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Evaluating Memetics: A Case of Competing Perspectives at an SME

Jameson Gill

A thesis submitted in partial fulfilment of the requirements of
Sheffield Hallam University
for the degree of Doctor of Philosophy

July 2013

Abstract

Memetics, which posits a cultural replicator similar to the gene in biology, has been proposed as a theory with which to study cultural phenomena such as organisations. However, much of the theory of memetics has been developed without empirical testing. Consequently, its application to organisations and its operationalisation in empirical studies tends to make assumptions about the nature of putative memes. The purpose of this project is to design a study to test the fundamental tenets of meme theory in an organisational setting. To do so the study poses research questions relating to the possibility of identifying units of culture and investigates whether such units can be seen to replicate.

The questions posed require the development of an 'extra-memetic' method which avoids the pitfalls of previous studies by rejecting the operationalisation of memes as part of its design. By considering complexity theory a narrative approach, grounded in a realist philosophy, is selected as the basis of an extra-memetic method. To accommodate the various technical terms used in the literature a glossary is included. Subsequently, an analysis based on first, structural narrative units and second, narrative evaluation is developed in the context of a case study organisation. The narrative approach enables the generic use of the underlying rationale of the genetic theory which underpins the proposal of the meme but without resorting to genetic analogy. In particular, the concept of the optimon is adopted.

By comparing competing perspectives at the case study organisation, the study finds that it is possible to identify 'optimon' units of culture similar to the optimon genes which are described in Mendelian heredity. However, the notion of replication in culture, similar to that of DNA, is not supported. The original contribution to knowledge is constituted by a critical evaluation of the extant memetic theory, an approach to identifying units of culture which might aid the application of genetic metaphor or discourse theory and a new methodological approach to investigating the meme. In particular, one unit of culture, the 'proof', is identified and through the use of a punnett square model its credibility as a replicator is critically evaluated.

The limitations of a single case study are recognised and summarised. However, in addition to the contribution to meme theory, the project points towards possible avenues for further research which are related to critical realism, discourse analysis and action research in organisations.

Candidate's Statement

I would like to thank my supervisors Ilfryn Price, Rory Ridley-Duff and Sara Mills as well as friends, family and other colleagues for their support and advice.

In advance of my doctoral study I completed the Sheffield Hallam University, Master of Arts in Social Science Research Methods which comprises all the taught elements of the Sheffield Hallam University PhD programme.

During the course of my doctoral study, I have presented papers at two conferences which to date, have culminated in one peer reviewed journal article (Gill, 2012). The article discusses the issues raised during my literature review and posits narrative analysis as the basis for an extra-memetic research methodology.

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Chapter 1 – Setting the Scene for the Project

Project Overview

My study was prompted by my experiences of working in a small printing firm which was struggling to achieve commercial success and I have used the firm as a case study for the project. I worked at the firm in question, which I shall refer to as 'CaseCo', in a sales and marketing capacity from December 2004 to October 2008. Through previous research (Gill, 2007) and work experience, I had identified a bias towards a production perspective amongst my colleagues at the firm. Feeling disillusioned with the marketing approach to management, and having developed a personal interest in evolution, I decided to apply the meme concept to provide a novel account of the way in which CaseCo operated.

However, once I began to engage with the memetics literature in more depth, I found there to be a degree of heterogeneity in the way the theory has been developed. Indeed, at no time is the 'optimon' definition of a replicator used in developing or applying meme theory and yet it is theory based on the optimon definition of a gene which led to the proposal of the meme. Consequently, the emphasis of my study moved, from that of an application of memetics to CaseCo, to an evaluation of memetics through my analysis of the circumstances where I worked. The meme concept, at its most fundamental level, posits units of self-replicating culture. My research questions, therefore, address the possibility of identifying units of CaseCo's culture, the case for judging them as replicators and the need to develop a suitable, new methodology which does not presume the existence of memes. I look to provide evidence for particulate inheritance in culture through optimon type replicators similar to that first demonstrated in biology by Gregor Mendel (Guttman et al., 2002).

By way of complexity theory (Gell-Mann, 1995; Kauffman, 2000; Pratchett, Stewart and Cohen, 2002; Stacey, 2010) I choose narrative theory as the basis of my methodological approach to the empirical stages of the project and I facilitate its operationalisation through a period of ethnographic participant observation at CaseCo. The method in itself is new and, therefore, contributes to my original contribution to knowledge. I deploy my method to search for identifiable units of culture and evaluate

their status as replicators. My findings enable me to model a potential meme, using a punnett square, by way of its dominant and recessive alternatives, thereby identifying particulate culture. However, my model fails to support replication in the sense that it is understood in genetics. I conclude the project by reflecting on the validity of my findings and I identify areas for further research.

Introduction

In this chapter, I describe the background to my project in each of the areas shown in Figure 1-1. First, I provide some background information including the motivation for me to undertake the work. I go on to situate the project with respect to the theoretical perspective of memetics and the research setting, including a review of CaseCo. As part of the discussion I present my research questions and I close the chapter with an overview of the thesis structure and the content of each chapter.

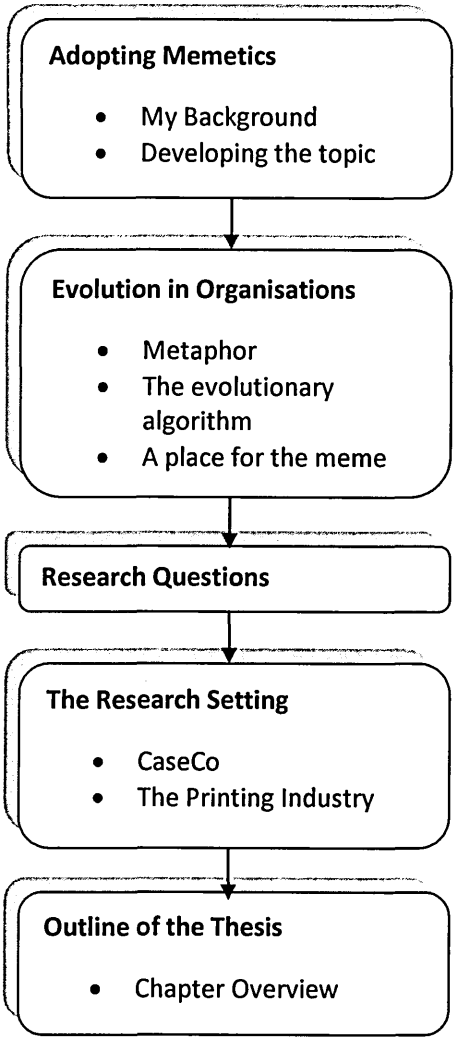

Figure 1-1: Structure and Content of Chapter 1

Adopting a Memetic Perspective

In both my career and education I have a marketing background. Having studied marketing through the professional examinations of the Chartered Institute of Marketing (CIM) and a Master of Arts degree, for some time I had envisaged extending my involvement with the subject to doctoral study. However, in the years preceding this project I had found it difficult to reconcile the marketing theory I had learned with my career experience. Marketing theory did not seem to offer a valid account of the management philosophies and practices I had encountered whilst working at CaseCo and in similar job roles at a number of other firms in a range of other industries[1].

Consequently, I had grown disillusioned with the marketing view of organisations because what was cogently described in many marketing text books and by the CIM as best practice did not seem to be adopted in the places at which I had worked. Indeed, I had seldom been able to convince my colleagues of its validity. Through my experience, my desire to continue my marketing studies at doctoral level had waned but recognising what I took to be shortcomings in marketing theory only served to fuel my intentions to engage in research. To help develop my interest, and as a precursor to my doctoral project, I completed the Sheffield Hallam University Master of Arts in Social Science Research Methods (MA SSRM)[2].

As part of my MA SSRM I conducted a research study at CaseCo (Gill, 2007), based on a period of participant observation, to investigate life at the firm. My findings suggested that, for the Managing Director, customers' orders were a natural consequence of a smoothly running firm. However, the Production Manager saw anything that affected the smooth running of production, including orders, as a problem, thereby posing the dilemma that orders mean problems and sales people bring problems to the firm. In contrast, sales people see orders as relief from the stress of sales targets. Therefore, there seemed to be two alternative perspectives of life at CaseCo. I concluded that a 'production' perspective dominated a 'sales' perspective and subsequently, the staff who

[1] With hindsight it is apparent to me that, through my study towards the professional qualifications of the CIM I had been 'exposed' to a particular 'managerialist' approach to the relationships between organisations and their customers. Such a perspective is, in fact, recognised in the literature and has been critiqued by 'critical marketers', for example, Hackley (2009), and more widely amongst management scholars, for example, Stacey (2010).

[2] Modules taken from the MA SSRM constitute the taught elements of the Sheffield Hallam University PhD programme.

processed the orders found their work stressful as they encountered conflict between the two perspectives in their day to day work.

However, despite helping to describe life at CaseCo, my findings fell short of explaining why the working practices I had experienced persisted. Why did the production perspective dominate in the face of all the well described marketing theory I had learned? By chance, I had listened to Richard Dawkins's contribution to a radio programme and I subsequently read his book *The Selfish Gene* (Dawkins, 1976; 1989). In the book, the 'meme' is proposed as a cultural replicator similar to the gene in biology. For me, the notion of replicating ideas reflected the persistence of cultures in the workplaces which I had encountered, where production processes seemed to be repeated with little reference to customers' needs. It appeared to me that the meme concept provided a novel perspective for conducting research in organisations.

Situating Meme Theory in the Realm of Evolution in Organisations

The term 'evolution' is used widely in culture as a euphemism for change (Weeks and Galunic, 2003) but more technical visions of an evolutionary dynamic in culture have been proposed. *"Since the time of Charles Darwin on, there have been recurrent attempts to extend ideas from The Origin of Species to social or political, cultural or intellectual development"* (Toulmin, 1972, p319). Indeed, there is a body of knowledge within organisational theory where the concepts of evolution have been applied, for example, Aldrich (1979; 1999; 2008), McKelvey (1982), Hull (1988), Morgan (1986), Sammut-Bonnici and Wensley (2002) and Aldrich and Ruef (2006).

In drawing attention to the usefulness of metaphors of evolution, Morgan (1986) suggests that an 'organismic metaphor' might help to identify organisational needs which alternative metaphors cannot accommodate[3]. The organismic metaphor casts an organisation's departments, groups and individuals as organs in a body, their cells and the molecules which comprise them. Survival in competitive environments is posited as the goal of organisations.

However, as Price (1999) points out, there is a risk of reifying metaphors as naive realist explanations of organisational life. In contrast to the use of metaphor, some

[3] Morgan (1986) provides eight metaphorical 'images' of organisations.

organisational scholars have developed realist accounts of organisations by adopting what Dawkins (1982) terms 'universal Darwinism'. Consequently, organisational theory has been posited, based on the view that a real evolutionary process, similar to that seen in biology will occur in any circumstances where there is the operation of the three Darwinian macro algorithmic components of variation, selection and retention (Dawkins, 1982; Dennett, 1995; Aldrich et al., 2008).

Aldrich and Ruef (2006) and Aldrich (1979; 1999; 2008) develop a metatheory of how organisations are manifested by showing how examples of variation, selection and retention can be found in a number of theoretical perspectives of organisations. Sammut-Bonnici and Wensley (2002) suggest that, not only organisational behaviour but the study of the social environments in which organisations operate, for example, economics, sociology, psychology, political science and anthropology, can benefit from an evolutionary account. McKelvey (1982) suggests a classification of organisational species based on biological systematics, because *"... there is strong evidence that natural selection takes place in organisations"* (McKelvey, 1982, p235) and Hull (1988) uses an evolutionary account to show how developments made in scientific communities can be explained. However, these theories omit or equivocate over a selfishly replicating equivalent to the gene as definitive as Dawkins's (1976) meme. Consequently, there are two potential contradictions between the domains of biological evolution and evolution in organisational settings, the first relating to the role of human consciousness and the second relating to the unit of selection.

The first contradiction is that where in biology the evolutionary algorithm is blind and without design, the organisational theory maintains elements of human design and direction. Therefore, where an observer might view the evolutionary algorithm playing itself out in the biotic domain and describe a struggle for existence, Aldrich and Ruef (2006) add 'struggle' as a fourth component of the evolutionary algorithm in organisations. Human intention is accommodated with evolution in their theory through the notion that people have 'goal direction' which is, however, limited by imperfect knowledge and habits. Consequently, they draw upon the notion of bounded rationality (March and Simon, 1958) to support their proposal of an evolutionary dynamic.

The concept of 'bounded rationality' is based on the observation that humans are organisms with *"... limited intellective capacities in comparison with the complexities of*

the problems that individuals and organisations face" (March and Simon, 1958, p169). Therefore, people depend on action programs[4], or strategies, which are used to decide how to act in recurrent situations. Similarly, in citing Aldrich (1979), DiMaggio and Powell (1983) question the degree to which consciousness can be exercised by people in organisations, based on their observation that organisations within a certain field tend to evolve towards homogeneity as that field becomes more structured. By drawing upon Giddens's (1979) theory of agency and structure, they propose that the greater the structuration in an organisational field[5], the more limited is people's ability to act freely (DiMaggio and Powell, 1983).

Therefore, the theories of evolution in organisations address the same social phenomena which might be considered by other conceptions of the social world. Foucauldian discourse analysis, for example, similarly addresses how behaviour is enabled and restricted by way of the power that is dispersed throughout social relations (Mills, 1997). However, the maintenance of *any* human free choice seems to be at odds with one of the key insights provided by biological evolution which is that there is no design, direction or space for a teleological account (Dawkins, 1976; 1989; Guttman, 2005).

The second contradiction between the two domains relates to the bias towards the macro, or algorithmic component, of evolution in organisational theory (Shepherd and McKelvey, 2009) compared to that described in biology through the modern synthesis. Where Dawkins's (1976; 1989) replicator concept is definitive in terms of the unit of selection and, therefore, inheritance in both biology and culture, there is no consensus in the organisational theory. Suggestions include internal organisational elements such as competencies (McKelvey, 1982), groups of organisations at the population or community level (Aldrich and Ruef, 2006) and population-like patterns such as organisational fields (DiMaggio and Powel, 1983). Sammut-Bonnici and Wensley (2002) summarise a wide range of potential units of selection both internal and external to organisations such as routines, competencies, companies, industries, markets and economies.

[4] In proffering the notion of action programs, March and Simon (1958) note the potential for game theoretic explanations of behaviour but they do not develop the approach. However, game theory has been shown to be useful in developing genetic theory and I discuss this issue in chapter 2.

[5] Organisational fields are institutionally defined groups of organisations which constitute a recognised area of institutionalised life (DiMaggio and Powell, 1983).

The two contradictions between evolution theory in biology and culture, which I have discussed above, mean it is not clear to what extent evolution in cultural phenomena, such as organisations, ought to be considered as a real process. Perhaps it would be more valid to maintain a reflexive use of metaphor such as that proposed by Morgan (1986) or adopt a more mainstream approach to studying the social world such as discourse analysis? Indeed, Sammut-Bonnici and Wensley (2002) suggest that evolutionary theory cannot answer questions regarding the 'engines' which drive the phenomenon in the abiotic domain. Rather, evolutionary organisation theory must depend on other approaches for their power. However, the meme concept does provide a potential explanation for the engine of cultural evolution because it posits an analogue to the engine of evolution in biology: the gene (Dawkins, 1976; 1989).

Dawkins's Neo-Darwinian View

In *The Selfish Gene* (Dawkins, 1976; 1989), and later in the *The Extended Phenotype* (Dawkins, 1982; 1999), the relationship between genes and organisms is described through the lens of Julian Huxley's neo-Darwinian 'modern synthesis'. The modern synthesis unites the Darwinian macro evolutionary algorithm of variation, selection and retention (Darwin, 1859; 1985) with the micro processes of gene replication. Consequently, the biological complexity of all life is characterised as simply the evolved machinery by which genes make copies of themselves, due to their innate tendency to replicate without forethought or direction, hence the term 'selfish'[6] (Dawkins, 1976; 1989).

Although Dawkins's (1976; 1989) work emphasises non-human cases of biological evolution, he identifies culture as the factor which makes humans exceptional amongst all other species. However, despite suggesting that cultural complexity is special, because it is not influenced directly by genes, he suggests that it may evolve in a similar manner to that of biology through an alternative replicator: the meme[7]. The cultural examples he provides as indicators of such a phenomenon are language, fashions, ceremonies, art, architecture and engineering/technology.

[6] The term 'selfish' is used in selfish replicator theory as a rhetorical device to indicate the innate tendency to make copies, i.e. the replication process is inherently self interested.

[7] Dawkins (1976; 1989) cites a combination of the etymology of the Greek 'mimeme' (linked to imitation), the French '*même*' meaning 'the same' or 'likewise' and the English 'memory' as the basis for the name of his cultural replicator.

The neo-Darwinian view of biology and genetics made intuitive sense to me and I was intrigued by the suggestion that culture may evolve via a similar process, so much so that I began to notice instances at work where 'things' seemed to be replicated, or at least repeated. For example, I remember being struck by the way I could enter an open plan office humming a tune and then hear the same tune repeated by a colleague a little later. I decided to develop my interest in cultural evolution and make it the basis for my PhD by applying the meme concept to my experience of organisations. I felt there were opportunities to make an original contribution to knowledge by addressing the lack of understanding of the engines of cultural evolution within current research, and I could provide a novel memetic view of organisational culture by further investigating the competing perspectives I had already identified at CaseCo.

Research Questions

With the initial broad based research aim of applying memetics to CaseCo, to shed light on the firm's culture, I reviewed the memetics literature. However, memetics is a young science and there have been a number of speculative theoretical developments based on the original concept. I address the various theories during my literature review in chapter 2 but the very fact that memetics provides a novel perspective meant that the more I read, the harder I found it to make my project more specific. As I will describe during my review of the meme based literature, the issues of the role of human design and the unit of selection in putative cultural evolution remain unclear in meme theory. Consequently, rather than simply apply meme theory to CaseCo, I decided upon two research questions which would address the validity of memetic theory by way of my case study. The two questions are:

1. **Can the organisational culture at CaseCo be divided into units?**
2. **If so, can such units be seen to selfishly replicate?**

In Chapter 2, I present my detailed discussion of how I arrived at my first two research questions. However, I also discuss how the lack of a theoretical consensus in memetics means that no extant methodology for empirical meme based research exists in the

literature which does not presume the existence of memes through significant *a priori* assumptions about the concept. These circumstances led me to add a third question related to methodology:

3. **Can an 'extra-memetic' research methodology be designed that can test the fundamental tenets of the meme concept?**

I also discuss the rationale for raising this question during my literature review in chapter 2 and I address the issue conceptually in chapter 3, where I discuss complexity theory as a generic basis for considering evolution in either the biotic or abiotic domains.

The Research Setting

Through linking my research questions directly to my own work place, much of the discussion which follows is based on CaseCo. Therefore, in this section, I provide some information about the firm to help set the scene for the later chapters. CaseCo is a small printing firm, employing less than thirty people, located in the north of England. The firm printed a range of items such as leaflets, brochures and posters, all produced and supplied to customer specifications. I had moved to CaseCo to take up a sales and marketing role having previously worked at a similar printing firm for four years.

Background

I worked at CaseCo for almost four years and for much of that time the firm suffered from a diminishing customer base and an associated decline in sales, despite my role changing over time towards an emphasis on selling rather than broader based marketing. From my marketing perspective, the firm adopted a production orientation which led to short term monthly sales targets which would satisfy the production capacity. The firm's long term future forever seemed in doubt.

Indeed, during my period of employment at CaseCo there were three separate owners, due to two periods of insolvency. The period of my data collection, which I describe in

chapter 5, occurred approximately six months into the second period of ownership. CaseCo had been taken over by another local printer and the operations of the two firms had been merged. Some of my colleagues had been made redundant and there had been new working relationships with the people who had been previously employed by the new owners.

However, despite the recent experience of insolvency, takeover and redundancy, the working practices at CaseCo did not seem to change. To my mind, the sales function and customer needs were subordinated to the management of the production facilities, another instance of the failure of the marketing ideology. In fact, during the period of my employment, a number of other salespeople had been employed and had left the firm having made little impact on sales. Subsequently, I found myself in the position of being the sole salesperson. Therefore, although it would be possible to suggest the firm's poor performance was due to my inability to sell, I had fared better than others.

