constructed by examining how knowledge is created and maintained to support *everyday life*.

The concept of everyday life is central to Berger and Luckmann's model. It contains common-sense knowledge, that is, the knowledge that everyone has access to. This body of knowledge is composed of contiguous sectors so a car mechanic knows things that a member of another profession does not but they are both part of the same reality, whereas theoretical physics or the contents of dreams are not. Other areas of experience are surrounded on all sides by the reality of everyday life so that they are experienced as mere excursions which eventually lead back to everyday life.

Common-sense knowledge includes such things as standard time schemes and types of people. In the case of time, it includes expectations of behaviour at different times in people's lives, for example children engage in play, and how people behave at different times of the day, for example not making business telephone calls in the middle of the night. It also has typificatory schemes for dealing with different types of people a notion which, as in the case of Silverman, is taken from the work of Schutz (Meyer 2008).

Everyday life is created and sustained by means of language. For the individual, language is a system which gives objectivity to pre-existing thoughts. Language contains a store of meaning and forces us into pre-existing patterns of thought. Because it creates common understanding and expectations, language has an integrating effect bringing individuals and groups together. Any one individual cannot have access to the whole store of common-sense knowledge but what the individual does know is structured by relevance to their particular situation and supplemented by a store of meta-knowledge about how knowledge is distributed so that this knowledge can be accessed if necessary, for example, the meta-knowledge that the doctor knows about disease and the car mechanic knows how to repair cars.

Berger and Luckmann define institutions through the process of institutionalisation which

... occurs whenever there is a reciprocal typification of habitualized actions by types of actors ... any such typification is an institution ... the institution itself typifies individual actors as well as individual actions.

(Berger & Luckmann 1971 p.72)

People tend to form habits for their actions so when people come together they act in typical ways (ibid pp.74-77). These *typifications* become shared between them forming routines and creating roles thus making their environment easier to operate in and reducing uncertainty and risk. Of course, the actions that become shared are the ones that it is relevant to share in the particular context. In this way, institutions control conduct from the outset through setting patterns of behaviour, though they may additionally develop systems of punishment and reward to control deviant behaviour. When new members join the institution the typifications of persons and habitualisations of actions seem to them to be matters of objective fact which have to be learned rather than negotiated, as they were when the original members formed the institution. It is only one step further for everyone to forget how the institution came to be formed in the first place and so it takes on the appearance of inevitability like a natural phenomenon and becomes reified. Although the purpose and need for the institution is obvious to its originating members, once the institution has taken on the appearance of an established objective fact it becomes impossible to question the justification for it.

Legitimacy is the justification that an institution can make to the rest of society for its existence (ibid pp.110-146). The institution must make sense in its context. It has values and it has a body of knowledge as well as theories of varying degrees of formality from

received wisdom to bodies of theory that can only be applied by experts. The institution, according to Berger and Luckmann is also legitimated by being integrated into a "symbolic universe" that gives structures and meaning to the institutional sphere as a whole, including its history (ibid pp.120-121).

The process by which the experience of individuals becomes formalised and added to the stock of knowledge of an institution is referred to as *sedimentation* (ibid pp.85-89). This process has a linguistic component because language is able to objectify subjective experience and make it transmissible. In this way, the body of knowledge within the institution grows over time and this process has much to do with maintaining and increasing its legitimacy. Some knowledge is for general consumption while other knowledge is reserved for people who have certain specific roles (ibid p.94). Some people have roles that involve them in the transmission of knowledge.

Roles embody the structure of the institution and the institution depends on there being people to fulfil roles for its existence (ibid p.92). People experience the actions they perform in their roles as their everyday relationship with the institution, and therefore with others, so they come to identify with their roles and their roles become part of their sense of self (ibid p.90). The institution also derives legitimacy from the role it has in structuring the biographies of its members (ibid pp.117-118).

The relationship between everyday life and institutions is one of specialisation. In everyday life there are no roles and no typifications of action (ibid pp.97-98). Institutions participate in the reality of everyday life, that is, they are not separate realities but institutions are the location of specialised activities and contain specific roles and bodies of knowledge. Institutions are brought about by the need for a body of specialist or professional knowledge. The existence of many institutions is characteristic of the complexity of industrial and post-industrial life and in simpler societies there are far fewer.

According to Berger and Luckmann an individual undergoes two stages of socialisation (ibid pp.149-182). Primary socialisation experienced by children as they acquire consciousness and language gives them a fundamental knowledge of who they are and their position in the world that has the appearance of inevitability and is hard to change

in later life. Secondary socialisation is where individuals learn their positions in the scheme of the division of labour and is more superficial and more easily altered.

There is an ambiguity about what Berger and Luckmann mean by an institution. Examples that are given include the legal system and paternity. In applying their model of how an institution is created to each of these examples the model seems to break down. Although it is apparent how their process of institution formation might apply to a legal system it is not apparent how it could apply to paternity which is not so much one phenomenon as a plethora of unconnected events involving individuals who have no contact with each other in time and space.

There is also ambiguity about their concepts of everyday life and symbolic universe. It seems that everyday life has no particular structure but it is hard to imagine how this institutionally neutral situation would work. If such matters as gender roles, for example, do not come from the institution of everyday life, where do they come from? Similarly, it is difficult to understand how an overarching symbolic system would come about prior to the institutions it would then support and what relationship this system might have with everyday life. Their model of institutions seems to require more explanations than is provided. It seems that Latour's injunction against mistaking a sociological label attached to a phenomenon, or disparate phenomena, for an explanation is applicable here: the label "institution" in this case explains nothing and it would be preferable to begin by searching for the causes of the specific instances of the phenomena themselves (Latour 2005 pp.1-10).

However, there are principles and insights that are present in Berger and Luckmann's model and discussion of the social construction of reality and its relationship to knowledge that are relevant to the development of DOT in this study. Firstly, their model is dynamic in that they see institutions as continuously created by process. Secondly, they see symbolic systems as being significant in the creation and maintenance of institutions. Thirdly, they see a relationship between the creation and maintenance of a body of knowledge and institutions. And fourthly, they argue that members of an institution have a subjectivity that is formed, to some degree, by their positions in the institution.

Several concepts may be translated from Berger and Luckmann's model into DOT. The notions that there is an institution of everyday life is important in DOT, though it is modified by allowing for their being roles and typifications. In DOT there is typification and legitimacy as in Berger and Luckman and also knowledge has a similar relationship with roles.

5.2. Weber's Bureaucracy

Weber's notion of bureaucracy is of interest in the context of this thesis not only because it gives an insight into organisational phenomena but also, mainly, because it is an example of the use of Weber's device of the *ideal type* which has useful elective affinities with Deleuze's notion of the *diagram* or *abstract machine* (Deleuze & Guattari 1987). Bureaucracy is the diagram of the organisation in the modern world and is fundamental to the concept of organisation in DOT.

Weber uses an interpretivist methodology where the actors' understanding of their own actions is taken to be a significant part of the data (Giddens 1971). It also acknowledges that the researcher is also making an interpretation of the data and that there is no neutral, scientific standpoint. As part of this methodology, Weber constructs the *ideal type* (Weber 1949 p.42), which is based on the respondents' own interpretation, as a heuristic to assist the researcher in the interpretation of data. This section examines the nature of these ideal types and Weber's notion of bureaucracy which is one of these ideal types.

Weber describes ideal types as being formed:

... by the one-sided accentuation of one or more points of view and by the synthesis of a great many diffuse, discrete, more or less present and occasionally absent concrete individual phenomena, which are arranged according to those one-sidedly emphasized viewpoints into a unified analytical construct... In its conceptual purity, this mental construct ... cannot be found empirically anywhere in reality.

(Weber 1949 p.90)

Thus, *ideal types* are a conceptual model which is derived from regularities observed in empirical data on social phenomena and the norms of behaviour of the actors involved. The model is abstract in that it does not attempt to precisely represent any particular manifestation of the phenomenon or data set and it does not attempt to calculate an average among the data. Instead it provides the researcher with a means of comparison where each data set can be compared with the *ideal type* (Weber 1949 p.43).

By developing an *ideal type* from the data the researcher is able to include a high degree of objectivity while at the same time also including an awareness of the subjectivity of the actors and the gap between it and the subjectivity of the researcher (Weber 1949 p.81). Weber believes that the study of social phenomena is the subjective interpretation of objective data which includes data about subjectivity. *Ideal types* are constructs that assist interpretation and are not a property of the data itself. Thus, they might be developed to assist a system of categorisation which is logical but not intended as a hypothesis about reality.

Weber defines domination as "the probability that certain specific commands (or all commands) will be obeyed by a given group of persons" (Weber 1968 p.212). Legitimacy, which supports relationships of domination in society, is based on three *ideal types:* traditional authority, charismatic authority and legal rational authority. Charismatic authority, derived from general belief that an individual has superhuman powers, tends to be short-lived and eventually disappears or changes into one of the other two whereas traditional authority and legal rational authority are more enduring. Here the focus is on legal rational authority, which is the main source of legitimacy in our contemporary world, with traditional authority as its main alternative.

Traditional authority is an ideal type where legitimacy derives from rules, norms and customs that have the sanctity of age. There can be no innovation in the rules or laws and any attempt to innovate in this way must be legitimated by appeals to precedence (ibid pp.226-231).

This type of authority is based on personal loyalty where people have a master-servant relationship in a hierarchical structure. The fundamental social unit is the household of a powerful person where blood relations, close friends and favourites and servants and their blood relations are perceived to be one familial unit. The master of the household dispenses justice and favours by following precedence but also has latitude to confer favours at will. Loyalty and obedience are accorded to the master personally, not to the rules. Resistance, when it occurs, is directed at the master and not at the system and is justified by the master having exceeded the limits set by tradition.

In traditional authority appointment is by gift of the appointer and does not depend on the appointee having to formally demonstrate competence for the post. There are no impersonal rules governing how the work should be carried out and there is no fixed area of competence that limits the post holder's duties so there is no contract of employment either which might define the extent of the post holder's commitment, such as working hours. The post holder is given powers personally so that he may carry out his duties but there is no restraint on using these powers beyond his duties. It is unlikely that there is any technical training to improve the post holder's competence and often there is no fixed monetary salary or scale of remuneration.

Weber divides the operation of traditional authority into two types: *patriarchalism* and *patrimonialism*. Patriarchalism is where the household or group is governed by someone who has this right by virtue of inheritance. The right to govern is accompanied by responsibilities to the governed and there is no great division between them. On the other hand, under patrimonialism there is an apparatus of government that is recognised to be the personal property of the ruler. With such a system, there is more latitude for the ruler to treat traditional practices as only loose guidelines and to rule arbitrarily (ibid pp.231-235).

Traditional authority satisfies needs but it does not generate surpluses because it does not strive for efficiency. The effect on the economy is to frustrate the operation of markets because powerful individuals treat all economic activity as a means only to satisfy their needs or needs identified by them. This lack of markets prevents the development of capitalism where surpluses are invested in improvements to future production (ibid pp.237-241).

Traditional authority was the ideal type of all organisations before capitalism. There were a small number of organisations that resembled bureaucracies before capitalism but they were largely patrimonial. Since capitalism has been established the dominant form of organisation has been based on rational legal authority, which is bureaucracy.

Rational legal authority is an ideal type where legitimacy derives from the rule of law and rationality, which is impersonal and applies to everyone regardless of rank. New law can be enacted through legislation which follows rational discussion among the legislators (ibid p.217). This ideal type generates bureaucratic organisations which are staffed by officials whose actions are bound by specific rules generates from rational principles.

Weber describes eight principles, or "categories", of bureaucracy (ibid pp.218-219):

- 1. The conduct of the organisation must follow the rules
- 2. Officials have a specific area of competence in which they operate; they have powers to carry out their duties which can only be used for that purpose and any powers of compulsion that they have can only be used in a manner and under the conditions defined by the rules
- 3. The organisation is shaped by a system of hierarchy that specifies to whom the official is responsible. This hierarchy is one of posts, not of individuals. An official is only responsible to a superior within the domain of the duties of the post.
- Officials are appointed to their posts because of their competence to carry out the duties attached to the post. Technical training may be required before or after appointment.
- 5. Officials, for the purposes of their duties, do not own the organisation or any part of it. In cases where an official has an ownership stake in the organisation the official has completely separate roles as employee and as owner, as though they were two separate persons. So, for example, an official has no right to appropriate organisational assets for personal use.
- 6. Officials do not have any right of ownership of their posts so, for example, they do not have a right to appoint a successor.
- 7. Procedures, decisions and rules are recorded in written documents so that they can be referred to at a later date and applied consistently and dispassionately.
- 8. The chief person at the head of the bureaucratic hierarchy may, or may not have been appointed on bureaucratic principles. However, domination that takes place within and through the bureaucratic organisation follows legal rational principles.

The preconditions of bureaucracy are a comparatively high literacy rate so that suitably qualified employees can be recruited and a well-developed monetary system so that employees can be paid and they can supply their personal needs by means of their salaries. In turn, because bureaucracy has efficiency as its goal it tends to generate surpluses that can be invested. Thus, bureaucracy and capitalism enable each other (ibid).

A trap which scholars have fallen into is to confuse Weber's ideal types with descriptive models of actual organisations (Hodson et al. 2012; Hodson et al. 2013). The ideal type is an attempt to describe a normative reference as it is conceived by the actors and is not a hypothesis about organisations to be compared with the empirical data. Therefore, it cannot be expected to include ways in which real organisations diverge from the ideal type (Aronovitch 2012). For example, Hodson et al. (2012) complains that real organisations diverge from the bureaucratic ideal because they often feature "divergent goals, patrimonialism, unwritten rules and chaos" (ibid p.257). Although these features may be prevalent, the complaint is beside the point because these researchers are concerned with the empirical data and ideal types are not. Divergence from the ideal type is to be expected and does not affect the role of the ideal type of bureaucracy in an interpretive approach to organisations.

Bureaucracy privileges the rational at the expense of the irrational and many writers and researchers have reacted with alarm to this tendency to squeeze out the emotional and creative aspects of humanity; however, in practice there is no alternative ideal type for organisations yet innovation still exists. Weber himself was alarmed by bureaucracy and called it an "iron cage". He saw an increasing trend towards rationality where the rules increasingly eliminated such significant human aspects of organisations as emotion and creativity and where rational organisation enclosed more and more of human existence. This view of social trends has been picked up by a number of writers, for example, Ritzer in his *The McDonaldization of Society* (1996) who points out the irrationality of striving for complete rationality in organisations, such as universities or companies like

⁹ "A skunkworks is a group of people who, in order to achieve unusual results, work on a project in a way that is outside the usual rules. A skunkworks is often a small team that assumes or is given responsibility

Apple (Dormehl 2013), where rigid rules about time keeping and the specific details of duties are relaxed (ibid pp.196-198). Whether the working environments that are studied resemble McDonalds or skunk works the ideal type that informs all of them is bureaucracy and the only variation is a slight difference in the interpretation of the concept of rationality; that is, for employees who have to produce a consistent product or service rationality means following the rules whereas for employees who have to innovate, perhaps in an attempt to stay ahead of a fast changing and competitive market, rationality means a relatively relaxed approach to the rules. Studies which assume that it is meaningful to contrast bureaucratic, in Weberian terminology, and organic organisations have misunderstood what Weber meant by ideal type, for example, Courpasson (2000).

Latour's reinterpretation of Hobbes's symbol of the Leviathan, (Callon & Latour 1981), where the absolute monarch through the "social contract" is an embodiment of the people, may be seen as drawing a connection between Weber's ideal types, the concept of institution and the concept of assemblage. In Latour's terminology Weber's traditional authority can be seen as the result of the king acting as *spokesman* for the will of the people through *translation* of the individual wills of people and, consequently, legitimacy must be an effect of *translation*. Similarly, under legal-rational authority the law has legitimacy in so far as it *translates* the will of the people. Thus, the Leviathan is an institution, the institution is an assemblage and the ideal type creates institutions with legitimacy as a generative principle.

DeLanda draws attention to the similarity between Deleuze's concept of diagram and Weber's concept of ideal type. The diagram structures the possibilities of an assemblage in the same way that the ideal type structures the possibilities of authority for an organisation (2006 p.30). This correspondence between *diagram* and *ideal type* will be used as a conceptual link between assemblages at different levels in the development of DOT.

for developing something in a short time with minimal management constraints. Typically, a skunkworks has a small number of members in order to reduce communications overhead. A skunkworks is sometimes used to spearhead a product design that thereafter will be developed according to the usual process. A skunkworks project may be secret." (The Urban Dictionary 2004)

5.3. Institutional Theory and Management

In the peer reviewed management literature of institution, the recurring topics that are relevant here are the nature of institutions, discourse, legitimacy, isomorphism, subjectivity and power. The development of new institutionalism has given rise to some significant insights and led to a growth of interest in the discursive aspects of institutions. Legitimacy and isomorphism have always been of interest to institutional scholars but, with the emergence of neoinstitutionalism, so have subjectivity and power. Aspects of these topics that are relevant to the development of DOT are examined here.

In the introductory chapter to their influential collection of papers The New Institutionalism in Organizational Analysis (Powell & DiMaggio 1991), in itself an exhaustive review of the literature before 1990, DiMaggio and Powell comment that neo-institutionalism can be said to have begun in 1977 with the publication of Meyer and Rowan's article "Institutionalized Organizations: Formal Structure as Myth and Ceremony" (DiMaggio & Powell 1991 p.11). This article focuses on the disparity between the formal structure of an organisation, from which it obtains its legitimacy, and the informal structure, by which it gets its work done. The authors cite Weber as the source of the assumption that the most efficient way to organise the complex activity which is found in modern organisations, is through rational, formal structures. However, they point out that the formal structures generate legitimacy but often impede efficiency and they give the example, "A sick worker must be treated by a doctor using accepted medical procedures; whether the worker is treated effectively is less important." (ibid p.55). They argue that in the developed world the social landscape is replete with institutional structures that can be readily used as building blocks to form organisations. Knowledge legitimated by the education system and rules legitimated by law are obvious examples. The common source of these institutional structures ensures that organisations exhibit considerable isomorphism in their formal structures and that they receive public support. These organisational components give rise to myths that generate the formal structure. However, because the formal structure is often in contradiction with efficient action, organisations are forced to adopt strategies to ensure that the contradictions are not destructive. The general term for these strategies is

"decoupling" whereby some activities are put in the hands of experts whose activities are deemed to be beyond the understanding of managers, goals are defined imprecisely so that they may be changed easily and the evaluation of tasks is ceremonialised in order that meaningful evaluation does not take place.

Jepperson in an effort to pin down the concept of institution suggests that the core usage defines institution as an "...organized, established procedure" (Jepperson 1991 p.143). He examines various ways in which institutional theory has been developed and identifies common themes such as institutions have rules; they have cultures that transmit the institution without the intrusion of rules; they are established and stable; they are taken-for-granted. The definition which he, tentatively, adopts is "institutions are socially constructed, routine-reproduced ... program or rule systems" (ibid p.149). Since part of the meaning of a term is what it does not mean, he also suggests that the alternative to a state where there is an institution is "social entropy" (ibid p.152) from which it follows that institution is the fundamental object of study of sociology.

Jepperson gives us a list of objects that are commonly taken to be institutions among institutional scholars (Table 5.1). He comments that some of these are organisations but, on closer inspection, none of these are organisations. For example, the list includes "the corporation" which is not an organisation but a type of organisation. This tendency to discuss the topic on a high level of abstraction is common among institutional scholars (Hasselbladh & Kallinikos 2000) and is symptomatic of the problem that Latour claims is characteristic of sociology in general: the tendency to apply a label to a phenomenon and then mistake it for an explanation instead of focusing on the concrete features of the phenomenon itself (Latour 2005).

A contrasting approach to the concept of institution is taken by Zucker in an ethnomethedological study (Zucker 1977). In this study, it is assumed that institutions can be created instantly with a minimal level of interaction between the members. The research method is based on the fact that a stationary pinpoint of light in a dark room appears to move. The degree of apparent movement of the light is particular to the individual respondent however, when a group of people are put together in the same room looking at the same light a group consensus forms about the degree of movement.

| marriage | academic tenure |
|---------------------|-------------------------|
| sexism | presidency |
| the contract | the vacation |
| wage labour | attending college |
| the handshake | the corporation |
| insurance | the motel |
| formal organization | the academic discipline |
| the army | voting |

Table 5.1. Examples of Institutions

(Jepperson 1991 p.144)

One of the institutional characteristics identified by scholars is the transmission of norms from one generation of members to the next. As part of a series of experiments this phenomenon was tested by having an experiment with a number of phases. Each phase involved two participants. In the first phase a confederate influenced the respondent to judge the movement of the light to be much greater than a respondent would normally judge it to be. In the second phase the confederate left the room and a new respondent joined the one from the previous phase. This procedure was repeated three times. In different iterations of the experiment (each with different respondents) the degree of institutionalisation was set at one of three different levels through the instructions given to the respondents at the beginning: the first level presented the task as involving individuals, at the second level the task was presented as involving individuals as members of an organisation and the third level presented the task as involving organisation members with named roles. It was found that the rate of decline of the influence of the confederate at the beginning of the experiment on the behaviour of the respondents in subsequent phases declined most rapidly where there was the least institutional context and least rapidly where there was the most institutional context.

In Zucker's approach institution is seen to be where people transmit social reality to others by enacting it. It is a view which is grounded in phenomena, rather than in the conceptualisations that surround the phenomena as is so often the case in institutional theory. In this view culture is the set of attributes of the institution that are transmitted. It is a view of institution that is consistent with the DOT version of institution and the design of this experiment influenced the design of the data gathering method in this thesis. See Chapter 8.

Hasselblach and Kallinikos (2000) draw attention to shortcomings in the development of institutional theory so far by referring to Weber's ideal type of legal-rational organisation (see 5.3 above). They point out that the isomorphism of these rational organisations has been explained by recourse to theories of diffusion but without looking at the concrete details of the mechanisms which bring it about. They object that there has been too much emphasis on the cognitive aspects of institutions and not enough attention has been paid to objects. They suggest that the explanation lies in the physical codification of processes that is characteristic of these organisations and suggest that the physical objects produced in codification then have an effect on the subjectivity of organisational members through constructing values, and making bodies of knowledge and systems of control possible. Though this article does include an acknowledgement of the significance of objects it is only a specific type of object, objects that involve writing, that are included and so it moves only a small distance towards a materialist approach.

Isomorphism is a core concept of institutional theory since it is assumed that institutions are patterns of behaviour that are propagated, therefore, isomorphism demonstrates institutionalism. DiMaggio and Powell (1983) address themselves to the question of why there is so much similarity between organisations, particularly between organisations in the same field. They begin by mentioning that previous authors have identified two main types of isomorphism, competitive and institutional, and declare their intention to focus on the institutional type while also stating that institutional isomorphism is itself competitive since organisations compete with each other for legitimacy. They identify three types of mechanism that bring about institutional isomorphism: coercive, mimetic and normative. Coercive mechanisms are mostly connected with the legal frameworks shared by organisations which impose or encourage similarities in working practices. Mimetic mechanisms are mostly connected with similarities in the risks faced by organisations. Ways of dealing with risks are transferred, sometimes unconsciously, as personnel move between jobs in different organisations in the same field. Normative mechanisms are mostly connected with the

professional standards of qualified technical personnel in the field, for example coming from study for professional qualifications or from higher education courses. Professional standards are subject to coercive and mimetic forces in the same way as organisations themselves. Normative mechanisms also operate through the tendency of managers to employ juniors who have the same background as themselves. Isomorphism and its causes has been a major theme in this literature.

Zilber (2006) looks at the way that institutional characteristics are propagated by the process of *translation*. She deliberately adopts the term *translation*, from Latour, rather than the term *diffusion*, from the older versions of institutional theory and favoured in rational-individualist theories. Diffusion of structures and practices implies that these are fixed objects that are moved from one location to another whereas translation implies that there are meanings which are negotiated and reinterpreted as well as structures and practices. She investigates the translation of rational myths, that are equivalent to Friedland and Alford's institutional logics, which she defines as "shared meanings and understandings associated with social structures" (ibid p.282). She looks at translation from the societal to the organisational level in the Israeli high-tech industry in the 1990s and 2000s. The source of the data is a national newspaper so the data about the societal level comes from articles about high-tech whereas the data about the organisational level comes from advertisements for jobs in the high-tech industry. She found that four themes emerged: enchantment, concerned with the glorification of the industry with an emphasis on its global scale, speed and competition; individualism, concerned with the benefits and opportunities brought by the job; nationalism, concerned with the part played by high-tech industry in the fortunes, standing and mission of the state of Israel and information, concerned with imparting relevant facts about the job and organisation. Zilber finds that the rational myths of the Israeli hightech industry echo rational myths of either Israeli society as a whole, for example, nationalism and individualism, or western society as a whole, for example, enchantment with high-tech and she assumes that this demonstrates that translation has taken place. Though this research is illuminating it also seems to be based on some naïve assumptions. It leaves out of the reckoning, for example, that a national newspaper is in itself an institution with its own organisation culture and not merely a passive transmitter of the broad societal institution.

An alternative view to the one where institutions are patterns of action is offered by researchers who adopt a discourse analysis approach. Though Berger and Luckmann acknowledge the central importance of language in the construction of institutions, they place habitual action at the centre of their model and being responsible for directly generating institutions (Berger & Luckmann 1971). Phillips et al. (2004) offer an alternative model in which action generates texts embedded in a specific discourse and it is these discourses that generate institutions. They propose that texts are likely to be generated when there are matters of sensemaking and legitimacy to be addressed. They also propose that institutional actors are able to affect the maintenance and development of the institution by generating these texts.

Here the authors build on Parker's definition of a discourse as "a system of statements which constructs an object" (ibid p.636) and that that discourses are "structured collections of meaningful texts" (ibid p.636). This use of the term is avoided in this thesis since it has tended to lead to vagueness. If discourses generate institutions, it leaves an unanswered question about the origin of discourses. Often the term only designates a theme of discussion. They agree with the assumption of this thesis that discourse encompasses more than just language. However, the paradigm in which Phillips et al. are working is constructionism which is a modernist one but in the postmodernist paradigm of this thesis the term "discourse" means something different because discourse is assumed to be fundamentally generative rather than being a variable among others.

Whereas scholars in the organisational culture field have focussed on the internal workings of organisations, institutional scholars have tended to focus on organisations in their environment looking at the industry *field* (Bourdieu 1977) as a whole or at the relationship between organisations and society at large or between organisations (Aten et al. 2012). The main concern with these external relationships is legitimacy which was first identified as a matter of importance at the very beginning of the discipline in the work of Weber (Weber 1964). The legitimacy of an organisation is the consistency between the aims, activities and values of the organisation and the aims and values of society at large. In most views of the concept of institution the degree of institutionalisation of an organisation depends almost entirely on the degree to which it has legitimacy since an institution can be defined as an entity that has the authority to

set standards. Suchman (1995) explores the range of relationships and factors affecting them that are grouped under the heading of legitimacy for organisations and shows it to be a multifaceted topic. He identifies three broad types of organisational legitimacy, before subdividing each of them: pragmatic legitimacy where managers consciously act in such a way as to build legitimacy in the eyes of stakeholders as a transactional asset to the organisation; moral legitimacy where managers act in a certain way because they feel that it is the right thing to do by the standards of the morality of society at large and cognitive legitimacy which arises from stakeholders being able to understand readily the institutional logic of actions and policies or an appearance that the organisation has a natural place in society and it is unthinkable that it could be otherwise. Such man's article opened an area of study which has been fruitful for researchers looking at how legitimacy is created, maintained or repaired. For example, Vaara and Monin (2008) examined discursive legitimation in the context of a company merger from within the critical realist paradigm. They discovered that managers were able to produce a convincing narrative about synergies between the merging organisations to legitimate the merger where no such synergies existed and when the failure became apparent used a similar narrative about lack of synergies to legitimate the break-up.

There are a number of significant topics in the institutional literature which have been omitted from this review since they are based on modernist assumptions about identity and the subject which give rise to debates the relationship between the individual and the group and, consequently, the location of agency. These topics include leadership and institutional entrepreneurialism (Lawrence & Suddaby 2006), power which is commonly only identified in its coercive form (Lawrence 2008; Ewick & Silbey 2003) and identity (Oakes et al. 1998; Lounsbury 2001).

The constructionist view of the subject, which is compatible with neoinstitutionalism in general, sees institutions as capable of constructing subjects and as having truth-effects. For example, Calas and Smircich (1999 p.665) recommend that researchers pay attention "to the ways in which our theoretical narratives are embedded in institutions that write us as we write them." Friedland and Alford (1991) find that the modern concept of the individual is itself a product of the evolution of institutions while it has also been argued that not only is the subject institutionally generated but the standards of rationality by which we judge the merit of an argument have also been institutionally

determined (Zimmerman & Pollner 1970; Friedland 2002). These constructionist arguments are readily compatible with the postmodernist paradigm of DOT while still being located within modernism.

5.4. Organisational Culture

In the 1980s there was a surge of interest among organisation scholars in the topic of organisational culture (Cameron & Quinn 2011; Morrill 2008) and a number of significant studies appeared (eg. Peters & Waterman 1982; Deal & Kennedy 1982; Schein 2010). Culture came to be seen by many as playing a significant role in the success or failure of an organisation and was seen as being less abstract, and therefore of more interest to practitioners, than institution.

The relationship between institution and culture is rarely discussed and, for the most part, scholars dealing with one of these objects of study rarely deal with the other (Aten et al. 2012). However, Scott acknowledges that there is an overlap between them by naming one of the three pillars of his institutional theory the "cultural-cognitive pillar" and stresses that in neoinstitutional theory there are structural and cultural components of institution that are interdependent (ibid p.46) where an organisation's culture is made up of "shared definitions of local situations" and "common frames and patterns of belief" (ibid p.68).

Deal and Kennedy (1982) favour a definition of organisational culture as "the way we do things around here" and this view is consistent with Berger and Luckmann's notion of institution as being based on habitual patterns of action. Also, consistent with this view, there has been much research conducted in the rational-actor paradigm, using game theory, that suggests that cultural phenomena are generated by a need for people to behave in similar ways when they live and work together to bring about efficiency and reduce inconvenience (Bednar & Page 2007; Page 2007).

This review of the literature of organisational culture will not be exhaustive but will be sufficient to justify the interpretation given to this object of study in the development of DOT. This study will argue for an interpretation of the term "culture" as a heading under which to aggregate the observable effects of institution. The obverse of this view is, of course, to interpret institution as an abstract model that seeks to explain cultural phenomena.

Smircich (1983) makes a useful attempt to classify approaches to culture in the organisational analysis literature. She first divides the approaches into two broad categories: firstly, the sociological approach where culture is seen as something that an organisation has and secondly, the anthropological approach where culture is seen as something that an organisation is. On the one hand the sociological approach sees culture as a variable, either as an independent variable where culture is something that enters the organisation via its members or as a dependent variable where the organisation itself produces culture. Both of these approaches tend to be located in the functionalist paradigm where the organisation is seen through the metaphor of an organism that must adapt itself for survival in its environment. The sociological approach is often used to ask questions about how culture may be used to improve an organisation's effectiveness. On the other hand, the anthropological approach sees culture as a metaphor for organisation. There are three subcategories of approach: the cognitive approach that sees organisation as being concerned with shared knowledge and beliefs; the symbolic approach that sees organisation as being concerned with systems of shared meaning (eg. Schein) and the structuralist approach that is concerned with the operation of unconscious structures. The anthropological approach is often used to ask questions about how organisation is achieved.

Smircich's categories are still applicable today. This study argues that the differences between these approaches derive from a difference between the unexamined relationship between culture and institution in each case. Her categorisation also reveals that the sociological approaches tend to be located in the functionalist paradigm whereas the anthropological approaches tend to be located in the constructionist paradigm. By explicitly defining a relationship between the concepts of culture and institution and moving the discussion into the postmodernist paradigm, this study intends to open up new possibilities for research and analysis

Three theories will serve to illustrate the thinking in the literature about the relationship between institution and culture: firstly, two sociological approaches in Smircich's classification, Hofstede's dimensions of national culture (Hofstede et al. 2010; Hofstede 2001) where culture is an independent variable entering the organisation through its members; and, Cameron and Quinn's Competing Values Framework (CVF) (Cameron & Quinn 2011) where culture is a dependent variable and the organisation itself produces culture and, secondly, an anthropological approach according to the same classification, Schein's three layers of organisational culture (Schein 2010) which though acknowledging that meaning and truth is relative to the organisation declares itself functionalist (ibid p.x) and is not constructionist with Schein stating that employees without authority play no part in constructing organisational culture (Schein 2014).

Hofstede's model is primarily a model of national culture; that is, the culture that is common to a large group of people in which they live all the aspects of their lives from early childhood. He believes that national culture is the level of culture that shapes people's values whereas organisational culture only shapes actions (Hofstede 2001). In this model of culture there is the metaphor of comparing the human mind with a computer where culture is the software that is loaded onto the computer before it receives input; the way that the computer interprets input and formulates action is circumscribed by the programming of this software (Hofstede et al. 2010). Human programming is in three levels: the basic level is termed "human nature" which is hardwired into us so it is inherited, unlearned and common to everyone; the next level is Hofstede's "culture" which is learned and is common to the group of which the individual is a member and the third level is termed "personality" which is specific to the individual and is partly inherited and partly learned through the individuals own experience within his or her own national culture (2010 p.6). Thus, Hofstede defines culture as "the collective programming of the mind that distinguishes the members of one group or category of people from another" (Hofstede 2001 p.9). Culture itself comes in layers and this theory identifies six distinct layers: nation, region, gender, generation, class and organisation (2010 p.18).

According to Hofstede's model, culture is composed of symbols, heroes, rituals and values. The most fundamental of these is values and the other elements are consistent with them. Values are "the tendency to prefer certain states of affairs over others" (2010 p.9). Identity is not core to culture and can change comparatively easily; it is rooted in practices and is associated with symbols, heroes and rituals. On the other hand, values are core to culture and shape, and are shaped by, institutions through rules, laws and organisations (2010, p.22).

Values may be analysed as a collection of pairs such as evil/good, dirty/clean and unnatural/natural, for example. However, this list is not illuminating since the choice between the terms is already decided in the use of the words. In Hofstede's theory, there is no possibility of further depth of analysis: all this theory seeks to do is to identify something to measure and measure it but it is short on explanatory power.

During the 1950s Inkeles and Levinson devised a list of areas of universal concern to human groups where values were significant: an individual's relationship with authority; conception of self including the relationship between the individual and society and masculinity and femininity and ways of dealing with conflict including control of aggression and expression of feelings (2010 p.30; Inkeles & Levinson 1969). Hofstede built on this list when he was analysing data that he obtained using a questionnaire on values from different offices of IBM around the world. This analysis led to the theory's original four dimensions of culture (later increased to six), which are measures of values for international comparison:

- Power Distance how society handles inequality. Hofstede's questionnaire asked respondents about subordinate's reluctance to disagree with their superiors, management styles in use and management styles preferred by subordinates (2001 p.79)
- Uncertainty Avoidance since life is unpredictable societies have find ways of dealing with the anxiety generated by this unpredictability and different societies deal with it differently. In high uncertainty avoidance countries people prefer rigid rules and hierarchies and authority is rarely challenged (2001 p.145)
- Individualism/Collectivism the relationship between individuals and the groups they belong to. In some countries (eg. USA) individualism is thought to be good whereas in others (eg. China during the Cultural Revolution) it is thought to be bad (2001 p.209)
- Masculine/Feminine masculine work goals are individualistic goals such as career and wealth whereas feminine work goals are social in nature such as helping others. These vary from one country to another (2001 p.279)

Hofstede mentions a theory of moral circles (2010 p.12) that states that people are better disposed towards other people who share their values, members of their moral circle,

than towards those who do not. Unfortunately, he does not discuss this point in depth. It is perhaps significant that Hofstede feels the need to introduce this concept of moral circle since, apart from a brief mention of levels of culture and his focus on national culture, the theory is vague on the topic of what culture is a culture of. He says that national cultures do not necessarily correspond to borders on a political map as in much of Africa (2010 p.21); he also says that two groups of people may occupy the same geographic space yet have different identities, as in Northern Ireland, though in this case he adds that the two groups share similar values and, therefore, the same culture (2010 p.23). Thus, even the word "national" itself has an ambiguous role in the theory.

Hofstede shows some awareness that theory has a point of view. In an article about the transferability of American management theories outside the American context (Hofstede 1980b), Hofstede suggests that much American management theory of the late twentieth century relies on the emphasis on individualism that he found in his national culture survey and suggests that these theories could not be fruitfully applied in parts of the world that have a different profile in terms of his dimensions of culture. In a brief debate with critics there is even mention of "American cultural imperialism" (Hofstede 1981); however, he seems to assume that there is a value free point of view that everyone can find their way to, which happens to be his own, but he does not explain what that point of view might be and declare its values and assumptions.

In Hofstede's theory, culture has different factors, to do with practices and history, but at the core are values. In a national culture, in which people experience their primary socialisation, values are mostly persistent over long periods of time. All societies have to solve problems around the four areas where Hofstede locates his four dimensions so it is possible to make comparisons of how much these dimensions vary country by country. These dimensions are measures of values on continuous scales. Although, these measurements of these dimensions do seem to have validity, it is difficult to say precisely what their scope of usefulness is. For example, the profile of Japan shows low individualism, high power distance and high uncertainty avoidance which suggests that Japanese people are unlikely to be entrepreneurs, yet this is not the case. Evidently, Hofstede's model on its own only tells part of the story. Schein's *Organizational Culture and Leadership* (2010) is a much cited¹⁰ and influential study focussing on organisational culture. Its implied audience is the consultant or practitioner first and the academic second. Its paradigm is explicitly functionalist (Schultz 1994) defining organisational culture as "

... a pattern of shared basic assumptions learned by a group as it has solved its problems of external adaptation and internal integration, which has worked well enough to be considered valid, and therefore, to be taught to new members as the correct way to perceive, think, and feel in relation to those problems.

(ibid p.18)

This approach contrasts with Hofstede's in that Hofstede sees culture as being fundamentally a matter of values whereas Schein sees it as being fundamentally a matter of assumptions. He describes culture as having "stability" – it confers identity on members, "depth" – much of its role is unconscious and "breadth" – it encompasses all aspects of group life (ibid pp.16-17). Thus, Schein's approach leads to a view that more nearly resembles a theory of structure, and therefore, of institution than Hofstede's.

According to Schein, culture comes in three levels: artefacts and behaviours, espoused values and assumptions (ibid p.24). Artefacts and behaviours are the concrete manifestations of the organisational culture that a newcomer would perceive. This level of culture includes the buildings and their layouts; the clothing worn by employees; how they communicate with each other; their myths and stories; logos; how they greet each other and so on (ibidpp.23-25). Espoused values are values that the organisation professes. However, sometimes these values are aspired to but not practiced and may be contradictory such as when a company claims to prioritise low cost and high quality at the same time (ibid p.27). The basic assumptions of the organisation are beliefs about the nature of reality that are universally held throughout the organisation and are so deeply embedded that they are probably unconscious and never articulated and so cannot be questioned (ibid pp.27-32).

¹⁰ Cited by 24,758 according to Google Scholar (22/08/2015).

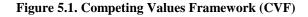
This layered view of culture works as a heuristic for researchers who are acquainting themselves with an organisation for the purposes of gathering data on its culture. Thus, the first aspect of culture that is apparent to the outsider are the artefacts and behaviours, after some observation and conversation with organisational members the values become apparent but the assumptions and beliefs have to be deduced. However, as Martin points out the three levels are not easily separable and have a mutually dependent relationship rather than the sequential one that Schein implies (Martin 2002)

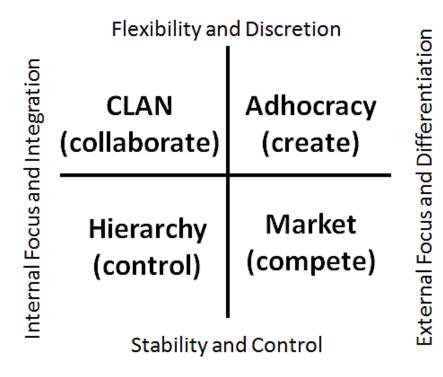
Despite Schein's theory involving the identification of assumptions and the belief that truth is culturally relative (Schein pp.115-124), he does not feel the need to culturally contextualise his own work. His approach is managerialist in that it addresses questions of the role of leaders and how they should behave. If his work were firmly located in the institution of academic research, it could claim objectivity relative to that institution by avoiding bias towards one particular point of view within the organisation being studied. Thus, Schein undermines the legitimacy, and utility, of his own theory.

A limitation of Schein's approach is illustrated by one of his case studies of the influence of leadership on organisational culture that is titled "Sam Steinberg" (ibid pp. 220-224). The case study states that the founder employed members of his family in a number of senior key positions in the company whether or not they were competent to do their jobs which led to ambitious and capable young managers leaving the company. In the long run the lack of capable home-grown managers undermined the company. Schein sees this as a cultural problem whereas it is better to see it as an institutional problem where the hierarchy of the organisation lacked legitimacy because it departed from rational-legal authority – see 2.6.6.

Cameron and Quinn's CVF is a model of organisational culture that depends on two dimensions by which organisations may be measured. CVF originated in a study by Quinn and Rohrbaugh which examined the opinions of leading researchers about indicators that can be used to measure organisational effectiveness. At first 39 criteria were listed and the researchers analysed these to find that they grouped into four clusters of values by which people prefer to judge effectiveness. These clusters may be located relative to each other using two dimensions: flexibility/discretion versus stability control and internal focus and integration versus external focus and differentiation (Quinn & Rohrbaugh 1983). By plotting these dimensions as axes on a

chart, four organisational cultures can be described: clan, adhocracy, hierarchy and market – as shown in Figure 5.1.





(Cameron and Quinn 2011 p.39)

Cameron and Quinn describe the hierarchy culture type which scores high on stability and control and high on internal focus and integration, by referring to Weber's notion of bureaucracy (ibid pp.41-43). In an organisation with this type of culture much emphasis is placed on following explicit rules that have been designed to give the organisation predictable stability. The examples given of this kind of organisation are ones that require processes that involve strict repetition such as vehicle assembly and fast food.

The market type of organisation culture scores high on stability and control and high on external focus and differentiation. Here the emphasis is placed on achieving high levels of productivity and competitiveness in the market place. These organisations are customer focussed and see their main goal as beating their competitors to take ever greater market share. The examples given of this kind of organisation are ones that have to respond to a high level of competition in their marketplace (ibid pp.43-46).

The clan type of organisation culture scores high on flexibility and discretion and high on internal focus and integration. Here employees are made to feel like part of a large family and everyone assumes that it is important that there is a friendly working environment. These companies place much emphasis on commitment to the organisation and teamwork for employees, managers are looked upon as mentors and customers are treated as partners. The examples given of this kind of organisation are mostly of Japanese organisations but also where a high degree of collaboration is required (ibid pp.46-48).

The adhocracy type of organisation culture scores high on flexibility and discretion and high on external focus and differentiation. Here employees are empowered to take risks, flexibility rather than stability is a virtue with structures constructed and dissolved rapidly and individuality and creativity are valued. These organisations place much emphasis on innovation and leadership is visionary (ibid pp.49-51). The examples given of this kind of organisation are where a high level of innovation is required such as in the electronics and aerospace industries (ibid pp.46-48).

CVF is a dynamic model of organisational culture with a constant negotiation between the different culture types. All organisations are a mixture of the four types and Cameron and Quinn represent the cultures of different organisations using spider charts. Because organisational culture is dynamic in this model, it can change. They comment that different dominant culture types are called for at different stages of an organisation's life-cycle (ibid p.64-68) and subsequent research using CVF suggests that the dominant culture type may also be influenced by the organisation's size (Nazarian & Atkinson 2013; Nazarian et al. 2014).

None of these theories of culture probes the concept of culture in depth, preferring instead to concentrate on describing the phenomena. Latour's injunction against attaching labels to phenomena and letting the label substitute for explanation comes to mind: culture is one of the social phenomena which he says has been treated in this way (Latour 2005 p.45). Hofstede's dimensions of national culture seem arbitrary and the object of study ambiguous; Schein offers the significant insight that standards of meaning and truth are relative to the organisation in which they are perceived but is unable to locate his own standards and CVF offers illuminating dimensions for

categorising organisations, but again, these dimensions seem arbitrary and require deeper explanation.

At a casual glance it would seem that organisational culture and institutional theory have the same, or overlapping, objects of study: the organisation. However, there is little crossover between the two disciplines. This was remarked upon by Kahryn Aten who noticed that at a symposium of the Academy of Management there was no one else attending sessions of both the culture and institution tracks (Aten et al. 2012). The observation eventually led to a debate, consisting of a series of papers written by institution and culture scholars, in a special issue of the *Journal of Management Inquiry* 21(1) in 2012. The debate is illuminating in that it illustrates a tendency to silo thinking in current modernist organisational enquiry.

One of these papers by Morrill (Morrill 2012) brings the different strands of the debate together by suggesting two ways forward, firstly by developing a common terminology and secondly by identifying problems that could be more fruitfully approached with a combination of the two perspectives. Morrill describes the particular institutional histories of the two disciplines, particularly in the context of Stamford University, which led to them becoming mutually exclusive territories. He suggests that what is required are *trading zones* where scholars from both disciplines can come together for mutually informed research projects.

This debate is illuminating in that it demonstrates how unhelpful to progress silo thinking can become and how entrenched it is. It is also illuminating that when the representatives of these two institutions come together they look for common ground in their activities rather than stopping to ask fundamental questions about their objects of study. The management, political science and sociology scholars who are involved in these institutions do not recognise the importance of the question "What is it?" An effect of DOT is an attempt to build something like Morrill's trading zone on ground prepared by an answer to the question "What is organisation?" but it is a zone where there can be a meeting of not just institutional and cultural scholars but many others as well. In DOT the terms institution and culture are defined in such a way that culture is a property, or collection of properties, of an institution. These properties are the apparent characteristics of the particular institution.

5.5. Foucault's Discursive Formations

Foucault's concept of *discursive formation*, expounded in *The Archaeology of Knowledge* (Foucault 1972), is the only attempt that has been made to formulate a postmodernist theory of institution so far. In this book he does not use the word "institution" though he uses the word in his later work (Foucault 1982) to refer to organisations which have physical components whereas discursive formations are purely discursive and conceptual. His objects of analysis bear only a superficial resemblance to Berger and Luckmann's examples of the banking system and paternity, nevertheless, they are structures which in scale lie between individuals and society as a whole and, therefore, fall into a category of social structure that is often referred to as institution. Also, they are structures that Foucault attempts to describe purely in terms of discourse; therefore, this is a postmodernist theory. These structures are characterised by groups of professionals who acknowledge each others' expertise and through their interactions determine standards of truth and they include psychology, medicine and the penal system (Sheridan 1980).

Foucault's work can be classified into three periods (Burrell 1988) with each period taking a new direction and a new focus while not rejecting or completely contradicting what came before. The three periods are referred to as *archaeology*, *genealogy* and *ethics*. The archaeological period has its focus on discourse, the genealogical period on power and the final period on ethics (McNay 1992). This section of this thesis is concerned with the archaeological period where Foucault develops and applies his concept of discursive formation which, it will be argued, is analogous to institution. The main focus of this section is his book *The Archaeology of Knowledge* (1972b) which he published at the culmination of this period and is a presentation of the methodology of archaeology.

The paradigm of Foucault's work is postmodernist throughout his oeuvre though there are times when he seems to slip into the language of realism, for example in an essay on Kant and the enlightenment (Foucault 1984). Archaeology is based on the assumption

that discourse dynamically creates the objects of which it speaks and that it creates the consciousness of its subjects and gives them a position from which to speak. He looks for the ultimate answers to his questions about shifts between groups of concepts, the related styles of discussion and their objects of enquiry in how discourse creates meaning and truth both of which he sees as being relative to a geo-spatial context. However, Foucault did not call himself a postmodernist and avoided other labels, though he does call himself a "positivist" (p.125) in the *Archaeology of Knowledge* and he describes his genealogical method as a "happy positivism" in a lecture in 1970 (Foucault 1981/1970 p.73). By adopting the positivist label he means that his methodology pays close attention to the empirical data about the objects of study while, at the same time, acknowledging that these objects have been created by a discursive formation and that the truth of anything said about an object can only be judged relative to a discursive formation. Thus, Foucault's positivism is also relative to the discursive formation in which it is being practised.

The archaeological period begins with Foucault focusing on some historical discontinuities which he has noticed in the fields of madness, health and punishment. He finds that instead of a steady development of understanding of fixed objects of study there are rapid changes which take place in the space of only a few years which involve not just changes in theory but the construction of completely new objects of study and these changes are accompanied by marked shifts in attitude and point of view. He finds patterns in these changes in different fields in *The Order of Things* (2002). The name he gives to his method of analysis is *archaeology* which involves looking for the statements that compose discursive formations.

The statement is a formulation of a truth, meaning or value which works with other statements to construct a discursive formation. It is the smallest component of a discursive formation; it is the "ultimate, undecomposable element that can be isolated and introduced into a set of relations with other similar elements" (p.80). That is, a statement can never stand on its own: it can only be a statement because of its relationships with the other statements that make the discursive formation.

Though Foucault conducts a lengthy and complex discussion of the relationship between the statement, in his particular use of the word, and linguistics the discussion is of secondary importance. His discussion of the statement is unnecessarily convoluted because of this concern to relate it to linguistics and it marks a confusion between discourse and language though he does make a gesture towards the principle that discourse includes symbols that are not purely linguistic; for instance, he mentions the first letters at the top left hand side of a French keyboard, A, Z, E, R, T, as an example of a statement (ibid p.86). An important principle of Foucault's theory is the relationship between statements and discursive formations.

A discursive formation is a social structure that is composed of a discursive network that has the capacity to create meaning and assign truth values, additionally it creates subjects and defines what they are authorised to say. However, the discursive formation is a construct that makes it easier to discuss the phenomenon and its empirical manifestation is the statements that combine together to create it (ibid p.97-98). These statements may be expressed in different words or in other symbols. On the other hand, a statement expressed in the same words could have a different meaning and truth value when used in a different discursive formation (ibid p.89) since it is the discursive formation as a whole that determines meaning and truth (ibid p.91).

A specific manifestation of a discursive formation such as an order given by a doctor to a nurse is referred to by Foucault as an *enunciation* (ibid pp.98-99). Each enunciation is unique because even if the same words were to be used again on another occasion the context would be different. However, enunciations are formed by statements so that the doctor knows what to say, though not necessarily the exact choice of words, and the nurse knows how to interpret what the doctor says. Thus, statements shape the enunciations in the same way that the rules of grammar shape what can be said using a language.

The unity of a discursive formation is composed of objects, positions from which subjects can speak which he refers to as "enunciative modalities", concepts and strategies (ibid pp.40-70). The conditions of the existence of a discursive formation, "but also of coexistence, maintenance, modification, and disappearance" (ibid p.38), he refers to as its *rules of formation*.

Firstly, he turns his attention to how objects are formed in discursive formations according these rules. Foucault has a postmodernist view of the relationship between words and things: he believes that discourses are "practices that systematically form the

objects of which they speak" (ibid p.49). Objects have three factors in their conditions of emergence: "surfaces of emergence", "authorities of delimitation" and "grids of specification" (ibid p.41-42). The surfaces of emergence are elements of the social conditions of that historical moment such as the family or working conditions (ibid pp.41-42). Authorities of delimitation are those individuals who are recognised by others as having more right to speak than others on a specific topic, such as doctors on matters to do with bodily malfunction. Grids of specification are systems of difference whereby characteristics of objects can be differentiated from each other. He points out that these conditions of emergence are historically specific because the factors which they depend upon change over time, therefore, the objects formed by discourse and available for discussion are different at different points in history so that "one cannot speak of anything at any time" (ibid p.44). Because objects are created by discursive formations, and these determine the discursive possibilities of their participants, "it is not easy to say something new" (ibid p.44). These factors include institutions, social processes and norms (ibid p.45).

Secondly, he turns his attention to the role of the subject the discursive formation and how the subject is able to speak. The enunciative modalities of the discursive formation allow some people to speak with more authority than others, because of who they are or the qualifications which they have, and because they speak from a certain position whose authority is defined by the discursive formation. Thus, a doctor is allowed to speak about medical matters and has the approval of powerful institutions like government or the legal system, to do so. The discursive formation also allocates positions from which a subject can speak such as a coroner or the head of a medical school. He points out that these identities and positions are defined by their relationships with objects which have also been, in turn, defined by the discursive formation. He emphasises that the subject he is referring to is nothing to do with the unified subject or biological entity of the person - the "transcendental subject" of the cogito (ibid p.55); instead the subject is defined by its role in discourse (ibid p.122). Foucault does not examine the construction of the self but only looks at the position of the subject in discourse. His interest in the self is no more than in roles marked out by what the discursive formation allows a subject to say. This approach to the subject is exemplified in his essay "What is an Author?" where he shows that the author's person and name are different entities with the latter representing something more like a brand (Foucault 1972a/1969).

Thirdly, he turns to concepts. Instead of looking at concepts already ordered into a pattern by the discursive formation, like stones in a wall, he looks at concepts at the level of the way that they create relationships between objects. He divides these relationships into three types: "succession", "coexistence" and "procedures of intervention" (ibid pp.56-59). Succession is concerned with patterns of relationship; for example, the system of classification of organisms that was developed by natural historians in the nineteenth century. Coexistence is concerned with which statements can be present in the same discursive formation; for example, in the biological sciences statements based on experimental verification may exist but ones based on literary imagination may not coexist with them, unless they are explicitly metaphorical. Procedures of intervention are concerned with the ways in which statements may be employed to bring about action; for example, the qualitative interpretation of numerical data.

Lastly, he turns to strategies. In a discursive formation there are commonly recurring theories or themes such as the theory of evolution by natural selection in biology. He refers to these theories or themes as "strategies" (ibid p.64). Not all the themes and theories that are possible in a discursive formation actually come into being. Instead there is a higher level pattern which Foucault calls a "discursive constellation" which determines what themes and theories actually emerge and this discursive constellation may depend on concepts in other discursive formations (ibid pp.66-67).

The discursive constellation seems to be similar to two other concepts: *archive* and *episteme*. Foucault does not explain the relationship between these concepts but they are both related to the radical shifts in ways of thinking in different fields that Foucault studied in his early work and how the same kind of shift seems to have taken place in a wide range of fields simultaneously. The word *episteme* is used in his book *The Order of Things* to describe regularities between discursive formations (ibid p.191). It implies that there are deeper structures that lie beneath the discursive formations that are shaped by them. In *The Archaeology of Knowledge* he introduces the term *archive* which is "systems of statements (whether events or things)" (ibid p.128). The archive seems to be a reinterpretation of the episteme but with the emphasis on the material nature of it:

instead of implying a deeper conceptual structure the archive consists of the manifestations of statements as enunciations leaving material traces behind them.

The Archaeology of Knowledge marked the end of Foucault's early body of work and he did not develop the concept of discursive formation any further. Instead, he shifted towards a different methodology which he termed *genealogy* which differs from *archaeology* only in that it focuses on power and he described this shift as a realisation that it was really power that he had been concerned with all along (Foucault 1980/1977 p.115). The effect of this change in emphasis was that the possibility of developing a postmodernist theory of institution was abandoned. There was too little of the groundwork done for the concept of discursive formation to be immediately useful and there was no appetite among scholars for the daunting task of continuing from where Foucault had left it.

Knights remarks on the neglect by scholars of Foucault's early work. He suggests that it is easy to appropriate elements of Foucault's work from the genealogical period without fully understanding it whereas with the earlier work it has to be understood as a whole (Knights 2002). However, this is not the only difficulty. A number of problems with Foucault's archaeological work have been remarked upon, in addition to the usual cross-paradigm misunderstandings such as the claim that it places too much emphasis on discourse. These problems include a problem with the objectivity that Foucault claims for his method (Dreyfus & Rabinow 1982), problems with defining what exactly a discursive formation is, and therefore how the concept might be applied, and precisely how different discursive formations exist in relation to each other.

Dreyfus and Rabinow (1982) object that the method of archaeology is self-contradictory in that it asserts that meaning and truth are relative and are created by the discursive formation yet archaeology itself seems to claim a transcendental objectivity that puts it beyond all discursive formations. They go on to argue that a position outside all discursive formations would be a nihilist position since in such a position you "...cannot produce a moral theory" (ibid p.95) so there is no reason to pose questions and no reason to take any interest in any possible answers. This is a valid objection to Foucault's archaeological approach and yet it is not as damaging as Dreyfus and Rabinow seem to think. In fact, despite what Foucault himself says, he is speaking from a position within a discursive formation, as a professor employed by a highly respected French academic institution (ultimately the Collège de France) and so his work is judged on the rigour of its argument and the depth of its research just as any other utterance from a similar source would be. It is not clear why Foucault's failure to acknowledge the position from which he speaks might invalidate the whole project of archaeology.

Little use has been made of the concept of discursive formation in the business and management, or indeed any other, body of literature. The reason for this is perhaps that scholars have found it difficult to decide what a discursive formation is in relation to other concepts that are used for analysing organisations, such as institution. The word le formation has a nuance of creation and a nuance of structure, in the same way that the English word that is used to translate it, formation, has in English. Peci and Vieira (2009) place the emphasis on "discourse" in the term "discursive formation" and in the word "formation" they prioritise the process of the creation of objects by discourse in their discussion of the development of the science of genetics. Peci and Vieira also point out that neo-institutional theory does not lend itself to discussion of the role of power in the institution or the formation of subjects whereas the use of Foucault's theory produces a model where the relationship between the formation of objects, relationships of power and the formation of subjects can easily be seen. This approach suggests that discursive formation might be an institution and it also suggests that this might be a dynamic model but it is not well developed. On the other hand Riad (2005), in her application of Foucault's discursive formations to corporate merger integration interprets discursive formation as a topic of discourse. In the word "formation" she places the emphasis on the structure nuance. She identifies organisational culture as a discursive formation in the larger context, presumably discursive and non-discursive, of merger integration. This is an error: in this context organisational culture is not a discursive formation but is instead, in Foucault's terms, a strategy in the discursive formation of management theory.

Hardy and Thomas (2014) use Foucault's view of power (6.1) to analyse strategy formation in a telecommunications company. They identified two separate discourses in the company's strategy, a market discourse ("be cost effective" p.327) and a professional discourse ("be first, be best" p327), and observed that the market discourse became stronger creating an object in the form of a cost-cutting strategy and subjects in

the form of cost-conscious employees whereas the professional discourse failed to gain strength. They found that this intensification of the market discourse was brought about by the actions of various stakeholders, external as well as internal to the company, not just senior managers. Thus, by applying Foucault's theory the researchers discovered that an idea for strategy is more likely to be put into practice if it makes sense to employees and other stake holders and if they see the need for it. This is a heavy-handed application of Foucault to the point that critics might find it ridiculous. The problem stems from the use of the word "discourse". The researchers define the word using a quotation from *The Archaeology of Knowledge* which in its original location is referring to the creation of objects by discursive formations. The noun "a discourse" is often used loosely like this and causes confusion¹¹. As with the Riad article, it is more useful to treat what these authors refer to as "a discourse" as a strategy.

These problems over the nature of the discursive formation may be resolved by taking the discursive formation as being an attempt at a postmodernist, and therefore discourse based, version of institutional theory. Foucault said that he was not trying to develop a general theory and that he was just trying to deal with specific problems he had identified in the areas of insanity, health and the penal system, among others. However, discursive formations can be seen as institutions and the same principles applied to other phenomena that are usually identified as institutions.

If discursive formations are to be taken as institutions, the theory needs further development. For example, as it stands in *The Archaeology of Knowledge* the theory has no discussion about how power might work within the discursive formation and there is, crucially, no discussion of the relationship between different discursive formations as would be required, for example, to explain legitimacy. In addition, there is no discussion of the conditions for the possibility of the existence of discursive formations nor is there any discussion of the formation of the subject beyond institutional roles. The absence of discussion in Foucault's work about the relationship between discursive

¹¹ Foucault himself uses the term rather loosely so that in, for example, *The History of Sexuality Volume I* it is not always clear whether "discourse" merely means talk about a particular topic or something more structural.

formation and the relationships between discursive formations and any wider context gives rise to confusion and speculation about what he might have meant, as in Armstrong (2015).

DOT has been developed with an institutional theory based on assemblage theory rather than on discursive formations which might have been the obvious place to begin for a theory located in the postmodernist paradigm. Foucault's theory has three main weaknesses: it lacks dynamism, it fails to explain how different discursive formations relate to each other and is not easily scalaeble. The model of discursive formations is not dynamic since it does not explain how and why they might change. It does not explain the relationships between different discursive formations, for example, the extent to which there is isomorphism between the discursive formations that Foucualt studies. Additionally, it is not easy to see how the model might be applied to smaller scale institutions than the ones Foucault studies. Though these defficiences might have been supplied by adding Foucault's later theory of generative power to the theory of discursive formations to make an institutional theory, he never does this. In comparison the DOT theory of institutions is more useful since it includes the elements of overlapping and intertwining institutions and a role for things.

5.6. Institutions as Discursive Formations

"Institution" in institution theory is a good example of what Wittgenstein means when he complains of what happens when "language goes on holiday" (Wittgenstein 1967 p.19), that is, when words are taken out of the context of the work that they were devised to do and placed in another, more abstract, context making problems, and solutions, appear when none really exist. In everyday language "institution" has a meaning which includes the concept of establishment, that is, of stability, longevity and authority. When it is taken into the scholarly realm it is put in the position of a technical term but without any of the precision that is needed for a technical term to do its work; the same is true of "culture". If we want to know about institutions, we must first ask what they are and look for an answer which is an interpretation of empirical phenomena. From our attempts to answer this question flow many others among the first of which might be: What is the relationship between institution and organisation? When does something become established enough to become an institution? What is it in the moments before it becomes an institution? What is the relationship between institution and culture? It is only by engaging with these and many other questions, which are questions about what we mean by the word "institution", that we can study the empirical phenomena. As DeLanda points out, sociology has been successful in analysing the micro level of interpersonal interaction and at the level of society as a whole but less successful at anything in between the two (DeLanda 2006 pp.5-6) but to study this meso level the concepts of organisation, institution and culture are key. In the development of a new grand theory of organisation the terms "institution" and "culture" have to be redefined.

One of the main problems that arises from analysis at the meso level is the relationship between the levels. Berger and Luckmann talk of "everyday life" (Berger & Luckmann 1971) and Hofstede talks of "national culture" (Hofstede et al. 2010). Other writers talk of the "societal level" (Zilber 2006) or use a similar term to mean something like "society at large". For Berger and Luckmann everyday life is without structure, for Hofstede it is the main structural influence. The theorisation of these levels in some of the theories reviewed here is shown in Table 5.2.

This table does not propose that the concepts in each column have equivalence, for example there may be several communities of practice (Wenger 1998) in an organisation (Hofstede 1980a), but it does propose that they overlap. It also suggests that these concepts might be combined to produce various research perspectives. DOT seeks to find similarities between concepts in order to increase their utility and from this perspective

However, the problem does not end with the relationships between the three levels identified here. There is also the problem of the relationships between the different levels suggested by Scott including the problem of the relationships between society at large and institutions and organisations; the problem of the relationship between different institutions and organisations and the problem of the relationships between different institutions and between different organisations, for example in a field or sector. In the development of DOT the best source of answers to this complex entanglement of problems is taken to be the assemblage approach whose literature is reviewed in Chapter 3. Table 5.2 shows the relationship between some of the concepts examined in this section.

The beginning of institutional theory might well be ascribed to Weber whose concern is with authority. This concern leads to legitimacy and this has remained a major topic throughout the history of institutional scholarship. From this topic has come theory about the relationship between society at large and organisations and the relationships between organisations. Weber has also given us the often misunderstood concept of ideal type which is analogous with the concept of diagram in assemblage theory.

The model of discursive formation as described by Foucault in *The Archaeology of Knowledge* (Foucault 1972) is sketchy and incomplete partly because it was Foucault's intention that it should have limited scope. However, it does give some indication of how a postmodernist theory of institution could be developed. In his inaugural lecture at the Collège de France in 1970, Foucault signals his movement of his work away from archaeology and its emphasis on discourse towards power, indicating that the two are wrapped up in each other: "...discourse is the power which is to be seized" (Foucault 1981 p.53). Similarly, in an essay published in 1982 he declares "... it is not power, but the subject, which is the theme of my research" (Dreyfus & Rabinow 1982 p.209). These statements might be taken as Foucauldian jests or half-truths: clearly in Foucault's work discourse, power and the subject are intimately imbricated in each other. For this reason, the literature of these topics is reviewed in the next section.

The literature that has been reviewed in this section has provided a rich suite of concepts which could be implemented in a new institutional theory such as: isomorphism, legitimacy, ideal type, traditional authority, categories of bureaucracy, typification, sedimentation, translation, institutional logic, rational myths, ritual and field.

5.7. DOT: Institutional Assemblages

5.7.1. DOT: Institution Assemblage - Expressive

All assemblages include the discourse assemblages (Assemblages 1 and 2) since without the discourse assemblages they would not be in consciousness. Therefore, DOT translates Deleuze's expressive/ materialist dimension of assemblage from the realist and modernist paradigm into the postmodernist one. In DOT, all Institution Assemblages have material components, including the discursive assemblage itself, and they have a discursive component even if it is just that they are represented so as to become a concept in consciousness.

| Author | Template for Meso Structure | Meso Structure | Macro Structure |
|-------------------|--------------------------------|--|----------------------------------|
| Hobbes | | Leviathan | |
| Berger & Luckmann | | Institution | Everyday Life |
| Schein | | Organisational Culture | |
| Hofstede | | Organisation (has organisational culture) | Nation (has national culture) |
| Cameron & Quinn | | Organisation (has organisational culture) | Nation (has national culture) |
| Wenger | | Community of Practice | |
| Douglas | | Institution | |
| Weber | Ideal-type | | |
| Deleuze | Diagram | Assemblage | Rhizome |
| Latour | | Leviathan Group Network | |
| Foucault | | Discursive Formation | |

Table 5.2. Meso and Macro Structures in Some Theoretical Models

Theorists who have drawn on Deleuze's assemblage theory, including DeLanda and Latour, have espoused realism and emphasised that they do not give language, or discourse, a central role which, from their viewpoint, would lead to idealism. They have also condemned discursive approaches as "anthropocentric" and insist that the human actor is not the only possible one giving non-human actors equal significance. This position contradicts several assumptions of DOT. Firstly, since Assemblage 1 is purely material, an emphasis on discourse does not lead to the theory being idealist but, on the

contrary, is entirely realist¹². Secondly, since there are no transcendental signifiers and nothing can enter human consciousness except as a concept, it follows that all assemblages must include a discursive component to be perceived at all. In fact, all assemblages must have Assemblages 1 and 2 as components for them to enter consciousness. It follows from the model of discourse being advocated here that there can be no approach that is not anthropocentric and there is nothing to be gained from an attempt to find such an approach. Thirdly, since this is an anthropocentric theory and since it is based on an assumption that the primary purpose of discourse is not the production of meaning and truth but the facilitation of human co-operative action, it follows that it is only meaningful to see humans as primary actors.

DOT sees the Institution Assemblage as consisting of discourse and things with the discursive assemblages at the core of the Institution Assemblages. In DOT institution generates meaning: that is its defining characteristic. At the level of Assemblage 2 it might seem that the signifier is free to play without constraint but experience indicates that signifiers cannot mean just anything. According to the theorists who advocate a dialogic approach to meaning, the origin of meaning is in the dialogic interaction between people in conversation (Todorov 1984). A subject proposes a meaning and another subject replies with a counter-proposal and thus meaning is negotiated and the agreement allows further negotiation, for example to produce an "account" of a situation (Garfinkel 1967). So, meaning is communally negotiated and so is the institution. There are private meanings, each subject is the locus of his or her own action and experience and, therefore, has his or her own trace, so there is an inherent indeterminacy about meaning, but there is a practical, active, limitation to this relativism of meaning which is communal action that is tied to communal meaning. The precise meanings accorded to the signifiers by the different parties to the conversation do not have to be exact matches; they only have to be good enough to influence action so there is always an indeterminacy about meaning. In short, there is no meaning

¹² A comparison between the meanings of the terms "real" and "material" is beyond the scope of this thesis. For the sake of brevity in this case the two terms are taken to be synonymous. Here DOT is described as "materialist" to be consistent with the "new materialist" movement eg. Barad (2007) and Harman (2016).

without there being a group of people who make agreements on how to respond to signifiers and this group, along with their physical and temporal context, will be referred to here, in DOT, as an institution.

Meaning is negotiated dialogically, that is, it is created in interactions rather than ostensibly defined. For example, in the beeping robots vignette a robot emitting "beep" might mean "I have encountered an obstacle" whereas another robot listening to it might interpret the sound as "Don't come over here". The community of robots over a period of time encompassing many interactions might settle on the meaning "Beware of obstacles over here". It is in this way that meanings are communally and dialogically formed, maintained and changed.