During the period of my research, I focused on meeting monthly sales targets by engaging in sales activities with my established customers[8] because the period of insolvency had made some of the customers question CaseCo's ability to fulfil their orders. To help the sales effort, the new Managing Director resolved to take on a sales role but, with me as the only full time salesperson, a large part of the day-to-day customer contact was handled by two members of staff and the Company Secretary who processed customer orders prior to production. My interactions with these colleagues form a large part of my analysis of CaseCo in the empirical stages of my project.

My Colleagues

I reported to the Managing Director but this occurred in an informal manner taking the form of conversations 'on the hoof' as issues arose. Indeed, there was no formal reorganisation or restructuring of CaseCo following the takeover. Each person continued to do the jobs they had done at each of the two firms before they were merged. Therefore, I tended to communicate directly with those of my colleagues whom I felt could impact on my ability to meet my sales targets by progressing orders through

[8] It is common practice in the print industry for salespeople to be responsible for the sales expected from specific customers. Indeed, a number of recruitment agencies operate to place salespeople in the industry, based on the customers they might be able to 'take' to a new employer.

the factory and making deliveries on time. I have summarised the 'constellation' of my working relationships in Figure 1-2.

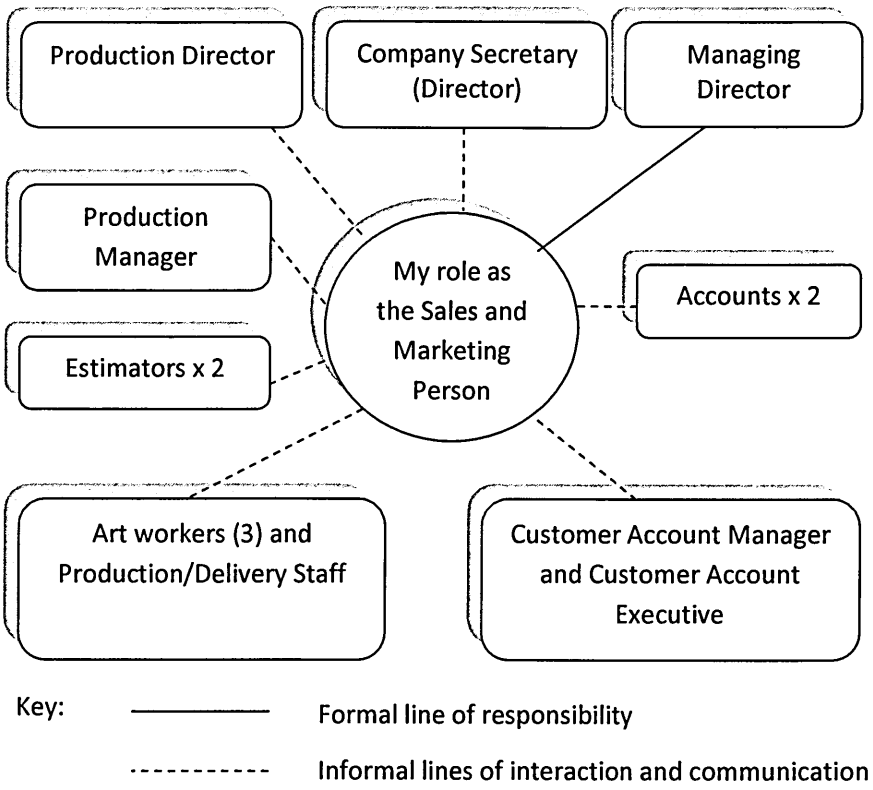

Figure 1-2: My Working Relationships at CaseCo

Of the three directors, my most frequent contact was with the Company Secretary who handled the day to day running of the administration functions which processed customers' orders. The Production Director operated one of the printing presses and it seemed to me that he did not differ, in any significant respect, from any of the other press operators. In fact, the Production Manager, who like me had worked for the previous owners, played more of a management role than the Production Director through his involvement in the scheduling of the manufacturing activities.

I had regular contact with both the Customer Account Manager and Customer Account Executive, both of whom processed orders and prepared the paperwork for production. Therefore, they each maintained regular contact with customers who had placed an order or sent an enquiry. Two estimators converted the customers' enquiries and orders into CaseCo's production schedule and in doing so produced a cost-plus selling price based on the estimated production times and material costs. Consequently, the output

from the estimators impacted on both the firm's competitiveness and the way work was processed through the factory. I would talk to the art workers, production operatives, delivery people and accounts staff when they worked on the orders sent from my customers.

The Printing Industry

It is usual for firms in the printing sector to base their business around the type of printing process they operate. Consequently, firms are known via their production process, for example, they might be known as a 'litho-printer', a 'digital printer', a 'web printer' or a 'screen-printer', etc. However, many customers' needs are not conveniently aligned with a single process, so it is usual for a customer to have a range of different print suppliers to make sure they can satisfy all their needs[9]. CaseCo was predominantly a litho-printer, but also had a small facility to offer digital print. However, the firm would use a range of industry partners to try and source items for customers which could not be printed 'in house'.

Consequently, complication might occur because there are variations in the way each printing technique operates. For example, the 'proofs' used to show and check how an item will be printed before the print run commences are produced differently for each printing process. Therefore, although a proof would be provided for each item ordered from CaseCo, so that the customer could approve the work, the degree to which the final item might match the proof could vary depending on the printing and proofing method in question. In the empirical stages of my project, proofing emerges as a key theme. There was also variation amongst the customers. As well as the variable requirements they might have, some customers employed specialist print buyers and their own artwork production workers, whilst others had very little print knowledge or depended on third party artwork production.

During my time working in the industry, through the linking of certain products to particular production methods, printing firms would tend to compete by updating their production facilities and the sales effort would then be used to find 'suitable' orders by

[9] In the years preceding my study, a new form of organisation known as 'print managers' had begun to offer an outsourced print buying and handling service for customers, based on the notion that there is value to be provided by managing the plethora of print process orientated firms.

contacting current and potential customers. It would not be unusual for me to contact a prospective new customer only to be told that there had already been similar prospecting contact from other printers that week or even the same day. Consequently, customers held the power in many negotiations and some were prepared to negotiate assertively. The demands of monthly sales targets and the need to find suitable orders for CaseCo's production facilities meant that my interactions with my colleagues at the firm could be awkward. It seemed to me that if a customer's request did not immediately match the firm's abilities to satisfy it, then there was an expectation that it would be better to find a new more suitable customer or to try and change the way the customer had defined their need.

I had made my concerns about this issue known to the MD because I felt the performance of CaseCo, in terms of its ability to serve customers, was being inhibited. Although the MD responded by telling the internal departments that the firm needed to be more customer focused, there seemed to be very little change in the way we operated. I took such instances as more evidence for detrimental practices persisting in spite of management actions to change them.

Structure of the Thesis

In this chapter, so far, I have introduced the background to my study. I conclude by outlining the structure of the thesis and, in the final section, I outline how my project proceeds, chapter by chapter. Figure 1-3 shows how the thesis is organised around nine chapters. I orientate the study through chapters 1, 2 and 3 discussing how I arrived at my research questions and choice of methodology. Chapters 4 and 5 present the methodological theory and how I have operationalised an approach with which to address my research questions. I discuss the empirical stages of my project in chapters 6, 7 and 8. Finally, I reflect on my research and summarise my original contribution to knowledge in chapter 9. I reiterate and update a version of Figure 1-3 at the beginning of each of the chapters, to help orientate the discussion.

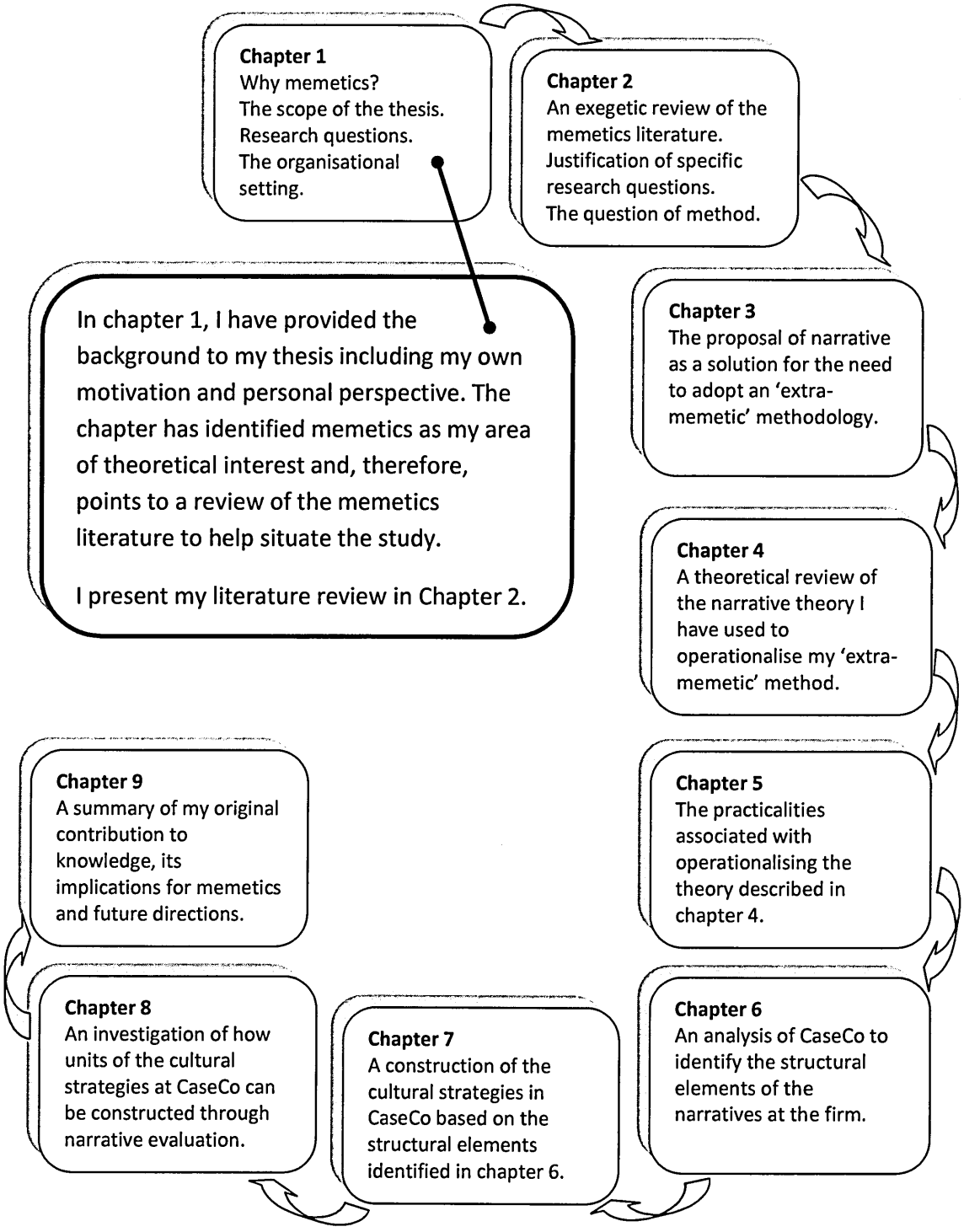

Figure 1-3: Thesis Structure Showing the Role of Chapter 1

Chapter Previews

Chapter 2 – Review of the Memetics Literature

Due to the heterogeneity in memetic theory and a bias towards theorising rather than empirical research in the memetic community, I adopt an exegetic rather than an inspirational approach to the literature (Czarniawska, 1998). To do so, first I review Dawkins's (1976; 1982; 1989; 1999) replicator concept and reflect on his 'optimon' definition of the gene including its conceptual similarity with Mendelian heredity. Mendelian heredity can be demonstrated by way of the punnett square model (Guttman et al., 2002). I go on to critique Dawkinsian replication in culture before similarly reviewing the theories provided by a range of scholars who have developed memetics as a fundamental concept. I then review the instances where memetics has been applied to the management of organisations and the few examples of memetic empirical research. I conclude my review of the literature with the justification for my research questions and the recognition that an 'extra-memetic' methodology is required for my empirical work.

Chapter 3 – Replicators, Complexity and an Extra-Memetic Method

To address the need to choose an extra-memetic method which does not presume the existence of memes, or even replication, at the outset of my empirical research I turn to the notion of complexity as the generic unifying aspect of evolution. By drawing on Gell-Mann's (1995) work on complex adaptive systems I link the notion of evolved schemata to narrative accounts, thereby leading to narrative as my choice for an extra-memetic methodology. Indeed, narrative is indicated in the memetics literature but it has not been developed as a methodology for memetic research. The method involves writing an account of either biological or cultural strategies as the basis from which to search for replicating units.

Chapter 4 – Methodology 1, Narrative Theory

Having not found an explicit use of narrative method in the memetics literature I present the narrative theory and models which I use in the empirical stages of my project. I also discuss the manner in which I deploy my narrative approach through ethnographic participant observation at a case study organisation and reflect on the epistemological

implications of my extra-memetic method. The narrative literature reciprocates the indications for its adoption as an extra-memetic method and facilitates addressing the question of replication in culture by way of the notion of narrative rationality.

Chapter 5 – Methodology 2, Operationalisation

Having reviewed narrative theory, I discuss how I managed the fieldwork stage of my project. I explain my data collection through covert ethnography, including its ethical implications, and I preview the data which I recorded in two participant observation diaries, diary 1 and diary 2. The chapter introduces my two part analysis based on my realisation, discussed in chapter 3, that a written account of the cultural strategies at CaseCo is required before my research questions can be addressed. My analysis leading to a written account of CaseCo's cultural strategies is presented in chapters 6 and 7 and I address my research questions directly in chapter 8.

Chapter 6 – The Structural Elements of the Diary 1 Data

In this chapter I apply a range of narratological tools to identify the structural narrative units in my diary 1 data. I identify a range of narrative functions attributable to both the sales and production perspectives at CaseCo and attribute each perspective to a 'narrative programme'. I conclude by organising the functions into narrative trajectories based on the interactions with CaseCo's customers.

Chapter 7 – The Strategies of the Narrative Programmes

Having coded the diary 1 data as narrative units, in chapter 7, I review the narrative trajectories linked to customers to construct written accounts of the strategy of the sales perspective, the narrative programme, and the production perspective, the narrative anti-programme. Comparing the two written accounts demonstrates that there are instances of competition between the two strategies and in chapter 8 I use this as the basis for investigating the notion of replicating units of culture.

Chapter 8 – The Possibility of Replicating Units of Culture

By analysing the narrative evaluative content of my diary 2 data, I describe the points of view of the sales and production perspectives at CaseCo and discuss the possibility that, in place of free choices, emploted causality and fact influences the way people at the firm act. By assessing the manner in which elements of the two strategies I identified in chapter 7 compete, I propose a unit of culture, the proof, which might be said to replicate by way of the underlying narrative rationality at the firm. I present two conceptualisations of proofs by applying the punnett square model.

Chapter 9 – Conclusions and Original Contribution to Knowledge

In this final chapter, I summarise my empirical findings by reflecting on the extent to which I have been able to answer my research questions. I posit the 'proof' as a putative meme at CaseCo by considering my application of the punnett square model which, as I discuss in chapter 2, is used in genetics to demonstrate variations in genes. I review the validity of my conclusions and discuss the impact they have for memetics and other areas of study.

Chapter Conclusions

In this chapter, I have explained the rationale and motivation for my doctoral project. To do so, I have provided background information about the research setting and situated the research within the body of knowledge related to evolution in organisations. In particular, that which relates to memes. In the next chapter, I present my review of the memetics literature to help support my choice of research questions and my approach to the empirical stages of the project.

Chapter 2 – Review of the Memetics Literature

In this chapter, I present my review of the memetics literature and show how the theory influenced my choice of research questions, as shown in Figure 2-1.

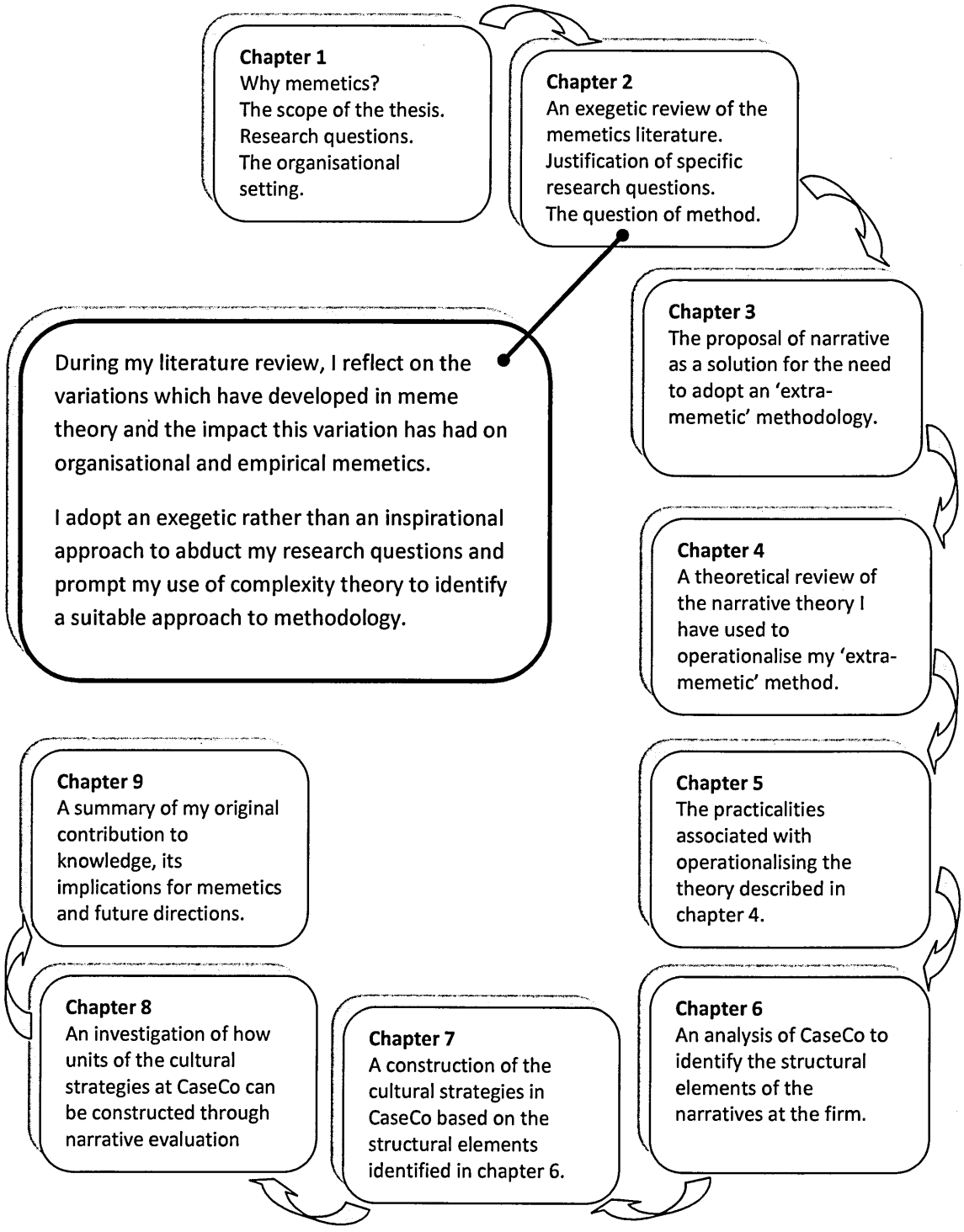

Figure 2-1 Thesis Structure Showing the Role of Chapter 2

In my opening chapter I have identified that there is a tendency, when discussing organisations from an evolutionary perspective, to concentrate on applying the macro evolutionary algorithm, at the expense of what Sammut-Bonnici and Wensley (2002) term the 'engines' of evolution acting at the micro level equivalent of genes in biology. Consequently, it is difficult to establish to what extent the validity of evolution in organisational studies should remain metaphorical. However memes, as selfishly replicating cultural entities (Dawkins, 1976; 1989), are suggested as analogical to genes and there is a body of knowledge which has been specifically based on developing the selfish meme concept[10]. The scope of my literature review, therefore, is based around an exploration of the work which has been inspired by the meme and my aim in this chapter is to show how the extant knowledge has informed the decisions I have made, with respect to the empirical element of my project.

My Approach to the Literature

The development of Dawkins's (1976) meme concept has become known as memetics but, having reviewed the literature my overarching view is that, because a number of theorists have contributed separate accounts of memes grounded in their individual background theoretical proclivities, there are a number of theoretical accounts of memes which are difficult to reconcile. To date, there has been very little accompanying empirical research to test the theories. Consequently, there is a risk that the meme concept might have dissolved into an imprecise notion of all things to all people (Lynch, 1998).

Although Edmonds (1998) regards memetics as gloriously diverse, I have found the number of different ways in which the meme concept has developed difficult to synthesise, so much so that I feel the term memetics somewhat overstates the unity of the discipline. Indeed, the variation in memetic theory has been recognised as problematical by some of those who have contributed to memetic theory, for example, Aunger (2000) and Distin (2005). Consequently, I have adopted an exegetic rather than an inspirational approach to my review of the literature (Czarniawska, 1998), the stages of which are shown in Figure 2-2.

[10] Facets of culture pertinent to meme theory have been discussed in various disciplines before Dawkins's (1976) 'meme' was proposed (Toulmin, 1972; Edmonds, 1998) but it is the ideas that have been attached to the meme as a Dawkinsian replicator which are of interest here.

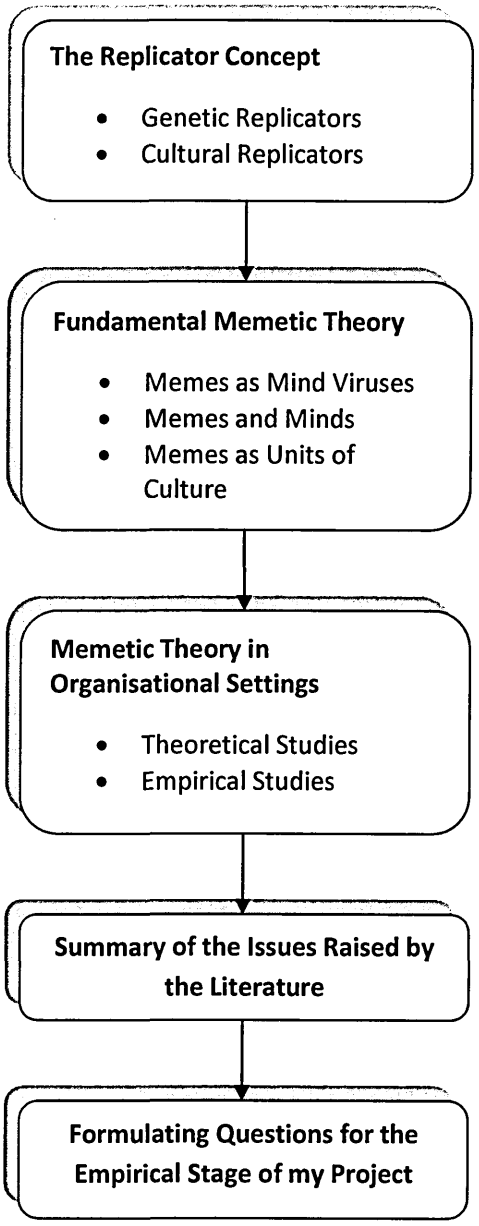

Figure 2-2: Structure and Content of Chapter 2

I first discuss Dawkins's (1976; 1989) original memetic theorising, thereby creating a touchstone with which to orientate my discussion. Indeed, much of the theoretical development of the fundamental meme concept, and even some of the more recent memetic theory and research, returns to Dawkins's (1976) original thesis, not only to acknowledge the original source, but to help support its use of the concept, for example, Voelpel, Leibold and Streb (2005), Conley, Toossi and Wooders (2006), Gatherer (2007) and Shepherd and McKelvey (2009). I go on to consider fundamental memetic

theorising, then the theory as it is applied to organisations and finally, how the small number of attempts at empirical memetic research have been able to design studies in light of the theoretical *milieu*. I end the chapter with a discussion of the impact of the literature on my choice of research questions and methodology.

Therefore, I present the memetics literature in a manner which explains my findings in terms of the inconsistencies and contradictions I have identified in the theory. At the end of each section, I reinforce my exegetic approach by listing the key insights I have gained from that part of the literature. At the end of the chapter, I use my summary of the key issues to derive my conclusions. My aim being to follow the advice of Gatherer (2005) and problematize memetics in order to find empirical research questions with which to refine the theory. My account supports my later abduction of a 'best solution' (Czarniawska, 2004; Blackburn, 2008) with which to approach the empirical stage of my project. I discuss my choice of methodology in chapter 3.

The Replicator Concept

Dawkins (1976; 1989; 1982; 1999) casts memes and genes as simply different tokens of the same underlying selfish replication process. However, rather than pursuing evidence for memes in culture, his conceptualisation of the meme is presented almost exclusively on the basis of genetic theory[11] (Deacon, 2004). Therefore, in this section, I discuss the various aspects of Dawkinsian genetic replication and I contextualise it with respect to the wider body of genetic knowledge. However, I do not intend to provide a review of genetics *per se*. The purpose of this section is simply to identify the key tenets of replication which underpin the notion of a meme.

Dawkinsian Genetic Replicators

Dawkins (1976; 1989) asserts that once the first molecules had arisen on Earth[12] which happened, by chance, to make copies of themselves, i.e. replicate, any variation in the three replicator characteristics of longevity, fecundity (rate of replication) and fidelity

[11] In his foreword to Susan Blackmore's (1999) *The Meme Machine,* Dawkins states that, rather than attempting to provide a fully-fledged explanation of culture, he introduced the meme simply to show how Darwinian processes could be universal.

[12] Dawkins (1976; 1989) suggests that the first replicators would have occurred as some molecules happened to form counterparts similar to themselves due to their innate chemical properties.

(copying accuracy) among the different kinds of molecule would have led to competition[13] for the finite chemical resources needed for replication. Those replicators better able to compete were naturally selected by the prevailing environmental conditions and deoxyribonucleic acid (DNA) not only won this battle for selection, it remains the replicator in all living things today.

However, the less than perfect copying fidelity of DNA led to the selection of cumulative improvements in the ability to replicate by way of phenotypic expressions. Once phenotypic expressions such as the replicating machinery of cells evolved (Guttman et al., 2002) further incremental adaptations led to the complex bodies of animals and plants. Dawkins (1976; 1989) regards these phenotypes as the 'survival machines' of the genes and, in today's world of evolved complex order, natural selection favours co-operative ventures of genes which are good at building bodies able to survive and reproduce. However, there is not an atomised link between certain genes and certain phenotypic expressions. Genes work together in an interconnected complex through embryonic development and contact with the environment, so each gene may influence many phenotypic effects, a phenomenon called pleiotropy (Dawkins 1976; 1989).

Dawkins (1976; 1989) attributes selfishness to replicators to express the way such entities become successful by simply being more suited than alternative entities to copying in their environment. Indeed, "... *selfishness is to be expected in any entity that deserves the title of a basic unit of natural selection*" (Dawkins, 1989, p33). Consequently, the traits of a genetic selfishly replicating entity will ordinarily lead to selfishness rather than altruism[14] in their survival machines. Much of Dawkins's (1976; 1989; 1982; 1999) work shows how apparently altruistic behaviour, such as that linked to kinship or reciprocity, can be explained by the frequencies of genes measured across groups of organisms, rather than in individuals.

The primacy of the gene over phenotypic expressions can be described through the concept of the extended phenotype (Dawkins, 1982; 1999), which I have modelled in

[13] The apparent competition one might describe as an observer does not endow the molecules with agency, they just happen to copy in ways more or less suited to the environment.

[14] Dawkins's (1976; 1989) definitions of selfishness and altruism are limited to behaviour. Any behaviour which raises the survival prospects of another, whilst reducing the givers survival prospects, is said to be altruistic.

Figure 2-3. Once phenotypic expressions occurred, in the first place probably acting as simple protective barriers (Dennett, 2003), a number of further levels of complexity were enabled which Dawkins (1999) refers to as the outward march of the phenotype. Natural selection operates to result in gene frequencies which span the levels so any phenotypic expression can be considered as the replicating machinery of the genes which gave rise to it.

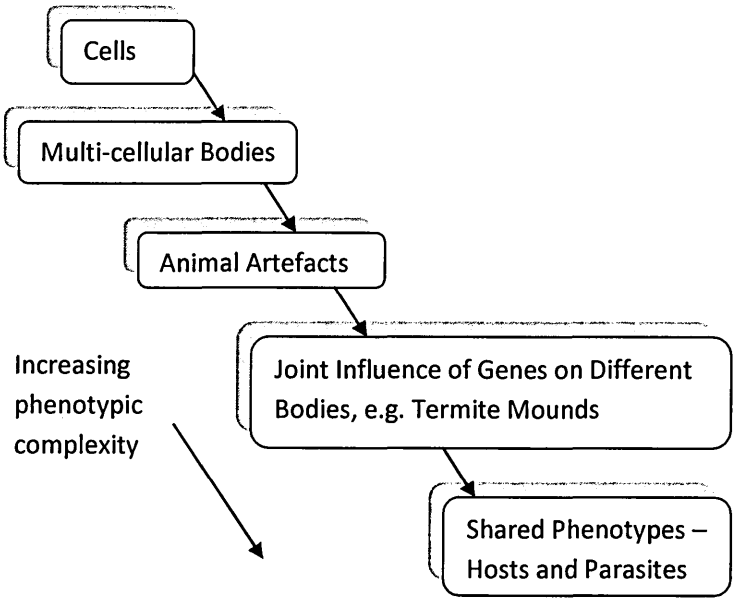

Figure 2-3: Outward March of the Phenotype, Adapted from Dawkins (1999)

Particulate Heredity

Due to the complex pleiotropic nature of phenotypic development, Dawkins (1976; 1989) notes the difficulty in identifying what actual piece of DNA counts as a specific gene, and decides upon a definition based on the phenotypic expression which is exposed to natural selection. By adopting this definition, a piece of DNA which can be seen to exert a particular phenotypic expression in contrast to its allele[15], when all else in the genotype is equal, can be said to be a gene 'for' that phenotypic expression.

> *To be strict this book* [The Selfish Gene] *should be called not The Selfish Cistron nor The Selfish Chromosome, but The Slightly Selfish Big Bit of Chromosome and the Even More Selfish Little Bit of Chromosome.*
>
> Dawkins (1989, p33)

[15] Alleles are the alternative forms of a gene (Guttman et al., 2002).

Dawkins (1982; 1999) defines this conceptualisation of the gene as the unit of natural selection, naming it the 'optimon'[16] and notes how the optimon view of genes rests on the particulate genetic inheritance first demonstrated by Gregor Mendel. Guttman et al. (2002) show how Mendel's laws of heredity were based on recurring proportions of characteristics displayed by subsequent generations of pea plants that flowered with either yellow or green flowers in a 3:1 ratio, in favour of yellow. Mendel's breeding experiments found that crossing purebred green flowering plants with purebred yellow flowering plants resulted in a generation of all yellow flowering plants. However, when this generation were allowed to cross pollinate, a quarter of the third generation showed green flowers.

By considering the third generation of pea plants, three conclusions can be drawn from what amount to be four combinations of their inheritance, as shown in Table 2-1. Firstly, individual plants carry the potential for two colours of flower, their genetic alleles. Secondly, in the case of flower colour the potential for yellow flowers is dominant over the recessive potential for green. Thirdly, the inheritance for flower colour is particulate.

Combination 1	Combination 2	Combination 3	Combination 4
Yellow/Yellow	Yellow/Green	Green/Yellow	Green/Green

Table 2-1: Mendelian Combinations of Inheritance in Pea Plants

Although each allele has an equal chance of being passed on by the parent plants, a recessive allele must be inherited from each parent to result in a green flower in the offspring (Guttman et al., 2002), combination 4 in Table 2-1. The first three combinations result in yellow flowers because the allele for yellow flowers is dominant. The dynamics of Mendelian heredity[17] can be modelled graphically in a 'punnett square', as demonstrated in Figure 2-4. One of the two alleles carried by each parent is passed on to their offspring with equal probability. Therefore, the punnett square shows

[16] Dawkins (1982; 1999) identifies the optimon definition of genes as central to his selfish gene theory and notes a range of alternative gene definitions which might be used in different contexts. These are:

- The Muton - minimum unit of mutational change
- The Recon - minimum unit of recombination
- The Cistron - unit responsible for synthesising one polypeptide chain

[17] Some alleles can be co-dominant or incompletely dominant. Therefore, organisms can be seen to blend in some characteristics (Guttman et al., 2002).

how a 50% chance of inheriting either a dominant or recessive allele from each parent leads to four equally likely scenarios. In chapter 8 the punnett square model provides a useful way for me to reflect on my own findings regarding the potential for replication in culture.

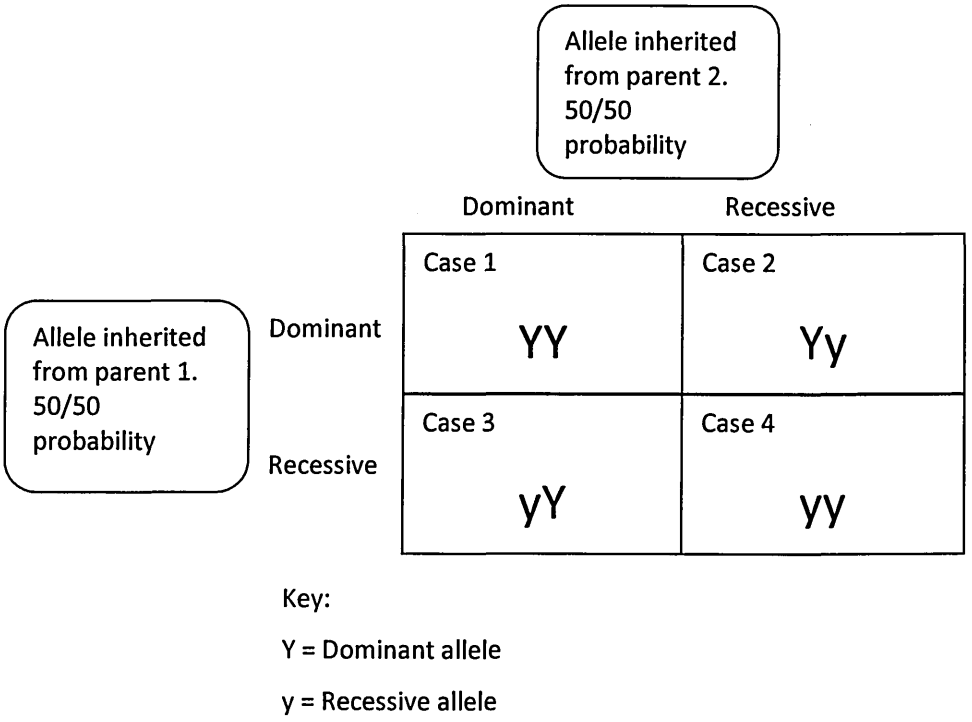

Figure 2-4: Punnett Square adapted from Guttman et al. (2002) to Demonstrate the 3:1 Proportions of Mendelian Heredity

Genetic Replication

DNA is present in all the cells of an organism and it is replicated each time a cell divides (Guttman et al., 2002). In complex multi-cellular organisms such as Mendel's pea plants, which sexually reproduce, DNA replicates in two contexts (Dawkins, 1982; 1999). Firstly, germ line cell division (meiosis) which results in either sperm or egg (gametes), leading, in turn, to a new genotype/phenotype and secondly, somatic cell division (mitosis) which results in body growth and maintenance within an existing survival machine. Each gene is paired with their equivalent in the same loci of each half of the DNA strand. Therefore, all the alleles in a genome compete for the same loci and,

of the two alleles present in any genotype, the 'dominant' allele will express its phenotypic effect, thereby exposing it to natural selection[18] (Guttman et al., 2002).

However, as the punnett square in Figure 2-4 illustrates, in sexually reproducing organisms the recessive allele is just as likely as the dominant to find its way into the next generation via meiotic cell division, through a process called 'crossing over'. During meiosis a gamete with one half of the double helix of DNA is formed from a combination of both halves of the double helix of the parent (Guttman et al., 2002). Crossing over is postulated by Dawkins (1976; 1989) as the usual way in which a new genetic unit (gene) is formed in sexually reproducing survival machines because it does not respect the boundaries between genes.

Although more rare, variation not dependent on sexual reproduction does exist as 'point mutations' which are simply errors in the chemical copying process of DNA (Dawkins, 1976; 1989). However, some DNA replicates in ways other than via sexually reproducing phenotypes. Viruses, for example, don't build their own phenotypes. Rather, they replicate by parasitizing the cellular machinery of other genes (Guttman et al., 2002).

Genetic Survival Strategies

Through their phenotypic expressions, genes can be said to deploy strategies for survival which compete against alternative strategies deployed by their own and other species[19] (Maynard Smith, 1982; Dawkins, 1989). Strategies evolve because natural selection, through the payoffs of survival and reproductive success, favours genes that build and control their survival machines in ways which make the best use of their environments, including other survival machines (Dawkins, 1976; 1989), i.e. the macro evolutionary algorithm. Consequently, by assuming a strategy is a genetically pre-programmed behavioural policy the descriptions of organisms' survival strategies can shed light on their genetic makeup.

[18] A number of alleles will exist in the genome of a species but any individual's genotype will have two, one inherited from each parent of the organism in question in sexually reproducing organisms (Guttman et al., 2002).

[19] Survival strategies become Evolutionary Stable Strategies (ESSs) when a persistent equilibrium of their adoption in a population is reached. ESSs are modes of behaving which penalise any organisms which defect against them but which do well when they encounter a copy of the same strategy (Dawkins, 1989).

> *Instead of comparing the success of individual organisms, it is often in practice more useful to compare the success of strategies or programs, or subroutines averaged across the individuals that use them.*
>
> Dawkins (1999, p118)

Consequently, Dawkins (1999) suggests that a written account of the strategy, in English[20], can be used as a methodology for studying the impact of the, yet to be discovered, genetic replicators which have given rise to the observed strategy. By observing an animal's survival strategy and converting it to an account in English, an assessment of the program encoded in its DNA can be made and alternative programs which might compete in the population can be considered.

> *... although no program was ever written down, just as in the case of a computer running a program which has been lost, it is convenient for us to think of the animal as 'obeying' a program 'written' in some easily understood language such as English.*
>
> Dawkins (1999, p119)

Such an operationalisation of genetic strategies facilitates the optimon definition of a gene because, to use the example of Mendelian heredity, part of the phenotypic survival strategy of a pea plant could be written in English as 'have coloured flowers'. When this is seen to vary amongst a population, for example green or yellow coloured flowers, that part of the description can be considered as an optimon genetic effect because the variations are due to different alleles.

Therefore, the optimon is a tautological[21] expression of the process of natural selection because it is the particulate description of an instance of the macro evolutionary algorithm. If the environment can recognise and act on a particulate phenotypic expression to naturally select it, the piece of DNA responsible for it, the optimon, will find its way into the next generation as its payoffs accrue and the inherited phenotypic expression reappears. I have found the notion of searching for optimon type replicators through written accounts vital in developing my approach to the empirical stages of my project. I discuss the detail of this part of the study in chapter 3.

[20] English is suggested simply because Dawkins (1999) is writing in English. Other languages could be used to the same effect.

[21] The Oxford English Dictionary (2013) provides six definitions of the word 'tautology'. I use the term in the fourth sense, to mean the repetition of a statement as its own reason, or the identification of cause and effect. For example, pea plants have yellow flowers because pea plants have yellow flowers.