In the same way as meanings are produced so too are power relations. As meaning is produced so is knowledge since meaning is never abstract but is always wrapped up in relationships with the unknowable, non-discursive world (noumenal) – the obstacles encountered by the robots (and the physical components of the robots themselves) in the beeping robots vignette (4.5.3.1). This knowledge is different for different people and is imbricated in their subjectivity. In this way hierarchies are formed within the group with each individual having a place within the structure.

By looking at the relationship between discourse and institution using the model of interdependent assemblages allows the elimination of some of the confusion which has occurred in the past. For example, in 1981 there was a debate between Derrida and Gadamer about the supposedly competing theories of discourse in the shape of deconstruction, as advocated by Derrida, and dialogism, as advocated by Gadamer (Michelfelder & Palmer 1989). However, DOT shows that the two theories are compatible because they are concerned with different assemblages, Derrida with Assemblage 2 and Gadamer with the Institution Assemblage.

A major problem which postmodernist theorists have encountered in the past has been finding the link between *différance* and organisation. Gergen (1993) uses the idea of "social supplementarity" which takes Derrida's idea of the supplement and applies it to dialogue. Derrida says that each term in a binary is supplemented by the other, that is, meaning depends on both terms so that each term always already carries the other wrapped up in it. Thus, the making of an utterance is an attempt to supply a deficit, the absence of the other, which is supplemented by an answer to the utterance. Gergen attempts to adapt this model to the social construction of meaning

The speaker signifies, but a supplement is required to determine its meaning: it is the listener who supplies the supplement.

(Gergen 1993 p.220)

This model does not work well because it does not take into account the relationship between the components of the assemblage to which it is being applied; in fact, Gergen's model of social supplementarity sounds like a restatement of Berlo's modernist SMCR¹³ model of communication (1960) which has no compatibility with Derrida's model at all. By applying *différance*, which is a part of Assemblage 2, directly to the Institution Assemblage confusion has been introduced. Instead of using the terms "speaker" and "listener" the terms "writer" and "reader" are substituted, the problem becomes more apparent. For the reader to attach any possible meaning to the writing there has to be a degree of agreement about meaning already and this agreement is already complicit in the construction of the writing and reading subjects. (Of course, the trace will be different to some extent for the writer and the reader and may have changed for the writer between the writer's act of writing and the reader's act of reading). The meaning of the signifiers used is modified by the context of the utterance assemblage and this modification modifies the line of flight of the traces of these signifiers. However, the most significant factor in the context is the institutional orientation of the subjects which are in this particular assemblage. Without acknowledging the institution assemblage's role in the utterance assemblage, with all that goes with it including the construction of subjects, the model is too simplistic to be useful.

The accusation that Derrida reduces the whole world to text is misguided because in *Of Grammatology* Derrida's focus is on epistemology not on ontology. In Derrida's model discourse is material, a matter of compression waves in the air and marks on paper, but there is little discussion of how it relates to the world of objects (Harman 2009 p.26). It is only when an assemblage of people comes together in the world and to

¹³ SMCR – source, message, channel, receiver with a feedback loop from receiver to source.

act upon the world (objects) that the generative connection between *différance* and institution may be discerned.

Derrida's discussion of *différance* in *Of Grammatology* only indicates a starting point about the origin of meaning. *Différance* does not produce *langue*¹⁴. It would be a mistake to think that there is such a thing as *langue* which is independent of *parole*. Just as, in Deleuze's ontology, there is no such thing as a species except after the fact of there being members of it, so in Derrida's *différance* there is no *langue* without the *parole* of human interaction. In practical terms, it is dialogue that produces meaning and meaning is dynamically created, and so is the trace. Derrida's image of the trace is that it is like a pathway through a forest (Derrida 1976 p.62) but it is a pathway that we are continually blazing as well as following. It is a "line of flight" in Deleuze's terminology, always moving forwards into new possibilities yet its direction is influenced by its history which it carries with it (Lorraine 2010). Thus, seen in this way, Derrida's concept is not static, instead différance is continuous becoming.

The unit of discourse is the utterance which is composed of one or more signifiers and is complete when it may be replied to. An utterance is unique and occurs at a specific time, in a specific place and in a specific context. For an utterance to come into being différance has to be operationalised, that is, a group of people have to come together to negotiate meaning. So, the institution creates meaning and meaning creates the institution.

Discourse is able to create institutions because power is generated by the position of dominance of one term over the other in binary combinations – such as think/do, speak/write, quantitative/qualitative and so on. Institutions may be thought of as primary structure since they are the precondition for the construction of other structure such as the subject, the organisation, the nation and so on. Although, institutions are dynamic, not a one-time construction but in a state of becoming discourse tends to

¹⁴ *Langue* is what is commonly referred to as the language with all its grammar rules and colloquialisms which precedes the actual use of the language and makes it possible. *Parole* is the unique speech acts of users of the language (De Saussure 1959).

attempt to create stability by fixing meanings and obscuring the means of construction of the institution.

5.7.2. DOT: Institution Assemblage - Material

Institutions are not merely a matter of discourse on its own. They are not only composed of individuals and their interactions, of signifiers and relationships. The Institution Assemblage is composed of things as well as people and discourse and the possibilities include: location, the bodies of the individuals, the resources at their disposal, the land, the weather, natural disasters, their neighbours, rivers, flora and forna, technologies and so on.

As Latour remarks, groups that are composed of only relationships between people are unstable, ephemeral and insubstantial. He compares the patterns of enmities and alliances within a colony of chimpanzees which are only based on the social relationships between individuals with patterns of social relationships between people based on property ownership and other contracts of various types. He concludes that the human relationships are more substantial because they involve things as well as people (Latour 2005).

It is necessary to make a clear distinction between what is described in DOT as Assemblage 3, the Institution Assemblage, and instantiations of this assemblage. Assemblage 3 is an abstract machine, a discursive assemblage that produces institutions each of which is a unique, dynamic, material assemblage.

In DOT Assemblages 1, 2 and 3 are a suite of abstract machines. These assemblages are only operationalised when implemented in a specific place at a specific time, for example, when a person speaks or writes there is an utterance assemblage that has called upon these abstract machines for its production. As has been pointed out above, the distinction between the component abstract machines of DOT is artificial and only for the convenience of explanation, in fact, all the components are involved simultaneously in the production of an utterance assemblage. The Institution Assemblage is the component where the production of social phenomena is enabled.

5.7.3. DOT: Institution Assemblage - Characteristics

In Foucault's account of discursive formations in *The Archaeology of Knowledge* (1972) (5.6) the discursive formation has four characteristics: the formation of objects, the formation of subjects ("enunciative modalities"), concepts and strategies ("themes and theories"). Although, this list might be a starting point, it does not go far in developing a theory of institution. Foucault's project was left incomplete and it is too great a task to complete it here.

However, from the DOT viewpoint of institution as discursive assemblage another list seems to emerge. Certainly institutions construct objects and subjects. Since power is generative, another category of interrelated characteristics emerge which have to do with hierarchy/ rules/ norms (6.1). Power also produces knowledge and is sustained by knowledge. This knowledge can take many forms, including ones commonly characterised using the explicit/ tacit binary. Culture is a general rubric under which many observable characteristics of the institution may be listed, for example, the relationship between individuals in different levels of the hierarchy, rituals, attitude towards risk and so on.

The institution may be measured using various dimensions: the degree to which it places emphasis on individual actors or collective enterprise; the degree to which power is explicitly exercised; the degree of territorialisation; the longevity of the institution and so on.

Institutions always have relationships with other institutions and, therefore, institutions are always subject to evaluation from other institutional viewpoints. These relationships, therefore, give rise to matters of legitimacy (Scott 2014). Communication has to take place between institutional viewpoints so translation (Latour 2005) between these viewpoints always has to take place.

Additionally, institutional assemblages are created from already existing institutional assemblages by a process of inheritance where most of the characteristics of the parent assemblage are transferred to the child, but not all of them, so that the child resembles the parent while being distinct.

In DOT organisational assemblages are created from the institutional assemblage of everyday life and, therefore, inherit characteristics from that assemblage. It is within the context of everyday life that organisational assemblages derive their legitimacy. However, the institutional assemblage of everyday life is itself complex and lacking in homogeneity. It might be represented as a cloud containing areas of varying intensities.

In assemblage theory components may take part in several assemblages simultaneously. Researchers should always be mindful of the fact that assemblages are not hard-edged entities and they are not "out there". They are a discursive tactic to interpret the flow of perception. Assemblages are unique and therefore they always have a specific geographic location (even virtual institutions have members who have specific locations) and a specific temporal location (Victorian England is not the same as Medieval England).

5.8. Culture as Assemblage

As was pointed out in section 5.4, cultural scholars either see culture an attribute of some entity such as nation or organisation or they identify culture with an entity such as nation or organisation (Smircich 1983). From the perspective of DOT the culture scholars' use of the word "culture" has a suppressed supplement which is "institution" but the two schools of thought about culture suppress the supplement in different ways, the one by ignoring it, so that the scholar only examines culture and does not concern him or herself with the nature of the structure that generates it, and the other by eliding it with culture, so that it vanishes altogether.

In DOT culture is an attribute of institution: it is a selection from the observable characteristics of institution. This view of culture allows DOT to encompass modernist theories of culture that appear to be at variance with each other. For example, Schein provides a useful approach for researchers attempting to understand organisations from the outside: the most obvious phenomena are the artefacts and behaviours, then you have to interview members to find out about values, finally there is much analysis of data required to dig down to the underlying assumptions (Schein 2010). (Schein is one of the few cultural or institutional scholars who, like DOT and its Deleuzian heritage, give things a place in his theory). Grid-Group is a cultural theory because it classifies the thought styles exhibited in the utterances of organisational members. It is not an institutional theory because, although its unit of analysis is often the institution, it does not provide an adequate theory of how the institution is constructed.

5.9. DOT: Institutional Assemblage and Institutional Theory

In institutional theory as a whole there is much confusion about an institution is with researchers adopting a wide variety of conceptions (Scott 2014). DOT has a precise conception of institutions as dynamic assemblages that include material and discursive components.

Though DOT draws on institutional theory as reviewed above, DOT has a different concept of institution to that of previous theory: that is the institution assemblage in DOT is not the same as the institution of institutional theory. For example, Meyer talks of genres such as "jokes, greetings, prayers, job interviews, emails, exams, parliamentary speeches, performance appraisal, or gossip" (2008 p.531) as being institutions but these cannot be institutions in DOT. Similarly, Riad (2005) talks of "organizational culture" as being a discursive formation but her conception of discursive formation does not correspond to what is meant by institution assemblage in DOT and it is this author's belief that it does not correspond to what Foucault meant by discursive formation either. In DOT genres are merely genres; that is, they are possible structures for utterances that might be used in a wide range of institution assemblages. Similarly, "organizational culture" is an academic body of knowledge and topic of debate which is part of the institution of academic business and management studies but it is not, in itself, an institution assemblage. In DOT institutions are not abstract structure, as in Berger and Luckmann (1971) and Scott (2014), but are, first and foremost, groups of people and are more like groups in Latour's thinking.

In many versions of institutional theory there is an assumption that the institution is something that is long lived. However, in DOT there is no assumption about the longevity of the phenomenon. They can last, in the case of water-cooler conversations, for a matter of minutes or, in the case of nations or major religions, for millennia.

There is much in DOT which concurs with existing institutional theory. For example, although much institutional theory tends to see institutions as stable and unchanging entities, some institutional theory, such as Giddens's structuration theory (1979), sees institutions as dynamic and in a continuous state of becoming and this view is consistent with DOT. Additionally, some institutional theorists place a great deal of emphasis on

discourse (Phillips et al. 2004) and culture (Scott 2014) in their accounts of institutional processes which is also consistent with DOT.

Two recurring concerns of institutional theory are legitimacy and isomorphism. In DOT legitimacy relates to the relationships between institutional assemblages. Since these assemblages are not hard-edged objects but interpenetrate each other it is easier to see how the principle of legitimacy works in practice. Isomorphism is similarly easier to conceptualise since new assemblages are created from already existing (parent) ones through the inheritance of characteristics. Thus, DOT does not seek to contradict the bulk of existing institutional theory but to reinterpret it.

5.10. DOT: Assemblages Building Social Structure

In DOT the structure of society as a whole is constructed by overlapping assemblages of various sizes with individuals taking part in several assemblages simultaneously. It seems likely that these dynamic and loosely coupled assemblages would exhibit certain behaviour in connection with their maintenance, creation and demise. For example, because institutions are dynamic it seems possible that a moderate level of conflict in an institution helps to keep it stable whereas a lack of disagreement would indicate that the institution is becoming moribund¹⁵. Additionally, it seems likely that new institutions are created from existing ones in a child/ parent relationship where the child inherits most, but not all, of the characteristics of the parent. Furthermore, it also seems likely that an institution would disappear when another institution offers a more useful fit with the noumenal. These are complex matters and require much further research. They are beyond the scope of this thesis, though it is assumed for the purposes of the empirical research that the parent/child relationship holds for new institutions.

In assemblage theory the ability of components of an assemblage to take part simultaneously in other assemblages explains the complexity of society as a whole (DeLanda 2006). The highest level of social assemblage in Berger and Luckmann is

¹⁵ This is for example, essentially, the argument of Minsky's instability hypothesis in economics (Minsky 1977). Michael Thompson pursues a similar argument in his most recent GGCT work (forthcoming) on instability in financial markets.

what the authors refer to as "everyday life" (Berger & Luckmann 1971), though this institution has rather more structure than these authors credit it with having, and this corresponds to what Scott refers to as the "societal" institution (Scott 2014). It is this macro institution which underlies what Hofstede refers to as "national culture" and is the location of primary socialisation for most people (Hofstede 2001), that is, those not brought-up in the context of a cult. It is the norms and values of this institution that largely sets the standards of legitimacy for other smaller institutions. It also sets the norms and values for government (Foucault 2007). At the micro level, the smallest social assemblage is the individual (6.5) which is usually constructed in the context of a family assemblage. In between are a variety of meso assemblages which include cities, regions, professions and organisations (DeLanda 2006). In this thesis the focus is placed on the organisational assemblage.

Although institutional theorists tend to see institutions as social structures that have durability, this is not the case in DOT. The Institution Assemblage does not have longevity as an attribute. In DOT institutions are assemblages that are capable of creating meaning, knowledge and hierarchy but they may have a duration that lasts from a few minutes, for example in the case of a water-cooler conversation, to millennia, for example in the case of a nation or religion. Institutions are easily spawned and just as easily disappear. They inherit their characteristics from parent institutions in the context of their initial construction.

There have been many definitions of organisation which have been advanced by various researchers and the definition advanced by any one researcher, of course, is consistent with the paradigm in which that researcher works. Researchers working in empiricist or functionalist paradigms tend to see organisations as stable, fixed entities which are preexistent objects of research (Bittner 1965; Burrell & Morgan 1979). Researchers working in the paradigms such as social constructionism and critical realism place the emphasis on the process, or organising, rather than the result of the process at any one time. For example, social constructionists emphasise the effect of human agency and the consequences of the argument that if human beings create organisation through their agency it is, therefore, possible for them to do it differently, or not at all (Silverman 1970; Burrell & Morgan 1979); critical realists emphasise the effect of unseen preexistent structure which shapes the actions of the organisational actors unconsciously (Fairclough 2005) and actor-network theory which emphasises the belief that none human actors also play a significant role in the process of organising (Latour 2005).

In modern society - Durkheim's "organic solidarity" (1984) - organisations are usually formed using the diagram of bureaucracy which is consistent with the principle of rational-legal authority that Weber identifies as being prevalent throughout society (1968a). This diagram is part of the knowledge base - Foucault's *archive* (1972) - of the institution of everyday life. It is proposed in this thesis (8.4.) that this diagram is automatically applied to the formation of organisations in modern society by those that have knowledge of it.

It is likely that each organisation, as commonly identified, is an assemblage that this assemblage may have various degrees of territorialisation, strong in some case and relatively weak in others. The organisation assemblage is likely to include other institutional assemblages among its components including professional or functional institutions and factions. This matter also requires further research and is beyond the scope of this thesis.

Chapter 6. Power and the Subject

In DOT, power arises from within discourse from a condition of interiority of the discursive assemblage which Derrida calls *violence*. It is, fundamental to discourse and, therefore, fundamental to human action and consciousness. Foucault also locates power as an effect of discourse (Foucault 1980b p.100) and in his work this discursive model of power is developed in a way that makes it applicable in organisational contexts.

In DOT Foucault's theory of power is a part of the theory assemblage since it theorises the power effect of *différance* within the Institution Assemblage. For example, the effects of disciplinary power are observable within the organisational assemblage and the effects of bio-power are observable within the the assemblage of Everyday Life. In this thesis, it is Foucault's model of power as elaborated in *Discipline and Punish* (1979) and *The History of Sexuality Volume 1* (1980b) that will enable the reinterpretation of GGCT so that it can be used within the DOT methodology.

The Archaeology of Knowledge marks the end of Foucault's *archaeological* period (5.5) where his focus is discursive formations and their conditions of formation whereas *Discipline and Punish* marks the beginning of his *genealogical* period where his work takes on a different focus by directly examining the working of power. In an interview in 1970 he looks back at his early work and comments, "... I ask myself what else it was that I was talking about, in *Madness and Civilisation* or *The Birth of the Clinic*, but power?" (Foucault 1980a p.115). He says that it is a mistake to think that power is only concerned with repression; instead it works mainly as a productive force since it "traverses and produces things, it induces pleasure, forms knowledge, produces discourse" (Foucault 1980a p.119). It is a force which is always at work everywhere.

In a lecture delivered in 1970 (Foucault 1981/1970), he explains the direction that his research is taking. He locates his work in the postmodernist paradigm, as defined in this thesis, describing it main principles in terms of discourse. He says that attention must be paid to the specifics of discursive practice because there is no continuous underlying discourse that controls its specific manifestation. Instead discursive practice is fragmented with bodies of discursive practice that "cross each other, are sometimes juxtaposed with one another, but can just as well exclude or be unaware of each other" (p.67). We should not look into discourse to find its central hub, that would be to go

beyond discourse, but instead we should look outwards from discourse to find its "external conditions of possibility" (p.67). This statement compliments and clarifies Derrida's specification of the postmodernist paradigm in "Structure, Sign and Play in the Discourse of the Human Sciences" (2.1.). By placing discourse at the centre of the paradigm which is a practice rather than a concept like god or man, postmodernism, as it were, turns itself inside out and makes the specific practices in which people take part its focus. Although Foucault rarely uses citation in his writing it is possible to discern the influence of Derrida in a passage in the lecture where he discusses these matters. He says that "the world is not the accomplice of our knowledge" but that discourse is "a violence which we do to things" in order to impose a regularity on the world.

This theoretical position leads to a clarification of the relationship between *archaeology* and *genealogy* which looks at specific practices to discover how power operates. In an interview (1991/1977) about his genealogical methodology in *Discipline and Punish* Foucault says that his method is to simultaneously look at what was done (specific penal practices) and what was said about it (theories and justifications) to discover how these practices came to be the accepted ones which seemed so natural that they no longer needed to be discussed (ibid p.75). He goes on to say that in this work he is not trying to formulate social theory but to discover how a discursive formation acquires a domain of objects in which it determines truth and falsehood (ibid p.79) and, therefore, distributes power. As Deleuze comments about Foucault's thinking, power does not comes from the state, as in Althusser for example, and is not a property of a person or institution but a strategy where the state itself is a product of interacting forces in a "microphysics of power" (Deleuze 2006 p.23).

In his later work Foucault examines two overlapping types of power, *disciplinary power*, particularly in *Discipline and Punish* (Foucault 1979/1975), which works locally and *biopower*, particularly in *The History of Sexuality Volume I* (Foucault 1980b), which works on whole populations.

In this section of the literature review Foucault's view of power and its relationship to related concepts, such as subjectivity and knowledge, is reviewed. Firstly, in 6.1, the literature of the two forms of Foucault's generative power, disciplinary power and biopower, are reviewed. Then, in 6.2, the literature relating to Foucault's theory of the subject is reviewed. In 6.3 the business and management literature that has made use of

Foucault's theories is reviewed. Next, in 6.4 the materialist criticism of Foucault's position is discussed. Finally, in 6.5 the DOT view of the subject is explained.

6.1. Disciplinary Power and Bio-power

Discipline and Punish (Foucault 1979/1975) and *The History of Sexuality Volume* I (Foucault 1980b/1977) employ the *genealogical* method to examine the nature of power in modern society. *Genealogy* focuses on the surface of things, on the apparent rituals where power and knowledge meet, particularly in the body (Dreyfus & Rabinow 1982). Power can only operate in the specific cases of its manifestation so power is not a global or general phenomenon, on the other hand, its manifestations are many, frequent, usually small scale and diffuse (Deleuze 2006).

In *The History of Sexuality Volume 1* (p.139) he makes clear the dual nature of genealogy which involves revealing the working of power in two forms: disciplinary power and bio-power. Disciplinary power operates on the individual and controls his or her body; this is the topic of his book *Discipline and Punish*. Bio-power controls whole populations and its emergence is contemporary with the emergence of the concept of population (ibid p.25); this is the topic of his book *The History of Sexuality Volume 1*.

Discipline and Punish contrasts the two sides of an epistemic shift which took place in Europe between approximately 1810 and approximately 1830 in the field of penal practice. On the one side of the discontinuity, punishment was spectacular, exemplary and public. Often the criminal was publicly tortured and killed and the crowd played their part by witnessing the event. Lesser crimes might be punished with fines, if the criminal had means, or banishment. Prison was not used as a form of punishment in itself but only as a place to hold the accused while the trial was being conducted. Foucault connects this approach to punishment with the form of political power at the time. This was shaped by sovereign power where the main purpose of the king was to maintain his power. Any criminal behaviour was looked upon as a challenge to his authority and vengeance was taken accordingly. In contrast, on the other side of the discontinuity political power rests in the hands of government whose purpose is to look after the interests of the people. Instead of vengeance being exacted on the body of the convict being subject to destruction it is maintained and the focus changes

to his soul so that he becomes a docile body constantly observed and controlled. Instead of spectacular public torture and execution, punishment takes place in private behind high walls and consists of constant surveillance by officials and regulation through a timetable.

Foucault does relate the operation of the legal and penal systems to the changing economic conditions over periods of time (ibid pp. 82-87). However, his argument is not reductive since he does not expect these economic conditions to explain the phenomena with which he is concerned. The economic is merely a collection of factors among many which come together to produce the actions and concepts that he describes.

The content of *Discipline and Punish* is largely historical data and its discussion, yet Foucault is not writing a history in the conventional sense: he is not trying to understand the historical milieu for its own sake. Instead he is following the principle that phenomena do not have an essence but only a history and it is the present that he is attempting to analyse; as he puts it, he is "writing a history of the present" (ibid p.31).

Dreyfus and Rabinow comment that he is not writing commentary, which would just repeat the sources in different words; he is not trying to understand the experience of the actors he describes in their own terms since there is much about their own motivations that is obscure to them and he is not analysing their understandings in order to find the hidden meanings that lie beneath since this would also leave the researcher's own unconscious motivations obscured (Dreyfus & Rabinow 1982 pp.122-5). The aim of *genealogy* is to uncover what is hidden in our own outlooks through the analysis of specific data which, in *Discipline and Punish*, is the uncovering of disciplinary power and its workings in the world in which we live.

He uses the example of the penal system to illustrate how disciplinary power is applied. Under this system incarceration is almost the only type of punishment for any crime (ibid p.115). The prison regime is one of hierarchical normalisation and surveillance. Prisoners are placed in categories according to their crimes, state of mind and danger to others. Their location is carefully controlled so that their guards always know exactly where each individual is and they follow a strict timetable so that their time is also carefully controlled. The prisoner is to be rehabilitated by training his body to induce good habits and discourage bad ones and the timetable plays a part in this strategy in that it prevents idleness.

In the disciplinary system the prisoner becomes objectified: his body is fully controlled so that he becomes docile, he is the object of surveillance and a written record is kept of his crimes and conduct in the prison so that he becomes a case in a file. Thus, the prisoner becomes an object of knowledge and Foucault makes the point that by becoming an object of knowledge the prisoner becomes a particular case that is also slotted into scientifically determined categories and in this way power is exerted upon him.

He identifies the panopticon as the diagram of disciplinary power. The panopticon is a design for a prison invented by the eighteenth century English philosopher, Jeremy Bentham. In this design the prison is a circular arrangement of cells several stories high with a large window in the inner wall of each cell facing the centre of the circle and a corresponding window in the outer wall of the cell facing outwards so that from the centre the prisoner can be clearly seen in silhouette. There is no means of communication between the cells and with the arrangement of some radial walls which go full height from the centre to the inner wall of the circle of cells, the prisoners cannot see into each others' cells. At the centre of the circle is the guard tower so that a guard can see the silhouettes of all the prisoners arranged in 360 degrees around him. However, the windows of the guard tower have blinds so that the guard cannot be seen by the prisoners.

The panopticon is the ideal surveillance technology. Since the prisoners do not know when they are being watched they have to assume that they are being watched all the time and are forced to internalise the rules of behaviour which they believe will be acceptable to the guard. In fact, there may be no one in the guard tower and the panopticon serves its purpose of controlling the prisoners as long as they believe that they are being watched, or might be watched.

Foucault argues that at the time the panoptic diagram was first applied to the penal system it was applied to all aspects of society and quickly the assumptions of disciplinary power became so entrenched that they became beyond question. One of the examples that he gives is that of the academic examination system. Here there is an

"observing hierarchy", the teacher or examiner who holds power over the candidate wielding this power on the authority of a powerful institution usually connected in some way to the state, and a "normalising judgement" which divides the students into categories and punishes those who do not perform to the required standard (ibid p.184). This process resembles a scientific experiment in that it is objective and purports to establish the truth about the candidates. Its underlying assumptions are placed beyond question because of its objective character. It also has a fixed ritual and actors who play well recognised roles. It makes the particular characteristics of the candidates more visible while maintaining an invisibility of how power is at work. It also places the examiners under surveillance through an elaborate apparatus of moderation, examination boards and appeals procedures. As the candidates collect their qualifications they become categorised and increasingly objectified so that they can be more easily digested by the labour market with the failures as much as the various levels of success channelling them towards different modes of employment.

Foucault points out that prison has been used as the main form of punishment for two centuries but it has not eliminated, nor apparently reduced, crime. He reasons that it must, therefore, have another function. He points out that prisons become schools for criminals institutionalising some people into delinquency. It is these people who are the main objects of the work of the police and the legal system. These people are the justification for the surveillance of everyone else.

In *The History of Sexuality Volume I* (1980b) Foucault explores the means by which power works by looking at the construction of sexuality. He begins by examining the commonplace opinion that since the seventeenth century in the west sexuality has been repressed with talk about sexual matters subjected to various taboos and limitations. However, he finds that at the same time there has been a huge proliferation of talk about sexuality in the official spheres of medicine, science and law. A body of knowledge has been created and people have been categorised by it. For example, "The sodomite had been a temporary aberration; the homosexual was now a species" (ibid p.43). The science of psychology adapted the model of the Catholic Church's practice of confidential confession to encourage people, objectified as patients, to talk about their sexuality which was valorised as the ultimate truth about their personalities. At the same time, the appearance of power as it operates is inverted with the patients apparently

achieving freedom through their confessional narrative whereas the reality is that this is the point at which they are being subjected to domination (ibid p.60).

He poses the question of why we believe that sexuality is repressed when there is so much talk about it. The answer that he finds lies in the relationship between sexuality, power, knowledge and discourse. Firstly, we think of power as a repressive force. It places prohibitions on things and punishes transgressions. We think of power in terms of law which always has physical force as its ultimate recourse. However, Foucault proposes that power is far more pervasive than this view suggests. Although it is easily observed in its acts of repression, power also generates social structure including subjects and their modes of consciousness. Both the repression of sexuality and the endless babble about it emanate from the same source which is the relationship between power and knowledge. When power operates negatively in the form of laws, rules and prohibitions it is visible but when it operates to generate structure it is invisible, "Its success is proportional to its ability to hide its own mechanisms" (ibid p.86). If power were visible when it operates generatively it could be questioned and undermined, so it is only when power naturalises itself by generating structure that is apparently "natural" or the "only way things can be" that it can operate successfully. This characteristic of the operation of power is significant in the formulation of DOT. Secondly, power and knowledge are intimately connected. They are not at odds with each other so it is not possible to speak truth to power because power has already constructed what is true and resistance is always already constructed by power (ibid p.95). It has also shaped desire and constructed what is pleasurable (ibid p.45). Thirdly, power works everywhere and at all times, it seeps into the capillaries of everyday life; it is always already present.

Foucault argues that it is significant that the construction of sexuality as a set of characteristics of the person rather than, as had previously been the case, a set of pleasurable acts coincides with the rise of the concept of government as an organisation which looks after a population. Prior to the emergence of sexuality people were controlled through alliance. That is for example, marriage was not primarily a means of demarcating sexual pleasure but of making a contract for the raising of children and the transfer of property. In the epistemic shift that created bio-power the concept of population was created and it became the responsibility of government to look after, or manage, this population. It was incumbent on government and its bureaucratic

machinery to monitor the attributes of population that ensured its maintenance, its resources, its labour power, its health, its fecundity, its morbidity and mortality. At the heart of this nexus of knowledge and power is sexuality.

Foucault specifies four methodological rules for examining the construction of sexuality, though these equally apply to any other effect of power. Firstly, power and knowledge are linked so that there is no power without knowledge and no knowledge without power. This binary entity is always material and specific, so it always works locally. Secondly, researchers should not ask simplistic questions about who has more power than whom. These questions miss the point that the operation of power is dynamic and the more revealing questions are about the matrices and flows of power which shift between different parts of the matrix. Thirdly, though power always acts locally it also fits into an overall pattern working at a higher level. So, the pattern of power distribution in a specific family is consistent in some way with the working of the state. Fourthly, power and knowledge exist and are joined together in discourse. However, power does not work simply by enabling one type of discourse while suppressing another but instead plays discourses off against each other in complex patterns:

It is this distribution that we must reconstruct, with the things said and those concealed, the enunciations required and those forbidden, that it comprises; with the variants and different effects – according to who is speaking, his position of power, the institutional context in which he happens to be situated – that it implies; and with shifts and reutilizations of identical formulas for contrary objectives that it also includes.

(Foucault 1980b p.100)

In this complex pattern silences play the same roles as speech so that they can become strongholds of power or shelters from it.

Although Foucault's methodological advice is useful to researchers in guarding against rushing to apply simplistic discourse analysis when analysing the working of power, he also fails to ask questions about what power is and why it can operate as it does. He fails to ask what are the preconditions of the discourse/power/knowledge relationship.

This is one of the questions that DOT addresses by tracing the genealogy of power in the discursive assemblage.

6.2. Foucault and the Subject

Foucault's account of the subject is easily misunderstood. On the one hand he gives us the view that subjects are created by discursive formations, by disciplinary power and by bio-power, which operates on a sufficiently fundamental level to construct our desires (Foucault 1980b); yet, on the other hand, he also gives us an account of resistance which seems to imply that there is an autonomous subject who precedes and underlies the other subjectivities that power imposes on it (Foucault 1984). On closer inspection, what Foucault actually argues is, firstly, that there is no one fixed truth about a specific subject and there is no transcendental subject that precedes construction in discourse; secondly, that because in enlightenment thinking there is the assumption that there is a transcendental subject - or public self - it opened up the possibility of a reflexive questioning of subjectification – production of private selves by the discursive formations the individual is a member of - and, therefore, thirdly, that this dialogue between the private self and the public selves creates a possibility of the individual's conscious intervention, including resistance, in the process of his or her own subjectification. Thus, though Foucault sees subjects as being formed by discourse he does not see them as being passively determined by it either.

In "Power and the Subject" (1982), Foucault declares that despite his focus on power over the preceding years it was really the subject that he was interested in. Whereas disciplinary power objectivises people, turns subjects into objects, governmental, biopower, works on the seemingly autonomous individual: "Power is only exercised over free subjects, and only insofar as they are free" (ibid p.790). Power is not something that acts directly on people but instead affects the way that they act. However, he insists that power is not something abstract and ethereal but is to do with people exerting their will over others. He explains his methodology as not beginning by taking power as an object of study, already constructed, and developing a theory from there but as analysing how people resist. Power only exists when it is used and can only be understood when it is challenged. He relates subjectivities of people at different times in the past to the nature of government at that time since government is the greatest form of power which influences all the others. For example, the modern European state absorbed the form of the Reformation church which placed a new emphasis on the significance of the individual. Although Foucault gives us a model of how subjects are constructed at the societal level, he does not look at the construction of subjects at the individual level.

Chan (2000) explores the concepts of freedom and resistance in the workplace from the perspective of Foucault's generative model of power. His discussion is based on the difference between the modernist and postmodernist paradigms. In modernist models of power there is an autonomous individual who has power imposed upon him bringing about his subjugation. From this position it is to be expected that the subject resists power and seeks freedom, which is freedom from constraints. Foucault's postmodernist model is quite different. Since discourse is at the centre of the paradigm rather than the human all subjectivity is generated by power. Chan points out that this model has confused some modernist critics because, from inside their paradigm, it seems that it follows from Foucault's argument that because all subjectivity is discursively constructed all subjects are the passive dopes of the forces that generated them, therefore, resistance is without purpose. Chan counters this argument by explaining that in Foucault's model resistance is always already present: because of the nature of construction, the supplement is always at work. Thus, order is impossible without disorder, law is impossible without criminality, organisation is impossible without resistance and so on. Foucault's model of freedom is a deconstructive critique of the structures that power makes so that they can be examined and made differently. Harman (2012) investigates organisational learning using the same theoretical principles.

Foucault addresses the problem of free will as a basis for ethics in his later work. Crane et al. (2008) apply Foucault's thinking on ethics specifically to business ethics. For Foucault, the subject is, at the same time, constructed by power and constrained by power. However, since the subject is constructed by power so too is desire but freedom, which is the ability to act on desire, is always constrained and can only ever be a limited catalogue of possibilities. Freedom arises from the extent of the ability of individuals to make choices to indulge, restrain, direct or transform their desires. From this freedom the possibility of ethics also arises. In the context of the shaping of subjectivity by disciplinary power in bureaucratic institutions, Foucault is claiming that individuals should chose to exercise self-discipline instead of just following the rules. Of course, it may be objected that Foucault's argument collapses because the desire for self-discipline is also constructed prior to their consciousness and therefore Foucault's subjects are automata after all. However, the point being made by Foucault is that it is a subject that is created which itself has desires and is not a passive responder, therefore, a dialogue is constituted between the subject and its experience of its environment which is the site of choice and, therefore, ethics comes into existence. Crane et al. discuss how Foucault's view of ethics could be applied in the workplace. They advise that it would consist of moving away from an ethical schema based on rules or codes towards an individual approach where people examine their relationships with themselves and with others.