The blind process of natural selection makes genetic survival strategies amenable to study through the application of game theory (Dawkins, 1989). Indeed, both Maynard Smith (1982) and Axelrod (1990) adopt a game theoretic perspective to show that genetic strategies, deployed through the iterations of contacts between organisms, are reinforced through inheritance by way of the payoffs of survival and reproduction[22]. Although it would always pay an organism to be selfish at the expense of others in a single interaction, when iterated interactions occur, it is likely that strategies of co-operation[23] will evolve via the genes distributed across the population of survival machines which they built (Maynard Smith, 1982; Axelrod, 1990). However, the organisms do not make conscious ethical decisions about what is good and bad, natural selection and inheritance remains the arbiter. If co-operation is successful, in terms of reproduction and survival, it is retained in the next generation (Dawkins, 1989).

Insights Gained from My Review of Dawkinsian Genetic Replication

My review of Dawkinsian genetic replication has raised a number of issues based on the selfish replicator concept. DNA replicates due to its inherent chemical properties and those replicators which are successful when exposed to natural selection appear 'selfish'. Phenotypic effects such as cells, sexual reproduction and behavioural strategies, which have occurred following the advent of DNA, can all be considered as replicating machinery, naturally selected for the replicative advantage it has provided the replicators which gave rise to it. Therefore, a distinction can be made between replicators which vary and their associated levels of phenotypic expressions which evolve to retain their abilities to replicate. *"Evolution is the external and visible manifestation of the differential survival of alternative replicators"* (original emphasis) Dawkins (1999, p82). It is the evolution of phenotypes based on the blind algorithmic process which has led to the biological complexity observable today (Dawkins, 1976; 1989) through the outward march of the phenotype (Dawkins, 1982; 1999).

In selfish replicator theory, the definition of a gene is not fixed. Rather, it is the genetic unit which can be said to be responsible for some type of phenotypic expression different to its alleles, on which selection might act, i.e. the optimon. Therefore, the

[22] Maynard Smith (1982) points out that the situation is complicated by instances where strategies are learnt rather than inherited because it is difficult to distinguish between the two contexts. In cases of learning, it is the genes for learning ability rather than the behaviour which are selected.

[23] Co-operative strategies are those which are nice, retaliatory, forgiving and clear (Axelrod, 1990).

definition of any optimon is constructed by the observer and its adoption is crucial for the validity of selfish replicator theory because, as the unit of natural selection, it helps to make sense of pleiotropic complexity, by making instrumental links between replication and the environment in which natural selection takes place (Dawkins, 1999). Mendelian heredity provides examples of optimon genes in cases where organisms have evolved sexual reproduction (Guttman et al., 2002).

Without adopting the optimon concept, it is difficult to appreciate selfish replication. For example, although he realises that genes can be considered to be the information for a phenotypic effect, Deacon (2004) misunderstands that the 'gene for' a particular phenotypic effect is a construction of the observer, who makes sense of pleiotropic complexity by identifying and describing competing alleles *where all else is equal.* Instead, he reifies the gene/phenotype dualism to suggest that genes simply hold the information for single phenotypic effects which then act to make copies of that genetic information. Such a conceptualisation reverses the precedence between the replicators and their phenotypic effects.

Genes do not hold the information for their phenotypic effects. Rather, phenotypic effects are the information for favouring the replication of that particular piece of DNA through natural selection. Deacon's (2004) view collapses the DNA into the phenotype. Indeed, he subsequently disputes genes replicator status, preferring to see them as 'replicas'. Consequently, when Deacon (2004) carries this conception forward to suggest memes are cultural replicas, the entire basis of the selfish replicator concept in culture proposed by Dawkins (1976; 1989) is abandoned.

Conversely, Dawkins's (1976; 1989) replicator theory suggests that phenotypic expressions are simply the successful ways to help genes replicate which have been naturally selected by the environment. Therefore, phenotypic effects can be considered as the genes' strategies for survival which serve as the mechanism of the macro evolutionary algorithm. Consequently, behaviours can serve as indicators of genetic programming but such an approach involves the assumption that behaviour is not learnt (Dawkins, 1982; 1999) or based on conscious decisions (Maynard Smith, 1982). Natural selection encodes in an organism the strategy or 'rationality' of the behaviours of its ancestors who succeeded in surviving and reproducing. Therefore, the strategic

'decisions' of survival machines that are encoded in their DNA enable game theoretic explanations of their survival strategies.

I have summarised the insights gained from this section in Table 2-2 and, to develop the discussion further with respect to the meme, in the next section I review Dawkins's (1976; 1989) proposal of cultural replication, in light of the concept of replication in biology.

	Key Insights Gained from this Section
1	Replicators copy themselves because of their inherent qualities.
2	Replicator driven evolution is blind. There is no design.
3	Although replicators and phenotypes are separate entities the optimon definition of a gene is constructed by an observer based on observed phenotypic effects.
4	The optimon makes instrumental links between a piece of DNA and evolved complexity.
5	Phenotypic effects are survival strategies and can be used to identify genes through the competition they engender.

Table 2-2: Insights from Dawkinsian Genetic Replication

Dawkinsian Memetic Replicators

It is the extent to which humans have culture, and the speed at which our cultures around the world have come to vary, that leads Dawkins (1976; 1989) to look beyond biological advantage for an explanation for cultural complexity and propose a cultural replicator. I have modelled the relationship between culture and biology proposed by Dawkins (1976; 1989) in Figure 2-5, which shows how memes occur due to the biological adaptation of imitation. They then instigate a separate system, based on the foundations of biology, through which culture evolves.

To illustrate the units by which culture evolves, Dawkins (1976; 1989) proposes tunes, ideas, catchphrases, clothes fashions and ways of making pots or building arches as memetic examples. However, despite identifying candidates for evolutionary phenomena in culture, he relies on genetic analogy to develop the theory of the meme.

Just as genes propagate themselves in the gene pool by leaping from body to body via sperm or egg, so memes propagate themselves in the meme pool by leaping from brain to brain via a process which, in the broad sense, can be called imitation.

Dawkins (1989, p192)

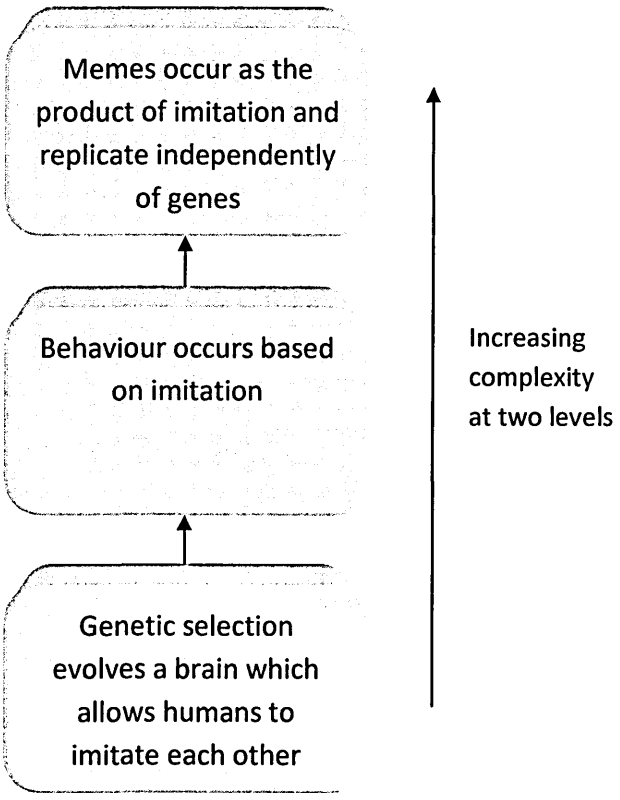

Figure 2-5: How Biological Adaptation in Humans Leads to the Advent of Memes, Adapted from Dawkins (1976; 1989)

However, by using genetic analogy, there is a risk of embedding in cultural theory facets of genetic replicating machinery which ought not to be assumed without supporting cultural evidence. After all, the gametes mentioned in Dawkins's (1989) description quoted above are examples of genetic replicating machinery from sexually reproducing organisms which have evolved meiotic cell division. Indeed, he goes on to point to the absence of an obvious mechanism for meme replication as definitive as that evolved by DNA. Subsequently, by relying on the concept of imitation, where people copy elements of culture rather than make free choices about what to adopt, he concludes that the new replicator is young and still drifting in its primeval soup, thereby rejecting the replicating machinery which his exposition based on gametes seems to suggest.

> *But in general memes resemble the early replicating molecules, floating chaotically free in the primeval soup, rather than genes in their neatly paired, chromosomal regiments.*
>
> Dawkins (1986, p196)

Seen this way, replicating machinery is rejected. Memes are said to not have direct equivalents to genetic alleles paired in their chromosomal loci, rather they are simply alternative ideas which might be considered to be opposites (Dawkins, 1976; 1989). However, viewing culture as primeval seems to contradict the need for a cultural replicator to operate as the engine of the very cultural complexity which prompted the invocation of the meme in the first place. Consequently, there is no need to accommodate pleiotropy through the optimon type connections which underpin the selfish replicator concept. Losing the possibility for a cultural optimon seems to rule out an equivalent to Mendel's pea plant experiments which were the paradigmatic experiment which illuminated genetics (Gatherer, 2005).

Memes and Phenotypes

To maintain the meme without evidence of cultural replicating machinery, Dawkins (1976; 1989) suggests the virus as a biological analogue to memes, because memes can be said to parasitize people's brains in a similar way to how a virus parasitizes a cell built by other pieces of DNA.

> *When you plant a fertile meme in my mind you parasitize my brain, turning it into a vehicle for the meme's propagation in just the same way as a virus may parasitize the genetic mechanism of a host cell.*
>
> Dawkins (1989, p192)

However, the conception of the meme as virus risks confusing the clear distinction between genetic and memetic evolutionary algorithms I have modelled in Figure 2-5, because it seems to suggest that memes must parasitize actual brain cells, as might a biological virus. If memes are brain structures then surely the human brain provides the substrate in biology which leads to cultural replication in the same way that certain chemistry is the substrate for DNA. Turning this back on genetics would lead one to suggest that genes parasitize the chemistry which enables replicating molecules, so the analogy is flawed.

To develop the relationship between memes and the human brain, Dawkins (1999) invokes Cloak's (1975) 'i' and 'm' culture. Cloak (1975) develops an ethology based theory of culture[24] where humans adopt culture in small units or, 'corpuscles of culture', through their genetically evolved ability to observe other humans' behaviour in response to environmental cues. The observer then copies the instruction that was triggered by the cue, thereby adopting that unit of culture. Therefore, i-culture is the set of instructions in a person's brain and m-culture is the behaviours instigated by i-culture.

For Dawkins (1999) then, the meme itself is said to reside as i-culture in people's brains, recorded as neurological structures (Delius, 1986; Dawkins, 1989) and its phenotypic effects are its consequences as m-culture in the outside world such as words, music and visual images which can be sensed by other people.

> *A meme should be regarded as a unit of information residing in a brain (Cloak's i-culture). It has a definite structure realised in whatever physical medium the brain uses for storing information.*
>
> Dawkins (1999, p109)

Such a conceptualisation appears to suggest a behaviourist-like cue/response psychology underpinning the meme concept. However, by reducing culture to distinct causal connections between a meme and its phenotype, without reference to any alleles, the complex nature of pleiotropy which is evident in biology and resolved by the optimon definition of a replicator is ignored. Similarly excluded is the range of alternative conceptualisations of human psychology which acknowledge greater degrees of cognition (Malim and Birch, 2005).

Consequently, although it would be tempting to make calculations regarding meme frequencies based on observed behaviour, as Aunger (2002) points out, measures such as web postings do not equate to the numbers of memes in people's minds. Indeed, making the one-to-one links between information in a brain and the consequential behaviour concrete, commits the same error as Deacon (2004), by collapsing the replicator into its effect.

[24] Cloak (1975) defines ethology as the study of the adaptiveness of animal behaviour in respect of its survival value. For Cloak (1975) people are 'carriers' of cultural instructions which when executed cause behaviours such as greeting a friend, participating in a ritual, getting married or helping to build a house.

The problem becomes evident when reviewing Dawkins's (1989) suggestions for measures of meme frequencies, which I have summarised in Table 2-3 along with my objections. My objections listed in Table 2-3 show that it is easy to think of ways in which each measure could be an inaccurate counter of the putative memes held in peoples' brains. Through *a priori* assumptions about human psychology and brain/environment dualisms the phenomenon of replication is assumed rather than demonstrated. Cultural elements are arbitrarily labelled as memes, a problem which remains in more recent memetic theorising (Sterelny, 2006). Indeed, later in this chapter, I discuss how this is a particular issue where memetics has been applied to organisations and where the meme has been operationalised as part of empirical studies.

Dawkins's (1989, p194) Examples of Meme Frequency Measures	My Objections
Scientific memes can be measured by journal citations	... but this is not a measure of how ideas are present in peoples' minds and Dawkins maintains that scientific memes are selected for their validity, which seems to eliminate their status as selfish replicators
Tune memes can be measured by the number of people whistling them	... but the funeral march won't get whistled often despite being well known and played at funerals
Styles of shoe can be measured in sales	... but a very stylish and expensive shoe may sell very few copies but the style may still be iconic amongst a large number of people
Written records make things like religious ideas more long lived than fashion items	... but there are plenty of fashion items recorded in print and the very appeal of fashion items is that they are transitory

Table 2-3: Objections to Dawkins's (1989) Measures of Meme Frequency

Memes and Strategy

Where in biology limited physical resources act to exert a selective pressure on genes, Dawkins (1976; 1989) proposes that memes compete to be retained in the limited attention of the human brain, radio and TV time, billboard space, newspaper column inches and library shelf space. Therefore, selection should favour memes that exploit their cultural environment in a way which helps them to be retained in these mediums. Of course, for any particular meme, other memes would be part of the environment so co-adapted meme-complexes might be expected to arise, which have strong psychological impact, e.g. the religions. Such meme-complexes would be expected to

evolve survival strategies by way of persuasive behaviours such as religious ritual and doctrine (Dawkins, 1976; 1989).

However, despite the cue/response behaviourism borrowed from Cloak (1975) and invoked through imitation as the way memes replicate, Dawkins (1976; 1989) assumes that humans still have sufficient conscious thought capability to be able to 'rebel' against their memes. Therefore, the blind algorithmic process, which enables game theoretic approaches to modelling replicator strategy in biology, based on the 'rationality' of previous successful behaviours being genetically encoded in generations of organisms, cannot be assumed to work in the same blind manner in memetics. Rather, people can intervene.

Axelrod (1990) does, however, extend the game theoretical approach to culture, but where his theory acknowledges that strategies in biology are recorded in DNA and spread as genes replicate, it is not clear how strategies are recorded in the cultural examples he provides. Indeed if, as Axelrod (1990) also acknowledges, human foresight and intention occur in cultural settings then the need to strategize diminishes. Why not simply assess situations as they arise and make a conscious decision about what to do? Axelrod (1990) accommodates this difficulty by asserting that humans are naturally self-interested and that they tend to operate in a manner similar to that described by March and Simon's (1958) bounded rationality.

> *There is no need to assume that players are rational. They need not be trying to maximise their rewards. Their strategies may simply reflect standard operating procedures, rules of thumb, instincts, habits and imitation.*
>
> Axelrod (1990, p18)

However, Axelrod (1990) maintains that people can still use foresight to take opportunities to co-operate and that intelligent players can convert to successful strategies, so there seems to be some unresolved contradictions in his theory. Indeed, Maynard Smith (1982) is somewhat more reticent when considering the extension of game theory to culture. He suggests that the approach should only be introduced to sociology once a suitable mechanism of cultural heredity exists so the blind rationality of natural selection operating by a feedback loop, similar to that in biology, can be accounted for. Despite the inconsistencies between the replicator concept in biology and culture, Edmonds (1998) advocates a modelling approach to memetic strategies by

characterising the utility people gain in social situations, such as going to a bar, as payoffs. However, he goes on to warn that in order to avoid building in either an assumption about replication at the micro level, or an assumption of an evolutionary algorithm at the macro level, a hierarchy of models might be required, which all validate each other, thereby providing an explanatory chain from the theory to phenomena.

Insights Gained from My Review of Dawkinsian Memetic Replication

Although Dawkins (1976; 1989) proposed the meme as a cultural replicator, much of his support for the concept is derived from genetics. In doing so, he makes a number of assumptions about human psychology to help accommodate the genetic analogies and consequently, the meme concept challenges human free will. Therefore, Dawkins's (1976; 1989) suggestion that people can 'rebel' against their replicators, and Axelrod's (1990) view that people can consciously strategize, does not seem to be integrated into meme theory, and its omission seems to undermine the validity of the meme concept. Indeed, the difficulties of the game theoretic modelling of putative memetic strategies are demonstrated by studies which look to follow Edmonds's (1998) advice and build models based on utility as the payback received by way of the memes people act upon. For example, Conley, Toossi and Wooders (2006) and Gatherer (2004; 2006; 2007) who both return to Dawkins's (1976) original thesis to help develop memetic modelling of voting contexts.

Conley, Toossi and Wooders (2006) look to build a memetic game theoretical model to explain people's propensity to vote in light of the rational understanding that any single vote is highly unlikely to be crucial in terms of an election result. Of course, behaviour which is apparently unjustifiable for conscious rational people does seem to be an interesting anomaly for which some kind of selfish replication, or blind algorithmic process, might be at work. However, they omit the possibility that people do understand that their vote is part of a co-operative venture with other likeminded people, as Axelrod (1990) suggests they might do. After all, there tend to be political organisations through which people know each other and interact.

Consequently, the charge of voter irrationality is based on a limited view of the payback and costs of voting. Payback is defined as the personal benefit accrued via 'public projects' but alternative motives on which paybacks may also be based, but which are

not included in the model, could be voting as a protest, not voting because no party adequately represents your views, or voting through duty because democracy is a hard won right. Of course, it would be possible to include such variables in a model but the ease with which one can come up with other motives for voting seems to suggest the model is rather arbitrary and that there may be, in fact, free choice at play rather than cultural replicators.

Also, Conley, Toossi and Wooders (2006) do not adopt Edmond's (1998) call for a chaining of models where each link triangulates the others in the chain. Instead, they make assumptions at both the micro and macro levels, thereby ensuring the internal validity of the model at the expense of its external validity. For example, a very broad based definition of memes is invoked where *"... almost any aspect of a culture can be seen as a meme"* (Conley, Toossi and Wooders, 2006, p73) and yet, replication is assumed to occur when parents pass on their voting preferences to their children. Doing so confuses cultural heredity with biological heredity so much of the potential explanatory power of a separate evolutionary algorithm is lost. Any instances of children's voting preferences not aligning with their parents, perhaps because of seeing a TV news report, is not accounted for in the model.

Similarly, Gatherer (2004; 2006; 2007) suggests that reciprocal voting strategies related to the Eurovision song contest show epidemiological characteristics and might be amenable to game theoretic modelling. However. once again, rather than chaining models (Edmonds, 1998), Gatherer (2007) assumes populations vote as a single entity which obfuscates how payoffs might actually influence the actions of individual voters. Indeed, he acknowledges this point but nevertheless persists with considering countries as decision makers.

Such an assumption places the payoffs at the level of bipartisan geopolitical collusion and indeed, the implicated blocs identified by Gatherer (2007) do have geographic connections and interwoven histories, for example, the Balkans. However, perhaps there are more complex issues regarding self-identity which are acting at the micro level, where the voting decisions actually take place. Indeed, the recognition that Eurovision is *"... a source of great joy, frustration and hilarious fun"* (Gatherer, 2007, p72) might suggest why people as individuals are, in fact, consciously engaging in the process without any major regard for any payoffs at the level of countries. Even seeing collusive

voting playing itself out on Europe wide television could be part of an actual game, played for fun by people who do not really care about the music, let alone who wins, consciously enjoying their involvement in the social process. After all, it has become popular to hold a Eurovision party[25].

By assuming payoffs at the level of the country, Gatherer's (2007) modelling hides the individual level of decision making and, in light of the considerations mentioned above, it seems to me rather odd that one would choose to construct putative models based on so many *a priori* assumptions. Indeed, the optimon definition of a replicator is not adopted, either in Dawkins's (1976; 1989) explication of the meme concept or the modelling approaches of Conley, Toossi and Wooders (2006) and Gatherer (2004; 2006; 2007). I have summarised my insights gained from this section in Table 2-4.

	Key Insights Gained from this Section
1	The use of genetic analogy threatens the meme's status as a separate replicator and risks the invocation of unsubstantiated replicating machinery.
2	Memes tend to invoke a behaviourist view of human psychology which challenges free will, but Dawkins admits a cognitive ability as well.
3	If humans have free will, then the viability of game theoretic modelling for culture is weakened.
4	For memes, Dawkins abandons the optimon definition of a replicator so Mendelian-like particulate inheritance is not demonstrated.

Table 2-4: Insights Gained from Dawkinsian Memetic Replication

Conclusions about Dawkinsian Replication

Dawkinsian replication suggests that the gene and meme are two tokens of the same phenomenon: replication. However, there are unresolved contradictions between the two which are accommodated through assumptions about human psychology and culture. Indeed, the same assumptions regarding such things as human free will and the possibility of units of culture remain embedded in some recent memetic writing.

Assuming that each observed cultural act has a corresponding piece of information in the brain performs a shortcut around the pleiotropy which the optimon definition of the gene acknowledges in biology. It is the optimon which enables insights about genetic

[25] You can view photographs taken at people's Eurovision parties' online (flickr.com).

inheritance to be drawn in selfish gene theory and, therefore, it is this definition of the gene which is implicit as the basis for game theoretical modelling in genetics. Without an optimon version of the meme, the attempts to build memetic models of culture cannot attribute payoffs to units of natural selection in the same way. I have summarised the insights gained in this section in Table 2-5 and, in the next section, I review the ways in which meme theory has been developed to help to illuminate the points I have raised so far.

Key Insights Gained from this Section	
1	Replication leads to, and can explain, complexity.
2	Human free choice threatens the replicator concept in culture.
3	There are unresolved differences between genes and memes in Dawkinsian replication, yet recent studies invoke Dawkins's original theorising.

Table 2-5: Insights gained from Dawkinsian replication

Theoretical Development of the Concept of Memetic Replication

A number of scholars have contributed theoretical visions of how memes may manifest systems of evolved cultural phenomena, for example, Blackmore (1999; 2000; 2010), Dennett (1991; 1996; 2003; 2006), Aunger (2002), Lynch (1996), Brodie (1996; 2009) and Distin (2005). However, each account tends to return independently to Dawkins's (1976) original meme concept, before the author provides their own vision of a memetic explanation of culture and critique of the theories that went before. Consequently, I have found a set of fundamental theories of the meme which radiate from the original meme concept, in the direction of each author's own perspective.

Figure 2-6 shows how I have categorised the theories into three types. Firstly, those which adopt the view that memes spread like viruses do in biology, for example, Lynch (1996) and Brodie (1996; 2009). Secondly, those which tackle the free will issue raised by replication, for example, Dennett (1991; 1996; 2003; 2006) and Blackmore (1999; 2000; 2010). Thirdly, those which look to define how cultural information might be retained as distinct units, for example, Aunger (2002) and Distin (2005).

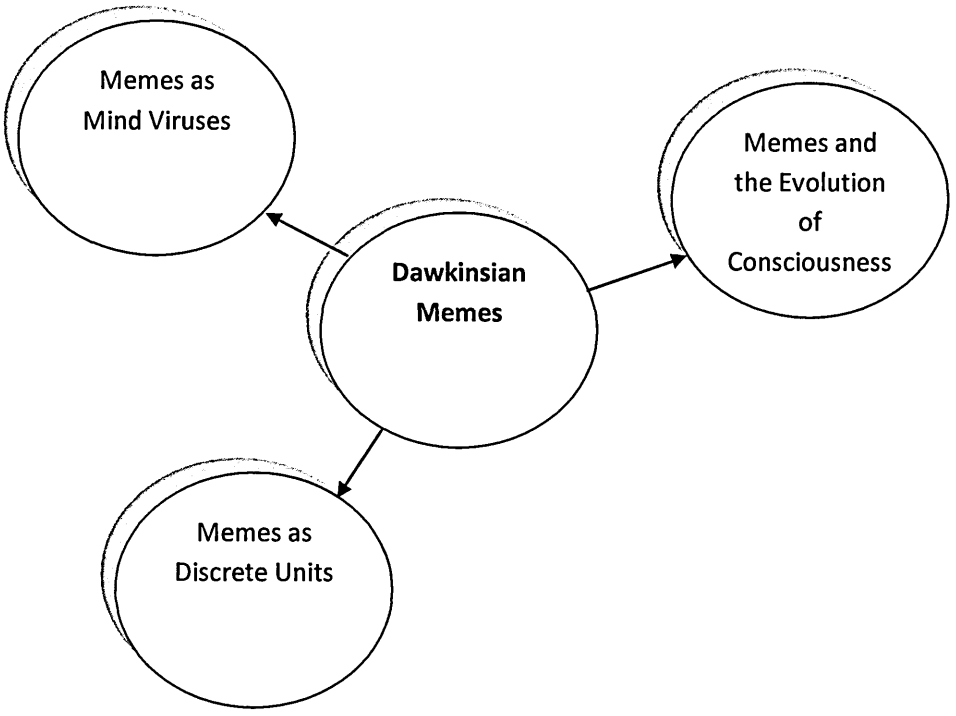

Figure 2-6: Categories of Memetic Theorising

Although each subsequent account of memes offers some criticism of those that went before, there is very little consensus developed. Indeed, the situation leads Dennett (2003) to comment that, because memetics is yet to be justified as a proper science, it ought to be regarded as no more than a metaphorical tool. Such a view supports my own concerns, described in chapter 1, regarding the risks of naively applying evolutionary metaphor as real, at the level of the macro evolutionary algorithm. Therefore, to continue my exegetic review, in the next sections, I consider each category of theorising. I critique their internal validity, compare them and reflect on their fit with the Dawkinsian view of replication I have discussed above. Following my review of fundamental memetic theory, I go on to consider how the concepts have been applied to organisations and used to conduct empirical studies.

Memes as Mind Viruses

Since his original proposal of a cultural replicator, and by drawing on the work of Delius (1986), Dawkins (1989) has acknowledged that memes could be either parasitic,

mutualist or commensal to the interests of the person whose brain they have infected. However, his own further development of the meme concept has tended towards the analogy of harmful viruses (Dawkins, 1993). The meme as virus concept casts certain cultural phenomena as pernicious infections and people, particularly children, are viewed as immune deficient patients susceptible to ideas which are not in their best interests, for example, religions.

By adopting the meme as virus theory, Lynch (1996) aims to warn people of the danger of Dawkins's (1993) pernicious cultural traits. He identifies how, what he terms 'thought contagion', spread due to proselytising behaviour in a person who has been infected. However, as Lynch (1996) acknowledges, his examples of thought contagion remain selective and speculative with only a few based on secondary empirical data. In fact, as is the case with Dawkins's (1993) examples, the putative instances of thought contagion provided by Lynch (1996), although wide ranging across a number of social issues such as religion, parenting and drug policy, seem to be largely identified as pernicious on the basis of his own personal values. Consequently, the characterisation of memes as viruses seems to limit the scope of memetics, because in place of a replicator responsible for all manner of cultural domains including clothes and tunes, etc. (Dawkins, 1976; 1989), there remains only a smaller set of value laden examples. Indeed, Lynch (1996) warns against expectations that memetics can explain everything about culture.

However, to maintain the broad scope of memetics Dawkins (1993) invokes two kinds of memetic epidemiology. Where memes selfishly infect people as a pernicious contagion, due to the inherent replicator qualities of the meme, for example, religious memes, epidemiology is said to be 'causal'. Where culture is consciously chosen by people epidemiology is said to be 'descriptive', for example, the ideas which spread via the scrutiny of the scientific community.

In making a similar theoretical development of the meme as virus concept to that of Lynch (1996), Brodie (1996; 2009) follows Dawkins's (1993) example by distinguishing between memes, as the building blocks of culture, and 'cultural viruses', which parasitize minds. For Brodie (2009, p11) "... a *meme is a unit of information in a mind whose existence influences events such that more copies of itself get created in other minds.*" Viruses of the mind, however, are infectious pieces of culture and occur

when memes come together to form clear cause and effect links which influence behaviour (Brodie, 1996; 2009).

Subsequently, Brodie (1996; 2009) mirrors Dawkins's (1993) dichotomy of two kinds of epidemiology by proposing two kinds of memetic virus. First, there are cultural viruses which emerge naturally, infecting people by way of being attractive to their genetically determined tendencies to fight, flee, feed or find a mate (the 4 Fs). Second, there are designer viruses which are invented by people (Brodie, 1996; 2009). I have modelled the conceptual similarities between the two accounts in Figure 2-7 which shows how descriptive epidemiology equates with designer viruses and causal epidemiology equates with cultural viruses. However, Figure 2-7 also shows how discriminating between cultural phenomena leads to a dualism which is not present in Dawkins's (1976; 1989) original thesis of a single cultural replicator.

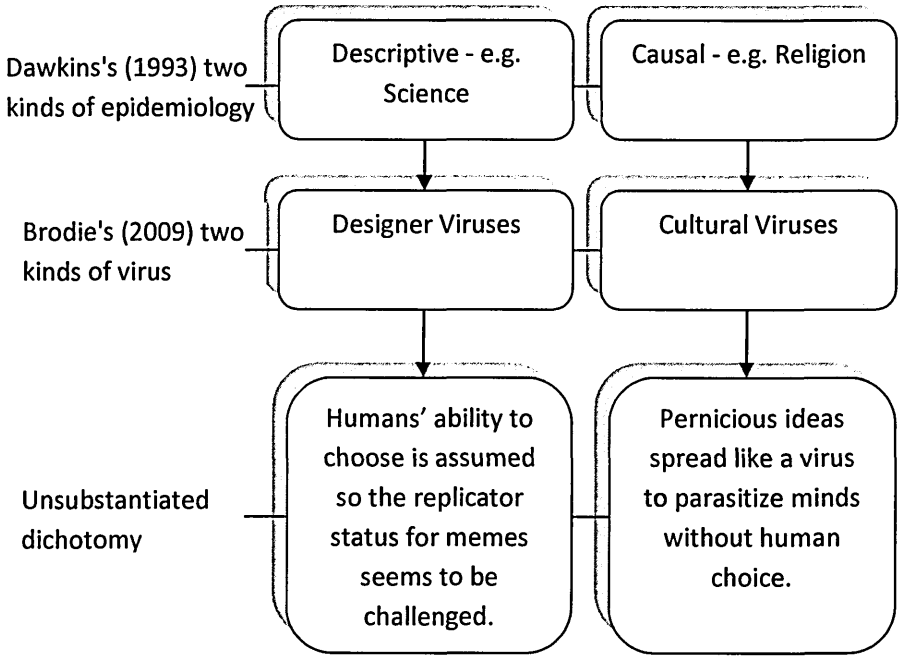

Figure 2-7: A Comparison of Dawkins's (1993) and Brodie's (2009) Virus Dualism

The dualism proposed by Dawkins (1993) and Brodie (1996; 2009) is based on the introduction of scope for humans to consciously decide whether to adopt a cultural trait in some circumstances, rather than be infected by it. In amending replicator theory this way, some of the cognitive psychological ability that the selfish replicator concept

seemed to reject is reintroduced. Indeed, both theorists characterise memetic viruses as infections of the mind rather than the brain.

Such a revision of the theory requires a modification to my earlier portrayal of the emergence of memes by way of brains capable of imitation, as previously shown in Figure 2-5. My revised conceptualisation, presented in Figure 2-8, shows that from the memes as virus perspective, it is a mind rather than the brain which facilitates memes, through both imitation and conscious decisions. Therefore, the dualism introduced by Dawkins (1993) and Brodie (2009) requires a fundamental revision to the nature of the genetically evolved environment which gives rise to a cultural replicator.

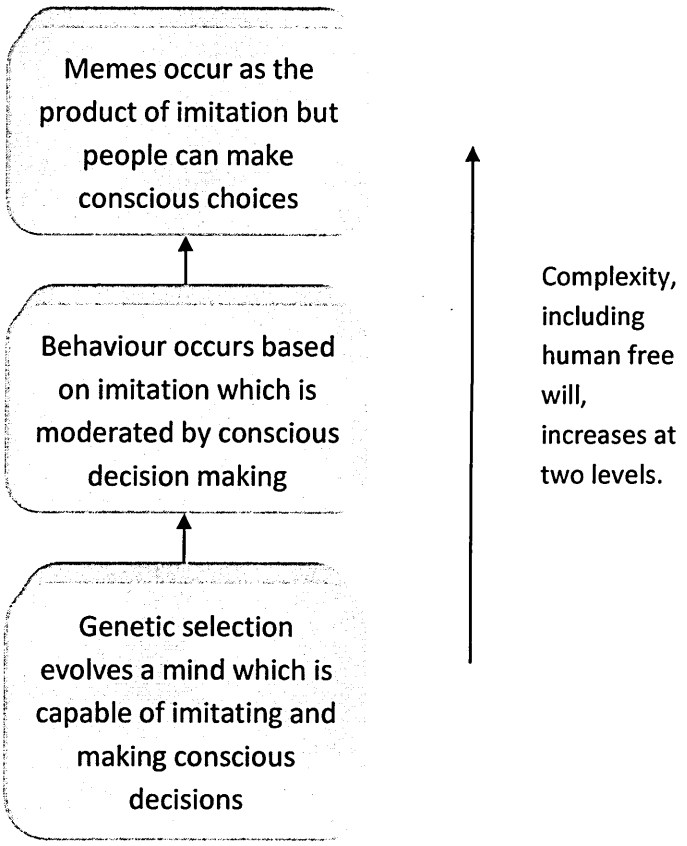

Figure 2-8: How Biology Gives Rise to Viruses of the Mind, Adapted from Dawkins (1993) and Brodie (2009)

Where in biology all variation is naturally selected, in the virus of the mind view of culture, two kinds of selection are proposed. Biology offers no equivalent to a free thinking mind, designer viruses or descriptive epidemiology. However, despite the inconsistencies between the selfish replicator theory in culture and biology, genetic

analogy is still invoked by both Dawkins (1993) and Brodie (1996; 2009) to support it in culture. Indeed, Dawkins (1993), whilst also introducing the analogy of computer viruses to explicate the meme as virus concept, goes so far as to introduce an alternative gene definition to the optimon, the codon[26].

> *The evolution of ideas, culture and society revolves around the selfish memes just as the evolution of species revolves around the selfish gene.*
>
> Brodie (2009, p68)

> *With so many mindbytes to be downloaded, so many mental codons to be replicated, it is no wonder that child brains are gullible, open to almost any suggestion, vulnerable to subversion, easy prey to Moonies, Scientologists and nuns.*
>
> Dawkins (1993, p13)

Despite the similarities between Brodie's (1996; 2009) and Dawkins's (1993) theories, there are inconsistencies between them in terms of how each author supports the validity of their theory. It is evident that in proposing the meme, and more generally, Dawkins (1976; 1989; 2003; 2011) adopts a standpoint where, supported by Delius (1986), memes are real physical patterns of neurons in people's brains. However, Brodie (1996; 2009) sees memetics as no more than a model.

> *I'm <u>not</u> saying this is the Truth. I'm <u>not</u> saying this is what Really Happens. I'm <u>not</u> saying this is the Only Way or the Right Way to look at the mind.* (Original Emphasis)
>
> Brodie (2009, p13)

Further epistemological inconsistencies appear when, to make the distinction between memes and mind viruses, while retaining the concept of selfish replication, Brodie (1996; 2009) attempts to remove the concept of 'self'. However, this stance becomes unsustainable by way of an assumption that humans have conscious minds with which we can overcome our instincts to pursue personal happiness. Indeed, he suggests he has a personal agenda based around helping people to achieve *self*-improvement.

Insights from My Review of the Memes as Mind Viruses Concept

The virus of the mind perspective raises difficulties for the meme concept, because the concept of selfish replication is diluted through the introduction of conscious decision making. Rather than memes being naturally selected by the environment, the move to a

[26] Codons are units of DNA which encode a particular amino acid (Dawkins, 1999; Guttman et al., 2002).

free thinking mind introduces design to the conditions in which memes arise and are selected. The free choice invoked by designer viruses and descriptive epidemiology suggests human agency. The meme as virus theory seems to posit the mind as memetic replicating machinery but the principles of Dawkinsian replication suggest that replicating machinery are phenotypic expressions. Therefore, the mind ought to be considered as the phenotypic expression of the memes. If that were the case, however, why should one expect it to provide conscious decision making for a self? It might be expected that it would simply operate to replicate the memes which built it.

However, the meme as virus theory does not recognise, let alone account for, the move from brain to mind. Consequently, the use of the virus analogy encourages value laden judgements regarding what parts of culture should be considered pernicious, based on the personal opinions of the authors' in question, rather than an equivalent of the optimon type replicators which demonstrate Mendelian heredity in biology. Indeed, although Lynch (1998) later acknowledged that the definition of a meme is dependent on the abstraction of an observer, he does not go so far as recognising the optimon definition which is implicit in Dawkins (1976; 1989) original thesis.

In light of the problems I have identified, it is not surprising that the memes as virus concept has attracted criticism. Aunger (2002) criticises it as intellectually lazy and lacking in scientific rigour and both Dennett (1991) and Blackmore (1999) criticise it as naive, suggesting that a treatment of memetics which ignores the implications of selfish replication on human free will and consciousness will be incomplete.

> *Indeed, the vast majority of memes (like the vast majority of genes) cannot be considered as viral at all – they are the very stuff of our minds. Our memes are who we are.*
>
> Blackmore (1999, p22)

Therefore, in the next part of my discussion I review how some scholars have looked to incorporate the themes of human consciousness, free will and imitation into their theories of the meme. I have summarised the key insights I have gained from this part of the discussion in Table 2-6.

Key Insights Gained from this Section	
1	The introduction of agency to the virus analogy in culture, where there is none in biology, stretches the metaphor beyond its validity.
2	The selective, value laden use of examples and genetic metaphors weakens the theory.
3	Memetics needs to acknowledge the concept of mind.
4	The optimon definition of a replicator is ignored by the meme as virus concept.

Table 2-6: Insights Gained from the Meme as Mind Virus Theory

Selfish Replication and Consciousness

Where the meme as virus theory invokes but fails to account for people's conscious free choice, both Dennett (1991; 1996; 2003; 2006) and Blackmore (1999; 2000) aim to accommodate consciousness in the processes of selfish memetic replication. In doing so, they make memes central in their theories of how humans experience a 'self'[27] and by returning to the brain, rather than the mind, as the environment in which memes occur, both authors reject the claim that people can simply rebel against pernicious cultural contagion. Instead, they each build theories where memes are regarded as constituent elements of human minds.

In developing a materialist[28] account of human consciousness, thereby rejecting any role for the unexplained 'mind matter' that is seemingly invoked by the meme as virus concept, Dennett (1991) builds a theory of the meme based on evidence for how the human brain functions. In doing so, he follows Delius (1986) in not only proposing that memes are to be found in the neuronal structures of the brain, but that they might be beneficial, tolerable or pernicious to people. Dennett (1991) explains how the parallel processing of our brains[29] can be said to result in a 'pandemonium' of various coexisting thoughts and responses which struggle for expression. Consequently, what we comprehend as a serial stream of consciousness is a retrospectively understood narrative which was, in fact, subject to continual editing as the various areas of the brain made their contributions. I.e. there are multiple drafts.

[27] The body of knowledge regarding the 'self' is large and I acknowledge that it ranges beyond the conceptual links made by memeticists. See Leary and Price Tangney (2003) for a summary.
[28] Dennett's (1991) materialism suggests that consciousness must be a product of the physical matter of the brain.
[29] Dennett (1991) draws on a range of experimental evidence to support his account of how the human brain functions.