6.3. Foucault and Management

Foucault has suffered from being fashionable. He achieved celebrity status in France in the 1970s and his name became a buzzword for intellectual chic from then until the end of the twentieth century. For a time, it was necessary to cite Foucault in order to sound authoritative and so his work has been misunderstood and misappropriated as well as understood and employed. More recently his work has become increasingly less fashionable among organisation scholars as though they had heaved a collective sigh of relief that they no longer had to read these difficult books and manipulate these difficult ideas. Some scholars have even felt it necessary to plead in leading journals that Foucault should be given a second chance (Dixon 2007; Barratt 2008). The statistics from Scopus for articles published which mention Foucault's two models of power show a steady rise until 2012-2013 and then a decline (Appendix B.5).

Foucault's model of power has immediate and obvious application in the modern workplace. According to Foucault power and knowledge are mutually constitutive and, in this case, the employer needs to have knowledge of employees in order to manage them. There have been a number of studies which have looked at the relationship between Foucault's conception of disciplinary and bio-power and the function of Human Resources Management (HRM) in the modern organisation. Fox (1989) looks at the use of management training to reinforce disciplinary power in the organisation. He uses Foucault's heuristic of the panopticon to explain the power structure of a modern

organisation. The panopticon creates a hierarchy where the observed prisoners become increasingly objectified and subjugated as their guards know more about them while, at the same time, the guards are invisible to the prisoners who know nothing about their methods or judgements. Here the prisoners of the heuristic translate into the employees of the organisation and the guards translate into the managers. He suggests that management training, which in itself acts according to the model of disciplinary power with the trainee manager as the object, serves to increase the knowledge of the managers and so it increases the legitimacy of the hierarchy in the organisation justifying the manager's authority to make normalising judgements on their subordinates. He suggests that the manager's role might be investigated using ethnomethodological techniques focussing on the written records produced by managers. Weiskopf and Munro (2012) suggests that the modern corporation is evolving into a form where discipline, based on Foucault's model of disciplinary power, is increasingly inappropriate as a form of HRM because of the increasing complexity of the social forces that act on individuals and where security, based instead on bio-power, is becoming more common. A regime of security puts the emphasis on using the subjectivity of employees as a resource rather than seeing it as something to be shaped and controlled. This is a movement towards a new model of government and capitalism where human capital, which values the skills and creativity of individuals, is of key importance. In a regime of security, control of individuals is much looser: it enables individual freedom while, at the same time, managing risks to society as a whole.

Barbara Townley (1993) provides a detailed analysis of the ways in which the HRM department of a modern organisation uses disciplinary power in the same way that Foucault describes it being used in prisons and other institutions. Firstly, the employer must locate the employee geographically and conceptually and three methods are employed: enclosure, partitioning and ranking. Enclosure is the creation of an inward looking space in which work is done and a strict division is made between work and non-work. Partitioning is the demarcation of the areas of the office or factory where different types of work are carried out, for example, the shop floor is separate from the office and the different functional departments each have their own area. Ranking is the hierarchical ordering of the employees who have been classified and measured. Each individual must be calculable and so must be measured and classified using various

HRM tools which compare individuals with an objective scale and compare them with each other. This use of measurement affords the punishment and reward of employees at the point where disciplinary power becomes coercive. Secondly, time and movement are observed, measured and controlled since are both are a resource of the employer and must not be wasted. Activity in the workplace is performed according to a timetable and the movements the employee must make to do the work are analysed and prescribed. Taylorism is an obvious application of disciplinary power. The observation of individuals is key to the operation of disciplinary power and Foucault identifies two methods: the examination and the confession. An example of the use of examinations is psychometric testing as part of the job selection process and confession is induced in selection and appraisal interviews with open-ended questions about employees' own perceptions of their progress, their strengths and weaknesses and their aspirations.

Kinsella (1999) studies the behaviour of scientists in a physics laboratory. When two teams of researchers produce two contradictory sets of findings there is a clash between their professional subjectivities that insist that the individual scientist should fight for his or her view of the truth and the needs of the organisationally constructed subjectivity that requires a definite result and, therefore, consensus. In fact, the scientists strive for and eventually reach a consensus without any external coercion at all and assume that this is what they must do.

Kinsella quotes Foucault describing truth:

'Truth' is to be understood as a system or ordered procedures for the production, regulation distribution, circulation and operation of statements ... 'Truth' is linked in a circular relation with systems of power which produce it and sustain it, and to effects of power which it induces and which extend it...

(Kinsella 1999 p.175; Townley 1993 p.133)

If scientific truth were as it is assumed to be in an empiricist modernist view, a consensus between the scientists would take precedence over the requirements of the organisation yet Kinsella's findings suggest that Foucault's model of truth applies just as much to the facts of the natural sciences as it does to any other knowledge.

Surveillance is a key concept in disciplinary and bio-power and several studies have looked at this aspect of power in the organisation (Sewell & Wilkinson 1992; Barker 1993; Sewell 1998). Barker (1993) observed that the move from a bureaucratic, hierarchical and rule based organisational structure to one of self-administered teams increased the constraints experienced by employees because the mutual surveillance among team members was more thorough and demanding. Sewell and Wilkinson (Sewell & Wilkinson 1992) analysed the JIT/TOM¹⁶ toolbox of management techniques in the light of Foucault's model of disciplinary power. They found that these techniques worked through increasing the level of surveillance. The way that the business processes were managed prior to the introduction of JIT/TQM was through a hierarchical system of management surveillance with employees responsible for their work to a manager (as in Taylor's scientific management) but with the introduction of JIT/TQM surveillance became panoptic with the employees working in self-regulating teams with responsibility to their colleagues. This device increased the level of scrutiny and placed greater pressure on each employee to perform making disciplinary management more effective than scientific management. Thus, a device that at first sight appears to empower employees and give them increased autonomy, in practice, does the opposite. However, the authors argue that peer scrutiny is not sufficient to gain the maximisation of resources that the higher mangers seek. Even with peer scrutiny within the team there is the possibility that the team members may collude with each other to conceal improvements that they discover in the processes from their superiors in order to make their lives easier instead of using them to increase productivity as is demanded by the philosophy of continuous improvement which accompanies JIT/TQM. For this reason, team working must also be accompanied by the use of information technology which centrally monitors the work processes allowing for detail analysis that is clearly visible to managers and which can be made visible to everyone,

¹⁶ Just-In-Time (JIT) and Total-Quality-Management (TQM) are aspects of a quality management philosophy developed by the Americans W. Edwards Deming, J.M. Juran and others in the 1950s. This philosophy was adopted and developed by Japanese industrialists before it was re-imported to the west in the 1980s. Its main principles include: a focus on customer definitions of quality, employee empowerment, continuous improvement and 'lean' processes (meaning having the minimum of raw materials and finished stock inventories) (Oliver & Wilkinson 1992; Heizer & Render 1999).

simultaneously putting everyone under scrutiny from within and from outside the team. This disciplinary effect of the use of information technology has also been specifically investigated in a number of studies (Moore 2000; Ball 2006; Brivot & Gendron 2011). Sewell (1998) points out that discipline only has the effect of compelling employees to perform to a standard but does not encourage them to exceed the standard perhaps by innovating in a way that might benefit the organisation as a whole. Sewell (2005) points out that while the vocabulary and thinking behind the management of knowledge workers are different the principles are the same disciplinary ones as they are in labour process thinking.

Jorgensen (2002) looks at the generation of knowledge in organisations. Foucault's genealogical methodology sees power as only existing in its specific manifestations. Since power produces knowledge, it too must be specific and local rather than something general and universal. Jorgensen gives functionalism as an example of what Foucault's rejects as social and historical theories that are applied broadly, what Jorgensen calls "totalitarian sciences" or what Lyotard calls "meta narratives" (ibid p.32). Foucault complained of scholars reducing the complex network of minor events that compose history to totalising narratives. Also he mocked, following Nietzsche, the search for origins of a people or of an idea saying that origins occur in chance interactions and small events, usually forgotten. Totalising narratives suppress smaller narratives, yet these smaller narratives give rise to local knowledge and offer alternatives.

Of course, genealogy is also a meta narrative – and so is DOT. The difference between these meta narratives and the ones that Foucault complains of is that these are meta narratives that seek to make visible the minor narratives that other meta narratives suppress. Foucault's approach to totalising and local knowledges is similar to Bakhtin's concept of two tendencies in discourse, the centrifugal tendency which creates *heteroglosia* (many voices) and the centripetal tendency which creates *monologism* (one dominating voice) (Holquist 1990; Todorov 1984; Bakhtin 1984).

Linstead and Brewis (2007) examine the relationship between passion, desire, motivation and knowledge. They assume that there is a creative force in human beings that precedes discourse which is manifested as "formless, unpredictable desire" (ibid p.351). Using Foucault's model of power, they argue that this force is constructed in

discourse as a lack which can become motivation to supply the lack. Theories of motivation at work such as those of Herzberg, Adams and Vroom are predicated on this assumption. Thus, there is a desire for knowledge which underlies our motivation to engage with the world, that is, engage with otherness but knowledge is also constructed by power so that it becomes a commodity. Their model of desire comes from Bataille. This argument is of interest for the development of DOT because it illustrates how Foucault's model of power explains constructs such as motivation and knowledge. This is not, however, the place to fully critique their model of desire as a force which anthropomorphises something which is, perhaps, not exclusively an attribute of human beings or, necessarily, of living organisms.

Gane (2012) follows the theme of governmentality¹⁷ in Foucault's later lectures at the Collège de France which concerns the role of government. This discussion is focused on society as a whole rather than on the level of organisations or fields. Foucault identifies a change which is currently taking place in the form of a shift from the liberal model of government applying disciplinary power towards a neo-liberal model which is a society of control. Under the liberal model the government watches over the market and only intervenes when something goes wrong and obstructs the working of the free market. It supports the market for example by providing legal machinery for the enforcement of contracts and the establishment of property rights or it might proactively support the market through infrastructure projects. Under the neo-liberal society of control power is applied more loosely and less coercively. Instead of people being controlled by commands or prohibitions they are channelled by devices like passwords so that they can only find themselves in permitted spaces. In neo-liberal society individuals have subjectivities that are formed by a wide range of different social structures. Instead of seeking to shape people's subjectivities power harnesses their individualities.

¹⁷ Foucault explains the meaning of this term as (1) a complex form of power that is targeted on the population as a whole, (2) the pre-eminence of government power that through a multitude of apparatuses creates bodies of knowledge and (3) the historical process by which the modern 'governmentalised' state was formed (Foucault 1991 pp.102-103).

6.4. Power and Discourse

Foucault believes that power arises from the relationships generated by discourse in the discursive formation, or Institution Assemblage as it is termed in DOT. In discursive formations power relations are generated which become entrenched because the assumptions on which they are based become naturalised, self evident and, therefore, beyond question. A regime of power such as sovereign power or disciplinary power is diffused throughout a whole society through diagrams of power relations that create isomorphic discursive formations such as the prison, the school, the hospital and the factory.

Foucault's method is to closely observe practices and listen to the actors' perspective on what they do rather than to approach the matter with pre-existent social theory so as to reveal the working of power. The individual subject is created within a discursive formation and therefore does not normally have sufficient perspective to see the larger context in which they function. Similarly, researchers are not aware of the preconceptions that they bring to their observations and interpretations. By seeing the practices and theories of the actors under observation researchers can see a larger perspective which allows them to gain a "history of the present" which includes the researcher as well as the observed. What is revealed is the way that power seeps into the smallest spaces of our lives which it mostly does undetected.

In modern society power operates by surveillance and normalisation; it is what Foucault calls disciplinary power. The diagram by which power operates is the Panopticon: which is a technology to induce constant self and mutual surveillance. Foucault shows how the prison system creates a body of delinquents who serve power by justifying universal surveillance. He gives some examples of how it works such as through the system of academic qualifications but the same diagram can be seen at work in all aspects of our lives including average speed cameras on roads, the checking of the CVs of job applicants by human resources departments and open plan offices. This form of power does not serve the ends of specific individuals or groups since these subjects are themselves created these same forces. Instead it has a logic of its own which cannot be questioned.

Foucault's theory of power has been criticised from the point of view of the "new materialism" (Lemke 2015 p.3) which stems from Deleuze's idea that things, as well as discourse and people are actors in the social sphere which finds that his work is "anthropocentric" and "constructivist". This is a school of thought of which has already been described above in the review of the relevant literature of Deleuze, Latour and DeLanda, additionally Harraway and Barad are also leading exponents. Lemke (2015) discusses Barad's critique of Foucault's suggesting that since Foucault's later conception of bio-power includes the notion of "government of things", Foucault's ideas are not at odds with those of the materialists but might potentially inform them. Barad makes three points of criticism (Lemke 2015; Barad 2007). Firstly, it limits its analysis of the operation of power to the social and assumes that the material world is passive in social institutions. This is the criticism of Foucault that says that his work is anthropocentric. Materialists argue that the culture/nature binary works on assumptions that have not been examined and are not as self-evident as they appear to be. Secondly, it ignores techno-scientific practices that are part of the construction of the human. Thirdly, it does not include an adequate account of the relationship between meaning and matter. According to Barad's argument because of Foucault's lack of appreciation of the role of the material in the social, he overestimates the role of the natural sciences, which are subject to the same disciplinary forces as any other activity, and underestimates the role of the physical in bio-power.

Lemke counters these materialist objections to Foucault's thinking by citing a lecture from towards the end of his life where he talks about the "government of things" (Lemke 2015; Foucault 2007). Foucault's list of "things" includes not only people and the relationships between them but also "wealth, resources ... territory climate, dryness, fertility ... accidents, misfortunes, famine, epidemics, and death" (Foucault 2007 p.96). Here he makes no distinction between the human and non-human actors. He introduces the concept of "milieu" which includes people acting on each other, people acting on things and things acting on people. Thus, Lemke argues, Foucault himself demonstrates the compatibility of his concept of bio-power with the materialist paradigm.

In the development of DOT in it will be argued that the weakness of current postmodernist theory is the inadequacy of its account of the relationship between power

and things and it will also be argued that the weakness of materialist theory, such as Barad's, is an unsatisfactory account of epistemology, which is taken to be unproblematic. DOT will overcome both of these weaknesses by showing the potential for a materialist postmodernism. One step towards this synthesis is Lemke's demonstration that Foucault's theory of power is consistent with materialism.

6.5. DOT and the Subject

In DOT the individual person is an assemblage that consists of two separate core assemblages, the subject and the animal, in addition to which there is the history of the whole assemblage and its immediate context. What is taken to be a hard-edged entity in modernism, the autonomous individual, a meeting place of many different forces or a node in a dynamic network?

According to Kramer and Bressan, at the physiological level the human organism is not only a totality of mutually supporting components but is also an assemblage of entities of various origins so that

> "... our emotions, cognition, behavior, and mental health are influenced by a large number of entities that reside in our bodies while pursuing their own interests, which need not coincide with ours. Such selfish entities include microbes, viruses, foreign human cells, and imprinted genes regulated by virus like elements."

(Kramer & Bressan 2015 p.464)

This physiological entity is what Derrida refers to as the "animal" (2.4.2.) (Derrida & Wills 2002). The human/animal binary has the human in the superior position and this has allowed the human to deny its animal connection throughout most of human history. However, the human is a discursive construct; it is based on the subject which, unlike the animal, has a position from which to articulate¹⁸.

¹⁸ This section seeks to produce a brief formulation from a complex topic. It is beyond the scope of this thesis to fully discuss Derrida's thinking on the subject, for example in "Eating Well" (1995) or to discuss associated related topics such as Spivak's "Can the Subaltern Speak?" (1988).

In DOT the rational-actor of the modernist paradigm is an illusion arising from the tendency of discourse to conceal the working of power. Subjects and objects appear to be hard-edged entities with an existence prior to discourse. The illusion provides a handy tool for everyday consciousness, just as the assumptions of Newtonian physics creates a useful model of the physical world for engineers. However, organising is a fundamental activity of discourse and in order to understand organisations it is necessary to dig beneath convenient assumptions.

DOT follows Foucault's model of the subject (6.2). The self is an assemblage of different subjects constructed by different institutions such as the family, society and various organisations such as schools and employers. The flow of sense perceptions is interpreted from within these institutional subject positions. The subject is not only constructed by these institutions but also is able to act in the process of its own construction. Each individual is the site of his or her own experiences and, therefore, has a unique perspective.

Chapter 7. Grid-Group Cultural Theory (GGCT)

So far, the literature reviewed in this section has been concerned with the components of a theory but it remains at the level of a general theory. To use a metaphor, so far the components of a power tool have been brought together but there has been no mention of what attachments it might drive, perhaps, a drill, a sander, a screwdriver or a spray gun. Perhaps it will be used to drive attachments that have not yet been invented. GGCT is an example of an attachment that might be driven by DOT to achieve practical ends which will be of utility to practitioners. Any of these attachments might have some utility without the power tool but the combination produces something far more effective. Of course, the attachment will need adaptation; it was designed in another context and will not immediately connect to the drive shaft of the power tool.

How GGCT can be adapted to become compatible with DOT will be discussed in section 7.5. Here it will be sufficient to review the literature so that the nature of the theory and the range of its applicability can be made apparent. It was first devised by Mary Douglas as an institutional theory but was developed as a theory of risk and for devising solutions to complex, or wicked, problems. GGCT does not depend on the precise nature of the institutional theory it is attached to thus it can be regarded as, in Merton's terms, a theory of the middle range; that is, a theory that is "close enough to empirical data to permit empirical testing" (Merton 1967 p.39).

What is being described here in this review is the evolution of a theory rather than a static entity. I have decided to call this theory "Grid-Group Cultural Theory" (GGCT) rather than just "Cultural Theory" as the exponents of the latest versions would have it¹⁹ because there are many cultural theories and for one of them to claim the title of the whole field is potentially confusing, and not a little grandiose (Mamadouh 1999).

In brief, the trajectory of the evolution of the theory is as follows. The founders of sociology such as Durkheim, Weber and so on identified two thought styles, hierarchy

¹⁹ It is perhaps symptomatic of flexibility, or vagueness, in the use of this theory that it comes under so many different names, each one marking a difference in interpretation and use: Grid-Group Model, Grid-Group Analysis, Grid-Group Theory, Grid-Group Cultural Theory, Cultural Theory, Theory of Cultural Complexity, Theory of Socio-Cultural Viability and Neo-Durkheimian Institutional Theory.

and individualism that, though opposed to each other in many ways, came together to produce the modern capitalist world. However, GGCT posits that analysis of trends and events based on these two alone do not have sufficient explanatory or predictive power. Mary Douglas identified two cultural dimensions which when combined as axes in a quadrant produced four ways of life or thought styles: hierarchy, egalitarianism, individualism and fatalism. In her work with Wildavsky she identifies hierarchy and individualism as working together as a constructive force at the centre of society with a third thought style that is egalitarian and enclave, which is produced as resistance to the centre, at the periphery of society. In the course of a number of scholars working together, including Mary Douglas and Michael Thompson, the idea of centre and periphery was abandoned and the four thought styles were given equal status. The theory now asserted that all four are ways of life, on the basis of which people act or do not act together, which are always present in any group, of any size. They go on to posit that attempts to silence or marginalise any of the four leads to less favourable outcomes for the whole of the group. They posit that groups have a dynamic negotiation between these thought styles and that people can shift from one to any of the other three according to circumstances. Later developments of the theory assert that each thought style has its own attitude towards nature, human nature and resources each of which are confirmed to some extent by the experienced state of nature – for example, climate change – or state of a market – for example, boom and bust.

However, the detail of the development of the theory is much more complex. The quadrant is common to the exponents of GGCT; however, the labelling of the axes varies a good deal, some GGCT researchers believe that there are not four but five thought styles with the fifth one located at the centre of the quadrant and there is some variation in the descriptions of the four thought styles.

Mamadouh, in an overview of the development of the theory divides it into two strands: a typology of thought styles and a "full explanatory theory" of society (Mamadouh 1999 p.395). The first of these is associated with Mary Douglas and the second with Michael Thompson. Both Douglas and Thompson have worked with a large number of collaborators, including each other, and there has been an enormous amount of work done independently of both; however, the work of Douglas and Thompson is taken as the focus of this review since their work is representative of the elements of GGCT which will be used in this thesis.

7.1. Mary Douglas and GGCT

Mary Douglas attributes the origin of the process of the development of GGCT to Basil Bernstein (Douglas 1973). Bernstein was conducting sociological research into the socialisation of children in London by examining how language is used in their family context. Douglas summarises his findings using two axes which make a quadrant. The horizontal axis concerns the child's experience of being controlled by others and the axis goes from "positional" where the child is expected to refer only to its position as a member of the family to "personal" where the child sees itself as having a unique value as an individual. The vertical axis is concerned with the child's use of language codes and the axis goes from "restricted" where the use of language is appropriate to the specific context of the child's life to "elaborated" where the child is open to acquiring any of the codes which it might come across including academic and professional uses of language (ibid p.49). Thus, in the London context of Bernstein's research children from some working-class families are in the positional/restricted quadrant which makes them unable to use education and other opportunities that are available to them to give them social mobility while children from middle-class families in the personal/elaborated quadrant are able to make full use of the opportunities for education and employment that come their way.

She goes on to adapt Bernstein's model to her own work in anthropology which encompasses a wide range of contexts. The adaptation is heavily influenced by Durkheim's *Suicide* which classifies suicide according to four types of society: egoism, altruism, anomie and fatalism (Thompson et al. 1990 pp.137-140). The horizontal axis of the quadrant becomes "ego controlling others" to "ego controlled by others" (Douglas 1973 p.84). The vertical axis becomes concerned with conceptual classification systems. Douglas points out that restricted codes are not just restricted in what can be articulated but they are also in themselves a control mechanism which restrict the thoughts and behaviour of their users. She mentions that rituals are a part of restricted codes and thus these codes are not necessarily confined to the linguistic. She wants to include the assumption that the way that a code controls its members is linked

to its "cosmology" by which she means the underlying ontology and epistemology of the users of that particular code. To encompass these ideas, Douglas adapts the vertical axis of the Bernstein's quadrant so that it is concerned with conceptual classification, or categorisation. The adapted axis has at one end of the scale "private classification" which provides classification for a limited range of experience while ignoring the rest and at the other "shared classification" which provides different systems for the classification of all experience but leaving the individual free to move between the systems (ibid p.84). Here we can see the influence of Durkheim on her work since the vertical axis seems to reflect Durkheim's notion of mechanical and organic solidarity with mechanical solidarity, associated with a single and limited system of thought typical of the pre-industrial era, below the horizontal axis and organic solidarity, associated with multiple social institutions characteristic of the industrial era, above it (Durkheim 1984).

Douglas herself described her early attempts at defining the dimensions of the gridgroup quadrant as "a simple idea presented in a complicated way" (Douglas 2006a p.1). The idea evolved during the 1980s. The next step can be seen in the book *Risk and Culture* which Douglas co-authored with Aaron Wildavsky (Douglas & Wildavsky 1982). The authors show that people's perception of risk depends on their cultural position. This perception includes not just how to respond to a risk but also in the identification of what is risky in the first place. For example, those with a bureaucratic (hierarchical) point of view the risks that should be given priority are those to the stability of the system so risk is a problem to be solved in advance whereas from the individualist point of view risk is an opportunity from which both positive and negative things can emerge. In the egalitarian thought style the main risk is to nature which needs to be protected.

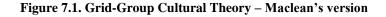
The three ways of life as described in this book produce a specific social structure. At the centre, the hierarchical and the individualist maintain a state of stability between them because they understand each other, supply each other's needs and can find an accommodation between them (Douglas & Wildavsky 1982 pp.99-101). The hierarchical form is close to Weber's bureaucracy, though this similarity is not mentioned. It is typical of large organisations, though size is not the deciding factor since it is also found in small ones. Though risk assessment is done by calculation, here

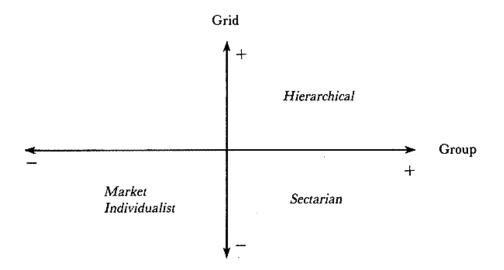
too much data is available so it is filtered through tradition and experience. Decision making follows traditional processes and is not left to individuals. Data is so heavily filtered through traditional processes that the organisation is unable to react to unexpected events. Decision making is slow and reactive so the same problems have to be solved over and over. Goals are vaguely defined resulting in an ease of making changes in direction without appearing to do so and without embarrassment. Energy goes into petty rivalries between subunits so that resources and projects are sometimes allocated to groups not well equipped for the task. In contrast, the individualist form of social life is the market which, on the one hand, is a democratic system where everyone has equality and autonomy so no one is allowed to have privileges but, on the other hand, some people are more gifted or lucky than others and self-reliance is highly respected. The market depends on standardised measurements, stability and fair-play. Without, for example, the law of contract the market could not function and this illustrates why the individualist form of social life needs the hierarchical form to support it. However, for the individualist the rules are there to enable transactions whereas for the hierarchist they are there to prescribe how things are done. Both are concerned about threats to the system as a whole. The third form is referred to in this book as "sectarian". It is found at the periphery of society and is composed of small inward-looking groups who are seeking to escape from the forms of social life prescribed by the other two. The description of this form of life dwells on Anabaptist groups in the USA such as the Amish and the Hutterites. The driving force for this form is a rejection of the centre – composed of the hierarchical and individualist forms – which is perceived as coercive. These groups are small in size and split if they grow too large and put a lot of emphasis on equality between the members with some holding property in common. The sectarian form is also used to describe left-leaning pressure groups such as environmentalist groups.

In this version of the theory the third form of social life, which is labelled "sectarian", places a lot of emphasis on its enclave nature. In later forms of the theory, for example Thompson's work, the emphasis tends to be on the community spirit and equality and this form tends to be labelled "egalitarian". It is not immediately obvious that these two characteristics, enclave and egalitarianism, should go together and it will be suggested

later in this thesis that this ambiguity suggests that it may be advantageous to add a third dimension to GGCT.

In a review of *Risk and Culture*, Maclean comments that there is a problem with this version of the theory (MacLean 1983). He draws the grid-group quadrant (see Figure 7.1 below) as described by Douglas with the vertical axis representing grid – that is, high grid meaning presence of explicit and enforced rules to low grid meaning the absence of explicit rules – and the horizontal axis representing group – that is, high group meaning high emphasis on the group and low group meaning high emphasis on the individual.





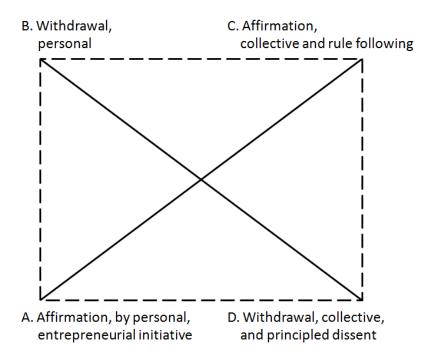
⁽from Maclean 1983 p.911)

He points out that though three of the quadrants have been covered by Douglas and Wildavsky, that is high grid and high group which is hierarchy, high group and low grid which is sectarian and low group and low grid which is individualist, the fourth quadrant, that is high grid and low group, has been ignored though it is the support of these people that might enable one of the other groups to press their agenda.

In an article that first appeared in 1994 Douglas uses a quadrant that is recognisably similar to Mclean's which is referred to as the "cultural map" (Douglas 1996). Now, the missing section of the quadrant has become labelled "isolate" which is a thought style where the individual seeks to avoid being influenced by, or influencing, any group. The

four cultures – Active individualism, Backwater isolation, Conservative hierarchy and Dissident enclave – are presented as a choice made by the individual as a basis upon which individuals might (hierarchy and enclave), or might not (individualism and isolation), form a group and are seen as mutually exclusive hence in competition and opposed to each other. However, Douglas discusses some possible relationships between the four thought styles and offers a "diagram of opposed cultural bias" (ibid p.45; Figure 7.2). She refers to the relationship A-C as the "positive diagonal" which

Figure 7.2. Diagram of Opposed Cultural Bias



(Douglas 1996 p.45)

represents an alliance between the individualist and hierarchical thought styles both of which abhor disorder and chaos and affirm structure and authority. The relationship B-D is the "negative diagonal" which represents an alliance between isolate and enclave thought styles both of which reject the domination of the mainstream.

In the 2000s Douglas published a short paper on the history of the development of GGCT. In this case she uses the terms for the four thought styles: Isolate, Positional, Individualist and Enclave. She acknowledges the contributions made to the model by Thompson and Wildavsky: that they argue that all four thought styles are always present in every group and are in continuous negotiation or conflict with each other and they

argue that the health of a group is the extent to which all four thought styles are able to be heard and take part in negotiation. She admits that there was a problem with the conception of the enclave thought style as she had described it in her earlier work and suggests that it needs revision.

GGCT is a theory of institution and in a series of lectures published in book form under the title How Institutions Think Douglas discusses the nature of institution. Her point of departure is a defence against the economics paradigm of rational individualism (Douglas 1986). As an alternative to this paradigm she proposes a slightly modified form of Durkheim's functionalism. In this paradigm the group determines what questions it is acceptable to ask and what standards of truth the answers should be judged by. She attempts to resolve the difference between the two by proposing that groups act in the group's self interest without any of the group members being conscious that this is happening and the individuals in the group unconsciously act in the group's interests because, ultimately, what is good for the group is good for the individual. The argument is functionalist because there is a feedback loop so if the group is successful in maintaining its own self interests it will continue but if the group acts contrary to its self interest it becomes self-contradictory and therefore dysfunctional and will have to modify itself or dissolve. She quotes Durkheim who argues that without common concepts of "time, space, cause, number, etc." (ibid p. 12) people cannot live together. Douglas extends this concept to stating that people need rules because, for example, it does not matter which side of the road the traffic drives on as long as everyone knows which side it is. Of course, there is no way to reconcile the individualist paradigm of economics with a collectivist paradigm like Durkheim's version of functionalism because in economics the individual enters the group fully formed with a clear notion of self-interest and rational behaviour whereas in a collectivist paradigm the individual is a product of the group and notions of self-interest and rationality vary and are constructed by the group.

Douglas's concept of institution is little different to that of Berger and Luckmann (1971), though she does not mention their work. For Berger and Luckmann, the roots of institutions are habitual behaviours and for Douglas it is conventions.

7.2. Michael Thompson and GGCT

Michael Thompson has been a central figure in the development and application of GGCT. His involvement began as a PhD student of Mary Douglas and was followed by joint authorship of articles with her. Thompson has been prolific in the production of books and articles on the subject as sole or joint author with many others. It is, therefore, convenient to focus on his work to describe the development of GGCT since Douglas. Thompson, along with Ellis and Wildavsky, was an author of a book *Cultural Theory* (1990) which has been influential in promoting GGCT and he later expounded "cultural theory without grid and group" that has modifications to Mary Douglas's typology which, he claims, transforms it from a typology into a theory (Thompson 2008 p.137).

Thompson, Ellis and Wildavsky (1990) describe a version of GGCT that is based on Douglas's earlier work and produces a similar quadrant. Like Douglas's, their work is developed within the functionalist paradigm apparently as an alternative to the rational actor paradigm. They wish to show that there is not just one form of rationality and they want to show that people's actions are determined by their position in a network or group (ibid p.3 p.50) rather than by the rational choices of autonomous individuals.

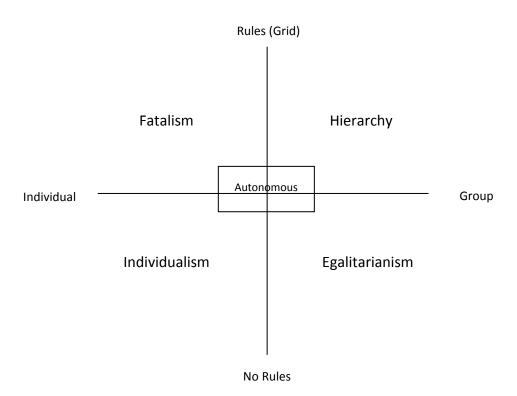
The axes of this version of the GGCT quadrant are the same as in Douglas's quadrant: group is the horizontal axis which indicates the extent that individuals are constrained by the group of which they are members on a continuous scale and grid is the vertical axis that indicates the extent that the lives of individuals are constrained by externally imposed rules also on a continuous scale. They emphasise that power is fundamental to the model and that it represents a rivalry that determines who has control over whom.

A fifth item has been added to Douglas's quadrant, at its centre, which is the autonomous hermit. The "isolate" has become the "fatalist" and "enclave" has become "egalitarian", both of which signal a change of emphasis. Thus, the quadrant produces five "ways of life" (ibid p.1) which are called: *hierarchy, egalitarianism, individualism, fatalism and autonomy* (ibid p.8). Like Douglas, these authors assume that these ways of life are the basis for an alliance between individuals who practice them so that the hierarchists as a group compete with the individualists as a group and so on, though fatalists and the autonomous do not form groups at all because of the nature of their

thought styles. The ways of life are a combination of thought styles and social relationships, though these authors concur with Douglas in seeing cognition as being secondary and place their emphasis on the model as describing patterns of action. They see these ways of life as constructing the desires of their followers (ibid p.55-66). So, to this extent at least desire is linked with power through the ways of life though this is a different conception to Foucault's concept of generative power since in GGCT it is the ways of life that generate desire which in turn generates the need to dominate others. They say that an individual may take part in a different way of life in each of the institutions in which he or she participates (ibid p.265).

The authors describe the five ways of life in detail. Hierarchy requires a strict social order with people occupying different levels, able to give orders to those lower than them while obeying the orders of those above them. The rules are precise and strictly enforced. Existence is orderly and the task of the group is to keep it that way. The justification for this way of life is that everyone benefits if the rules are followed so there must be different roles with different levels of authority and those who have power have it for the good of the system. The egalitarian way of life has strong group boundaries and comes about because of a rejection of coercion and competition produced by hierarchy and individualism. Within the group everyone is equal and there is intensive networking both of which gives the group cohesion; however, lack of authority means that the only way of resolving conflict is expulsion from the group. Individualism is competitive and produces markets in which there is equality of opportunity. The individualist networks as widely as possible to facilitate market transactions. The individualist seeks to be free of control by others and only accepts rules in so far as they enable market transactions (such as formal property rights and law of contract) though the individualist must control others since the individual cannot do alone everything that needs to be done. Often the employee of the individualist is the fatalist whose way of life is founded on the assumption that his or her life is shaped by forces that are beyond the control of the individual. The fatalist is on the periphery of the network and has few network contacts. The autonomous hermit avoids taking part in the network as far as possible seeking to avoid being controlled or to be controlling. These five ways of life and the quadrant which locates them is shown in Figure 7.3.

Figure 7.3. Grid-Group Cultural Theory



(adapted from Thompson et al. 1990 p.8)

These five ways of life is not only about the thought styles of their participants but also each has its own relationship with nature and its own views of human nature. Hierarchy sees nature as perverse yet tolerant. If it is not managed and kept within prescribed limits, it is potentially destructive. As long as it is managed adequately according to the advice of experts the risk which might follow from over or under exploitation is kept to a minimum. Its main assumption about human nature is that people are fundamentally selfish, lazy and unreliable but can be made good by their participation in good institutions. For egalitarianism nature is vulnerable and must be protected. Natural equilibria are easily upset by human activity bringing disaster for all concerned. Egalitarians believe that people are fundamentally good and communally minded but uncooperative behaviour is brought about by participation in coercive institutions. For individualism, nature is benign and whatever is done to it by human forces it finds its own equilibrium. Individualists see nature as a resource to be used and to be used quickly while it is still useful. Individualists believe that people are self-seeking and, because it is unrealistic to attempt to change this, the best thing to do is to channel this inclination so that it produces benefits for everyone. Fatalism sees nature as capricious.

Its unpredictability means that nothing can be learned from experience and we must be ready to benefit from anything nature gives us or protect ourselves from any disasters that may occur. Fatalists believe that human nature is unpredictable and this justifies them from excluding themselves from communal activity. For example, a ruthlessly selfish and self-seeking individual might act benevolently in order to show off his wealth and gain prestige. The autonomous hermit at the centre of the quadrant rejects the dualism between the human and nature believing that the human should be a part of nature accepting the seasons of plenty and scarcity as they come along.

Just as the different ways of perceiving nature and human nature are associated with the five ways of life, so too are attitudes towards needs, resources and the relationship between them. The hierarchist sees the relationship between needs and resources as one of balance. Both must be set at a level that is acceptable to social norms and then maintained in such a way as to avoid uncertainty. The individualist sees the matter as being one of perpetually increasing resources to take care of similarly increasing needs. The egalitarian thinks that it is important to reduce needs to a minimum so as not to stretch resources to a dangerous limit. The fatalist believes that neither needs nor resources can be controlled and that life is a matter of dealing with the mismatches between the two.

Thompson et al. (ibid) argue that nature and human nature behave in the way that a particular way of life - hierarchical, individualist, egalitarian and fatalist - predicts only some of the time. It behaves that way for enough of the time to justify those beliefs and the world provides empirical evidence for all of them. They also give a table of "surprises" which shows when each one experiences discomfirmatory evidence from its environment (ibid p.71). For example, when harvests are good and resources are plenty it is a good time for taking risks, perhaps by trying out a new method of farming. The risk taker is the individualist meighbour getting rich for no good reason from his point of view. When there are a few years of bad harvests the egalitarians survive because this is what they were expecting while the risk taking individualist loses his seed corn and starves. Thus, at some time or other all of the four will be proved wrong and, therefore, encourage individuals to switch to another one so, in times of bad harvests some of the egalitarians may become individualists and in times of bad harvests some of the

individualists may become egalitarians. Thus, the authors argue, that it is the behaviour of others that unconsciously encourages an individual to adopt one way of life or another. The position of the autonomous hermit is different to the other four since this thought style sees nature as cyclical and resilient. Thompson et al. use the metaphor of the ways of living of individuals in a society as being like the behaviour of starlings. These remarkable birds gather in flocks composed of many thousands of individuals. They spectacularly conduct a communal activity of flying in a huge cloud -a murmuration - which moves little compared to a fixed point on the ground but all the birds must keep moving continuously to be able to fly at all. The authors explain this phenomenon by the birds moving from denser to less dense parts of the cloud by reference to a handful of other individuals who happen to be proximate to them at any particular time.

These GGCT scholars are proposing is that the five ways of life are produced by the relationships between individuals and give rise to the five thought styles which have been described. Each of these thought styles, in turn, gives rise to the views of nature, human nature and resources which have also been described. The adherents of the five thought styles can find sufficient confirmatory empirical evidence for their views for these views to persist so none of them is incorrect, but also none of them is complete since the environment has different "surprises" for each one. However, a social group always has all of the thought styles since they are defined in opposition to each other. In the functionalist view of these scholars the balance between the different ways of life within a group is self-regulating, like the pattern of starlings in a murmuration.

Thompson's book, *Organising and Disorganising*, claims to develop GGCT, which is a heuristic, into Cultural Theory, which is a theory of organisational learning (Thompson 2008). In this version of the GGCT concept the axes are labelled differently to emphasise that the unit of analysis is relationships between people. The grid axis has become "asymmetrical transactions/ symmetrical transactions". The group axis has become "unfettered competition/ fettered competition" (ibid p.33). He argues that the earlier, grid-group, version of the concept was not a fully formed theory because it had no explanation of why the four typologies are generated; it only describes what they are. He claims that the explanation can be found in *transaction theory* which posits that as people interact with each other they generate a more orderly system with shared values.

However, Thompson argues that it is not one set of values that is generated but the five that are described by GGCT and these are sustained by their version of their context which provides a flow of confirmatory and disconfirmatory evidence in varying proportions.

Thompson discusses the relationships between the different ways of life in some detail. He refers to the assertion that there can only be these five ways of life as the "impossibility theorem" (ibid pp.36-38). This is the deduction from the way that the GGCT dimensions have been defined that only these five ways of life are possible, no more and no less. Thompson claims that the impossibility theorem may be proved by mathematical modelling but this has been questioned on the grounds that the descriptions of the dimensions of the quadrant are not sufficiently precise to be amenable to this kind of analysis (Nowacki 2004). He also refers to the "requisite variety condition" which states that each of the ways of life depends on the others for its existence. If one way of life dominates and drives out the others, it undermines itself.

This principle of requisite variety is demonstrated by Thompson in his examples of clumsy solutions which are polyrational, that is, solutions that call upon more than one thought style. One of his examples is that of the building of the Emirates football stadium in north London. Arsenal football club, the market/ individualist actor, wished to build a new stadium because their existing one was not large enough. They formed an alliance with the local government authority, Islington Council, playing the part of the hierarchical actor. They agreed that a new stadium would be built on a new site which would involve the demolition of some houses and the re-housing of the occupants. Inconveniently for these two actors, the inhabitants of the houses that were proposed for demolition formed a community group, the egalitarian actor, to oppose the scheme. In the delay caused by the opposition someone noticed that there was an alternative site which had a number of advantages that would appeal to all three actors and this was chosen instead. This pattern of business forming an alliance with government to do a deal which is detrimental to the community is one that occurs many times in Thompson's work (Umejesi & Thompson 2015; Verweij & Thompson 2011). In the longer term the harm done to the community undermines the viability of the scheme. The example of the Emirates Stadium is a poor one, though, since the appearance of the

alternative site does not arise directly from polyrational thinking but appears to be completely fortuitous.

According to Thompson, individuals are nodes in a network and what is significant about them is these relationships rather than what they are in themselves. Thus, GGCT is not a typology of personalities, though Douglas does adopt the position that individuals can be categorised according to thought style (Mamadouh 1999 p.404). In Thompson's version, there is no straightforward correspondence between individuals and thought styles since each individual is capable of adopting any of the thought styles according to how the individual finds himself or herself orientated towards specific circumstances. Thompson provides an example from empirical research that shows how inhabitants of a Swiss village adopt all of the styles of life according to the role they happen to playing at the time (Thompson 2008 p.96). However, for GGCT there seems to be nothing smaller than the group and the theory does not extend to psychology in any way. Though, the theory is described as "fractal" the levels that this description applies to ranges from society as a whole down to small groups like the family, but no smaller. Nowacki takes Thompson to task about the scalability of the theory pointing out that it falsely maintains a semblance of scalability because its terms of description are used metaphorically to cover the circumstances of the individual and the group (Nowacki 2004).

As in *Cultural Theory* (1990), Thompson explains the relevance of the five ways of life as fitting with states of the context of those ways of life. Thus, for example, when nature actually is benign, the individualist view of it is confirmed and so on. In *Organising and Disorganising* he argues that the group is always in a complex, two-way relationship with its environment, which is always changing. Thus, there is no one way for people to behave towards a market or aspect of the natural environment. With Mary Douglas, GGCT had started out as a typology of ways of life and thought styles of groups of people of various sizes which are composed of relationships between individuals and between groups; however, with these later developments Cultural Theory becomes an all encompassing theory of groups and their environments so that it is not just human relationships that are being included but also relationships with external agencies, particularly nature and markets.

Thompson et al. (1990) draws a table of "surprises" which cross references each thought style's supposed attitude towards nature with how nature actually behaves. The argument is that the environment in which the group lives cycles between four different types each of which confirms the view of one of the thought styles. Each of the four states of the natural world brings disconfirmation to some of the thought styles and these are the "surprises". Thompson (2008 pp.109-11) refers to an article by Emery and Trist (1965) which describes four states of the organisational environment as: Placid randomised - an unpredictable world in which it is impossible to formulate strategy because it is not possible to learn from experience; Placid clustered - there is some order so it is possible to learn from experience and construct strategy; Disturbed reactive – the world is crowded with competitors so strategy has to take into account not just what is happening in the world but also what others are doing and, Turbulent – the environment is crowded with competitors and heavily interconnected so actions have unintended consequences therefore adaptability is the main advantage. Each of these four organisational environments favours one or more of the GGCT ways of life and is unfavourable to one or more of them.

7.3. Using GGCT

In the business and management literature, GGCT has been used as an approach to organisational problem solving; problems of economic development and examining risk in general, but particularly the risk of environmental change or damage and the risks of market uncertainty.

Each use of GGCT interprets the theory slightly differently from any other; this is a loose and flexible theory. Hendry finds a conflict between hierarchical and individualist cultures in modern organisations (Hendry 1999). He begins by defining his own account of Douglas's view of GGCT so that he can compare it with a Williamson's, rational-actor, transaction cost theory: it has four thought styles; where the axes cross is a zero point on both; the zero point on the group axis marks the point where the individual becomes free of constraints; to the left of the zero point of the group axis the individual increasingly dominates others; the zero point on the group axis represents confusion; moving down the bottom half of the group axis there is increasing strength of private systems of thought, creativity and the possibility of insanity and the whole theory is

about how individuals perceive and structure their world. He criticises Douglas's later amendments of the theory which removes the zero point from the centre and makes it more orientated towards group behaviour than describing individual commitments. In Hendry's interpretation individualism is shaped by the institutional needs of such things as the law of contract whereas hierarchy is shaped by a fear of failure to perform and by mutual dependence. He sees GGCT as being an improvement or extension to rationalactor theory rather than being at odds with it.

Hendry's application of GGCT is to trends in management thinking. He contrasts the individualist thought style of the entrepreneur that founds a business organisation to the hierarchical thought style that must be used to manage it. He points out that the fashion for culture in the 1980s was an attempt to reconcile the need for innovation to adapt to a changing market with the need for control to keep the organisation running smoothly by strengthening the power of groups and reducing the power of formal structures thus making individual employees feel that they had more freedom while, at the same time, making them more accountable to their immediate colleagues. Hendry sees this as a strengthening of the individualist thought style yet from a Foucauldian perspective of disciplinary power this account seems simplistic and uninformative. He goes on to analyse other developments in management thinking in terms of a struggle between individualism and hierarchy.

Hendry's contribution is useful in two ways. Firstly, it illustrates that GGCT is flexible and can be adapted to the argument of the researcher. Hendry's version of GGCT is somewhat different to Thompson's yet its use is internally consistent. Secondly, it illustrates that used on its own it tends to produce inadequate accounts of organisational phenomena. This adaptability of GGCT might suggest that the contention that it can function as a full-blown theory is erroneous and might even suggest that it is too vague to be useful at all. In the development of DOT, I shall argue that it is valuable in its original form as a typology of thought styles. As for Hendry's perception of a conflict between individualism and hierarchy in organisations I shall make three arguments: firstly, such a conflict does exist but, secondly, the relationship between the thought styles is as much one of mutual support as conflict and thirdly, that arguments like Hendry's that attempt to use GGCT to explain power relationships are rather crude. In the development of DOT the GGCT typology of thought styles is used in combination with Foucault's theory of disciplinary power, of which the concern with organisational culture and team working is a prime example.

In an article about organisational problems, Mason and Mitroff classify problems into three types: tame problems which are those that have a few variables and it is possible to have some idea of what the solution may be like; problems of disorganised complexity which are complex because there are many variables to consider but these variables act independently and wicked problems, or problems of organised complexity, which there those where there are many variables which are intertwined in each other (Mason & Mitroff 1981). Tame problems require technical knowledge and expertise to solve, complex disorganised problems require the collection of data and statistical aggregation and analysis of that data whereas wicked problems have no one solution, formulating the problem and identifying the solution are the same thing and solutions require input from a diversity of viewpoints. The authors make a connection between organised complexity and Emery and Trist's "turbulent environment" (Emery & Trist 1965). They summarise Rittels's discussion of the characteristics of wicked problems as: interconnectedness - these problems are linked to other problems; complicatedness factors are linked in feedback loops which may multiply effects or cancel each other out; uncertainty – exist in a uncertain and constantly changing environment so risk has to be accepted; ambiguity – can be perceived differently from different viewpoints; conflict - often the occasion of power struggles between competing interests and societal constraints – social and political factors as well as technical and financial ones have to be taken into account (Rittel 1972). Verweij and Thompson offer GGCT as an effective way of dealing with wicked problems (Verweij & Thompson 2011)

According to Verweij and Thompson (ibid), wicked problems are dealt with by the construction of *clumsy solutions*. The alternative is to build solutions around one of the four thought styles – hierarchy, individualism, egalitarian or fatalist – which would be, in their terminology an *elegant solution*. Since elegant solutions only take account of a part of the whole picture, they create a situation that is not as beneficial to any of the parties, including the one of the dominant thought style. According to the authors, clumsy solutions are beneficial to democracy and produce more benefits for everyone concerned in the problem.

Various researchers have demonstrated that the GGCT thought styles can be applied in their field with illuminating results including ethics, public administration and climate change. Karmasin combines GGCT with Habermass's consensual discourse to show how a cross-cultural consensus on ethics may be produced (Karmasin 2002). Hood applies GGCT to system for the control of public administration (Hood 1995). He argues that GGCT provides a useful way for categorising control systems, a way of predicting the kind of instability that is inherent in each of them and ways of combining them to make something more effective. Blakeman uses Hood's version of GGCT to create a system of categorisation of attitudes towards regulation for management evaluation (Blakeman 2003). Swedlow (2002) evaluates Wildavsky's application of GGCT to public policy. Assuming that individuals favour one thought style in all aspects of their lives, he points out that if policy makers fulfil the needs of people who have one thought style, it probably means that the people who have adopted one of the other thought styles will be disappointed. It would be advantageous to know what proportion of each thought style was present in society. Culture affects three factors in the design of policy: firstly, it affects what people desire; secondly, it affects how people produce things, including public services, and thirdly, it affects how the effects of policy are assessed. He also points out that policy analysts, who are more likely to have the hierarchical thought style, will only get their own way in a society dominated by the hierarchical thought style. The paper concludes that, though GGCT is useful in helping to shape policy, more work needs to be done on the theory, particularly on how individuals relate to institutions. Similarly Langford et al. (2000) found that perceptions of risk from polluted bathing water were as predicted by GGCT. The attitudes towards nature that GGCT associates with each of the four thought styles have been applied to the problem of climate change by several researchers. Verweij (2006) analyses the negotiation and subsequent fate of the Kyoto Protocol on climate change. He points out that the agreement, which places limits on emissions of greenhouses gases for each country but allows them to trade their permits between them, is an intensively bureaucratic and hierarchical solution which ignores small-scale community efforts and the market forces that might be harnessed to find new energy technologies. Instead he proposes that governments should not put a lot of energy into negotiating formal contracts but should encourage technological development to produce sustainable and

cheaper forms of energy which should be shared worldwide. This is a polyrational solution which would include hierarchical, individualist and egalitarian thought styles and would be, in GGCT terms, a clumsy solution. Jones (2014) examines whether GGCT thought styles have an impact on the communication to the public of the dangers of climate change and policy alternatives to deal with it. He finds that it does have an effect and that each thought style sees the problem in terms of different sets of heroes and villains. He recommends that sensitivity to perceptions of people who have different thought styles should inform communication on this topic.

GGCT has been applied at the level of a region to problems in developing countries. Gyawali looks at the problems of hydro-electricity generation in developing the economy in the Himalaya of Nepal (Gyawali 2006). With the apparent potential to generate electricity from hydro schemes governments with the backing of external aid donors attempted a series of ludicrously overambitious schemes to generate electricity on a huge scale and sell it to India – or, in one particularly far-fetched scenario, to China which is a large distance away. The schemes failed because of unchallenged hierarchical thinking which was accompanied by corruption and self-deception. It was only when the political system became more democratic and the egalitarian voice of village communities and the individualist voice of entrepreneurs were heard that smaller, more practicable schemes for water management have been considered and the possibility for electricity generation at a reasonable cost may be realised. Umejesi and Thompson (2015) looks at the way that the economy of the Niger Delta has been developed. This shows the familiar pattern of an alliance between the hierarchical (government) actor and the individualist (oil and gas companies) actors leading to the impoverishment of the egalitarian actor (local community) and environmental degradation.

One of the arenas where GGCT was developed was in the arena of risk. Douglas and Wildavsky, asked the question who fears what and why (Douglas & Wildavsky 1982)? They posited that each thought style had a different perception of what to be wary of. In an evaluation of the contribution of GGCT to the study of risk Oltedal et al. (2004) finds that the theory has "relatively low explanatory or predictive power" (ibid p.33) and that the "theory has weak or vague parts" (ibid p.27). These comments are based on some notable studies of risk that have used GGCT. Studies of Dake (1991) and Wildavsky

and Dake (1990) found that thought style was a good predictor of risk perception but these results have not been reproduced since (Oltedal et al. 2004) and their methodology has been questioned (Kahan 2012; Oltedal et al. 2004; Sjoberg 2000). Sjoberg (2000) found that GGCT was unable to explain more than 5 - 10% of variance in perceived risk. In a study designed to look for correlation between thought style and assessment of risks, Marris et al. (1998) found that the correlations were as predicted by the theory but rather weak.

7.4. GGCT in Organisations

The original formulation of GGCT as a typology of ways of life or thought styles in an institution seems to have utility. If the dimensions on which the axes are based have empirical validity, the contents of each of the four quadrants follow logically. Of course, these are not the only dimensions that might be used to analyse an institution but the characterisations of each of the four thought styles seems to be familiar and it is a simple task to identify examples of these in everyday experience. The argument of GGCT is that since all of these thought styles are intrinsically present in all institutions, and since they are all defined in opposition to each other, it is, therefore, counterproductive for an institution to suppress or attempt to banish any of them and a balanced negotiation between them leads to optimal problem solving thus making GGCT a handy tool for the practitioner. The reasons for these dimensions being particularly illuminating are discussed in the development of DOT.

However, though the original model works as a heuristic the development of it by Thompson and others is sometimes unconvincing. The weakest points are: the assertion that there are no organisations; the place of the individual; the lack of explanation of historical change and the inferences that are drawn about people's relationships with nature.

The assertion that there are no organisations, only ways of organising is flamboyant and unhelpful (Thompson 2008). The statement is based on the assumption that organisations must have one single organising principle and, since GGCT says that there are five of them, this means that according to GGCT there are no organisations. This is a non-sequitur. It might be possible for an organisation to have more than one organising principle and, in any case, the five organising principles can, and do, continuously negotiate one continuously changing organising principle. The assertion that there are no organisations seems pointless since most people believe that organisations exist and they must mean something by it. A good way to determine whether or not an individual is on the inside or outside of an organisation is to check whether or not they are on the payroll or whether or not they have a swipe card and where it allows them to go. At the same time, attention has already breen brought to the assumption made in DOT that fixed entities are convenient fictions and that they are snapshots of a flow of continuously changing states. From this point of view, it is true that there are no organisations only ways of organising but the same could also be said of a diamond, or Mount Everest or anything else. So, this assertion really tells us nothing useful.

Thompson says that he has converted GGCT from a heuristic into a theory by asking and answering the question, "What would be the simplest dynamical system that would generate the recurrent regularities that are captured by this typology?" (Thompson 2008 p.138). His answer lies in transaction theory. In other words, he implies that the unit of analysis, "the smallest dynamical system" is the transactions within a group of people. But if the theory is fractal (ibid pp.19-20), why does it not have a position in it for the individual? He says that this is not a theory of personality types (ibid p.19) since an individual may exhibit different thought styles in different circumstances. It follows from this that individual consciousness is a product of group transactions rather than group transactions being the product of individual consciousness. He says that there are no organisations just ways of organising, so are there no individuals just ways of thinking about others? Is the individual consciousness itself an entity that "would generate the recurrent regularities"? Perhaps this is so, but what follows about a particular line of thought in the mind of an individual? Even if there is a mutually generative relationship between individual and group consciousness, if the group's transactions produce the individual's consciousness, does this not perhaps imply a decentred self? The position of the individual in this theory is unclear and poorly developed.

If organisations are to be thought of as being composed of dynamic negotiations between the four (or five) thought styles, there is scope for a great many different organisational cultures, each having slightly different proportions of the thought styles at work. So, this might explain why there is the degree of isomorphism that there is, though not why a particular organisation has the particular mixture of thought styles that it does, and it does not explain why there should be different kinds of organisation at different times in history. In fact, GGCT suffers from the same weaknesses that Latour identified as being common to all sociological theory: too much focus on the relationships between people while ignoring the significance of things (Latour 2005).

The development of GGCT presented in *Cultural Theory* makes a simple correspondence between a thought style and a view of nature. This is making the theory carry more than it can bear. Firstly, it makes people into cultural dopes unable to think through complex problems and devise innovative courses of action. Take the example of a private organisation that has managers who all have an individualist thought style. According to GGCT they can only have an exploititative stance towards nature but they may have read a lot of scientific studies that convince them that climate change is a reality that requires everyone to act. They might, for example, turn their energies towards making new products that use less energy. This would disconfirm the theory. If an exponent of GGCT were to suggest that they had become polyrational, that is egalitarian on environmental issues and individualist on business ones this argument would also disconfirm the theory that there is a necessary connection between thought style and attitudes towards nature. Secondly, as Swedlow (2002) points out, the attitudes towards nature identified by GGCT are not exhaustive.

The way that the descriptions of attitudes towards nature in GGCT are described is historically specific. For example, the attitude towards nature attributed to egalitarianism, that nature is delicate and needs to be protected, is true of twenty-first century environmental pressure groups but would have been incomprehensible before the end of the eighteenth century²⁰. Prior to the Romantic movement, arguably a response to a rise in industrialisation in Europe, a typical perception of nature was that

²⁰ The earliest example that the author can find of thinking that a local degradation of the environment might have a negative effect on the entire system is in Coleridge's poem "The Rime of the Ancient Mariner" (Wordsworth et al. 1963/1798). In this poem the mariner brings about the general degradation of the environment through his gratuitous destruction of an albatross and the situation is only reversed when he reacts positively towards some sea snakes.

of Malthus which sees nature as hostile, that is, of not providing sufficient resources (Malthus et al. 1992/1798). It would follow from this argument that resources should be conserved and needs reduced which could be argued to amount to the same thing as the GGCT proposal, yet it is a stretch to characterise Malthusian arguments as egalitarian rather than hierarchical.

The axes of the GGCT quadrant have been interpreted in various ways. Some researchers have regarded them as binary less/more and some as a continuous scale. Douglas indicated that she regarded them as polythetic, that is, composed of several factors which do not all have to be present in any particular instance of application (Douglas 1982). For example, Mars uses four factors to assess the grid dimension – autonomy, insulation, reciprocity and competition – and four to assess the group dimension – frequency of interaction, mutuality, scope of activities and strength of group boundary (Mars 1982). These were chosen because of their appropriateness to Mars's research and, for example, Gross and Rayner choose different ones (Gross & Rayner 1985). This tailoring of the dimensions to the application of the theory suggests that it is a theory that is not transcendental but is used in a way that is relative to the respondents' and researcher's assumptions. Verweij et al.'s discussion of the wording of questionnaire questions for gathering data on individuals' thought styles confirms this suggestion (Verweij et al. 2011). They say that the questions must be worded carefully with the context of the respondents in mind.

Rather than seeing GGCT as a kind of grand theory, DOT adopts it as a typology of thought styles and as a heuristic of interpretation. Therefore, the GGCT ways of life do not structure the social world to any greater extent than the structure of a simple sentence - subject, verb, object - which is also found everywhere. In DOT, GGCT is a way of classifying the continuum of discourse using a categorisation which measures its dimensions. In this way it is like the rainbow: the colours are an arbitrary, but useful, categorisation of a continuum which varies between national cultures (Deutscher 2011) and, to a lesser extent, between individuals. In the same way the GGCT thought styles are flexible and can be adapted according to the researcher's assumptions and requirements.

The status of the individual is unclear in GGCT. Douglas thinks that each individual adopts one of the four ways of life for every aspect of their lives and seems to believe

that essentially each the individual is a "self interested rational being" (Hendry 1999 p.562). Thompson believes that individuals adopt a thought style for each compartment of their lives (Thompson 2008). GGCT researchers usually assume that individuals adopt one thought style consistently for all aspects of their lives (Blakeman 2003; Hood 1995). Marris et al. (1998) expected that respondents would fall into one of the four GGCT thought styles; however, 62% of their sample showed mixed thought styles and cites other researchers who confirm this finding.

Power is not well theorised in GGCT. The explanation for power effects is the conflict between the thought styles and an inbuilt need for each one of them to dominate the others. GGCT gives an incomplete account of power compared with, for example, Foucault's theory. For example, GGCT does not explain why hierarchical power works one way under traditional authority and another way under rational legal authority.

In their review of Weber's work, Thompson et al. (1990) complain that Weber's legalrational authority fails "to distinguish the hierarchical structure of a bureaucracy from the individualist structure of the market" (ibid p.163) seeing both as characteristic of the rationality of modernity. However, this criticism seems beside the point since this was not what Weber was attempting to do. They go on to say that Weber identifies rationality with the hierarchical structure of bureaucracy. Their argument is something of a distortion of Weber's work: in their effort to demonstrate that Weber's thinking has something in common with GGCT they criticise it for failing to conduct analyses consistent with GGCT.

Instead, DOT employs a different approach by deconstructing Weber's ideal-type of bureaucracy. An examination of Weber's list of the characteristics of bureaucracy (5.2) indicates that it is rooted in the hierarchical thought style: there is a hierarchy of authority; individual inclinations and emotions are suppressed and the individual is subordinated to the collective and rules are to be followed dispassionately. Here it is the individual that is suppressed so bureaucracy is constructed by the binary hierarchy/individual. As the supplement to hierarchy, the individual is necessary to the structure: the hierarchy is built from positions of authority and appointments to these positions are made by having individuals compete with each other in the job selection process. Without this competition bureaucracy could not have efficiency as its legitimating aim. However, the binary hierarchy/individual (the "positive diagonal" of

Figure 7.3) only partially accounts for bureaucracy. Once the appointment has been made, the individualist nature of the competition in the selection process must be suppressed and the selected and unselected alike must accept the position in which they find themselves. This is where fatalism comes into the structure: bureaucracy depends on all the members of the organisation accepting their positions and working within the remits of those positions. On the other hand, efficiency as the legitimating aim of bureaucracy must itself be legitimated: it is good for all concerned. Everyone taking part in a bureaucracy benefits from its ordered structure and society at large also benefits. Ultimately, bureaucracy is legitimised by egalitarianism. Thus, I would like to argue: GGCT deconstructs bureaucracy and this point is of value in the development of DOT.

7.5. DOT: Demonstrating DOT

The first three assemblages of DOT, which are its core, do not provide a theoretical base for empirical enquiry. Just as it would be a mistake to contend that researchers can make their work more practical by ignoring theory it would be a mistake to contend that grand theory is irrelevant to empirical research. The utility of a grand theory is to provide a viewpoint from where middle range theories can be operationalised and from which it may be seen how they can be combined; that is, a grand theory can be used as a methodology which is how DOT is employed in the empirical research in this thesis.

This thesis makes an empirical demonstration of DOT through interpreting GGCT in its terms. Assemblage 1 consists of individual actors who act together. Therefore, it is possible for an institutional assemblage to have an emphasis on the relative importance of the individual compared to the collective at any point on a continuous spectrum. At the same time, discourse relies to a large extent on power being hidden yet also that it can become revealed, in its coercive form. The extent to which an institutional assemblage is orientated towards reference to coercive power also lies on a continuous spectrum: a spectrum between implicit (generative) power and explicit (coercive) power. At one end of the spectrum (low grid) norms and rules are internalised by the members of the institution so it appears to them that they are acting in an unconstrained manner; in the centre of the spectrum (high grid), not only are there formal rules but they are enforced with rewards and punishments. These two spectra are the two

dimensions of the GGCT quadrant. A particular institution assemblage will choose to set its normal values of each of these dimensions within a certain range.

This is a dynamic not a static model. An institutional assemblage always consists of individuals and a collective so neither can be suppressed; both ends of this spectrum are always possible so there is a constant negotiation taking place between them in the flow of events. Similarly, the two ends of the implicit power/ explicit power spectrum are always possible and there is a continuous negotiation taking place. The norms of the institution determine where the centre of the GGCT quadrant is located but all the four thought styles are arranged around it in all institutional assemblages.

Since institutional assemblages are dialogic, that is, in continuous dialogue with themselves in the flow of events, the four thought styles are in continuous dialogue, and therefore negotiation, with each other. If the quadrant tries to stabilise itself by suppressing one of more of the four thought styles, it creates a fractured structure with one official pole and one or more poles of resistance thus, the expression of the desire for stability creates a tendency to disintegration. Therefore, DOT affirms the GGCT principle that a stable structure is produced by unrestricted dialogue between the four thought styles.

GGCT proposes that there is one fixed and transcendental centre to the quadrant. That is, that there is one point around which the four thought styles can be balanced. This is a logocentric view. In the DOT interpretation of GGCT the centre of the quadrant is determined uniquely by each institutional assemblage which is, in turn, largely influenced by the assemblage of everyday eife. It is, therefore, possible for the researcher to perceive the centre of the quadrant to be located differently to the members of the institution that he or she is observing.

In the DOT version of GGCT the five thought styles are specifically defined:

 Hierarchy – many of the values of the institution are coded into specific rules with specific sanctions attached to them. Thus, power is explicit and its coercive form is apparent. Hierarchy seeks to conceal power in its generative form by insisting on facts. Since the institution has already decided on how facticity is determined and how facts shall be interpreted, power is naturalised and debate is stifled since any challenge to an act of authority requires a challenge to the basis of authority.

- Egalitarianism the view of this quadrant in DOT is implied by the choice of this term rather than "enclave". This quadrant values the common good and places members on an equal footing. It is not concerned with the degree of territorialisation of the institution.
- Individualism this quadrant is concerned with a relationship between the individual and the collective that emphasises the individual actor. Since action must be performed by individuals this thought style emphasises action: it is task and results orientated and tends to emphasise the benefits of competition.
- Fatalism again, the viewpoint of DOT is implied by the choice of term. Douglas uses the term "isolate" for this quadrant and Thompson uses this term instead for the centre of the quadrant. In the DOT version of GGCT, this thought style arises as a response to the perception that life is shaped by overwhelming forces that it is useless to resist either individually or collectively. This is not necessarily an extreme form of individualism, as the term "isolate" implies but a perception that individual or collective action would be fruitless – the subject has become an object even to itself.
- The Researcher Thompson has a concept that there is a position at the centre of the quadrant which might be occupied by self-employed taxi drivers and janitors which he terms "isolate" (Thompson et al. 1990). In DOT this is a mistake and that what he is describing is on the border between Fatalism and Individualism at the individualist end of the horizontal axis. Instead, in DOT the centre is occupied by a neutral observer of all the other thought styles, rather than a participant, which is characterised as "The Researcher". This is the location on the grid which a researcher should aim to locate himself or herself while observing the institution.

In the DOT version of GGCT the Egalitarian quadrant is more tightly defined. DOT avoids the term "enclave" since this emphasises a tendency to separateness. From the DOT viewpoint GGCT is confused in bringing together the egalitarian and enclave tendencies as though they are not separable. Both Douglas and Thompson see Egalitarianism as the product of resistance to Hierarchy and Individualism (Thompson

et al. 1990; Douglas 1996). The DOT interpretation of GGCT does not posit that the Egalitarian thought style arises in opposition to the others any more than this could be said of any of the thought styles. In DOT GGCT is incorrect to combine equality and territorialisation in its description of this quadrant. Instead, the territorialisation characteristic of this thought style belongs to another dimension of the assemblage and is included by GGCT theorists because they have generalised from observation of empirical data rather than from a grand theory.

The GGCT thought styles are a way of breaking up a continuum so that it may be conceptualised in the same way that the colours of the rainbow break up a continuous range of the wavelength of light. This may be illustrated using these fictional examples:

We can't make a decision about this matter because we don't know all the facts.

This statement could be taken as fatalistic – we can't make a decision – or it could be taken as hierarchical – the rational, and proper, approach is to base decisions on facts. This statement seems to sit on the division between the two thought styles. Similarly:

The way in which these people are behaving is to the detriment of the interests of all of us.

This statement could be taken as hierarchical – *this behaviour disrupting the orderly state of things and needs to be dealt with* – or egalitarian – *we must look after the interests of everyone*; it is at a point on the GGCT spectrum that it could be interpreted either way.

DOT shows why the dimensions of GGCT have universal applicability and why the GGCT quadrant provides a tool of great utility to the researcher. In DOT, GGCT provides a methodology for the observation of institutions and a method of diagnosing them. As pointed out in section 7.4, GGCT deconstructs bureaucracy so the use of this typology of thought styles is especially useful in understanding the construction of bureaucratic institutions.

In DOT the two dimensions of GGCT arise from Assemblage 2 and, therefore, are fundamental to all assemblages. However, it would be incorrect to believe that the two dimensions of GGCT are the only possible dimensions of institution that can be used in institutional research: there are many ways of looking at the realised properties of Institution Assemblages. For example, the territorialise/ deterritorialised dimension could also be used. It should also be noted that GGCT can only deconstruct the discursive component of a social assemblage: it does not engage with the material component.

DOT rejects the GGCT model of power as being a phenomenon that is generated by the competition between the thought styles. Instead it adopts a Foucauldian model where power arises as the generative power of the assemblage. Foucault's models of disciplinary and bio-power have far more explanatory power and are able to provide more nuanced explanations of phenomena. However, as this discussion has shown, Foucault's view of power can be used in conjunction with GGCT.