> *... at any point in time there are multiple "drafts" of narrative fragments at various stages of editing in various parts of the brain.*
>
> Dennett (1991, p113)

The multiple drafts model suggests that telling stories is a fundamental tactic of humans and the stories posit a self, a centre of narrative gravity. The words of these stories act as catalysts that fix the content of what constitutes memes (Dennett 1991). Consequently, although memes remain invisible, their phenotypic effects occur in the world as words and phrases, pictures, books, tools and buildings. Such phenotypic effects then act as vehicles which carry their memes to other people's brains.

The locating of memes in the material of the brain reaffirms the realist standpoint abandoned by Brodie (1996; 2009) and makes consciousness an evolved adaptation, based on the brain's role as an 'anticipation machine' which aids survival and reproduction (Dennett, 1991). However, Dennett (2003) reserves a bounded space for free will because people still need to think for memes to be able to wield their phenotypic effects. People still do things for *their* reasons and they construct the meaning of cultural elements based on an understanding of how they are part of a wider semantic context of shared norms (Dennett, 2006). Based on this position, Dennett (1991) proposes the research methodology of 'heterophenomenology' with which one can study another's phenomenological account of the world. The approach should form the basis of epistemological engagement with memetically driven consciousness, by providing a neutral portrayal of what it is like to be that subject in the subjects own terms.

Where Dennett (2003) reserves some degree of human influence in his memetic theory, Blackmore (1999) suggests that the concept of a narrative centre of gravity constitutes no more than an aid to memetic replication. In Blackmore's (1999) theory, what people experience as a 'self' is no more than a group of interdependent memes in one human brain which that human experiences as a self, a 'selfplex'. Consequently, human foresight is no more than a range of memetic strategies for handling the future, so free will is no more than a story told by the selfplex.

> *It is more accurate to say that we are just human beings doing complex things that need memory and who then construct a story about a self who does the remembering.*
>
> Blackmore (1999, p227)

Blackmore (1999) even disavows her status as the conscious independent author of her own work, instead preferring to cast herself as a vehicle for the memes which are 'fermenting' in her brain as she types. For Blackmore (1999; 2000), the large human brain itself is the product of 'memetic drive', a process of gene/meme co-evolution where individuals with better adapted brains for the adoption of culture achieved better differential survival and reproduction.

The incorporation of human consciousness into memetic theory means my model of how memes emerge from biology can again be modified. Figure 2-9 demonstrates how the processing of the human brain leads to competition amongst pieces of cultural information, the experience of which feels like a conscious self.

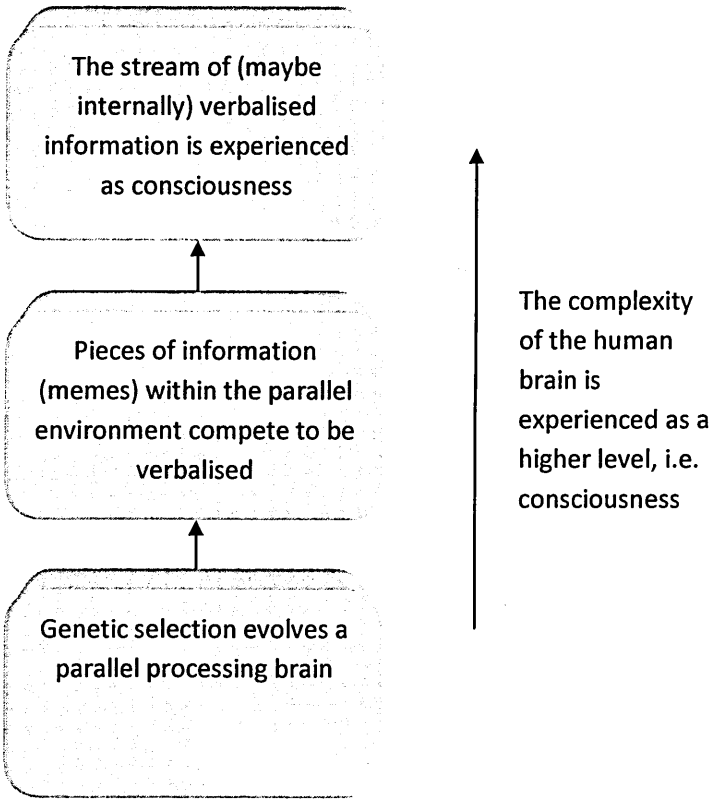

Figure 2-9: Memes Role in Human Minds, Adapted from Dennett (1991; 2003) and Blackmore (1999)

By proposing the concept of 'memetic equilibrium', diCarlo (2010a; 2010b) makes an observation similar to that of Dennett (1991; 1996; 2003; 2006) and Blackmore (1999; 2000) regarding the role memes might have played in the cultural/biological co-evolution of consciousness in evolving humans. Memetic equilibrium is the state which

occurs through neural rewards such as endorphins released by the feeling of environmental control, through problem solving. On the basis that consciousness means humans are not only part of an ecosystem but also distinct from it, the need to understand causality, morality and mortality has led, through generations of people, to the construction of mythologies and invocation of supernatural agency. Where biological equilibrium occurs without consciousness, through the blind evolutionary algorithm, memetic equilibrium occurs through humans' confidence in their cultural survival strategies (diCarlo, 2010a; 2010b).

Consequently, the urge/desire to achieve memetic equilibrium leads to habits and heuristics which are taken to be dependable. However, diCarlo (2010a 2010b) uses memes as merely shorthand for cultural artefacts and indeed, he retains scope for creativity, by proposing that new memes are invented to fill in conceptual gaps (diCarlo, 2010b). Indeed, the empirical evidence to support the memetic theories of consciousness is limited. Although Dennett (1991) looks to base his theorising on a range of experimental evidence for how the brain works, Blackmore (1999, 2000) depends wholly on the notion of imitation as the fundamental process by which memes replicate. However, her pivotal use of imitation seems to be based on no more than Dawkins's (1976) original speculative theorising and Cloak's (1975) theory of cultural corpuscles[30]. Consequently, she asserts that memes should be defined as whatever is passed on when you imitate someone and, therefore, there is no need for empirical evidence for memes. They are self-evident.

However, despite Blackmore's (1999) invocation of Dawkins's (1976) use of imitation, in his foreword to *The Meme Machine* (Blackmore, 1999), Dawkins suggests that he would be surprised if culture could be explained by unconscious imitation alone, so there appears to be a lack of consensus. Indeed, where Cloak (1975) suggests that language is no more than a verbal cue, to accommodate the complex nature of today's cultures, Blackmore (1999) broadens the definition of imitation to include processes such as reading, writing and direct instruction by *presuming* that Dawkins (1976; 1989)

[30] Cloak (1975) implies imitation by suggesting humans can copy the instructions which lead to particular responses to certain cues through observing behaviour.

meant to include such activities when suggesting *"... a process which in the broad sense, can be called imitation"* (Dawkins, 1989, p192)[31].

Consequently, Blackmore's (1999) examples of memes are wide ranging and include words, stories, skills, habits, games, songs and rules. In support of this position, she points to the various ways of defining the gene but such an argument ignores the more specific optimon definition of the gene, which is preeminent in Dawkins's (1976) original selfish replicator theory. Indeed, the notion of imitation as the sole or major way in which culture spreads seems difficult to maintain. Although Blackmore (1999) suggests her writing is the product of memetic competition in her own brain, she reverts to the assumption of a more conscious self, which seems to explode her selfplex concept.

> *Memetic jargon is changing so fast and much of it is poorly thought out and so misused that I shall try to avoid using it.*
>
> Blackmore (1999, p19)

> *There are clever people around who manage to combine the existing memes and come up with new inventions.*
>
> Blackmore (1999, p146)

> *... and humans are complicated creatures who strive to maintain some kind of consistency to their ideas.*
>
> Blackmore (1999, p165)

Although Blackmore (2010) has recently reasserted the primacy of imitation in her theory to accommodate complex cultural phenomena, she has been criticised for expanding the meaning of imitation to such an extent that it becomes meaningless (Distin 2005). Indeed, having reviewed the memes and consciousness theories, it seems to me that, in place of imitation, there is an alternative underlying factor, that of narrative and storytelling.

Consciousness, Memes and the Role of Stories

In addition to suggesting that free will is no more than a story told by the selfplex, Blackmore (1999) suggests that stories about the cultural complexity people experience, such as urban myths, are subject to variation and selection.

[31] Blackmore (1999; 2000; 2010) is sufficiently confident that the meme concept is adequately validated through the definition based on 'that which is imitated' to suggest a third replicator, the 'teme', which is a cultural unit replicated by technology, without the need for human brains (Blackmore, 2010).

> *You have not precisely imitated your friend's every action and word, but something (the gist of the story) has been copied from her to you and then on to someone else.*
> Blackmore (1999, p6)

> *Millions of people tell millions of stories every day but most are completely forgotten. Only a very few achieve urban myth status.*
> Blackmore (1999, p15)

> *We produce memes each time we speak, but most of these are quickly snuffed out in their travels. Other memes are carried on radio and television, in written words, in other peoples' actions, or the products of technology, films and pictures.*
> Blackmore (1999, p36)

Blackmore's (1999) view of storytelling seems to expand Dennett's (1991) internal narrative centre of gravity into an interpersonal context and Dennett (1996) does, in fact, suggest that a macro level narrative is deployed by people, as a way of navigating the social landscape. We anticipate future events and guide our actions by exploiting a smallish stock of narrative schemata which represent a vision of the future. Therefore, we have narrative imperatives because stories try to be re-enacted and, as part of the process, intentional stances are attributed to inanimate things to make them predictable (Dennett, 1996).

The themes of narrative and memetics are more overtly linked by Pratchett, Stewart and Cohen (2002), who suggest that humans have evolved to use mental models based on stories. Consequently, they see human communication as characterised by storytelling and memetics as science's attempt to comprehend the power of stories. It is the pressure of self-replicating ideas which makes people indulge in storytelling and "... *a meme is an idea that is so attractive to human minds that they want to pass it on to others*" (Pratchett, Stewart and Cohen, 2002, p328).

Indeed, Price (2012) adopts this view to suggest that narratives can be thought of as cultural DNA. However, in neither case do the authors define narrative in technical terms, seemingly using the word narrative interchangeably with the word story. Also, by suggesting that memes are attractive to minds rather than brains, Pratchett, Stewart and Cohen (2002) fall foul of the meme as virus analogy, labelling some memes as good, for example, Oxfam and some bad, for example, tobacco.

Insights Gained From My Review of the Memes and Consciousness Theory

Incorporating consciousness into memetic theory avoids naive assumptions regarding free will and reinforces a realist perspective by grounding the theory in the material workings of the brain. The realist position is supported by Dennett (1991), through evidence about how the brain functions, and diCarlo's (2010a; 2010b) concept of memetic equilibrium, which links memetics to neural payoffs. However, the degree to which people have free will remains unclear.

The notion of imitation seems to limit free choices but, when Blackmore (1999; 2000) reviews more complex cultural phenomena, the definition of imitation is stretched beyond what one might have expected from its use in Dawkins's (1976) original thesis. Dennett (2003), on the other hand, overtly leaves space for free will in his theory. However, storytelling is a recurring theme which seems to unite the memetic theories which look to incorporate consciousness, but the concept of narrative is not developed in the technical sense described in social science methodology.

The optimon definition of a replicator is similarly unused and other scholars, for example, Aunger (2002) and Distin (2005), have drawn attention to the lack of the clear identification of what constitutes a meme. To address the efficacy of the meme as a unit of culture, in the next section, I review how these theorists have suggested culture could be particulate. I have summarised my key insights gained from this section in Table 2-7.

	Key Insights Gained from this Section
1	The theories which account for memetic consciousness fail to accommodate the optimon definition of replication.
2	It is difficult to describe a theory which challenges the notion of a self without assuming a self.
3	Imitation as a replication process becomes exhausted with respect to more complex culture.
4	Storytelling is implied as a more fundamental process than imitation.

Table 2-7: Insights from the Memes and Consciousness Theory

Identifying Memes as Discrete Units of Culture

Both Aunger (2002) and Distin (2005) recognise that no general system for memetics has emerged from the meme as virus theory or the memetic consciousness theories. In

looking to develop the field they each offer their definition of what might actually constitute a meme because, as Aunger (2002) assertively points out, memetics needs to know what memes are like and where they can be found in order to develop as a rigorous science.

> *No one knows what a meme is. Certainly the existence of one has yet to be demonstrated. That no one has sounded an alarm about this is astounding ...*
>
> Aunger (2002, p21)

> *At present, memeticists can't even act like the drunk searching for his keys under the lamppost because the light is better there. We don't know where the lamppost is or where the light is coming from.*
>
> Aunger (2002, p160)

Similarly, Distin (2005) points to the risk of granting validity to evolution in culture based on trivial or selective observations of one idea persisting at the expense of another. Indeed, whilst noting that instances of cultural variation, selection and retention can describe an evolutionary process which incorporates human agency, Aunger (2002) recognises that finding replication in culture would be the 'knock 'em dead' argument to support the meme concept. To set the standards against which any candidates for replication ought to be judged, he suggests four characteristics which ought to be present in a relationship between a copy and some source of that copy. They are causation, similarity, information transfer and duplication. Also, by reflecting on the known replicators, genes, prions and computer viruses, Aunger (2002) points to the need to locate any type of replicator in a single material substrate[32] such as the chemistry which provides DNA with its replicating properties.

To avoid remaining an inadequate theory, memetics needs to demonstrate units of culture which satisfy the four characteristics of replication and are grounded in a single substrate, although they may use a range of 'interactors'[33] to help them make copies of themselves (Aunger, 2002). To fulfil his meme criteria, Aunger (2002) proposes the concept of 'neuromemes', which are the electrical patterns formed between neurons to constitute cultural information in the short term memory of the person in whom the neuromeme resides.

[32] Aunger (2002) describes the tendency for a replicator to stick to one substrate as 'the sticky replicator principle'.

[33] Interactors are all the elements which are involved in the replication process other than the replicators (Aunger, 2002).

Aunger (2002) likens neuromemes to Cloak's (1975) corpuscles of culture and suggests that they are stimulated by things in the outside world. In neurometheme theory, replication evolved as a process of backing up neuromemes in a single host brain, based on the adaptive benefits gained through avoiding loss of knowledge, through brain degeneration or damage. Conceptually therefore, the functioning of neuromemes distinct from consciousness is similar to Dennett's (1991) pandemonium of thoughts concept.

Indeed, where Blackmore (1999) synthesises Cloak's (1975) work with behavioural imitation because copies of information within the brain must be replicated by making a copy in a second brain, the notion of within brain replication means that memes can evolve at a fast rate below our consciousness in a single brain. Consequently, Aunger (2002) eliminates imitation as the prime force in his theory of memetics. The neurometheme concept leads Aunger (2002) to distinguish between the 'replicator' (memes), which are limited to the single substrate of electrical brain activity in people's heads, and the 'signals' they use to jump to other brains.

Signals travel through the macro environment and are picked up by others' sensory organs, instigating a replicated neurometheme in a new brain. Therefore, neuromemes have two strategies for between brain replication, either generate a signal or generate an artefact which can be decoded as a signal (Aunger, 2002). Consequently, signals can be symbolic which enables large amounts of cultural knowledge to be moved into the environment rather than having to be learnt by each individual, thereby enabling cultural complexity to build.

However, although Aunger (2002) suggests that culture exists in brains as particulate units, and that in the complex cultural environment, when two memes have the same job with the same overall consequence in some larger context they can compete, the theory does not specify how distinct memes should be identified. Indeed, he suggests that there may be no equivalent to Mendelian particulate units in culture because neuromemes may act at differing levels of complex concepts and cultural meaning is always context dependent. Of course, as I have illustrated above, Mendelian heredity is, in fact, the observation of instrumental DNA/phenotype links which make sense of the similar levels of complexity inherent in biological pleiotropy, through optimon type genes. However, Aunger (2002) does not develop the optimon concept.

To address the problem of units of culture, Distin (2005) posits the meme hypothesis: are there discreet units of culture and, if so, to what extent can the concepts of genetics be transferred to memes? In answer, she proposes 'Representational Content' (RC) as a conceptualisation of cultural information which could play the same role as DNA in biology. RC is the information a person has attached to an object and, because the information related to a specific object could theoretically be quantified through a process of experimental elimination, Distin (2005) concludes that cultural information can be conceptualised as particulate. However, she doubts the possibility of actually conducting such experiments because of the practical difficulties in constructing the required experimental design. Like Aunger (2002) then, she ignores the more instrumental optimon based approach of attributing content based on how a replicator engenders alternative effects compared to its alleles, when all else is equal.

Indeed, despite suggesting that there may be a variety of any particular cultural trait, similar to the variations in eye colour in biology, Distin (2005) rejects the possibility of memetic equivalents to the replicating machinery and survival machines which enable optimon type gene definitions. Instead, she recasts the evolutionary algorithm itself as replication, variation and selection rather than variation, selection and retention. However, as I have already noted, in biology it is through phenotypic effects that retention is achieved and evolution occurs, so once an equivalent in culture is eliminated the replicator is collapsed into the effect.

In rejecting memetic survival machines, Distin (2005) agrees with Dawkins (1976; 1989) by suggesting that culture is akin to a primitive primeval soup. However, this highlights the same dilemma inherent in Dawkins's (1976; 1989) thesis because, as Distin (2005) also notes, there is a high degree of cultural complexity in human societies.

> *One of the most astonishing aspects of both realms* [biological and cultural] *is the enormous complexity that has developed over time.*
>
> Distin (2005, p41)

Of course, in biology, complexity is due to the emergence of phenotypes, survival machines and the strategies they deploy. However, to maintain memetics as an approach with which to address cultural complexity, Distin (2005) invokes humans' ability to

meta-represent. Meta-representation (being aware of our representations) is what lends memes the power to enable complex culture, because it allows pieces of RC to be manipulated away from their original context.

> *Only once a creature can meta-represent (give labels to its representations and manipulate those labels in its mind) can it lift its representations out of their original context and use them in another arena.* (Original emphasis)
>
> Distin (2005, p130)

Meta-representation raises two areas of interest which turn out to be interrelated. Firstly, if labels can be manipulated away from their original context, what is the role of symbolic language in memetic processes? Secondly, who or what does the 'meta' part of meta-representing? Could it be that an unsubstantiated 'self' is being invoked in a similar manner to that of the meme as virus concept? After all, a similar question seems to be posed by Aunger's (2002) suggestion that people can decode signals. Who does the decoding?

Particulateness, Words and Agency

The symbolic representation introduced with Distin's (2005) meta-representations and Aunger's (2002) signals, raises the issue of how memetics ought to regard symbolic language systems. Indeed, how to incorporate words into the meme concept does seem to be a recurring, yet unresolved issue. Dawkins (1989) notes how the words in songs such as *Auld Lang Syne* or *Rule Britannia* may change over time, sometimes changing the meaning they convey as well. Despite focusing on imitation, Blackmore (1999) suggests that, due to their digital nature, words improve the fidelity of memes and, therefore, our tendency to talk evolved through memetic drive to benefit replication. Dennett (1991) characterises words as the catalysts which precipitate fixations of content as one part of the brain tries to communicate with another as part of its parallel processing. Pratchett, Stewart and Cohen (2002) mirror Distin's (2005) notion of RC by suggesting 'ontic dumping', where a word is created to attach some cultural meaning, the unit of information then becoming reified as a thing, rather than a labelled concept.

Some scholars have taken the view that symbols ought themselves to be considered as the memes. Deacon (2004) suggests that memes should be thought of as symbols which represent a piece of culture and Price (2012) suggests that it is the signifier of units of

culture which are the replicator. Both views are consistent with Aunger's (2002) claim that signals can instigate a neurometeme in another person's mind and Dennett's (2006) claim that people understand the semantics of a meme, based on their knowledge of the context in which it occurs.

However, if only the symbol/signal is copied rather than the RC then Aunger's (2002) third replicator criterion of replication, involving a copy of information from the original source is denied. The attributing of meaning is left to the person who adopts the use of the symbol which seems to invoke a mind or self that does the adopting and attributing. Indeed, Deacon (2004) characterises memes as replicas rather than replicators because an outside agency is at work. Similarly, Price (2012) suggests that terms spread virus-like through communities of likeminded people, thereby assuming some kind of agency which can be infected and risking a return to the problematical meme as virus concept.