The empirical research in this thesis demonstrates the use of DOT as a grand theory. DOT provides a viewpoint from which the theoretical components of the research assemblage may be effectively combined. These components are GGCT, the Foucauldian models of generative and disciplinary power, the Deleuzian notion of diagram as applied to Weber's notion of bureaucracy as an ideal-type of institution under legal-rational authority and the principle that GGCT deconstructs bureaucracy (discussed in 7.4) following the Derridean method of deconstruction. Without DOT, it is unlikely that these theories would be chosen to be used together, and even if they were, there would no basis for their compatibility.

Section 3 Empirical Demonstration

DOT is a new postmodernist theory of institution. It is different from previous theories in that it proposes that discourse is a wholly material assemblage. Institution is defined as an assemblage that is capable of generating meaning. All assemblages have a discursive component and a material component. The Institutional Assemblage is the unit from which all other social structure is built and the Institutional Assemblage constructs subject assemblages.

DOT provides a methodology for the study of organisations. The unit of study is the institution. By building a grand theory from the basic assumptions of its paradigm up to the level where theory may be used to interpret empirical data it makes possible new perspectives on organisational research. From the viewpoint of DOT it is not only desirable but necessary to take account of the relationships between research constructs. In DOT it makes no sense to study, for example, leadership without power, knowledge without power, motivation without resistance, stability without instability or culture without institution. As a methodology, DOT calls for researchers to be mindful of their own institution and that when they are observing other institutions they must *translate* (3.3) between them.

In this thesis the DOT methodology is demonstrated by interpreting GGCT as a DOT theory of the middle-range. In this version of GGCT dimensions arising from the discourse assemblage component of the institutional assemblage are used to form a typology of thought styles. This typology is then used to analyse group discussions within a specific institution.

The aim of this empirical research is: to demonstrate the utility of the DOT methodology through the analysis of discussions within institutions.

Chapter 8. Methodology and Method

8.1. Introduction

DOT is a grand theory and is primarily a way of looking at the world. It is falsifiable but not readily so and it has little predictive power but a great deal of explanatory power. It is the role of middle-range theories which are closer to the empirical data to make predictions and to be falsifiable and perfectible through application to empirical data. Instead, the utility of DOT lies in evaluating middle-range theories and showing how such theories might be used in conjunction with each other; for example, here DOT provides a perspective in which GGCT and Foucault's disciplinary power are used in combination.

As has already been pointed out in earlier chapters, the grand theory of DOT can be operationalised for use in addressing empirical research by linking it with middle-range theories as long as the middle-range theory is consistent with DOT. In the empirical project of this thesis GGCT, reinterpreted to be consistent with DOT, is used. The purpose of the empirical section of this thesis – Chapters 8, 9 and 10 – is to demonstrate the utility of DOT by applying its methodology in an empirical study.

This chapter concerns the methodology and method of the empirical project of the thesis. It has been pointed out that whereas methodology is the epistemological framework of the research, the method is the technique for doing the research (Llewellyn 1992 p.18). According to this definition of the word, the methodology of this research is, therefore, DOT. The method is qualitative and deductive involving the analysis of transcripts produced by focus groups. Others employ different usage, for example, according to the terminology of Creswell, DOT is an "interpretive framework" (Creswell 2013) but this usage implies that the research design is separable from the interpretation of the data. In this thesis, DOT is identified as a methodology since it influences all aspects of the research.

Research in the field of business is commonly categorised as having two paradigms positivist/quantitative and interpretivist/qualitative. Positivist/quantitative research gathers numerical data and answers questions to do with how much variables vary in

defined circumstances. Interpretivist/qualitative research gathers qualitative data to discover how people perceive the world in which they live.

Positivist/quantitative research is suitable for situations where the meaning attached to these variables is uncontroversial within the institution whose members will use and evaluate the research. This kind of research is broadly, and imprecisely, characterised as "positivist"²¹ and makes certain ontological and epistemological assumptions including that the world under observation has an existence independent of the actors or the observer. It usually proceeds by developing theories and then trying to falsify them through empirical observation – the deductive method. The results of quantitative research are regarded as having predictive power but little explanatory power. It is derived from the natural sciences but to imply that it is the only methodology of the natural sciences would be erroneous (Bryman & Bell 2003 p.14); for example, it is the methodology of Newtonian physics where it is assumed that there is a universal viewpoint for observers, such as universal time, but it is not the methodology of Einsteinian physics where each observer has their own viewpoint relative to the phenomenon under observation, so that each observer has his or her own experience of now (Holquist 1990 pp.156-157). Similarly, a "positivist" methodology assumes a universal viewpoint so it would be unnecessary to take account of how respondents perceive their world.

On the other hand, qualitative research is suitable for answering questions about why social phenomena appear. This kind of research is broadly, and imprecisely, characterised as "interpretivist" and makes certain ontological and epistemological assumptions that are different from those of qualitative research and usually assume that people communally create the world in which they live (constructivism) and therefore phenomena should be studied by discovering how people interpret their world (interpretivism). This kind of research generally begins without any declared theory and inductively looks for regularities in the observed data in order to construct theory which

²¹ The use of the terms "positivist" in business research is often sloppy. It means many different things to different researchers (Bryman & Bell 2003) and is often in contradiction to the principles laid down by its supposed founder, Auguste Comte (Urry, Russell and Keat 1975).

may be only generalisable to a limited extent. Although this approach assumes that there are different viewpoints it still has at its core the assumption that there is an autonomous rational individual which precedes the groups that it joins and makes rational choices based on its experience.

This account of the research paradigms is commonplace in the literature of how to write a PhD thesis and is often expanded upon in the methodology section of PhD theses. A detailed critique of this account is beyond the scope of this thesis. However, this two paradigm model of research is constructed within the modernist master paradigm and therefore makes assumptions that do not necessarily apply within the postmodernist paradigm.

It is sometimes suggested by researchers within the modernist master paradigm that there is a necessary relationship between the type of data gathered and the methodology of the researcher so that researchers gathering qualitative data always have a certain relationship with the data but this does not hold for DOT. It may, therefore, appear strange to some that this research collects qualitative data in order to test hypotheses. For example, Denzin and Lincoln state "... qualitative researchers study things in their natural settings, attempting to make sense of, or interpret, phenomena in terms of the meanings people bring to them." (2011 p.5). In the DOT methodology, it may be that the researcher is interested in the meanings the respondents bring to the phenomena under study, or not, depending on the aim of the research. However, even where the researcher is interested in how respondents understand phenomena it is not possible for the researcher to understand the object of study in the same way as the respondents since the researcher must look at the matter from within a different institution. Qualitative researchers often account for the difference between their own viewpoint and that of the respondents under the heading of "reflexivity" but this is almost always at the level of the individual researcher rather than at the institutional level (Creswell 2013 p.216).

The DOT methodology is postmodernist so departs from all modernist methodologies in that it rejects the assumption that there is an autonomous individual subject that precedes the group and instead assumes that individuals are discursive entities constructed by institutions. The DOT methodology is designed to investigate the means of that construction, its consequences and how it might be influenced by other institutions.

8.2. Research Aim and Objectives

The broad aim of this empirical research is to demonstrate the application of the DOT methodology. DOT is a grand theory with a huge range of possible application that includes, but is not confined to, organisational theory. In this thesis, an empirical research project is conducted. It demonstrates how an empirical research project devised within the DOT methodology can be used.

All methodologies make assumptions on which the research is built. The assumptions of the DOT methodology that are particularly relevant to this research are

- Institutions are the unit of analysis
- Institutional assemblages include the discursive assemblage which provides diagrams for institutional construction
- Institutions construct subjects
- The 4 GGCT thought styles are always present in all discursive flows
- The degree of freedom of discussion between the thought styles is indicative of the ability of the institution to make good decisions

The aim of this research is:

• To demonstrate the utility of the DOT methodology through the discursive analysis of discussions within institutional assemblages using the GGCT typology

The objectives of this research are:

- To demonstrate:
 - That the GGCT typology of thought styles can be used for analysis of discussion text
- To discover:
 - If all four thought styles are present in the discussion
 - If there is evidence that the bureaucratic diagram has been used to construct the institution is to be found in the discussion

- How the thought styles individually construct the institution
- The relationship between the four thought styles in the construction of the institution
- Assuming that the GGCT principle that polyrationality helps institutions to make optimal decisions for their survival and are better able to withstand black swan events, to discover:
 - If experienced managers tend to be more polyrational than inexperienced ones

8.3. Research Approach

This research was conducted by the construction of pop-up institutions by means of focus groups. Each focus group was given a case study which described a managerial problem in a factory. Respondents were told that they were to adopt the role of a team of management consultants tasked with making recommendations to the factory managers on how to deal with the problem. The discussion was recorded, transcribed and analysed using the GGCT typology of thought styles.

As the data were being collected from the focus groups they were being transcribed and analysed. Data saturation had taken place when the researcher found that no new insights were being gained from the data and, at this point, no further focus groups were necessary.

8.4. Hypotheses

In the design of the research, four hypotheses were framed to address the research objectives (Table 8.1).

The *requisite variety theorem* of GGCT (Thompson et al. 1990 p.4) posits that since the four thought styles are mutually dependent they must always be present in institutions. So, it is to be expected that all four thought styles will be found in the focus group discussions. Therefore:

Hypothesis 1: The group discussion exhibits all four thought styles (H1)

Since the thought styles are defined in opposition to each other it is to be expected that there will be a conflict and a struggle for power between them in the discussion. Therefore:

Hypothesis 2: The four thought styles are in conflict with each other in the discussion with each one trying to gain the ascendancy (H2)

This research proposes that bureaucracy is the abstract machine assemblage which produces work based institutions. Bureaucracy shows hierarchy as the dominant thought style. Therefore:

Hypothesis 3: The dominant thought style of the discussion and solutions proposed by all groups are hierarchical (H3)

According to Thompson the suppression of any of the four thought styles when addressing a problem which involves a group, or groups, of people leads to a less than optimal solution (Thompson 2008). If he is correct, experienced managers will have discovered that using one particular thought style at the expense of all the others has led to solutions that are less than satisfactory in the long run. On the other hand, less experienced managers will tend to look only to the bureaucratic paradigm for solutions. Therefore:

Hypothesis 4: The solutions agreed by the groups of students with little managerial experience are more hierarchical than the solutions proposed by the experienced managers (H4)

The hypotheses were tested by examination of the data generated by eight focus groups.

Table 8.1. Research Objectives and Hypotheses

| Research Objective | Hypothesis |
|--|-------------------|
| To demonstrate: | |
| That the GGCT typology of thought styles can be used for analysis of discussion text | H1, H2, H3 and H4 |
| To discover: | |
| If all four thought styles are present in the discussion | H1 |
| If there is evidence that the bureaucratic diagram has been used to construct the institution is to be found in the discussion | Н3 |
| How the thought styles individually construct the institution | H2 |
| The relationship between the four thought styles in the construction of the institution | H2 |
| Assuming that the GGCT principle that polyrationality helps institutions to make optimal decisions for their survival and are better able to withstand Black Swan events, to discover: | |
| If experienced managers tend to be more polyrational than inexperienced ones | H4 |

8.5. Orientation of DOT to the Aim of the Research

DOT is a methodology; that is, it provides an epistemological framework in which to do empirical research. In this research institutions are created so that their continuous construction may be observed through analysis of the text of discussion.

In DOT power is generative constructing structures, including institutions, through discursive work. Also in DOT, GGCT is a typology of thought styles which enables the categorisation of discursive utterances for the purposes of analysis, rather like the colours of the rainbow categorise the continuous spectrum of wavelengths of visible radiation. Generative power conceals itself (3.4.) so that structures take on the appearance of being natural and inevitable. To reveal the constructed nature of institutions Derrida's method of deconstruction is necessary; however, since GGCT is

itself a deconstruction of the institutional assemblage (2.8.4.), it may be used as a method to reveal the work done by generative power in the continuous construction of institutions. It is the aim of this research (4.2.) to demonstrate how DOT enables the researcher to do this.

8.5.1. Investigation of the Bureaucratic Institution

In Chapter 5 it was discussed how the ideal type of bureaucracy is present in the institution of everyday life as a diagram for the formation of organisations and is an item of knowledge in that institution. This research proposes the hypothesis that respondents will use the bureaucratic diagram in their discussion. Though it would be surprising if they did not use it because learning how to use the bureaucratic diagram for the creation and maintenance of organisations is a large part of their current context, it would be significant if there were departures from its use.

As was mentioned in section 7.4 where GGCT was discussed as a deconstruction specifically of the bureaucratic diagram, hierarchy and order are dominant features of the diagram consequently, it might be expected that the hierarchical thought style would dominate a discussion about how to solve a problem within a bureaucratic institution. Hypothesis 3 tests if this is the case.

8.5.2. Interpreting the GGCT Quadrant

As has been pointed out in section 7.4, the interpretation of GGCT in DOT is specific to DOT. The vertical 'group' axis represents the degree to which power is concealed with its supplement, repressive power, becoming more apparent as you move up the scale. The horizontal axis represents the degree to which there is an emphasis on the individual actor with the interests of the group increasing as you move along the scale from left to right.

This interpretation of the axes leads to a specific interpretation of the resulting quadrants and, therefore, how the thought styles are defined. In this study, hierarchy is closely identified with sticking to impersonal rules and insisting on objective facts. Egalitarianism is identified with an appeal to an unstated principle of the common good and fairness. Individualism is identified with the need for competition at the individual,

team or inter-organisational level. Fatalism is identified with the impossibility of full knowledge, the frailty of human nature and the general unpredictability of life.

8.6. Researching Institutions

In this research it was assumed that a pop-up institution could be instantly created for the purposes of observing it. A previous example of this approach was Zucker's (1977) study of institutional cultural persistence.

Zucker's institutions consisted of five respondents each where no more than two were present at any one time. Different levels of institutionalisation were created by issuing respondents with different sets of written instructions at the beginning of the experimental session. She describes her methodology as "ethnomethodology" which seems wide of the mark since it is not concerned with the viewpoint of the respondents. Instead it seems to be, like this study, more closely consistent with ethnography.

In this case, the rubric at the top of the sheet describing the case study (Appendix C1) was designed to create the pop-up institution for the focus group:

You are a team of management consultants who company managers can approach for advice. Read the scenario below and as a group decide what is the best advice that can be given to this Plant Manager. Please try to give him one definite course of action rather than alternatives.

Though the artificial nature of the activity makes it different from a real life activity conducted as part of the respondent's employment, I propose that the pop-up institutions constructed in this research are not dissimilar to real life institutions in any ways that would affect the results of the research. Drew and Heritage argue that it is not the formal setting of an activity that determines its institutionality but the mode of involvement of the respondents:

...the institutionality of an interaction is not determined by its setting. Rather, interaction is institutional in so far as participants' institutional or professional identities are somehow made relevant to the work activities in which they are engaged.

(Drew & Heritage 1992 pp.3-4; Silverman 2001 p.175)

8.7. Ethnography and Focus Groups

The categories that the research method of this study fall into are ethnography and focus groups and it might be seen as a blend of these methods. However, both of these methods have been adapted to the specific requirements of this research. In this case an institution is constructed using a focus group for the purposes of observing its behaviour (ethnography) in an experiment to test hypotheses.

Ethnography was developed by anthropologists for gathering data about primitive societies (Creswell 2013 p.91). The anthropological researcher would live with a group of primitive people, observe them in their natural context and return to the civilized world with a notebook of data for analysis. This approach has been adapted for use in sociological enquiry and in organisation studies often involves the researcher in being a participant observer in a workplace setting. In this study pop-up institutions are created by the researcher and then observed without participation which is a type of ethnographic approach. Ethnographic studies are often deductive as is the study in this thesis (ibid p.92). They also usually involve a combination of the *emic* (the viewpoint of the respondents) and the *etic* (the viewpoint of the researcher) (ibid p.96) though, this case the study is confined to the *etic*.

The focus group is a method which has been popular with social scientists since the 1980s for gathering qualitative data about people's thoughts and feelings on specific topics (Hennink 2014). It has been perceived by many researchers to be a more efficient and effective alternative to interviewing.

Focus groups consists of a small number of people with a facilitator discussing a specific topic or topics with the guidance of a facilitator who ensures that the discussion sticks to the topic and that everyone has an opportunity to express their views. Usually, focus group discussions last 60 to 90 minutes and groups consist of 6 to 10 people (Hennink 2014). The advantages of focus groups are thought to be that data can be gathered more quickly and that the discussion stimulates more thoughtful contributions since respondents stimulate each other to think more deeply and express themselves more precisely and the effect of the researcher on what the respondent says is reduced.

In the DOT methodology a focus group is a pop-up institution which inherits knowledge from a parent institution. The particular parent institution or institutions that the pop-up institution inherits from is influenced by the initial focus group briefing that is given by the researcher and by the recruitment criteria for the respondents.

Focus groups are often used in commercial market research (Hennink 2014). What would be considered to be a statistically tiny sample by quantitative research standards has been found to offer useful insights into the thinking of large consumer markets. If modernist assumptions that groups are formed from autonomous individuals are followed, this utility of focus group findings may seem surprising. However, following the DOT methodology the result is as expected since the subjects in the focus group have been formed by the same institution or institutions as the market and, therefore, the group discussion is also formed by that institution and provides the researcher with information about it.

In this study focus groups are not used in the usual way to find out how the respondents perceive a phenomenon or object of study but to observe the process of discussion within the group. The respondents are invited to focus on a workplace problem described in the form of a fictional case study. The researcher is not concerned with the perceptions of the respondents as individuals or with the conclusions that they reach but with the thought styles exhibited in the course of the discussion.

8.8. Research Strategy and Design

The strategy of the research method was to create pop-up bureaucratic institutions using focus groups and analyse transcriptions of the discussions that these institutions generated. The focus group method was not used in the usual way to find out the opinions of the respondents but instead to create an experimental institution so that its processes could be observed. The researcher did not take part as a facilitator in the discussion and this instance of the use of focus group did not include any element of the "group interview" (Bryman & Bell 2003 p.368) aspect of the focus group method.

The method used was based on a teaching method which was the group discussion of a case study (Appendix C.1). The case study prescribed, in general terms, a role for the respondent: that of management consultant advising the managers of the organisation described in the text. The purpose of defining a role for the respondents was to create an institution in which the discussion was to take place. The case study used was one that had been developed for teaching purposes so it was identified as a text that was likely

provoke discussion among the respondents and was likely to elicit different viewpoints and, therefore, debate among them.

The institution was created by inviting the respondents to meet for a focus group. The respondents were each given the same case study in the form of text on a sheet of paper and invited to read it. The case study described a workplace situation which contained an implied problem. The precise nature of the problem is not discussed in the case study which describes the situation in a factual way. When all the respondents in the group had finished reading the case study the group was invited to discuss it and attempt to form a consensus on the advice that they would give to the managers of the organisation in the case study to help them to solve their problems. The researcher stayed in the room as a reassurance to the respondents that any unforeseen difficulty would be addressed but the researcher took no part in the discussion. A video with audio, or audio recording, was made of the group's discussion. This recording was later transcribed and analysed using NVIVO 11 software.

8.9. Modifications of the Research Design

Qualitative research is necessarily a dynamic process. It is a recursive process whereby expectations are modified by the experience of the researcher while conducting the research (Miles & Huberman 1994). Thus, it is a hermeneutic circle and is a process analogous to that described as the process used for gathering literature review data in Chapter 2 (2.2). It is essential to achieve a high quality of research that the process should be recursive in this way (Morse 2002). The experience of gathering the data may change the nature of the project in fundamental ways such as focussing or, on occasion, completely changing the research aim. Certainly small aspects of the research will be modified as data is gathered such as the coding tags used for analysis of textual data. However, research is often presented as though the way it appears in its finished forms was the way that it was intended all along (ibid).

In this case, two variations were considered before making a final choice of research design. Firstly, the use of a questionnaire to discover the dominant thought styles of individual respondents was tried and, secondly, the option of giving the respondents suggested solutions to the case study problem based on the four thought styles was also tried.

A questionnaire instrument taken from Grenstad's (2001) study of government policies in Nordic countries was used since this seemed to be applicable in this context. The questionnaires (Appendix C2) were given to the respondents as they arrived to take part in the focus group and they were asked to complete them before they were given the case study scenario. There was never an intention to treat this as a quantitative survey since the sample would have been too small but only to compare an average of the scores on the questionnaires with an overall impression of the thought style profile of the group.

This part of the study was abandoned for several reasons. Firstly, it contradicted an underlying principle of the research that thought styles are generated in the context of institutions and that it was not possible to identify what the institutional setting might be for the respondents when they were completing the questionnaires. Secondly, the questionnaire was designed for use in a Nordic context and no attempt had been made to validate it in the context of this study. This point was confirmed when one of the respondents, who was an overseas student, asked whether he should complete the questionnaire from a UK viewpoint or from the viewpoint of his native country. Thirdly, I felt that there were theoretical difficulties in asking respondents to complete the questionnaire individually since the study assumes that thought styles are dynamically generated by the institutional context. From these reservations I concluded that a questionnaire survey of this type might produce useful results but that it needed to be conducted as a research project in its own right and that it would not be appropriate to broaden the scope of the existing project in this way.

In the first four groups, a sheet of suggested solutions (Appendix C3) was given to the respondents at the end of their discussion and they were asked their opinions. The sheet consisted of four solutions, each one representing one of the four thought styles. This was abandoned because after analysing some of the data already gathered I concluded that it was most profitable for the study to focus on the process of how the thought styles were used in constructing the discussion rather than to consider the possible products of the discussion. In any case, this part of the group discussion could be seen as an exercise in evaluating the relative quality of the suggested solutions rather than being about the thought styles themselves. Thus, data gathered after the main discussion had ended were ignored.

8.10. Respondents

Respondents were recruited by a lecturer at University of West London and another at Brunel University London from among master's level business students at those universities. It was made clear to the respondents both verbally and in the joining instructions for the focus groups that their participation was purely voluntary and had no connection with their studies (4.13.). Business students were chosen because they could be expected to have knowledge of the bureaucratic diagram of organising.

The respondents were divided into two groups: one group of people who had little or no experience of working in a management role and a second group of experienced managers. Each focus group was drawn from one group or the other.

No demographic data were collected about the respondents. Both the University of West London and Brunel University draw a large proportion of their students from outside the UK. Consequently, many of the respondents were overseas students from a variety of different countries; however, nationality was not collected. There were both male and female respondents and a wide range of ages.

Appendix E shows meta-data about the focus groups: the number of participants and whether they were experienced or inexperienced as managers.

8.11. Position of the Researcher

As Kilduff and Mehra point out:

... for postmodernists, there is no methodology capable of achieving an unmediated, objective representation of the facts. Instead of trying to erase all personal traces of the researcher from the work so as to provide the reader with an illusion of unmediated access to the subject, postmodernists seek to demystify the technology of mediation by explicitly detailing the involvement of the researcher.

(Kilduff & Mehra 1997 p.464)

Thus, in postmodernist research it is important for the researcher to be fully aware of his or her viewpoint and that observation of objects constructed within other institutions must be done with mindfulness of the need for translation work to be done between the two viewpoints.

The position of the researcher is defined by the institution which the researcher is a subject. In this case, the researcher is located in the university business school institution. Additionally, the respondents were recruited from the population of master's level business students and the focus groups took place on university premises; so the pop-up institutions constructed for data gathering were created within the same parent institution as the location of the researcher. The similarity of the institutions observed with the institution of the observer has two consequences: firstly, it makes the data easier for the researcher to interpret the data since there is little translation work to do and, secondly, it makes it more likely that the respondents would use the bureaucratic diagram to construct the pop-up institutions in the focus groups since this diagram is part of the institutional common knowledge of the university business school.

There are two purposes to a PhD thesis such as this one. Firstly, there is the ostensible purpose which is its investigation of its declared research problem in a manner which fulfils certain standards set by the academic institution. But, it has a second, institutional purpose which is marked by a transmogrification of the researching subject who, as a result of the process being followed to a satisfactory standard, has his or her name altered with the prefix "Doctor" which marks a change in the relationship between the individual and the institution. The aim of this institutional aspect of the PhD is to create a researching subject who has been constructed in a way that is acceptable to the academic institution and who will thenceforth behave in predictable ways when conducting and documenting research or when involved in the creation of new researching subjects, perhaps by becoming a PhD supervisor or examiner.

The standards set by the institution for a PhD have been created in the modernist paradigm and this fact might suggest that a postmodernist PhD is a contradiction. However, this apparent contradiction does not hold because postmodernism is not a rejection of modernism but a development of modernism: a tribute and extension rather than a revolution and a supplement rather than a simple negation (Chia 1996 p.7-8) and this thesis seeks to satisfy all the modernist requirements of the academic institution.

8.12. Reliability and Validity

Morse (1999) calls for qualitative researchers to pay the same attention to matters of reliability and validity in gathering data as do quantitative researchers. Morse et al. (2002) complain that standards of rigour have become applied only to the output from the research project whereas true rigour lies in every stage of the research process. They complain that the legitimacy of qualitative research in general has been undermined in the academic institution by this movement away from reliability and validity, which refer to the whole research process, towards "trustworthiness", which is a concept of quality applied by reviewers to the final product of the research.

"Trustworthiness" is a term adopted by Guba and Lincoln for what Morse et al. prefer to call "rigour". Guba and Lincoln recommend certain criteria that might be applied to check for trustworthiness including: "member checks when coding, categorizing or confirming results with participants ..." (Morse et al. 2002 p.15). Morse et al. point out that asking respondents to check the analysis is not always a sound strategy and might undermine validity in some circumstances. In the instance of this study asking the respondents to check the analysis would not be helpful since it would demand them to have technical knowledge of the categorisations that could not be expected of them.

Instead, Morse et al. advocate the use of a different strategy which they call "verification" which is applied iteratively throughout the research process. The five verification strategies that they recommend are (ibid p18): "methodological coherence", meaning that the research method is appropriate to the research question; "the sample must be appropriate", meaning that the respondents must be appropriate to the research question and that data saturation is achieved; "collecting and analysing data concurrently", meaning that the researcher must analyse the data as it is gathered and feed what is learned in the analysis back into the process of gathering further data; "thinking theoretically", meaning that as the data is gathered and analysed theoretical insights emerge which need to be tested as further data are gathered and "theory development", meaning that theory development is a continuous and iterative process with the theory that was applied in the initial research design inevitably being modified in some way in the process of conducting the research. Each one of these strategies was applied in this research.

8.13. Ethics

It is an important part of the subjectivity of an academic researcher to have a high level of ethical standards. Miles and Huberman (1994 pp.290-297) give a non-exhaustive list of ethical issues which should be considered in the conduct of gathering data and this list was kept in mind throughout this research. The particular organisation to which the researcher is affiliated (Brunel University) also has ethical requirements for the conduct of research which were adhered to. However, bureaucratic requirements are not necessarily an adequate guide in all practical situations and I feel that it is essential for researchers to develop consciousness of the principles that should be followed.

The ethical standards that I have developed while doing research may be summarised under two headings: firstly, respect for respondents and, secondly, to add to knowledge. The first of these principles would be put into practice by, for example, always being open and honest with respondents about the nature of the research and how the data is to be stored and used - principle of "informed consent" (Miles & Huberman 1994 p.291), not to waste their time by conducting ill-considered research and to respect their perceptions of privacy and consent. The second of these principles would be put into practice by, for example, not misrepresenting or falsifying the data in any way, to be fully acquainted with knowledge gained and methods used in previous research in order to make the most of the current research and to disseminate the results of the research as clearly as possible to other researchers who might benefit from it.

The ethical requirements for research of Brunel University were fully satisfied before any data were collected. The procedure required the full disclosure of all the details of the data gathering and its purpose to a member of staff charged with checking the ethical standards of research. In accordance with this procedure all the respondents were given a written statement about the research before their participation in the project (Appendix C4).

This written statement includes the point that respondents were not under any obligation to take part in any way and could withdraw from the research at any time. It also states that any respondent could request that data relevant to him or her be deleted. It says that that the identities of the respondents would not be recorded and any clues to their identity or the identity of any organisation to which they may be affiliated if it were to emerge in the data would be anonomised. One respondent in the first focus group took up this provision by asking for the recording equipment to be turned off for part of the group's discussion.

8.14. Conclusion – Process and Verification

The research aim and objectives led to a set of hypotheses to be tested by gathering empirical data using a method devised within the DOT methodology. The five verification strategies listed by Morse et al. (2002) (4.12) were all utilised.

Methodological coherence was satisfied by having a data gathering method consistent with the aim of analysing discussions within institutions. Pop-up institutions were to be constructed by conducting focus groups without moderators which discussed a management problem described in a case study. The discussions were to be recorded and transcribed for analysis using the GGCT typology.

The appropriateness of the sample was satisfied by recruiting post-graduate business students at two universities in London. They could be expected to have knowledge of the bureaucratic organisational diagram. Eight groups were conducted to achieve data saturation.

To collect and analyse data concurrently was irrelevant in this case since, unlike with a conventional focus group, the groups were unmoderated so there was no opportunity to use ideas gathered in previous groups. However, the codebook of nodes used for the data analysis was developed iteratively.

Theoretical thinking was applied as the transcripts were coded. Characteristics of the texts suggested new ways of applying the GGCT typology and other aspects of the DOT methodology.

Theory development was done by using these new insights to improve the theory about how the GGCT thought styles enable the discursive construction of institutions.

Chapter 9. Data Analysis

9.1. Introduction

The transcripts of the discussions of the focus groups, which were set up to form pop-up institutions, were analysed so that the hypotheses (9.7) could be tested. The results not only tested the hypotheses but also revealed unpredicted and illuminating aspects of the construction of the institutions.

The group discussions focused on a case study in written form given to each member of the focus groups. The case study (Appendix C1) describes a situation in a factory that produces cartons of breakfast cereal. The workforce is divided into 12 teams who work three shifts. Each team works one shift per day but the shifts are rotated so that all the teams work all three shifts over a period of time. The factory has a very high level of productivity and a surprisingly high level for the nightshift. Another characteristic of this factory is that the team members are closely bonded with each other but there is intense competition between the teams. This competition spills over from the work performance into other competitive activities. On the nightshift the employees enjoy themselves by playing games with paintballs. Now there is a rumour that the employees are planning to build rockets to see which team's rocket will go the highest and this may involve the use of explosives. The respondents were instructed that they were a team of management consultants brought in to advise the factory manager on a course of action.

Transcriptions of the eight focus groups were made and loaded into NVivo 11 software and these texts were then coded for analysis. Coding was done by creating nodes (tags) and the transcripts were analysed by attaching nodes to sections of text.

Coding is an iterative process (Miles & Huberman 1994). Assumptions were made with guidance from the literature about what nodes would be required but these were progressively added to and amended as the researcher spent more time with the transcripts.

There was little need for translation between the institutions constructed by the respondents and the institution of the researcher since the conditions in which the popup institutions were constructed were close to the academic institution. The respondents were all business students and the groups took place on university premises. Additionally, the respondents were addressed in the case study as management professionals, which is how university business students are addressed.

9.2. Method

The method used to analyse the transcripts of the discussion groups was one of close reading. That is, the transcripts were read paying close attention to the words on the page, interpretation was based on the words used by the respondents and any personal subjective judgements or associations made by the researcher were suppressed. It is a method which presupposes the subjectivity of the researcher as a member of the academic institution and is defined by bureaucratic principles of objectivity and impersonality. Thus, judgements about how to classify and interpret passages of the texts were inevitably subjective but made within the academic institution whereas illegitimate classification and interpretation would have come from another subjectivity.

Rather than resembling the approaches normally taken in conversation analysis (Silverman 2001 p.167-177), where the text is assumed to refer to the thoughts of the respondents that precede the text and where conversation is assumed to be communication which is the coding of a pre-existent concept in the mind of one participant so that it is transferred to the mind of another, the textual analysis in this research is a type of discourse analysis where constructionist assumptions are adopted. The method of textual analysis employed in this research is a type of discourse analysis where constructionist assumptions are adopted. The method of textual analysis employed in this research is a type of discourse analysis where constructionist position (Jorgensen & Phillips 2002).

In the DOT postmodernist methodology the content conversation plays a part in constructing the discursive component of the Institution Assemblage; thus, the institution is the primary object of analysis and the individual is a product of institution. In this study the individual was not an object of analysis at all. Instead, an objective of the research was to discover how discourse employs the GGCT thought styles to construct the institution. The approach taken in this study to the analysis of the transcripts closely resembles the method of practical criticism (Richards 1964) which is a method that literary scholars may use to interpret literary works where the text itself is the focus of attention.

9.3. Coding

The transcripts were coded so as to facilitate the gathering together of passages of text to demonstrate aspects of it in the testing of the hypotheses and the discussion of other findings about the discursive construction of the institutions in the research. There was no attempt to code the whole of the text which might have been done if the research was concerned with, for example, comparing the relative frequency of the appearance of the nodes or the number of words included in each node.

Initially four nodes were created, one for each thought style. Since researchers do not normally explain at this level of detail in published papers how their texts were coded, it is not known how this task has been approached in the past. From the characterisation of Thompson and other scholars of the thought styles, it was expected that it would be a simple matter to code each paragraph of text with one of the thought styles. Also, since Thompson and others suggest that the thought styles are defined in opposition to each other, that they each constitute a "solidarity" (way of life) (Thompson 2008; Caulkins 1999), and because clumsy solutions tend to be described as adversarial debates about the interests of those driven by the four thought styles (Verweij et al. 2006), it was expected that simple antagonism would be found between the thought styles in the transcripts.

Child nodes were added to each of the thought style parent nodes to identify where a particular thought style was being neutrally identified in the case study, where it was being identified with the cause of the problem and where it was being identified with the proposed solution to the problem.

It became apparent that the text moved between thought styles not from one paragraph to the next but from one sentence to the next. Additionally, it also became apparent that the thought styles were not in a simple relationship of antagonism with each other.

For example, a respondent speaks two consecutive sentences, both using the hierarchical thought style but containing different relationships with the egalitarian thought style. The first makes a negative judgement:

And I can say that first of all this game is not... like they're not playing this game when the manager is here, which means that they're playing without their manager knowing.

Group 2 46-48

This says that the employees are not behaving according to the rules and it implies that they are undermining the organisation. However, the speaker goes on to say:

> I think he is putting a blind eye because the production is really good, which means for me as a manager, first of all I have to let's say give them one time, let's say one hour or two hours to play.

Group 2 48-51

From within the hierarchical thought style he is acknowledging that the employees' activities have also proved to be supportive of the organisation's aims so their egalitarian behaviour should be accommodated somehow.

Since this pattern of co-operation as well as antagonism between thought styles was seen often in the transcripts, child nodes were created for each parent node associated with a thought style to identify where that thought style was dominant but was either antagonistic or co-operative towards another thought style. The first of the sentences just quoted was coded "Hierarchical thought style antagonistic towards Egalitarian" and the second was coded "Hierarchical thought style co-operative towards Egalitarian".

Drawing of the GGCT literature, further child nodes were added to each parent thought style node to identify where there was an occurrence of what is usually seen by that thought style as the main problem with the other thought styles; for example, hierarchy sees the main problem with the others as irrationality. Similarly, further child nodes were added to identify that thought style's attitude towards resources and towards risk.

After further trial coding it was observed that there are occasions in the transcripts where attitudes appear which are typical of that thought style. For example, in the hierarchy thought there were examples of the importance of sticking to the facts and a need for surveillance of the workforce which are also typical of disciplinary power. Child nodes were added to the parent thought style nodes accordingly.

Finally, a high level node with no child nodes was added to identify polyrationality, where three or four thought styles were simultaneously present. The nodes that were used in the analysis of the transcripts are shown in Appendix D.

9.4. The Bureaucratic Institution

It was expected that the focus groups would use the bureaucratic diagram to create their institutions and to apply thinking from this diagram to the problem they were given. In DOT the bureaucratic institution may be deconstructed using GGCT as described in section 7.4 with all the four thought styles playing a part. It would be expected that all four thought styles would be present in the construction of a bureaucratic institution but with hierarchy in dominance. Hierarchy would be expected to be evident in an insistence on rules being applied impersonally and on basing decisions on facts. Egalitarianism would be expected in the form of an insistence on management acting in a way that would protect the well-being of all the employees equally and taking a wide view of what this well-being might consist of rather than relating it narrowly to their jobs. Individualism would be expected in an insistence on stimulating the individual motivation of employees, the benefits of a competitive spirit and the importance of performance and profit. Fatalism would be expected in the form of being resigned to there being aspects of the business beyond management control including unforeseen events and the necessity to conform to the wishes of higher authority.

9.5. Appearance of Thought Styles in the Groups

The analysis of the data showed that all four thought styles were present in the group discussions but not in the form expected. Firstly, the vast majority of the data was categorised as hierarchical; secondly, the thought styles often appeared in combination with each other and often in the same sentence, as described in section 9.8; thirdly, mostly the individual respondents did not adopt one thought style and argue against the others, though this did happen at times, and fourthly, there was little evidence of the fatalistic thought style.

The groups automatically and wholeheartedly adopted the bureaucratic diagram without any apparent consciousness that they were doing so. It was consistent with the use of the bureaucratic diagram that the hierarchical thought style overwhelmingly dominated the discussions to the extent that it was rare for any of the other three thought styles to emerge on its own. When they did emerge on their own it was usually because the respondent had, in some way, stepped outside his or her bureaucratic role. For example, the individualist thought style appears in a speech close to the beginning of the discussion of a group:

Yeah. I would add something on your points, on your points, yeah, thank you for your points.

Group 2 45-46

This utterance does not come from within the institutional context. The speaker has adopted a position that is not defined by the case study or by the institution that has been created in the group; he is speaking from the position of private individual trying to assert his authority in the group. He takes it upon himself to thank another member of the group for his contribution thus creating a friendly and co-operative atmosphere while, at the same time, placing the other group member in a subordinate position to himself.

Another example of individualism appearing on its own was when a respondent spoke about something that had happened in his personal work experience. Another respondent spoke approvingly of the individualist thought style in what the first respondent had said:

> You're a line manager and they listened to you. So, it means that it was great organisation that they took your advice, because you are, you are the one who really work on the production line and you are in probably the best position to spot the little changes which could be made to improve the product.

Group 3 885-889

Again, this example of a thought style appearing on its own and not in the context of hierarchy occurred when the respondent diverted from the institutional task.

Because the hierarchical thought style dominated the discussion it was not always apparent when another thought style appeared on its own whether it was being implicitly contextualised by the hierarchical. For example, here the respondent is voicing the individualist thought style:

Yes, if you make this in to a competition people will opt in or opt out. So they don't have to be involved. If you make it official with the teams, some people if you don't want to get involved you don't have to. But you can even involve the manager in there.

Group 1 473-476

However, it is not clear whether individualism is advocated for its own sake or because it is useful to the hierarchy.

A respondent advanced an egalitarian viewpoint in the matter of managerial control, but this was unusual:

I think as soon as you introduce a supervisor I definitely think that atmosphere is killed. I think the supervisor is the highest point we can go doing this.

Group 1 375-376

There was an occasion when a respondent spoke warmly in favour of egalitarianism for its own sake:

... you know in here what we're looking at is these guys have gelled as a team, okay, the whole point is there are no more departments, there are lines...they have such a team spirit ... it's not even just us and them either

Group 1 438-442

Statements like this may have a switching function in the discussion because they leave it open to interpretation as advocating egalitarianism on its own or as advocating egalitarianism within the hierarchical context. Perhaps this is a mechanism whereby the discussion might switch its emphasis from one thought style to another if Thompson et al.'s (1990) metaphor of the thought styles moving like the birds in a murmuration of starlings is an accurate model (7.2).

One respondent identified individualism as a problem from the egalitarian viewpoint:

Getting them to get together on different basis than the way that they've just been competing against one another so far. Group 6 67-68

The word "just" is telling in this case. In this group the discussion hovered on the boundary between hierarchy and egalitarian for much of the time.

The only solution that was suggested that was not hierarchical was egalitarian. This solution met with disbelief by other members of the group but the respondent stuck to his suggestion:

| 7-C | No, if I was the manager I would join them, that is my |
|---------|--|
| answer. | |
| 7-D | No, be serious. |
| 7-C | No, I'm serious. |
| 7-D | Your real answer? You would join them? |
| 7-C | Yes. |
| 7-D | They're all on night shift. |
| | |

7-*C* No, because, you see, when you join them, when they know that you are the person that they can trust, you join them, but at the same time, you say, okay, I will give you permission to do certain things but there is, you make some barriers, you can't do that, but definitely I would talk to them, but before that I can give them a chance to join them.

Group 7 383-403

This gave rise to further discussion in the group. 7-C moderated his suggestion saying that he would use his authority to prohibit illegal activity but he continued to insist that the most important thing was to maintain the team spirit which he identified as being the source of the superior performance of the plant.

A respondent suggested that the introduction of rules by the hierarchical thought style would inevitably lead to resistance from the employees, which is a fatalistic position:

... that's what always happens, if you introduce rules into any situation, the first thing that happens is...everyone, you know, they at least will turn around and say no, I'm not doing that. Why it was working fine ten minutes ago.

Group1 175-177

The other occasions when the fatalistic thought style appeared was when the respondents questioned whether it was worth taking action when nothing had yet gone seriously wrong:

Okay I was along the lines with X. The financials are very good there has been no down time. There has been no employee turnover. The financials of the company is good they are doing 28.7%. Basically like X even I thought that the basic problem here is that the rockets are being made which is something unofficial which they should not be doing during work hours, and the second things is that the nightshift has- some women are complaining about some games that are being played. So there is misconduct going on otherwise the company is doing financially very well.

Group 8 170-177

Polyrationality appeared from time to time. For example, in this example a respondent considers possible solutions and covers hierarchy, fatalism and egalitarianism:

He can for example go forward and stop the whole thing, confront them. He can just ignore it like he has no idea so he can ignore that. Maybe he can just say okay I will be with you guys. If you want to do some rocket thing let's make it official and he can attend and supervise.

Group8 116-119

9.6. Role of Hierarchical Thought Style

The hierarchical thought style was the dominant thought style in almost the whole of all of the focus group discussions with the other thought styles appearing independently only on rare occasions. Often the hierarchical thought style appeared in its pure form in the perception of the role of managers. For example, the role of the manager was interpreted paternalistically by one respondent:

> ... it's like a family house, you've got children, you're happy to play but again you try to moderate when you know that it is getting excessive. That is the way I see the role of a manager, it's true. I tell my little ones, look, you can play but if you hurt yourself when I tell you to stop, that is enough, or it is getting excessive.

Group 1 337-341

One respondent clearly stated the bureaucratic principle of management:

... we have to clearly understand something. We are all here for a purpose, the primary reason why we are here is to ensure that the goals of this organisation are achieved.

Group 1 347-349

9.6.1. Hierarchical View of the Problem

The groups typically began their analysis of the problem by attempting to define it. These definitions usually depended on bureaucratic principles: lack of control, blurring or work-private boundaries and loss of legitimacy.

The hierarchical thought style one respondent lamented the lack of control that management were exercising over the workforce.

I think it may be getting out of control because of the fact that it's unknown. What is taking place no one is actually in control of it. Group 1 135-137 It is significant that control and knowledge are brought together here in the manner of Foucault's model of disciplinary power (Foucault 1979).

Another respondent complained about the lack of sufficient managerial manpower which he thought brought about a deficit of control:

The problem he doesn't have manager. There is one manager, the plant manager. They don't have a line manager. Maybe create a line manager.

Group 2 134-135

A respondent thought that it was a dereliction of duty on the part of the plant manager that had led to the present problem:

They should have been confronted. They should not be encouraged to do it. It's a criminal offence. He should stop it. Group 2 266-267

A strong principle of bureaucracy is that there is a strict demarcation between the workplace and outside the workplace and between work time and private time. One respondent identified confusion between these categories as being at the heart of the problem:

... they are doing things that are usually associated with your free time, it's come into the workplace hasn't it?

Group 1 90-91

The same respondent later tied this confusion to loss of managerial control:

I can't get past the idea, to be honest with you, that these people are coming in at night when they aren't supposed to be there. There is a whole health and safety issue involved in that. And the thing is the second that you start...forget about the rockets, say they are not making rockets, they're making...blowing up balloons, it's nothing dangerous but you've got these people who shouldn't be here coming in on Saturday...I don't know how many people in the building, I have no idea how many people in the building right now.

Group 1 280-286

He went on introduce a *slippery slope* argument²² to express the opinion that there was an increasing lack of control in the factory which would progress in the future:

He shouldn't ignore it, I mean, you can't not do it it's because it's already starting to go...next thing they're making rocket powered cars or something like that. It's going to keep progressing and I do think that this really represents a complete betrayal of trust to be honest with you. I think it's a start of it. I don't think there is the intention there for it but it's the breakdown of the whole thing.

Group 1 563-567

And he also made the point that this loss of control in the factory would lead to a loss of legitimacy by the whole organisation if it were to be allowed to continue:

It's like I say, it's the reputation of the organisation isn't it? Because as he said next minute he's set...one of the local people says did you know that outside of your factory or two people firing rockets? These kinds of things rapidly get out of hand

Group 1 581-583

9.6.2. Hierarchical Solutions

Because hierarchy is dominant in bureaucracy it might be expected that managers might respond to problems with an in increase control and enforcement of the rules. A respondent asserted that:

²² The argument that if A happens B must eventually follow, without explaining the reasons. This form of argument is fallacious (Volokh 2003).

... they need rules and regulations to abide with

Group 8 650

This was a tacit theme of much of the discussion. A respondent suggested a list of possible solutions which involved asserting management authority and control:

... The fourth option is that the Plant Manager can confront all members and take corrective action. The fifth option is that the Plant Manager can put security staff in the nightshift, so that there is no rocket making during the night because they will be vigilant. The last option I came up with is that the Plant Manager should attend the night shift himself to supervise because the Plant Manager never comes in the night shifts. He is always only coming in the day shifts. That's what written over there. So these are my six options.

Group 8 187-193

One respondent invoked the bureaucratic principle that the enforcement of some rules are of overriding importance for the organisation to maintain legitimacy even if doing so compromises the individualist principle of prioritising performance:

> ... yes it's all great, it's all brilliant, well done, excellent but I'm sorry you cannot compromise the health and safety. And you cannot compromise the reputation of my company because my company comes first.

Group 1 499-502

9.6.3. Importance of the Facts

One of the characteristics of bureaucracy is a concern for the facts as a basis for rational decisions. In bureaucracy hierarchy needs to have the facts:

What we shouldn't do is, we shouldn't come to a conclusion without any facts and figures. We shouldn't come to a conclusion.

Group 4 560-561

In disciplinary power facts are also a central concern since these are the source of power. Respondents often showed an interest in separating fact from rumour before making recommendations, for example:

1-C This is the point without actually knowing what they're doing you don't know whether they're doing that there or just producing the shell which is...

1-F That's why I said that rumours should be...you can't let the rumours go around.

Group1 197-198

One respondent suggested that the decision about what to do about this disciplinary problem should ultimately be based on a cost-benefit analysis alone. This takes objectivity to its limits:

> And whose machine is it, the company's? Did they use the company property during the off shift hours every night, it's an offence. If it is an offence they need to be warned, this is a misconduct. Somebody will need to supervise that so basically I would say the HR would need to call them in. They need a supervisor but everything has a cost and a benefit. For me I think the production line is working fine, they have 75 people including the Plant Manager. I would say based on this give them a warning letter.

Group 8 632-638

9.6.4. Surveillance

A characteristic of bureaucracy is the need to enforce the rules. The methods of disciplinary power, as described by Foucault, are germane to this purpose. One of these methods is surveillance which appears in the discussions in connection with controlling access to the factory:

That point of entry, you swipe your card or somebody there to ensure that you sign in to get in.

Group 1 368-369

There is a suggestion that surveillance in general this will go a long way to solving the problem either by introducing a security camera or through underhand methods:

The plant manager should deploy a security camera for supervision or for seeing that there is no misbehaviour or the Plant Manager can add a rat in the team which means they can add one person who moves around the different shifts to identify who is the person rather than confronting all of them.

Group 8 182-185

Another form of surveillance that was suggested was random checks on the night shift:

4-C No, so, it should be a random, it shouldn't be taken for granted that at night no people will come, it shouldn't be like that, it should be like somebody might come, a line manager, so it comes under what should the plant manager not do or what should the plant manager do, so it

•••

4-B Random nature.
4-D Random checking.
Group 4 788-799

9.6.5. Hierarchy Organises the Others

Although the hierarchical thought style appeared often in its pure form it also appeared along with the other thought styles. Hierarchy controlled, limited and promoted the other thought styles. Far from the simple competition and debate implied by Thompson and other GGCT scholars (Thompson 2008), the thought styles seemed to work with each other as much as against each other. Take this example:

We definitely have to restrict any factory access during no working hours, and be strict with rules and regulations within our [unclear] procedures. If we do not have any we should definitely coordinate to start producing one. And we should definitely as plant managers not fall into any trap of discrimination against employees which involve age or gender in this situation because layoffs of employees can be very costly in this situation. Consequences for our actions would probably lower motivation for employees and probably have some consequences on profits and revenues.

Group 2 179-186

The first sentence states a hierarchical position. The following sentences state that the egalitarian thought style should be respected as part of the solution. Thirdly, the individualist viewpoint of including individual motivation and company performance are also advocated as part of the solution. In this way hierarchy can be seen to be controlling and co-ordinating the other thought styles.

9.6.6. Hierarchy Controls Others

Sometimes the hierarchical thought style was antagonistic or suspicious of the other thought styles. However, even when hierarchy was adopting a negative stance towards the other thought styles, the relationship was not necessarily a simple one.

The word "trust" seems to be a keyword in the difference between the hierarchical thought style and the egalitarian thought style in this context. From the egalitarian viewpoint, implicit in the employee's behaviour, trust is related to the absence of implicit rules and compulsion whereas from the hierarchical viewpoint there is a principle that you can only trust people who obey the rules

You're talking about trust, there is a building of trust but this is actually an abuse of that trust. It's actually abusing it because they know that you're not watching so they will start making things, and doing things. Coming in and out when they feel like it. I don't know, if somebody is coming in at night, how am I to know that someone else is not leaving?

Group 1 303-307

Here the two interpretations of trust are in conflict and hierarchy has the upper hand.

Hierarchy can be seen here defending the interests of individual preferences and egalitarian fairness by suggesting that rules be devised that are fair to everyone:

But with the paint ball aspect of it...the paint ball thing where people were just firing balls of something across at each other across the room. Okay if somebody then says to you whilst we're at it I don't like this, I really don't like this. Make you feel intimidated, to be honest I've not enjoyed it for a long time. Do you then say to the staff, by the way, this has to stop as well

Group 1 477-481

Again, hierarchy manages egalitarianism where the egalitarian notion that games are permissible at work is allowed as long as the games are regulated:

...if you were to continue to allow that it would have to be something that was managed in some way

Group 1 91-93

It is also suggested that hierarchy regulates the egalitarian dynamics of the work teams:

Third option is that the Plant Manager can swop team combinations. You go in his team, he goes in my team. Group 8 186-187

From the hierarchical viewpoint an egalitarian culture removes order and stability and produces an attitude of fatalism among managers:

Inside the culture, like they're all equal in the company and it means no one is responsible for no one. So, if someone does something I don't care. If you do something wrong I don't care because I'm not responsible for that.

Group 2 196-199

Hierarchy and individualism have an uneasy relationship. Too much individualism may distract from achieving the organisation's aims but, on the other hand, individualism may be instrumental in achieving the organisation's aims:

1-F I do agree people being happy but they are not there for being happy they are there to serve the objectives.

•••

1-F That's it, that's what I want.

1-A That is good but then you have to infringe on that...that freedom what is right, to use their initiative without being controlled like a robot.

Group 1 168-178

In one group some of the respondents (A and B) identify the individualist characteristics competition and motivation in the case study and are happy with them but one of the respondents (D) sees it as disruption.

| 8-D | My problem is that there is not supervision, | |
|---|--|--|
| 8-B | No supervision is not a problem. | |
| 8-A | Yes. It's not a problem. | |
| 8-D | Yes it is a problem. The working groups they report to | |
| the Plant Manager. They should have a supervisor. | | |
| 8-B | It doesn't matter as long at the results are okay. | |
| 8-D | No. That is why you have to have a structure in every | |
| position. You can go out and employ the best people in the world | | |
| but you don't just leave them to do what they need to do. That is | | |
| why they are turning the work place into a fun fair. Work is | | |
| | | |

different and fun is different. If you want to play, then go to the park. That's different situations.

8-A The results are good. You don't change something good.

8-D The results may also be good if they reduce the amount of play they put in the work.

8-A Maybe if you do that you might lose something else which is the motivation. You would lose the ability to work. Look at it this way. When they play the paint ball they found out that actually the performance is becoming higher and higher. Look at it here. It said output average 13% higher on nightshift because they are doing all of that games so actually the games are motivating the employees then. They don't need supervision.

8-D The wrong motivation.

Group 8 230-261

Here "the wrong motivation" evidently signals the hierarchical principle thinks that the manager's main responsibility control and everything else, including the performance of the organisation is secondary.

9.6.7. Hierarchy Promotes Others

In the discussions the egalitarian thought style appeared most often in the form of a positive stance towards the team spirit of the employees which was perceived to be a significant contributor to the plant's success. The respondents recognised the importance of team spirit but wanted to find ways to set boundaries to it:

... if I was a plant manager I would not change too much but I would simply say, look, there are some things that are acceptable within the limits of...because I would be the last person to go and disrupt the team dynamics. So the team dynamic should stay constant and be probably nurtured even better to the next level.

Group 1 133-136

A recurring solution suggested by the groups was to take a friendly approach towards the employees through an open discussion:

3-F So, are we all in agreement, because remember, the thing we need to take back is what's the advice, when we give this person? So, are we all saying we need to sit down and talk to these people? ...

3-F Open, honest, transparent.

3-B Yes. Probably talk to them firstly as a, to the whole group.

3-D Explain, yes.

3-B You know, to day shift, talk to them during the day.

Group 3 542-554

Here the exercise of managerial power is deferred to create an opportunity for discussion with the employees apparently on equal terms. However, after further discussion the balance between the thought styles shifts and the hierarchical asserts itself wanting to take control of the situation by enforcing a legal contract:

And we'll get you to sign a contract saying you understand what I've told you ... and if it happens again these are the consequences. So, we agree on that?

Group 3 705-707

Another group also chose the friendly approach towards the employees but there was a perception that individualist activity was a danger that might threaten both the egalitarian consensus and the hierarchical need for order. A respondent suggests that employees should be given a relaxed environment but that managers should act if a boundary were crossed:

1-E But do you find that in that situation where if you abuse it you lose it, is that an individual or everybody loses it?

1-C The individual because the collective nature of the group is more important, so the culture is there where you have that trust and flexibility to do things.

Group 1 429-432

This dialogue was followed by the hierarchical need for coercion if the boundary, it had itself drawn, was transgressed. Individualistic behaviour that broke the boundary would meet with dismissal:

... if they do become problematic then they're not the right fit and they're gone

Group 1 425

One of the characteristics of bureaucracy, and of the hierarchical thought style in the discussions, is the need to work with the facts. Whoever has the facts has power over the situation so possession of the facts is essential to making an effective decision. At the same time, a concern with the facts is also a mark of fairness which is an egalitarian value so, once again, the hierarchical can be seen supporting the egalitarian in the endeavour to maintain order:

...call that particular team that produces this, try to find out what they are actually doing. If it is revealed in the course of this caution that explosives are actually being made get them to understand the implication of making explosives within the factory environment, the production environment and if things get out of hand, you know, the consequences that could come along with it.

Group 1 – 37-41

In a similar way, some of the respondents thought that management should act in defence of those employees who did not enjoy the unofficial games that were being played by their colleagues which played a significant part in building the strong, egalitarian team culture:

There are young employees, but they're also women who are not always happy to take part with these activities. So, perhaps we can meet as a manager, I would have a look on the needs of those ... groups and.

Group 3 484-487

On the same problem, the need to make one rule for everyone was expressed:

You can't segregate them. You have to be taking them into account that's what...

Group 1 215

This is, again, a bureaucratic principle of hierarchy supporting the egalitarian to achieve objectivity, impersonality and order.

Some of the respondents saw individualism as well as egalitarianism in the activities of the employees. These activities consisted of games played by teams where each team was made up of members of the same workgroup. These team games played a significant part in building the team spirit in the factory which was evidently responsible, to a large extent, for the superior performance of the plant. The individualist thought style was perceived at work in the competition between the teams which they associated with the individualist principles of innovation and competition ("challenge"):

...why not challenge them to create some innovative product or something? Something which...come and tell me if you can save something on the production line such as efficiency or effectiveness or bring in some measures. Maybe that could be a good challenge. Like can you identify any areas where I can save costs?

Group 1 139-143

In another group hierarchy interprets the egalitarianism of the team as "team spirit" and the individualism of competition between the teams as "motivation". It perceives them both to be favourable for the aims of hierarchy and to be encouraged:

They had fun. This is what they call it. They call them the team building it builds motivation and team spirit. So what I want to say is that playing with rockets in my opinion is not a problem and it's totally legal as long as they are not using explosives. The manager is afraid that they might use explosives so that is the whole problem is. That is why I suggest the best way is to make it official and say okay, you can come, you can play and they will come with you. So that it will be to make sure that there is no explosives.

Group 8 328-334

It is significant that these are being given a place in what is, predominantly, a hierarchical view of the world.

One respondent, speaking from his personal experience, gives an example of individualism serving the requirements of hierarchy in the form of sales targets:

I used to work in sales and marketing and believe me they would let me take whatever it takes to bring orders up by 13%. Group 8 497-495

Another respondent voiced the opinion that it was the responsibility of hierarchy to create the best conditions for individualism:

...create an environment where it's a competitive environment with structure

Group 1 253-254

Although the fatalistic thought style was little in evidence it did appear in the decision making process where the respondent argued that no action should be taken, demonstrating the fatalistic principle that if something is not broken, it does not need fixing.

I think the major issue is about the incident of the rocket and it should be looked at because what it looks like- I mean they are doing quite well and they're the best amongst 17 plants. They work quite well and they are very protective even when I think when some ladies workers were not comfortable with games still they are producing quite high. So in general their production is very good. Their turnover is very low and the happiness of the employees is quite okay. What I can say is that in general they don't need a dramatic change.

Group 8 78-84

Here the respondent is arguing that there is little wrong with this working environment from a managerial viewpoint so not much should be done to fix it.

9.6.8. Comparing Groups

The focus group discussions tended to follow a pattern. In seven out of the eight groups at the beginning the hierarchical thought style took the lead by identifying the problem as a breakdown of managerial control. This analysis was then followed by a realisation that the egalitarian thought style of the employees was producing a strong team spirit. In some discussions there was some acknowledgement that that the individualist competitive spirit might have something to do with the superior performance. In the eighth group there was an early realisation of the significance of the workers' egalitarian thought style which was quickly supplemented by a hierarchical insistence on the need for rules. In the groups where the egalitarian was at its strongest it was not always easy to tell where the boundary between hierarchy and egalitarianism should be drawn by the researcher. For example, one respondent spoke of enforcing rules indirectly by getting the employees to police themselves.

Groups 2, 4 and 5 consisted of business students without managerial experience and these groups put forward similar arguments and displayed a similar mix of GGCT thought styles as groups 1, 3, 6, 7 and 8 who were experienced managers. There was a tendency for the groups of inexperienced respondents to give more consideration to hierarchical solutions such as dismissal and other punishments compared to the other groups. Additionally, there was a greater appreciation that the situation described in the case study required handling tactfully among the experienced groups. For example, a respondent in a managerially experienced group said:

... it's going to take huge management skill to be able to regulate this, put it under control and not because, you know, bitterness in the mind of the staff who has already been doing a great job. So it's going to require wisdom, it's going to require care

Group 1 231-233

Although, there was no shortage of heavy-handed hierarchical solutions among the experienced respondents these tended to be moderated by the group discussion.

9.7. Hypothesis Testing

The first thing to note in the data produced by the discussion groups is that the respondents automatically applied the bureaucratic diagram to the problem. They held the description of the organisation in the case study up to that standard and devised solutions to the case study problem using the same standard. It was not a hypothesis that this would happen since it was fully expected, nevertheless it would have been possible to apply other diagrams such as that of traditional authority or of the commune.

Since GGCT holds that all four thought styles are constantly present, the first hypothesis was:

Hypothesis 1: The group discussion exhibits all four thought styles (H1)

This hypothesis was confirmed by the data. All four thought styles were present but not in equal amounts. The hierarchical thought style dominated both in quantity of text and in importance in constructing the discussions and solutions. The fatalistic thought style had little presence.

GGCT holds that the thought styles are defined in opposition to each other, many GGCT scholars have thought of the GGCT thought styles as being a typology of personality with each individual having one dominant one and many GGCT scholars have thought of organisations as potentially having different thought styles in dominance. From these assumptions:

Hypothesis 2: The four thought styles are in conflict with each other in the discussion with each one trying to gain the ascendancy (H2)

was not upheld because there was no simple struggle between the thought styles. The dominant thought style was hierarchy and there was no serious challenge to it. Hierarchy was sometimes in some way antagonistic to the other thought styles but it was also often co-operative towards them.

The appearance of bureaucracy in the focus groups was not specifically tested by the hypotheses. The researcher thought that some bureaucratic principles would probably emerge because of the context in which the pop-up institutions were formed: composed of business students and focus groups held on university premises. However, the extent to which the content of the discussions exhibited bureaucratic principles was striking. In fact, the relationship between the thought styles in the discussions was consistent with the DOT proposition that GGCT deconstructs bureaucracy (7.4.) Consistent with the relationships between the thought styles in bureaucracy, hierarchy was found to dominate the other thought styles in the group discussions. Therefore:

Hypothesis 3: The dominant thought style of the discussion and solutions proposed by all groups are hierarchical (H3)

was confirmed.

In the group discussions as a whole there was a similar intensity of hierarchy in all the groups. Nevertheless, the experienced groups expressed a greater need for tact and consideration of the role of the egalitarian thought style. Therefore:

Hypothesis 4: The solutions agreed by the groups of students with little managerial experience are more hierarchical than the solutions proposed by the experienced managers (H4)

was confirmed.

9.8. Conclusion: The Dance of Polyrationality

The analysis of the data gathered from the pop-up institutions created using focus groups showed a different relationship between the GGCT thought styles than expected. Instead of simple rivalry between them there was a complex and subtle interweaving of relationships. As was expected, the bureaucratic diagram was used and this placed hierarchy in dominance but hierarchy then orchestrated the other thought styles through antagonism and promotion. As a whole, these institutions were observed to be polyrational.

Chapter 10. Discussion

10.1. Introduction

The aim of this research is to demonstrate the utility of the DOT methodology through the analysis of discussions within institutional assemblages using the GGCT typology. Institutional assemblages consist of material as well as discursive components though only the discursive component was investigated in this research.

10.2. Relationships between the Thought Styles

The findings of this research showed four things. Firstly, they showed that the focus groups automatically applied principles of the bureaucratic diagram to the problem in the case study that they were given. Secondly, they showed that the all GGCT thought styles were present in the discussions but with the hierarchical thought style in dominance. Thirdly, they showed that the relationship between the thought styles was often supportive in addition to the antagonistic relationship predicted. Fourthly, characteristic features of disciplinary power appeared in the context of the hierarchical thought style.

The four thought styles were not present in the discussions in equal measures. The hierarchical was by far the most prevalent. The next most common was egalitarianism, followed by individualism with fatalism rarely appearing. It may be that these proportions were influenced by the context of the groups. The preponderance of hierarchy was because of the application of the bureaucratic diagram; the relative proportions of egalitarianism and individualism may have been influenced by the nature of the problem in the case study which was about the employees playing team games rather than a lack of innovation or competitiveness and the lack of fatalism may have been because of an absence of the need for long-term acceptance of a controversial decision. Mainstream GGCT does not suggest that the balance between the thought styles is due to circumstances like these. If it is, a good metaphor might be the response of a murmuration of starlings to a cross wind (7.2) where the context is the crosswind or, to recall the Bag of Limpets Vignette where the context is the bumps in the surface

of the rock across which the bag is dragged (2.4.4). The influence of the context on the balance between the thought styles in a dialogue needs further investigation.

The relationship between Weber's bureaucracy and Foucault's disciplinary power is well known (O'Neill 1986; Clegg 1994). The mechanisms of disciplinary power are contributory to the construction of institutions using the bureaucratic diagram. In the focus groups disciplinary power was associated with the hierarchical voice in the form of surveillance and the role of the facts in creating power. The presence of this association of hierarchy, bureaucracy and disciplinary power illustrates DOT's ability to draw together different strands of theory while showing how institutions are constructed.

10.3. Dialogic Construction

In a study of risk perception Marris et al. (1998) found that only 32% of their respondents could be allocated to one thought style with certainty and the remainder exhibited more than one thought style simultaneously or no thought style. This finding suggests that the assumptions of the mainstream of GGCT thinking, that the thought styles are in opposition to each other and in themselves form the basis for social solidarity, are incorrect. It also suggests that the matter needs further investigation and this study has made a step in that direction.

The findings of this study show that there is a complex relationship between the thought styles. Foucault's model of social construction driven by generative power through discourse provides a more satisfactory explanation. By observing the relationships between the GGCT thought styles the process of institutional construction is revealed. According to Foucault:

...it is in discourse that power and knowledge are joined together... we must not imagine a world of discourse divided between accepted discourse and excluded discourse, or between the dominant discourse and the dominated one; but as a multiplicity of discursive elements that can come into play in various strategies.

(Foucault 1980b p.100)

This study reveals an aspect of the "various strategies" that Foucault alludes to.

These various strategies include antagonism and co-operation but there are many flavours of both of these. An example of the wide variety of strategies that the thought styles use to compete with each other that came from this research was where the hierarchical used the slippery slope argument (Volokh 2003) against the egalitarian (5.6.1.): "if people think like this, things will only get worse and order will be undermined completely". Of course, the argument works the other way. The egalitarian could say: "if people think like this, things will only get worse and authoritarianism will be become unbearably oppressive". However, in the bureaucratic diagram hierarchy is dominant so it has more legitimacy than egalitarianism and the second of these statements is likely to be suppressed.

As has already been shown (7.2) bureaucracy has a central contradiction: it is an attempt to satisfy the contradictory demands of hierarchy and individualism. For example, in the case of a commercial organisation whereas the officers of the organisation have a hierarchical top priority of order and stability, the owners have an individualist top priority of competition and profit. This is the dilemma of the case study: it is a combination of the egalitarian and individualist principles that actually drive the performance of the plant which is in conflict with the hierarchical principle of management that is expected to have this role.

10.4. GGCT as Diagnostic Staining

It is an assumption of the DOT methodology that the GGCT thought styles are a discursive convenience for making apparent the dialogic flow of social construction. The researcher's experience of coding the transcripts confirmed the theoretical principle that the GGCT thought styles form a continuum, as in the colours of the rainbow metaphor. In the same way that we know that a balanced mixture of wavelengths gives white light, we also know that a balanced mixture of thought styles gives optimum resilience – ability to make effective decisions - to an institution.

To extend the simile that the GGCT thought styles are like the colours of the rainbow their utility may be explained by their use as dyes. Two examples of this method are a medical test called the fluorescein angiography test (Medline n.d.) which involves injecting a dye into a patient's bloodstream so that abnormalities in the eye may be detected and the use of dyes by hydrological engineers who put dyes into water to trace flows (Laine-Kaulio et al. 2015). In the same way, by looking for the appearance of the thought styles at the level of the close reading of the discourse, the process of construction is revealed.

This method works by making the role of individuals in the construction of social structure secondary to that of discourse. In DOT individual subjects are assemblages constructed by institutional assemblages through the agency of discourse.

10.5. Useful Tool

The method employed in this research may be characterised as close reading of institutionally produced texts using GGCT thought styles to track the dialogic process of construction. It is one which has a wide range of applications. It can be used in organisation studies, for example, team working, risk control, project management or culture. It may also be used in other disciplines such as social science, political science, psychology or anywhere else where close textual analysis is employed such as law and literary criticism.

In the management field it has immediate utility for practitioners. If managers are made conscious of the way that the bureaucratic diagram works, they can take control of it. If they are aware that a balance between the thought styles leads to more effective solutions to problems, they can actively seek to achieve this balance to find clumsy solutions and avoid elegant ones (Verweij & Thompson 2011). They also need to understand how this balance is affected by the context. These principles can be applied at any level of the organisation or inter-organisationally.

Too often business schools give the impression that they equip managers with a recipe book of solution to problems. By applying DOT's deconstructionist approach, managers may be equipped with tools, like GGCT, that enable them to approach problems with an open mind rather than with fixed ideas and draw on points of view which they may not have realised could make a useful contribution. In the case study given to the focus groups a purely hierarchical solution to the problem would be likely to damage the performance of the plant whereas a combination of all four thought styles in the solution might solve the problem without adversely affecting performance but this balance could only be found through dialogue with the actors.