In fact, Deacon (2004) goes so far as to suggest that not only memes should be considered to be replicas, but also genes. Rather than replicators, they should be regarded as the information phenotypic effects need to perpetuate themselves. However, doing so undermines the very replicator concept on which the meme was initially based and restricts both genes and memes to no more than bookkeepers (Aunger, 2002). Privileging the phenotypic effect over the replicator collapses the replicator/phenotype dualism into one phenomenon, rejecting the instrumental links of the optimon, thereby ignoring the potential for the pleiotropic effects of particular replicators. Consequently, the ability to address cultural complexity is lost.

Distin (2005) recognises the importance of symbolic representation, which might lead the memeticist to consider words as units of culture suitable for memetic theorising. They are the obvious candidates for the abstract labels of meta-representations. However, she dismisses them as candidates for memetic DNA because although words are particulate they are too context dependent. There is more than one language and within languages there can be more than one word for the same thing. Conversely, some words have more than one meaning so the RC is not fixed. Indeed, there are different

representational systems to suit different cultural circumstances, for example, musical notation and sign language[34].

However, Distin's (2005) treatment of the word 'suicide' illustrates some problems. By suggesting that people can know the word suicide, while not acting out the effect of killing oneself, she rules out the word as a meme. However, such a view fails to tackle the cultural complexity in which the term occurs, for example, give care to suicidal people, comment that suicide is an easy way out, suggest that suicide is an indicator for the state of a society, etc. There is something clearly 'suicidey' in content maintained in each of these contexts and perhaps the complex ways in which that content plays out in cultural systems, is closer to the pleiotropy which the optimon resolves in biology through instrumental descriptions using language.

More generally, language itself seems to encourage the invocation of an unexplained agency which is not present in biology, because it poses the problem of who uses symbols and who does the meta-representing. In fact, both Distin (2005) and Aunger (2002) overtly leave space in their theories for human free will which is not memetically accounted for, thereby implying that the meme as virus concept underpins their theories. Aunger (2002) limits neuromeme activity to short term memory which means that not all human thought is memetic and Distin (2005) simply asserts human free will, by invoking an innate human mind potential and common sense.

> *... my own conclusion – freely reached after many hours of genuinely creative thought and non-illusory choices – is that memetic evolution is quite consistent with a world of intentional, conscious and responsible free agents. And if it weren't, then common sense dictates that I should exercise my free will and reject meme theory in preference to dispensing with mind, conscience and autonomy.*
>
> Distin (2005, p5)

Conclusions Following the Memes as Discrete Units of Culture Theory

The attempts to conceptualise units of culture enable me to again modify my model of how memes occur. Figure 2-10 shows how biological adaptations might evolve a brain which gives rise to self-replicating pieces of cultural information, but which can also use symbolic language. Once the cultural units begin to replicate within brains, a new

[34] Distin (2005) notes that language holds the greatest potential for alternative ways of representing other representational systems.

process of evolution occurs building cultural complexity through artefacts which hold cultural information in the environment and act as signals/symbols for their respective units of culture.

However, the conceptualisation demonstrated in Figure 2-10 raises a number of points for my exegesis. In particular, the theories which aim to define unitary memes fail to provide an equivalent to the optimon units which instrumentally resolve complexity in biology. Where scholars who have tackled memetics point to cultural complexity as the domain in which memetics ought to make a contribution to knowledge, the lack of an optimon seems to be a recurring weakness.

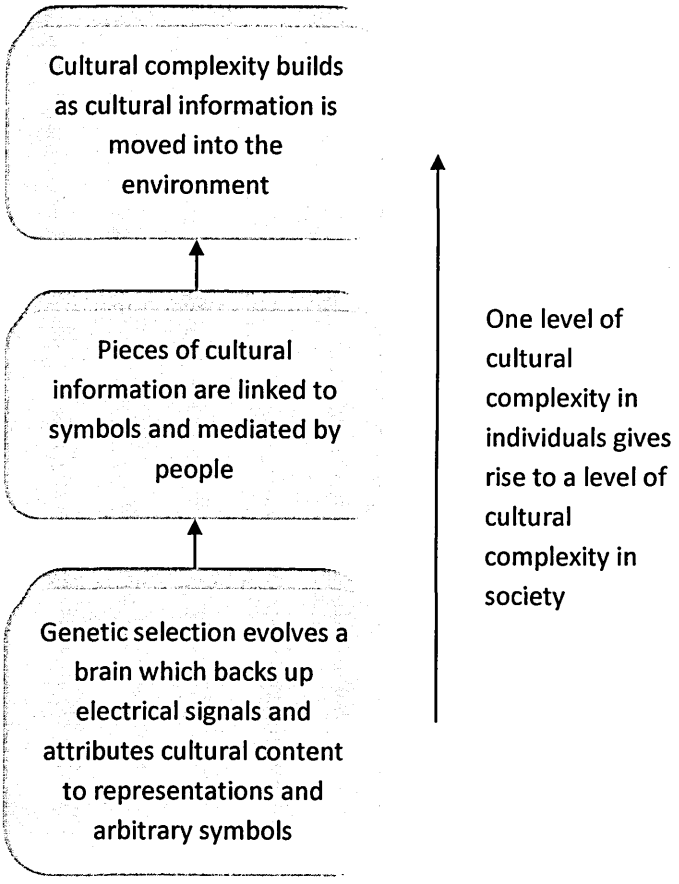

Figure 2-10: Particulate Memes, Adapted from Aunger (2002) and Distin (2005)

The aim of finding a general theory of units of culture is also frustrated by language. Language is used in genetics to describe units of natural selection which occur in the language-free domain of biological evolution. However, memetics is complicated because, as Distin (2005; 2010) identifies, much modern culture is embedded in and

mediated through language. Replicator theories of culture are part of culture where replicator theories of biology are not part of biology. Hull (1988) highlights how the role of language is pivotal in both biology and culture by suggesting that the verbal description of a gene, once used in culture, becomes a meme. Although this view mistakes the optimon description of a gene as a meme, thereby endowing replicator status in culture through a naive carrying over of properties from one domain to the other, it does point to the need to describe any optimon type replicator in language.

However, having failed to address cultural complexity through some kind of pleiotropic influence of memes there is a risk, demonstrated by Distin (2005), of reverting to genetic analogy and selective cultural examples to help discuss the putative evolutionary algorithm in culture.

> *Although we ought not search in the cultural realm for analogues of the finer details of the physical story, if a plausible parallel may be drawn between the two then it should not automatically be ignored.*
>
> Distin (2005, p119)

However, the selective use of genetic analogy confuses Distin's (2005) argument and leads her to make *non sequitur* assertions such as, gaining attention is analogous to reproduction and retention is analogous to gaining food, even though she has rejected memetic survival machines. Biological survival machines eat and reproduce, not genes. Such an assertion assumes equivalents to sexual selection, embryology and metabolism to break chemicals into a form which can then be used to make physical copies of DNA.

Although the theories which attempt to identify units of culture offer some critique of the meme concept, in positing how culture could be particulate they struggle to account for cultural complexity. Both Aunger (2002) and Distin (2005) seem to rule out an equivalent to Mendelian heredity. Complexity in biology is explained by instrumental optimon gene definitions which limit the variables of a particular circumstance with the working assumption of, where all else is equal.

However, both Distin (2005) and Aunger (2002), in a manner similar to those who offer the memetic consciousness theories, also refer indirectly to narrative and storytelling to help explain their theories. Distin (2005) suggests that humans organise their lives around themes and narratives and Aunger (2002) suggests that people use life stories to

create permanence from the constant flux of memetic activity in our brains. I have summarised the key insights I have gained from this section in Table 2-8.

	Key Insights Gained from this Section
1	Finding replication is crucial for memetics.
2	The concepts of the neurometeme and representational content reject the optimon definition of a replicator.
3	Memetic theory must account for symbolic language.
4	Genetic analogy confuses the discussion but continues to be used despite recognition of the concerns surrounding it.
5	Narrative is a recurring theme.

Table 2-8: Insights from the Memes as Discrete Units of Culture Theory

Insights Gained from Fundamental Meme Theory

The degree to which there is variation in the extant memetic theoretical standpoints has made it difficult for me to isolate a point at which to engage the subject with my own empirical work. My attempts to model the way memetics can be conceptualised highlights variations in the fundamental theory which are yet to be reconciled. There are significant anomalies between my models of each standpoint relating to issues such as free will and whether or not culture can be regarded as particulate.

Most surprising for me is the fact that, at no time has the optimon definition of a replicator, which was one of my key insights taken from Dawkinsian genetic replication, been recognised in the memetics literature. Yet, as I have discussed in relation to Dawkinsian replication, the optimon is crucial for the selfish gene theory which gave rise to the meme concept. Indeed, the lack of theoretical consensus and apparent drift from the optimon concept seems to demonstrate why the attempts at memetic modelling of culture remain grounded in assumptions at both the macro and micro levels.

The elements of the fundamental theory which have offered me the prospect of designing the empirical element of my project are complexity and the theme of narrative, which reoccurs when scholars attempt to explicate their ideas. Although they have not developed the narrative approach, a number of scholars have moved to apply memetics to organisational settings. Similarly, a small number of empirical studies have

also been designed. Therefore, to help develop my own approach to empirical work, I review these parts of the literature next.

Memetics and the Study of Organisations and Management

Memetics has been applied to both organisational and management theory, to offer memetic based visions of how organisations manifest themselves (Price and Shaw, 1998; Vos and Kelleher, 2001; Weeks and Galunic, 2003) and to suggest memetically derived management tools (Williams, 2000; Pech, 2003; Voelpel, Leibold and Streb, 2005; Pech and Slade, 2004; Price, 2009). In this section, I review the applied literature in light of the issues raised during my discussion of fundamental memetic theorising, the aim being to search for indications for how my own research can be operationalised.

Organisational memetics provides accounts of how the behaviour of people in organisations might be influenced by memes. For Price and Shaw (1998) memes engender dominant patterns, which act as strategies that enable but also limit behaviour, through their influence on organisational structure and practices. Vos and Kelleher (2001) offer a similar, but more specific, review of behaviour relating to takeovers and mergers of organisations. They suggest that managers persist in acting in their own interests, rather than for shareholders, despite evidence of the failure of many organisational acquisitions to generate shareholder value. Weeks and Galunic (2003) suggest that organisational forms themselves, in particular the firm, might be memetic phenotypes.

Memetic management theory tends to consider the way innovation might be influenced through meme based management (Pech and Slade, 2004), because memes offer an insight into the innovative capabilities of organisations (Pech, 2003; Voelpel, Leibold and Streb, 2005). The approach proselytises meme management intervention through activities such as meme audits (Pech, 2003), the memetic construction of advertising messages to make them appealing to their audience (Williams, 2000) and the management of the physical environment of firms to engender memetic creativity (Price, 2009).

Applying the Meme Concept

Despite the heterogeneity I have identified in the fundamental conceptualisation of what a meme might be and the lack of empirical evidence for memes, without exception each applied study assumes memes' existence. Subsequently, the definition of a meme varies from study to study and in each case memes are couched in terms which suit the message of the author's thesis, rather than a consensus about what might constitute a putatively real entity. Memes might be core elements of culture which are imitated (Voelpel, Leibold and Streb, 2005; Weeks and Galunic, 2003), self-replicating ideas or thoughts (Pech, 2003), anything that is copied (Vos and Kelleher, 2001) or the smallest element capable of being exchanged with an associated sense of meaning and interpretation (Price and Shaw, 1998).

I have found this degree of variation frustrating when trying to design my empirical work. Surely definitions should be at least broadly similar and specific shared points of common understanding within a discipline. If a meme is defined differently to suit different writers' positions then, in actual fact, it means practically nothing (Lynch, 1998). Edmonds (1998) warns against weakening the meaning of key terms such as 'meme' to ensure that any processes of variation and selection are memetic and not simply designated as such by the theory. He identifies the risk of a gap between theory and the phenomena it aims to describe.

Indeed, Dawkins's (1976) original theorising has been modified by some organisational scholars to help support applied theory, for example, Voelpel, Leibold and Streb (2005, p60) truncate his original wording to *"... a unit of culture [...] leaping from brain to brain"*. Such a recasting of Dawkins's (1976) original words ignores the inherent underpinning assumptions grounded in genetics which I have already discussed. In this edited version, there is no mention of the replicating machinery of sperm or eggs which is present in the original quotation.

My own review of the fundamental meme theory has raised the importance of the optimon definition of a replicator in Dawkins's (1976) original theory and, although there is some recognition that gene definitions depend on their phenotypic expressions (Weeks and Galunic, 2003), at no time is the optimon recognised in the applied theory. In fact, despite the selfish replicator concept being based on the optimon, the issue of particulate units of culture tends to be dismissed. Either it is assumed that culture does

not divide itself into independent units (Weeks and Galunic, 2003) or it is not necessary to know the boundaries of a meme (Voelpel, Leibold and Streb, 2005).

Use of Fundamental Theory

Much of the variation in the definitions of organisational memetics is grounded in the arbitrary manner in which the concept has been applied. Indeed, the unresolved debates in fundamental memetics are not overtly recognised by the organisational scholars. Consequently, support for the various definitions of memes which are offered tends to be drawn from authors who have offered different perspectives on the meme. Dennett and Blackmore are regularly cited but the implications of the limited human agency, inherent in their theories, are not recognised.

Pech (2003) is not alone in invoking Blackmore's (1999) conceptualisation of memes, whilst proposing the 'meme as virus' concept, to suggest that memes can be managed via a 'meme audit'. Such a perspective contains an internal contradiction which is repeated by, Williams (2000), Vos and Kelleher (2001), Weeks and Galunic (2003), Pech and Slade (2004) and Voelpel, Leibold and Streb (2005). This practice must surely undermine the credibility of the definitions outlined above and the usefulness of any proposed management action. Indeed, there is an assumption of management agency throughout the applied literature which implies the meme as virus concept. Pech (2003), for example, clearly assumes managers have the ability to control memes.

> *Entrepreneurs and managers have the power to conceive and shape appropriate memes for their markets, their products and their work milieu.*
>
> Pech (2003, p113)

Similarly, Pech and Slade (2004) suggest that managers can adopt memetic engineering to identify virus like, toxic memes which occur in employees' minds, without the authorisation or consent of management. Voelpel, Leibold and Streb (2005) suggest that managers can skilfully manage replicators, through organisational fitness profiling and skilful interviewing. Williams (2000) proposes the management of memes to construct strong advertising massages. Even where the agency issue is recognised, some degree of management control is maintained. Price and Shaw (1998) point to the bounding of choices due to organisational memetic patterns but also suggest that people can recognise and shift their memetic patterns.

> *We have the capacity, should we choose to use it, of not being led by out patterns, the capacity to neither be victims, creations or creatures of such patterns.*
> Price and Shaw (1998, p313)

Similarly, Weeks and Galunic (2003) suggest that people can exercise local free choices but organisational culture emerges out of the complex interactions of many people, rather than by management decree. Such a claim is counter to the random mutations of replicators in biology, of course. To be evolutionary, rather than intentional, the process of variation must be blind to the chances of selection (Edmonds, 1998).

Return to Genetics and Biology and the Re-emergence of Narrative

In the face of an inconclusive fundamental theory of memes, the applied literature reverts to genetic and biological analogies for theoretical support and explication. Price and Shaw (1998) suggest their memetic patterns are akin to evolutionary stable strategies (ESSs) and that drop-in rooms can be thought of as transposons[35]. Weeks and Galunic (2003) suggest that organisational practices have offspring and firms are like multi-cellular organisms. Indeed, the virus concept is implicit wherever a role for management agency is retained, because it presumes that choices can be made between which cultural elements are beneficial, and should be adopted, and which should be rejected as pernicious.

Of course, invoking the meme as virus concept, as well as other biological analogies, introduces assumptions of something akin to evolved cellular replicating machinery which may not be an appropriate extension of replicator theory for culture, because the replicator/phenotype distinction is an unresolved debate. Similarly, invoking the dynamics described by ESSs tends to assume complex life, population dynamics and sexual reproduction. However, where in biology genetic strategies can be game theoretically modelled on the basis that payoffs are accrued blindly through survival and reproduction (Axelrod, 1990; Maynard Smith, 1982), applying the concept to organisations assumes a similar blind cultural algorithmic counterpart. This is not consistent with the free choices of managers in a cultural setting (Maynard Smith, 1982).

[35] Transposons are genetic elements which can move from place to place in a genome (Guttman et al., 2002).

Although Price and Shaw (1998) note that memetics can offer valid insights without needing to account for absolute truth, the degree to which such genetic analogies ought to be regarded as metaphorical is seldom explored. It seems to me that to achieve valid accounts of organisations, it may well be more instructive to offer sociological explanations rather than genetic analogies, which are at risk of being made literal along with the underlying assumptions that are embedded within them. However, the tendency to invoke narrative, which I identified as implicit in the fundamental theorising, reappears in the applied literature when the biological analogies are abandoned. People are said to understand organisational patterns through other people's stories (Price and Shaw, 1998), stories and legends play a role in cultures (Voelpel, Leibold and Streb, 2005) and memes are deployed through the corporate story (Vos and Kelleher, 2001).

Insights Gained Following My Review of Applied Memetics

Organisational applications of memetics demonstrate some potential uses for a rigorously devised and applied theory of memetics, but they also demonstrate the need to reflect critically on meme theory at a fundamental level, via empirical investigations devoted to resolving the validity of a cultural replicator. Memes must be shown to be replicators to make evolutionary sense (Aunger, 2002). However, where applied theory could provide cultural examples to help inform the fundamental theory it assumes the existence of memes to suggest instrumental proposals for management action.

By avoiding the issue of free choice and reverting to biological and genetic analogy, the applied theory tends to unreflectively adopt the meme as virus conceptualisation rather than develop the optimon view of replication. Of course, the virus analogy is amenable to a managerialist outlook, because pernicious cultural viruses provide an excuse for why management action might not result in the desired outcomes, and yet provide planning tools for corrective management control. Indeed, Pech and Slade (2004) go so far as to suggest that memetic engineering, carried out by managers, is management of thought.

In recognising the problematic assumptions underpinning applied memetics, I have been able to identify areas where empirical work should be focused to help resolve some of

the contradictions embedded in fundamental meme theory. Clearly, there is a need to search for replication and, if it is found, to articulate a definition of memes based on evidence. In the extant applied theory, memes are used as a stand-in for yet to be confirmed concepts, making them unsuitable for precise analysis (Deacon, 2004). I have summarised the key insights I have gained from reviewing the applied memetic literature in Table 2-9.

Key Insights Gained from this Section	
1	The applied theory highlights the risks of assuming memes simply by way of carrying over validity from genetics.
2	The optimon definition of a replicator is ignored by the applied theory.
3	Narrative is a recurring theme.

Table 2-9: Insights from the Applied Memetics Literature

Empirical Memetics

From the natural science perspective, on which the concept of a replicating cultural unit is based, the theoretical and empirical elements of a scientific endeavour should work in tandem. Through iterations of theory testing, assertions are confirmed or rejected and with the aid of empirical observation, theory is generated (Gell-Mann, 1995). Every problem with a theory should be a candidate for translation into an empirical question because *"... that makes for fine and interesting science"* (McKelvey, 1982, p8).

Through carrying out my review of the literature, I have found that memetics has lacked the balancing influence of an empirical research effort, to match its theoretical development, the result being a wide ranging set of theories, amongst which there remain areas of contradiction. Such contradictions are not resolved when the theory is applied to organisations and the discrepancy between the volume of memetic theorising and its empirical counterpart means that, in McKelvey's (1982) terms, the scientific status of memetics is undermined. However, there is a small corpus of empirical research pertaining to memes. Therefore, in this section, I review how other empirically orientated researchers have tackled the operationalisation of the meme concept.

Of the four attempts to conduct empirical memetics, two are situated in organisational contexts. O'Mahoney (2007) follows the applied theory of Pech (2003) and Voelpel, Leibold and Streb (2005), by designing a study of management practices and Shepherd and McKelvey (2009) look to study how memetic variation can provide managers with indications of a misalignment between organisational actions and strategic intent. The two remaining studies address broader cultural phenomena such as behaviour related to internet postings (Best, 1997) and the emergence of Christian denominations (Lord and Price, 2001).