10.6. Conclusion of Discussion

This empirical research confirms the utility of the DOT methodology. DOT provides a platform where theoretical components may be combined to provide new insights. Here it hypothesis was postulated that Deleuze's 'diagram of bureaucracy' (that as described by Weber), would construct the pop-up institutions of the focus groups (8.4). This proposition was confirmed by the textual analysis of the focus group discussion transcripts. These demonstrated hierarchy as the ascendant thought style though all the other thought styles were present and contributing to the viability of the 'diagram'. Analysis of the data shows that just as GGCT can be seen as a deconstructed by the four thought styles working together. Discussions of hierarchy could be seen to be closely associated with disciplinary power, validating the reinterpretation of the grid axis in terms of a continuum between explicit power and concealement of implicit generative power.

This empirical research thus demonstrated too, a new method for instutional analysis (through the identification of GGCT thought styles in the analysis of institutional text).

Therefore, two contributions have been made. Firstly, it demonstrates the utility of the DOT methodology both as a tool of analysis and as a tool for practitioners. Secondly, it demonstrates the effectiveness of using GGCT in combination with discourse analysis to investigate institutional construction and, therefore, the viability of an institution in terms of requisite variety in its thought styles.

Section 4 – Concluding Remarks

Chapter 11. Conclusion

11.1. The Utility of DOT

Because DOT is a grand theory which begins from basic assumptions it provides a viewpoint from which *anything* at all may be analysed. It is a theory developed within the postmodernist paradigm and the assumptions of this paradigm are stated and accepted. It begins with discourse as a material assemblage and asks what follows from it. The next step is to develop an institutional theory and, in doing so, it produces a theory of organisation as assemblage and of society as a whole as consisting of interlocking assemblages.

Orgnisation studies needs a new grand theory. Over the past thirty years theory has been refined and extended but new theory has been in short supply. There is a need for new perspectives to enable fresh insights. An obvious area for the development of a new grand theory is postmodernism since postmodernists have tended to eschew such theory whereas they need not have done so. DOT has been developed as a new postmodernist grand theory with the hope of opening up a new field of enquiry.

Thompson lists a set of criteria for sorting out better from worse theories (Thompson 2008 pp.119-122). It is instructive to use this list to evaluate DOT:

1. Allows us to expect behaviour that comes as a surprise without the theory

The way the thought styles interact with each in the process of construction was unexpected but is explained by DOT.

2. More parsimonious explanation

DOT provides a simpler model of institution than any of the new institutionalist models and explains the relationships between a greater range of phenomena.

3. Counter-intuitive

It is counter-intuitive that institutions construct individuals rather than the other way around. Postmodernism is the most radical, and to some offensive, alternatives to methodological individualism.

4. Falsifiable

It is possible that the converging disciplines of neurology and artificial intelligence may disprove the fundamental model of DOT which consists of the three assemblages of discourse that produce institution.

5. Subsumes other theories

DOT subsumes, and accommodates easily, a wide range of other theories as has been shown in this thesis. It enables assessment of middle range theories and creates the possibility of making them into more effective tools. Also, it enables the assembling of middle range theories to take advantage of emergent properties that they mutually realise.

6. Aesthetically satisfying

DOT has a simple elegance.

7. Not reductionist

One of the components of DOT is assemblage theory which holds that assemblages have properties that do not arise from their components individually and it is, therefore, anti-reductionist (Polkinghorne 1987). Although DOT begins with materialist assumptions, it is not reductionist since *différance* is an emergent property that is not present in the components of the assemblage that creates it.

8. Few uncaused causes

The basic assumptions that are the preconditions of the theory are explicitly stated and few.

9. Absence of loose ends

Potentially, there are no loose ends though, of course, it is not possible to discuss everything here.

Thus, DOT fulfils all of Thompson's criteria for a good theory.

11.2. Contribution

11.2.1. Contribution of the Theory Development of DOT

- 1. Exposes the fallacy of the argument that postmodernism cannot create grand theory.
- 2. Posits that discourse is a material assemblage one of the consequences of which is that it brings together poststructuralism and the new materialism. Postmodernism has underestimated the role of the material world and, on the other hand, the philosophy of the new materialism fails to theorise epistemology adequately (Barad 2007; Harman 2016). DOT creates a synthesis of postmodernism and materialism which resolves both weaknesses.
- 3. It is the first postmodernist grand theory of organisation and subsumes both Foucault's archaeology (1972) and genealogy (1979). It proposes an institutional theory which is more complete than archaeology and is consistent with genealogy. In this thesis the genealogical theory of generative power is linked with the thought styles of GGCT to reveal the process of institutional construction.
- 4. It is a methodology (epistemological framework) that makes apparent the relationship between what have generally been regarded as disparate phenomena such as power, culture, institution, discourse and so on.
- 5. It extends previous assemblage theory in both Deleuzian and ANT forms because it shows the role of the discourse assemblage in other assemblages. DOT rejects the contention that there is a strict division between the social and material worlds and proposes that the material world plays an essential role in social assemblages.
- 6. It goes beyond previous constructionist theory because it shows the relationship between the social and the material context.
- It goes beyond previous (constructionist) dialogic theory because previous dialogic theory only shows that there are different voices (heteroglossia) but does not show how they may be categorised and related to effectiveness (Linell 2009).

- 8. It goes beyond ANT because it gives a satisfactory account of the relationship between the human and non-human components of assemblages. ANT proposes that human and non-human actants should be given the same priority and complains of anthropocentrism when the human is privileged (Latour 2005). DOT shows that this argument is fallacious since all human enquiry inevitably has a human viewpoint.
- 9. It goes beyond Structuration Theory because it shows how the discursive assemblage creates structure, adequately theorises the relationship between individuals and subjects and has an epistemology that is linked to its ontology (Giddens 1979; Giddens 1984).
- 10. It goes beyond Critical Realism because it it there is no explanation of what the deep structures consist of (Fairclough 2005). DOT explains these structures as properties of the Institution Assemblage (4.5) and existing in discourse.
- 11. It goes beyond (constructionist) institutional theory because it shows how the discursive and material components of the institutional assemblage interact.
- 12. It extends previous institutional theories by showing how the Institution Assemblage creates institutional culture in such a way that its dimensions may be discerned and changed (4.5).
- 13. From the concept of discursive assemblage, various insights about the nature of organising can emerge. The example given here is a postmodernist interpretation of GGCT which has a wide range of applications.

11.2.2. Contribution of the Empirical Research

- 1. Demonstrates how GGCT can be used to deconstruct bureaucracy.
- 2. Produces a model of GGCT as a discursive typology.
- 3. Shows that the balance between the GGCT thought styles in decision making can be seen to be influenced by the context.
- Suggests ways in which GGCT may be used in business education to make students aware of how decisions are made and give them a normative principle of balancing viewpoints.

11.3. Limitations

The limitations of the development of DOT arise from its potential. It has only been developed to the limit of what is possible in a PhD thesis but it could be extended to include many further topics, for example, work, ethics, socialisation and the role of technology.

A limitation of the empirical research arose from the nature of the sample. The study, as it was done, served to demonstrate the method and to provide a model for further research. However, the respondents were business students and the problem to be solved was artificial so further studies involving practitioners in their natural environment solving real and pressing problems could potentially provide further insights.

A further limitation was the subjective nature of the coding. This process is inevitably subjective and validity could be improved by having more than one researcher code the same text. Unfortunately, there was not the availability of resources to have more than one researcher working on this project.

11.4. Further Theoretical Development and Research

DOT requires further theoretical development so that it can be applied in a wide range of areas such as Corporate Social Responsibility, marketing and policy. Since DOT is a methodology there is the potential to apply it in any field of organisation studies.

These are some areas of the further theoretical development and research that presented themselves to the researcher while working on this study:

- Desire and work Extend DOT to include an improved model of the relationship between the physical world and discourse incorporating the notions of desire and work. In this case, redefining "work" as the effect of human action on the physical world.
- A third dimensions for GGCT quadrant The GGCT quadrant uses only two dimensions of the Institution Assemblage whereas many others exist. GGCT itself could be extended by adding a third dimension, for example, territorialise/deterritorialised. In this way a useful distinction could be made

between territorialised egalitarianism, for example a religious sect, and deterritorialised egalitarianism, for example, the concept of human rights.

- 3. GGCT and national culture Investigation of national culture using the dimensions of GGCT or an extended version of GGCT.
- 4. Technology and change Application of DOT to technology eg. role of IT trainers in organisational change brought about by technological update.
- HRM in developing countries Application of DOT to human resources management in developing countries. Eg disciplinary power and the development of HRM.
- Deconstructing the corporation Deconstruction of organisation as text deconstruction of a corporate assemblage, which includes non-linguistic as well as linguistic elements.
- Study of relationship between GGCT thought styles in construction of social structure – A larger scale study could be undertaken to identify the range of strategies that may be found for the GGCT thought styles to interact with each other and categorise them for the benefit of further research.
- Development of business education Using DOT to develop business education so that it is more orientated towards problem solving than towards ready-made solutions to problems.

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Appendices

Appendix A – Authoritative Texts

Table of key Authoritative Texts used to develop DOT.

| Author | Title | First Published |
|----------------------------------|---|-----------------|
| Derrida | Of Grammatology | 1967 |
| Derrida | "Structure, Sign and Play in the Discourse of the Human Sciences" in Writing and Difference | 1966 |
| Derrida | "Plato's Pharmacy" in Dissemination | 1968 |
| Deleuze and Guattari | A Thousand Plateaus – Capitalism and Schizophrenia | 1980 |
| DeLanda | A New Philosophy of Society | 2006 |
| Latour | Reassembling the Social | 2005 |
| Scott | Institutions and Organizations | 2014 |
| Berger and Luckmann | The Social Construction of Reality | 1966 |
| Foucault | The Archaeology of Knowledge | 1969 |
| Foucault | Discipline and Punish – The Birth of the Prison | |
| Thompson, Ellis and Wildavsky | Cultural Theory | 1990 |
| Thompson | Organising and Disorganising | 2008 |

Appendix B – Literature Search Results

B.1. Postmodernism

| Date | Database | Search String | Results |
|----------|----------|--|---------|
| 19/07/14 | Sage | Results 131 found for postmodernism or postmodern in Abstract or postmodernist in Abstract, from Jan 1990 through Jan 2015 in selected journals: Accounting History: Journal of the Accounting History Special Interest Group of the Accounting and Finance Association of Australia and New Zealand, Action Research, Administrative Science Quarterly, Advances in Developing Human Resources, Asia Pacific Journal of Human Resources, and 153 other journals. | |
| 17/07/14 | АВІ | ab(postmodernism) OR ab((postmodern OR postmodernist)) Date: After January 01 1980 Source type Scholarly Journals Document type Article Language English organization theory (22) organizational behavior (6) management science (5) organizational change (3) management theory (2) | 29 |
| 08/07/14 | Scopus | TITLE-ABS-KEY(postmodernism) OR TITLE-ABS- KEY(postmodern) OR TITLE-ABS-KEY(postmodernist) AND SUBJAREA(MULT OR ARTS OR BUSI OR DECI OR ECON OR PSYC OR SOCI) AND PUBYEAR > 1979 AND (LIMIT- TO(DOCTYPE,"ar")) AND (LIMIT-TO(SUBJAREA,"BUSI")) AND (LIMIT-TO(LANGUAGE,"English")) | 442 |

B.1.2. Bar Chart Showing Publications by Year 1989 to 2013 with Trendline

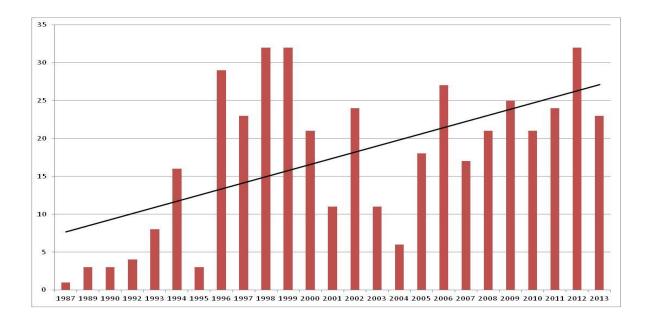
Scopus query analysis 08/07/2014 – 435 articles found

Query: TITLE-ABS-KEY(postmodernism) OR TITLE-ABS-KEY(postmodern) OR TITLE-ABS-

KEY(postmodernist) AND SUBJAREA(mult OR arts OR busi OR deci OR econ OR psyc OR soci) AND PUBYE

AR > 1979 AND PUBYEAR <2014 AND (LIMIT-TO(DOCTYPE, "ar")) AND (LIMIT-

TO(SUBJAREA, "BUSI")) AND (LIMIT-TO(LANGUAGE, "English"))



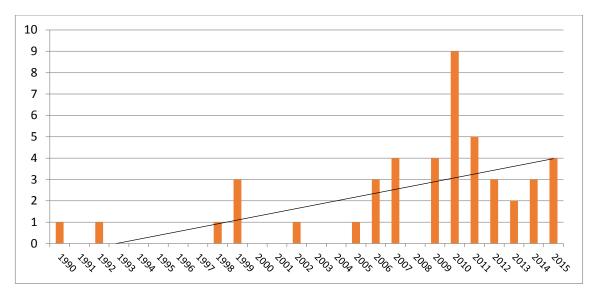
B.2. Derrida

| Date | Database | Search String | Results |
|----------|----------|---|---------|
| 07/09/14 | Sage | Results 1-16 of 16 found for derrida in Abstract, from Jan 1990 through Mar 2015 in selected journals: Accounting History: Journal of the Accounting History Special Interest Group of the Accounting and Finance Association of Australia and New Zealand, Action Research, Administrative Science Quarterly, Advances in Developing Human Resources, Asia Pacific Journal of Human Resources, and 155 other journals. | |
| 08/09/14 | ABI | ab(derrida) Date: After January 01 1980 Source type: Scholarly Journals Document type: Article Language: English Subject: organization theory | - |
| 18/06/16 | Scopus | TITLE-ABS-KEY(derrida) AND PUBYEAR > 1979 AND (LIMIT- TO(DOCTYPE,"ar")) AND (LIMIT-TO(SUBJAREA,"BUSI")) | 45 |

B.2.2. Bar Chart Showing Publications by Year 1989 to 2015 with Trendline

Scopus query analysis 18/06/2015 – 45 articles found UK 18

Query: TITLE-ABS-KEY(derrida) AND SUBJAREA(MULT OR ARTS OR BUSI OR DECI OR ECON OR PSYC OR SOCI) AND PUBYEAR > 1989 AND PUBYEAR < 2015 AND (LIMIT-TO(DOCTYPE,"ar")) AND (LIMIT-TO(SUBJAREA,"BUSI"))



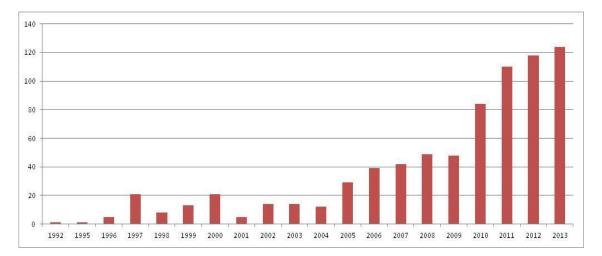
B.3. Assemblage

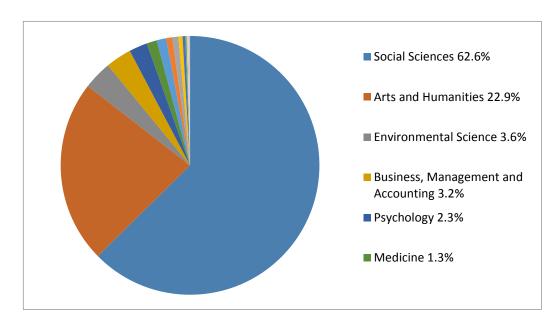
B.3.1. Table showing Literature Searches

| Date | Database | Search String | |
|------------|----------|--|-----|
| 15/06/2014 | Sage | deleuze and assemblage in Abstract, from Jan 1980 through Dec 2014 in SAGE journals available to me | |
| 15/06/2014 | Sage | assemblage in Abstract and ant or actor network theory in Abstract, from Jan 1980 through Dec 2014 in SAGE journals available to me | |
| 15/06/2014 | ABI | ab(assemblage) AND ab((delanda OR deleuze)) | 14 |
| 15/06/2014 | ABI | ab("actor network theory") | 260 |
| 15/06/2014 | Scopus | TITLE-ABS-KEY(deleuze) AND DOCTYPE(ar) AND SUBJAREA(mult OR arts OR busi OR deci OR econ OR psyc OR soci) AND PUBYEAR > 1989 AND PUBYEAR < 2014 AND (LIMIT-TO(SUBJAREA, "SOCI") OR LIMIT-TO(SUBJAREA, "BUSI")) AND (LIMIT-TO(LANGUAGE, "English")) | |

B.3.2. Bar Chart showing Publications by Year

Query: (TITLE-ABS-KEY(deleuze) AND DOCTYPE(ar) AND SUBJAREA(MULT OR ARTS OR BUSI OR DECI OR ECON OR PSYC OR SOCI) AND PUBYEAR > 1989 AND PUBYEAR < 2014 AND (LIMIT-TO(SUBJAREA,"SOCI") OR LIMIT-TO(SUBJAREA,"BUSI")) AND (LIMIT-TO(LANGUAGE,"English")))





B.3.3. Pie Chart showing Publications by Subject Area

B.4. Foucault

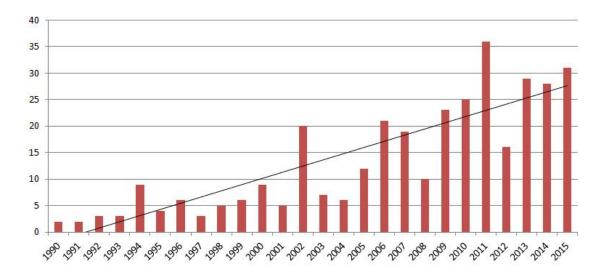
B.4.1. Table showing Literature Searches

| Date | Database | Search String | | |
|------------|----------|---|-----|--|
| | Sage | | | |
| | Sage | assemblage in Abstract and ant or actor network theory in Abstract, from Jan 1980 through Dec 2014 in SAGE journals available to me | | |
| | ABI | ab(assemblage) AND ab((delanda OR deleuze)) | | |
| | ABI | ab("actor network theory") | | |
| 18/06/2016 | Scopus | TITLE-ABS-KEY(foucault) AND SUBJAREA(MULT OR ARTS OR BUSI OR DECI OR ECON OR PSYC OR SOCI) AND PUBYEAR > 1989 AND PUBYEAR < 2016 AND (LIMIT-TO(DOCTYPE,"ar")) AND (LIMIT- TO(SUBJAREA,"BUSI")) | 340 | |
| 15/06/2014 | Scopus | (TITLE-ABS-KEY ("biopower") OR TITLE-ABS-KEY (bio- | 195 | |

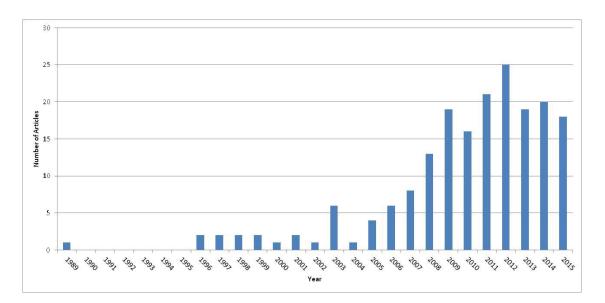
| power) | AND | TITLE-ABS- | |
|--------------------|--------------------|---------------------|--|
| KEY (foucault)) AN | ND DOCTYPE(ar) AN | D SUBJAREA (mult O | |
| R arts OR busi OR | deci OR econ OR ps | yc OR soci) AND PU | |
| BYEAR > 1979 AND | D PUBYEAR < 2017 | | |
| | | | |

B.4.2. Bar Chart showing Publications by Year

Query: TITLE-ABS-KEY(foucault) AND SUBJAREA(MULT OR ARTS OR BUSI OR DECI OR ECON OR PSYC OR SOCI) AND PUBYEAR > 1989 AND PUBYEAR < 2016 AND (LIMIT-TO(DOCTYPE,"ar")) AND (LIMIT-TO(SUBJAREA,"BUSI"))



Query: (TITLE-ABS-KEY ("biopower") OR TITLE-ABS-KEY (bio-power) AND TITLE-ABS-KEY (foucault)) AND DOCTYPE (ar) AND SUBJAREA (mult OR arts OR busi OR deci OR econ OR psyc OR soci) AND PUBYEAR > 1979 AND PUBYEAR < 2016



Appendix C – Data Gathering

- C.1. Case Study Scenario
- C.2. Questionnaire
- C.3. Suggested Solutions
- C.4. Respondent's Information and Consent

C.1. Case Study Scenario

Case Study: the Factory

by Dr Stephen L. Smith, Brunel University London

You are a team of management consultants who company managers can approach for advice. Read the scenario below and as a group decide what is the best advice that can be given to this Plant Manager. Please try to give him one definite course of action rather than alternatives.

There is one Plant Manager who is in charge of the factory located in the UK. At the factory there are twelve Work Groups. There are no Line Managers: just the Plant Manager, the Work Groups and two Planned Maintenance Fitters. Each Work Group has six workers, giving a total shop-floor workforce (including the fitters) of 74, plus the Plant Manager. The factory is wholly owned by an MNC and the Plant Manager reports directly to its HQ in San Francisco. Only twelve women are employed.

The Work Groups operate four identical production lines laid out in parallel to each other. Each line is capable of producing different sized boxes of several different kinds of breakfast cereal, including muesli, fruit and fibre, fruit and fibre with coconut, honey-oats, corn flakes, choco-rice-crispies etc. Each production line is controlled and operated by three dedicated work groups which take it in turns to work the lines on a Three-Shift System of eight hours for each shift (six workers per line per shift). There is an Early Shift, a Late Shift and a Nightshift. The shift patterns are changed on a four week cycle, so that all workers eventually do Day, Evening and Night Shifts. The production technology is 'Operator Programmable' and is probably the best such equipment available anywhere in the world. Demand for the product is high.

The first production line is called the 'Red Line'; the second is called the 'Green Line', the third, 'Blue Line' and the fourth 'Yellow Line'. Each Work Group has made up names for themselves; for example there are Raiders, Outlaws, Nutty Boys, Rats, Gooners, Spurs, X-Factor etc. Some workers have decorated 'their' production line with emblems and mascots including cuddly toys, pictures of football players and bumper-stickers such as 'The Floggings will Stop when Morale Improves'.

There is 'horse play' in the factory and sometimes workers 'zapp' each other with paintball guns, using the colours of their production line (Red, Green, Blue and Yellow). These play-fights only take place on the 00:00hrs to 08:00hrs Night Shift when the Plant Manager is not on duty. Some women say they don't like these games but some participate in them. Outputs average 13% higher on the Night Shift than on Day or Evening Shifts. Most workers look forward to their team's periods of Night Shift working. The output levels from the factory are very high. Quality is also excellent and exceeds all the standards set. The factory is by far the most profitable of seventeen which are operated by the company around the World, returning 28.7% annual Return on Total Assets.

Workers have organised a league of darts teams and after each season, the winning trophy is placed on top of the production line control room whenever the winning team is operating that particular production line. Sometimes the trophy is 'stolen' by other teams, who hide it in obscure places around the factory. Three teams include women workers, one of whom is an Olympic Archery Bronze Medal Winner. There seem to be a correlation between the sporting success (or failure) of each darts team and that team's productivity. The best team (the Nutty Boys) has held the Production Record for each of the last five years. Nobody has reported sick from this team for more than eight years as they 'hate to let the side down and make others carry their workload'. The team that wins the fewest darts matches usually produces the lowest output, but still shows almost no workplace absence and in any case it exceeds all production targets. Labour turnover is exceptionally low at around 7% per year; so that the workforce is slowly getting older. The Plant Manager has little to do except tell each team what cereal recipe to make and how much to make. All operational decisions are left to the teams. The teams also communicate with suppliers to ensure that all raw materials arrive in time for each production batch. The teams swap roles so that every member gets their 'fair share' of the most interesting tasks, such as monitoring the production line and setting 'speeds and feeds'. Workers check all machinery very carefully to ensure maintenance is up to standard. There have been no unplanned stoppages for seventeen years.

It has come to the Plant Manager's attention that many team members (and the two maintenance fitters) are coming into the factory during their days-off and at night, using company equipment to make rockets for fun. There is an unofficial contest to make the rocket which can reach the highest altitude. Rocket-making must involve some method for powering the rockets but there is no evidence that explosives are being made at the factory, but it is generally known that rocket cases are being machined and assembled in the fitter's workshop. There is a rumour that the 'worst' production team is determined to launch the winning rocket. You should remember that making and using explosives without a licence is a criminal activity.

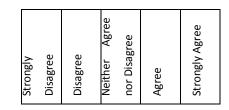
Things to consider:

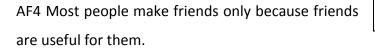
- What should the Plant Manger do?
- What are the likely consequences of this course of action?
- What should the Plant Manager not do?
- What are the likely consequences of this inaction?

C.2. Thought Style Survey

In this survey we are interested in your individual thought style so we want you to answer these questions in the context of your own personal thoughts, rather than in the context of your work or any other activities that you take part in.

Please complete all the questions.

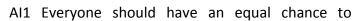




AE4 We need to dramatically reduce inequalities between men and women.

Al2 If people have the vision and ability to acquire property, they ought to be allowed to enjoy it.

AE2 What our country needs is a fairness revolution to make the distribution of goods more equal.









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succeed or fail without government interference.

AE3 I support a tax shift so that burden falls more heavily on corporations and people with large incomes.

AH3 Society works best when people obey all rules and regulations.

AH2 The best way to provide for future generations is to preserve the customs and practices of our past.

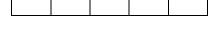
AE1 The world would be a more peaceful place if its wealth were divided more equally among nations.

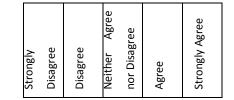
Al4 Competitive markets are almost always the best way to supply people with things they need.

AI3 People who are successful in business have a right to enjoy their wealth as they see fit.

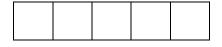












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AI5 In a fair system, people with more ability should earn more.

AF1 It seems that whichever party you vote for things go on pretty much the same.

AH1 One of the problems with people today is that they challenge authority too often.

AH5 Different roles for different sorts of people enable people to live together more harmoniously.

AF2 Cooperation with others rarely works.

AF5 I feel that life is a lottery.

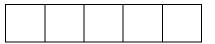
AF3 The future is too uncertain for a person to make serious plans.

AH4 Respect for authority is one of the most important things that children should learn.

AE5 Decisions in business and government should rely more heavily on popular participation.

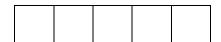
(Grendstad 2001)









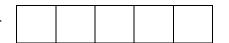












C.3. Suggested Solutions

Solution 1

The most important thing about this situation is that it is illegal and dangerous. These activities must be stopped immediately before someone gets hurt. The trouble is that the success of production in the factory has obscured the fact that management have lost control of the situation. There is no alternative but to call the police and have the whole matter properly investigated. When the culprits are identified they will be an example to the others and send the message that irresponsible behaviour cannot be tolerated in the workplace.

Solution 2

The most important thing about this situation is that these are excellent workers who are a real asset to the company. The worst thing to do would be to demoralise them by upsetting them. They have shown that they can organise themselves very well and that should be encouraged. The best solution is to get them to elect a safety representative for each shift who will be responsible for the safe running of the factory and then send that person on a safety training course which includes such topics as fires and explosives. In this way, if there is anything dangerous going on, they will regulate the matter themselves.

Solution 3

The most important thing about this situation is that these workers have found that the secret of motivation is competition. It is their competitive instincts that have made them the top performers that they are. This situation should not only be encouraged but should be copied by other plants. The worst thing that you could do is to prevent the competition. So, the company should get involved and support these activities. The

company should provide whatever equipment they need and give a prize for the rocket that goes the highest.

Solution 4

This whole matter is probably completely overblown. These workers haven't wrecked the place in the past so why would they wreck it now? If you interfere, you will certainly not properly understand what is going on and just mess everything up and why mess up a factory that is running well? If some of the workers are doing unauthorised stuff in the workshop, they probably have their own good reasons. The best thing to do is to leave well alone and let the matter sort itself out. Probably, in a couple of months' time everyone will have forgotten about the whole thing anyway.

C.4. Respondent's Information and Consent

Overview of Project

You have been invited to take part in a questionnaire survey and discussion group which is part of a research project undertaken by Peter Atkinson. The research project involves analysing the role of certain thought styles in management problem solving.

The session will take approximately 1.5 to 2 hours.

If you wish to leave the session at any point, you are free to do so. If you would like any of your contribution deleted from the project at any time, please tell us and it will be deleted straight away.

Questionnaire Survey

You will be asked to complete a questionnaire survey. Please complete all the questions with the nearest best answer that you can give. Do not write your name on the questionnaire.

Discussion Group

You will be given a case study scenario and other material for discussion. Please ask your facilitator for clarification if there is anything you are unsure about.

Confidentiality

All information which you impart in taking part in this project will be treated with the utmost discretion. Your identity will not be recorded in connection with any information and the fact of your participation will not be revealed or confirmed to any third party.

The discussion will be recorded using a video recording device for the purpose of making a written transcript for analysis. If you reveal the name of any organisation or individual during the discussion, it will be anonymised in the transcript. The video recording will be destroyed once the transcript has been made. The transcript will be retained in a secure environment for analysis and for confirmation of the results at a later date if required. Quotations from the transcript may be used in academic articles and for teaching purposes.

Thank You

Thank you for agreeing to take part in this project.

Contact Details

Peter Atkinson

Email: peter.atkinson@brunel.ac.uk

PhD Research Student, Brunel University

Consent3

I have read the above information and I agree to participate in this study

Signature _____

Name _____

Appendix D – Nvivo Nodes

| Node | Description | | | | |
|---------------------------------|---------------------------------------|--|--|--|--|
| Egalitarian thought style | Parent node | | | | |
| 1E Case | perceived to be in the case study | | | | |
| 2E Cause | view of cause of the problem | | | | |
| 3E Solution | view of solution to the problem | | | | |
| 4E Hierarchy - antagonistic | antagonism between egal. and hier. | | | | |
| 5E Hierarchy - co-operative | co-operation between egal. and hier. | | | | |
| 6E Individualism - antagonistic | antagonism between egal. and indv. | | | | |
| 7E Individualism - co-operative | co-operation between egal. and indv. | | | | |
| 8E Fatalism - antagonistic | antagonism between egal. and fatal. | | | | |
| 9E Fatalism - co-operative | co-operation between egal. and fatal. | | | | |
| 10E The System | what egal. sees as problem | | | | |
| 11E Protect Resources | egal. attitude towards nature | | | | |
| 12E Risk to Nature | egal. attitude towards risk | | | | |
| 13E Cameraderie | valued by egal. | | | | |
| Fatalist thought style | Parent node | | | | |
| 1F Case | perceived to be in the case study | | | | |
| 2F Cause | view of cause of the problem | | | | |
| 3F Solution | view of solution to the problem | | | | |
| 4F Egalitarian - antagonistic | antagonism between fatal. and egal. | | | | |
| 5F Egalitarian - co-operative | co-operation between fatal. and egal. | | | | |

| 6F Hierarchy - antagonistic | antagonism between fatal. and hier. | | |
|------------------------------------|---------------------------------------|--|--|
| 7F Hierarchy - co-operative | co-operation between fatal. and hier. | | |
| 8F Individualism - antagonistic | antagonism between fatal. and indv. | | |
| 9F Individualism - co-operative | co-operation between fatal. and indv. | | |
| 10F Naivete | what fatal. sees as problem | | |
| 11F Resources Unpredictable | fatal. attitude towards nature | | |
| 12F Risk must be accepted | fatal. attitude towards risk | | |
| 13F Wait and See | fatal. strategy | | |
| 14F If it ain't broke don't fix it | fatal. strategy | | |
| Hierarchical thought style | Parent node | | |
| 1H Case | perceived to be in the case study | | |
| 2H Cause | view of cause of the problem | | |
| 3H Solution | view of solution to the problem | | |
| 4H Egalitarian - antagonistic | antagonism between hier. and egal. | | |
| 5H Egalitarian - co-operative | co-operation between hier. and egal. | | |
| 6H Individualism - antagonistic | antagonism between hier. and indv. | | |
| 7H Individualism - co-operative | co-operation between hier. and indv. | | |
| 8H Fatalism - antagonistic | antagonism between hier. and fatal. | | |
| 9H Fatalism - co-operative | co-operation between hier. and fatal. | | |
| 10H Employees untrustworthy | what hier. sees as problem | | |
| 11H Resources must be managed | hier. attitude towards nature | | |
| 12H Risk to stability/order | hier. attitude towards risk | | |

| 13H Stick to the Facts | hier. stance | | | |
|----------------------------------|--------------------------------------|--|--|--|
| 14H Surveillance | hier. strategy | | | |
| 15H Must apply the rules | hier. strategy | | | |
| Individualist thought style | Parent node | | | |
| 1l Case | perceived to be in the case study | | | |
| 2I Cause | view of cause of the problem | | | |
| 3I Solution | view of solution to the problem | | | |
| 41 Hierarchy - antagonistic | antagonism between indv. and hier. | | | |
| 5I Hierarchy - co-operative | co-operation between indv. and hier. | | | |
| 6I Egalitarianism - antagonistic | antagonism between indv. and indv. | | | |
| 7I Egalitarianism - co-operative | co-operation between egal. and indv | | | |
| 8I Fatalism - antagonistic | antagonism between egal. and fatal. | | | |
| 9I Fatalism - co-operative | co-operation between indv. and fatal | | | |
| 10I Too much control | what indv. sees as the problem | | | |
| 111 Use resources while you can | indv. attitude towards nature | | | |
| 12I Risk as opportunity | indv. attitude towards risk | | | |
| 13I Competition | indv. strategy | | | |
| Polyrational thought style | 3 or 4 thought styles combined | | | |

Appendix E – Focus Groups

| Group | Date | # | Experienced | Length | Type of Recording | Location | Comments |
|-------|------------|---|-------------|------------|----------------------|----------|-------------------------------------|
| 1 | 14/11/2014 | 4 | Y | 1 hr 4mins | Video | UWL | |
| 2 | 21/11/2014 | 4 | N | 21mins | Video | UWL | Tech. fault- part of recording lost |
| 3 | 22/11/2014 | 6 | Y | 1hr 4mins | Video | UWL | |
| 4 | 28/11/2014 | 4 | N | 50mins | Video | UWL | |
| 5 | 28/11/2014 | 3 | N | 1hr 9mins | Video | UWL | Small group |
| 6 | 28/11/2014 | 3 | Y | 35mins | Video | UWL | Small group |
| 7 | 15/01/2015 | 5 | Y | 50mins | Audio | Brunel | |
| 8 | 15/01/2015 | 5 | Y | 50mins | Audio | Brunel | |