There is wider use of the term 'meme' in empirical research, where it is used as metaphorical shorthand for cultural phenomena. As part of their empirical study of the influence of emotions on people's 'selection' of ideas, Heath, Bell and Sternberg (2001), for example, adopt the term 'meme' as a metaphor for urban legends and rumours. Such research would not suffer from the removal of the meme terminology, so I have excluded it from my review[36].

Operationalising Memes

Rather than constructing studies to empirically test memetic theory, especially the areas I have identified as contradictory or contentious, each of the four studies I have noted above assumes the nature of memetic phenomena in some way at the outset. Both Best (1997) and Shepherd and McKelvey (2009) short circuit the fundamental debates by returning to Dawkins's (1976) original thesis as the basis for their meme definitions. Indeed Shepherd and McKelvey (2009), like Voelpel, Leibold and Streb (2005), do so by arbitrarily adapting Dawkins's (1976) original definition.

> [Memes] ... *propagate themselves in the meme pool by leaping from brain to brain via a process which can be called imitation."* (Original emphasis)
>
> Shepherd and McKelvey (2009, p138)

Once again, the omission of the genetic analogy related to gametes which appears in Dawkins's (1976) exposition fails to acknowledge the risk of reifying biological metaphor. Indeed, as is the case with the applied theory, each empirical project adopts

[36] I have found such contributions unhelpful in addressing my research questions, which relate to the degree to which aspects of fundamental meme theory might be valid. Indeed, the various nontechnical uses of meme terminology have influenced Distin's (2010) decision to abandon the use of memetic language in the development of her theory of cultural evolution.

differently constructed meme definitions which range from, the largest reliably replicating unit of text (Best, 1997), to beliefs and practices (Lord and Price, 2001) and distinct memorable units, for example, business programmes such as BPR (O'Mahoney, 2007).

Adopting a 'suitable' meme definition around which to design a study risks data collection and coding which conforms to your definition of a meme, so the findings do not represent a critical and rigorous test of the theory. Lord and Price (2001), for example, construct a sample of the beliefs and practices (memes) of various religious denominations, from secondary data. The data is then clustered to observe whether a pattern of descent can be discerned which matches historical accounts of how the denominations split into new groups over time. However, their analysis cannot show that any links between the groups are due to anything other than people consciously deciding to make adjustments to their worship practices, for whatever reasons they deemed to be important. Seen this way, there is no need to assume replication. Consequently, the application of a technique such as cluster analysis, which assumes replication, might appear to describe a blind evolutionary process which later turns out to be otherwise, for example, individuals coming to their own conclusions which happen to be similar to the conclusions of others (Edmonds, 1998).

Indeed, a picture of 'descent' should be expected to occur in Lord and Price's (2001) findings because, after all, the phenomenon has been sufficiently recognised for an historical account to be written, which can be used to make comparisons against. Consequently, much of the validity for the study seems to be grounded in the assumption that religions are not rationally based on evidence, thereby covertly invoking the meme as virus concept. However, the study *is* memetic simply because the beliefs and practices have been called memes at the outset.

There is an unqualified level of risk that a type 1 error has occurred in such an application of the theory, because the identification of an evolutionary algorithm might simply be made by those who find the theory, or story, of evolution appealing in biology. It is the same error that occurs when people attribute biological complexity to divine creation, based on the religious stories they favour. However, there are similar risks due to the presumed existence of memes when Best (1997) conducts a cluster

analysis based on internet postings and O'Mahoney (2007) investigates the persistence of potentially deleterious working practices.

Best (1997) arbitrarily assigns the status of 'copying agent', rather than free agent, to the people who make web postings, so the findings of a memetic process seem to be, once again, built on no more than the operationalisation of the meme concept. Indeed, the clustering of similar putative memes, which happen to have occurred in the same news group threads, is taken to demonstrate heredity but the threads are conversations where people are responding to what others have said about the same topic. What else should be expected? However, Best (1997) goes on to draw parallels with biology where texts are seen as species-like organisms. When the analysis leaves unanswered questions, Best (1997) reverts to what he calls 'qualitative analysis', which I take to mean that he reads the data to see what the 'copying agents' meant.

To operationalise the meme concept, O'Mahoney (2007) attributes replication to practices which are potentially deleterious to firms, which might be spread because they suit individuals, who find particular business practices appealing, rather than the organisation. However, by accepting that managers can decide to make decisions either in line with the organisational goals or to suit their own ends, free will seems to be assumed, so the study errs towards the meme as virus concept. Subsequently, in a similar manner to that evident in some examples of the applied literature, the study invokes support from both Dennett's and Blackmore's fundamental theories which contradict the meme as virus concept.

Without a well defined fundamental theory, O'Mahoney (2007) follows the applied theory by introducing genetic analogy through concepts such as genotype, phenotype, phylogeny and cross fertilisation. Whilst useful in illustrating the processes which memetics alludes to, the assumption of free will is incongruous with such concepts and, therefore, the coding of instances recorded in qualitative data as replication, selection or variation seems limited to metaphor. O'Mahoney (2007) does, however, recognise the wider debate regarding the ontological status of the meme which is yet to be resolved. Indeed, without a consensus over the possibility of, or nature of, memetic phenotypes, O'Mahoney (2007), like Distin (2005), modifies the evolutionary algorithm to variation, selection and replication instead of variation, selection and retention.

Despite stating that there is no meme-based empirical research of consequence antecedent to their study, rather than addressing the weaknesses of invoking a presumed cultural replicator, Shepherd and Mckelvey (2009) propose yet another *a priori* definition of memes which neglects the central issue of replication.

> [Memes are] ... *independent knowledge-based units of meaning that can be (socially) exchanged -transmitted- with more or less accurate transfer with or without alteration of meaning.*
>
> Shepherd and McKelvey (2009, p138)

With a definition of memes unsupported by cultural evidence, Shepherd and McKelvey (2009) revert to genetic analogy to justify and construct a methodology designed to operationalise the assumed memes, thereby risking the unrecognised invocation of genetically evolved traits which are not substantiated in culture. It is suggested, for example, that memes recombine in a manner akin to crossing over via mating in biology which assumes cellular replicating machinery and sexual reproduction. Subsequently, portions of Shepherd and McKelvey's (2009) transcribed data are coded as memes on the basis that words are equivalent to codons[37], rather than the optimon definition of a gene, on which the selfish replicator theory is based.

However, having adopted the codon/word synthesis the implications that words are deployed without human agency and in some way achieve a task akin to synthesising an amino acid are not developed. Nor is there any justification for adopting an approach to analysing text via genetic analogy over and above the methods proposed by the social sciences. The only reason to suppose that the study is memetic is that pieces of text have been called memes and, where the genetic analogy raises the question of agency, Shepherd and McKelvey (2009) offer inconsistent arguments. First, it is suggested that only variation is blind, then the whole variation, selection and retention process is referred to as blind and later, it is suggested that variation can be consciously managed by people.

Insights Gained Following My Review of Empirical Memetics

Throughout the empirical memetic research, as is the case with the applied theory, assumptions are made as part of operationalising the meme concept, which means the

[37] As previously mentioned codons, as an alternative to the optimon, are genes defined as a triple unit (of nucleotides) which specify the synthesis of an amino acid (Dawkins, 1999; Guttman et al., 2002).

agency and particulate questions, raised by fundamental memetic theorising, are not resolved. By arbitrarily defining memes as part of the operationalisation of the theory, the interplay between theory and empirical testing, advocated by Gell-Mann (1995) and McKelvey (1982) has not occurred. Subsequently, the meme as virus concept is assumed, although this is not necessarily recognised, and the key issue of whether Dawkinsian replication occurs in culture is not addressed. In its place, there is a reintroduction of genetic and biological analogy. Rather than meme theory having been *tested* empirically, the meme concept has been applied to empirical studies and assumptions made to accommodate the unresolved debates of the fundamental meme theories.

The issues highlighted by my review of the empirical memetic work suggest that, in order to address the imbalance between theoretical and empirical memetics, 'extra-memetic' studies which do not revert to arbitrary definitions and genetic analogies should be designed. Only by adopting such an approach can the key debates surrounding the discipline be addressed, thereby leading to a more secure basis for its truth claims. I have summarised the key insights I have gained from this section in Table 2-10.

	Key Insights Gained from this Section
1	No empirical work has adopted the optimon definition of a replicator.
2	Assuming memes via an arbitrary definition means that you will find memes regardless of whether there is actually replication in culture.
3	Invoking genetic analogy is a diversion from how the cultural domain works.
4	An 'extra-memetic' methodology is required to make progress in memetics.

Table 2-10: Insights from Empirical Memetics

Summary of My Exegetic Analysis of Meme Theory

My review of the memetics literature has, as mentioned in chapter 1, revealed a degree of heterogeneity in the theory. The extent of the variation amongst the theoretical views of the meme has led me to adopt an exegetic approach through which I have aimed to abduct a way of developing the empirical part of my project. To that end, I have listed my key insights gained following each part of my review and I have summarised the complete set of my insights in Table 2-11.

Section	Key Issues
Dawkinsian Genetic Replication	• Replicators copy themselves because of their inherent qualities. • Replicator driven evolution is blind. There is no design. • Although replicators and phenotypes are separate entities, the optimon definition of a gene is constructed by an observer, based on observed phenotypic effects. • The optimon makes instrumental links between a piece of DNA and evolved complexity. • Phenotypic effects are survival strategies and can be used to identify genes through the competition they engender.
Dawkinsian Memetic Replicators	• The use of genetic analogy threatens the meme's status as a separate replicator and risks the invocation of unsubstantiated replicating machinery. • Memes tend to invoke a behaviourist view of human psychology which challenges free will but Dawkins admits a cognitive ability as well. • If humans have free will then the viability of game theoretic modelling for culture is weakened. • For memes, Dawkins abandons the optimon definition of a replicator so Mendelian-like particulate inheritance is not demonstrated.
Dawkinsian Replication	• Replication leads to, and can explain, complexity. • Human free choice threatens the replicator concept in culture. • There are unresolved differences between genes and memes in Dawkinsian replication, yet recent studies invoke Dawkins's original theorising.
Memes as Mind Viruses	• The introduction of agency to the virus analogy in culture, where there is none in biology, stretches the metaphor beyond its validity. • The selective, value laden use of examples and genetic metaphors weakens the theory. • Memetics needs to acknowledge the concept of mind. • The optimon definition of a replicator is ignored by the meme as virus concept.
Memes and Consciousness	• The theories which account for memetic consciousness fail to accommodate the optimon definition of replication. • It is difficult to theorise about a theory which challenges the notion of a self without assuming a self. • Imitation as a replication process becomes exhausted with respect to more complex culture. • Storytelling is implicit as a more fundamental process than imitation.
Memes as Discrete Units of Culture	• Finding replication is important for memetics. • The concepts of the neurometne and representational content reject the optimon definition of a replicator. • Memetic theory must account for symbolic language. • Genetic analogy confuses the discussion but continues to be used despite recognition of the concerns surrounding it. • Narrative is a recurring theme.

Applied Memetics	• The applied theory highlights the risks of assuming memes simply by way of carrying over validity from genetics. • The optimon definition of a replicator is ignored by the applied theory. • Narrative is a recurring theme.
Empirical Memetics	• No empirical work has adopted the optimon definition of a replicator. • Assuming memes via an arbitrary definition means that you will find memes regardless of whether there is actually replication in culture. • Invoking genetic analogy is a diversion from how the cultural domain works. • An 'extra-memetic' methodology is required to make progress in memetics.

Table 2-11: Summary of My Key Insights Regarding Memetics

Conclusions Following My Exegesis

The list of my key insights, provided in Table 2-11, illustrates how Dawkinsian replication in biology is definitive in its articulation of how biological evolution occurs. DNA replicates by way of its chemical properties, the whole process is blind and without design. Cumulative phenotypic expressions build complexity which constitutes a range of alternative survival strategies. The complexity can be instrumentally explained by optimon gene/trait connections which an observer constructs.

However, Dawkinsian replication in culture equivocates over how the process might work and, therefore, resorts to piecemeal genetic analogies and metaphors which risk endorsing unsubstantiated equivalents to evolved replicating machinery. The notion of selfish replication can be sustained by invoking the concept of imitation but the memetic view of human psychology threatens agency, because free choices refute replication.

The most apparent difference between the two domains of biology and culture, I have noticed, is that the optimon definition of a gene is abandoned in the replicator based accounts of culture. Where scholars have addressed the issue of particulateness in culture, and one might expect the re-emergence of the optimon, it is still ignored.

Consequently, the ability for memetics to provide a theory of cultural complexity is diminished and there is a tendency to return to biological metaphors.

The debates in fundamental meme theory indicate the need to account for the impact of replication on human agency. However, those who have written on the subject have demonstrated how difficult it is to write in a manner which excludes one's own self. Storytelling and narrative appears as a more instructive description of putative memetic processes than imitation. The need to accommodate symbolic language in relation to particulateness and agency in a theory of memes is also highlighted.

When memetics is applied to organisational contexts and operationalised for empirical research, the debates in fundamental meme theory tend to be ignored. Meme definitions are made arbitrarily and memetic processes are speculated upon. This approach facilitates the internal validity of the arguments which are presented but cannot claim external validity, beyond the recognised and unrecognised assumptions. Replication is operationalised rather than discovered and the optimon concept is not adopted in any applied or empirical work.

Indeed, the empirical contributions seem overwhelmed by theory which is simply applied rather than tested. This may well provide instrumental approaches to handling life in organisations but at the expense of an explanatory theory akin to genetics. Finding unitary replication in culture is crucial for memetics. Without it there is no need to speculate on how memes may play a part in the broader cultural complexity which we experience.

Scholarly Critique of the Meme Concept

There are a number of scholars who have voiced concerns over the efficacy of the memetic view of culture similar to those I have revealed through my exegesis, including some of those who have contributed to the theory. For instance, despite his proselytising of the meme concept, Dennett (1991) suggests that we are unlikely to ever be able to read the memetic content of some section of the brain, so social scientists will never have the reductionist techniques available to those studying genes. In suggesting that the memetic community should stop what he calls an over ambitious grand theoretical discussion, Edmonds (2002) calls for smaller scale work that will advance the

knowledge of memetic processes. He poses three challenges for memetics, each of which, if met, would provide credibility for the discipline:

1. To provide a conclusive case study that demonstrates a replication mechanism.
2. To provide a theoretical model for when it is more appropriate to use a memetic model.
3. A simulation model showing the true emergence of a memetic process.

Lissack (2003) draws on Edmonds's (2002) critique to characterise the contribution of memetics to management and complexity theory as negligible. To encourage developments in the field, which might address the first two of Edmonds's (2002) challenges, Lissack (2003) encourages the abandonment of the realist view of memes. Instead, he favours a more instrumental view of memes as 'indexicals', signs to represent a context dependent meaning. Viewing memes as indexicals would enable ethnographers to discern the variation of meaning attributed to things like organisational missions and visions in specific cultural patterns (Lissack, 2003), but this may well signal that memetics ought to remain as an instrumental metaphor.

Lissack's (2003) view hints at the question of whether an evolutionary process in culture should be assumed to be closely similar to that in biology. Indeed, Richerson and Boyd (2005) maintain that culture evolves, but they reject the possibility of stable particulate units of culture. Rather, they suggest 'cultural variants' which vary each time they are transferred from one person to another. Consequently, the replicator status of such an entity is diluted because it cannot maintain its own form. Human choice is, therefore, embraced by their theory.

In addition to what might be considered constructive criticism, there is also wider critique of memetics based on what McKelvey (1982) identifies as a general antipathy towards evolution from the social sciences, because of the connotations of 'social Darwinism'. Similarly, Aunger (2000) points to the social sciences as the primary adversaries to what he terms the 'evolutionarization' of social phenomena. Consequently, he recognises the conspicuous lack of development of the meme concept amongst those who study culture.

Robinson (2010), for example, suggests that biological adaptations ought to remain distinct from the study of human culture. She rejects the need for material explanations

of a mind by attacking what she characterises as the naive dualisms which underpin the philosophy of the natural sciences. In a more specific critique of the selfish gene concept, Midgley (1979; 1983) objects to what she takes to be Dawkins's (1976) literal anthropomorphism of the gene through the attributing of selfishness. She assumes that selfish genes lead to selfishness as the natural state for people in terms of social interactions, thereby risking the encouragement of social Darwinism based on notions of Spenserian 'survival of the fittest' (Midgley, 1983).

> *... this personification, in its literal sense is essential for his* [Dawkins's] *whole contention; without it he is bankrupt.*
>
> Midgley (1979, p439)

Midgley (1979; 1983) raises valuable critique of the notion than single pieces of DNA have atomised links to phenotypic expressions, a tendency I have identified in memetic theory with the loss of the optimon. However, she fails to appreciate the optimon notion of a gene which incorporates the 'where all else is equal' proviso when making gene/phenotype connections in biology. Consequently, she falsely sees the possibility of two pieces of DNA contributing to the same phenotypic effect as a weakness in the selfish gene theory, a point which Dawkins (1981) himself raised in his reply to Midgley (1979).

Stating My Position Following My Review of the Literature

By casting memes as replicators, memetics claims to account for the micro level dynamics of a Darwinian macro level evolutionary algorithm in culture. However, memetics remains biased towards conceptualisation and theorising. The question of whether memes do actually exist is yet to be addressed and, without such evidence, the validity of memetics ought to be regarded as simply an additional metaphorical 'image', through which organisations can be understood, studied and managed (Morgan, 1986).

Darwinism recognises a causal logic at play in biology operating via the feedback loop which occurs due to replication and heredity (Hull, 1988; Stoelhorst, 2008). I find evolution an appealing theory but without replication, a question is begged. Why adapt a theory from biology which needs to be distorted for use in human social settings when alternative methodologies are established in the social sciences? To refute its critics, meme theory needs to demonstrate unitary replication in culture through empirical

evidence. If found, such evidence would provide both knowledge of the micro level dynamics of culture and construct validity to the macro evolutionary theories of social phenomena, which remain inconclusive in terms of the unit of selection.

Following my generation of key insights gained through my review of the literature, I have abstracted the following overarching key issues to guide my own empirical research.

- Memetic empirical research should test the inconsistencies embedded in the fundamental theory. In particular, it should acknowledge the agency question and search for particulate replication.
- My methodology for the primary research element of this project should not assume the existence of memes as part of its operationalisation. An 'extra-memetic' methodology is required.
- The research will need to acknowledge the role of symbolic language and avoid resorting to genetic analogy.
- The optimon definition of a replicator should be borne in mind as the model for a cultural replicator which might explain cultural complexity.

Reviewing My Research Questions

My exegetic review of the literature demonstrates the rationale for setting the three research questions which I presented in chapter 1. They are:

1. **Can the organisational culture at CaseCo be divided into units?**
2. **If so, can such units be seen to selfishly replicate?**
3. **Can an 'extra-memetic' research methodology be designed that can test the fundamental tenets of the meme concept?**

Questions one and two address the key conceptual elements of the meme, particulateness and selfish replicator status. The third looks to avoid the epistemological circularity inherent in operationalising particulateness and replication as part of the empirical research design.

Towards a Methodology

Although my discussion of the memetics literature has helped me refine my research goal into more specific research questions, the issue of how to construct an extra-memetic study remains. Indeed, an approach to empirical memetics which does not assume the existence of memes at the outset would in itself constitute an original methodological contribution to knowledge, because none exists in the extant literature. To decide upon a methodology, I have focused on the complexity which, according to selfish replicator theory, both genes and memes generate and explain. In the next chapter, I discuss the reasoning which has led to my 'abducted' choice of narrative methodology, as the best solution, based on the insights I have generated (Czarniawska, 1998; Blackburn, 2008), for my extra-memetic method.

Chapter 3 – Replicators, Complexity and an Extra-Memetic Method

In this chapter, and as shown in Figure 3-1, I discuss my choice of narrative as my extra-memetic methodology. My choice is based on the synthesis of my models of fundamental memetics shown in Figure 3-2.

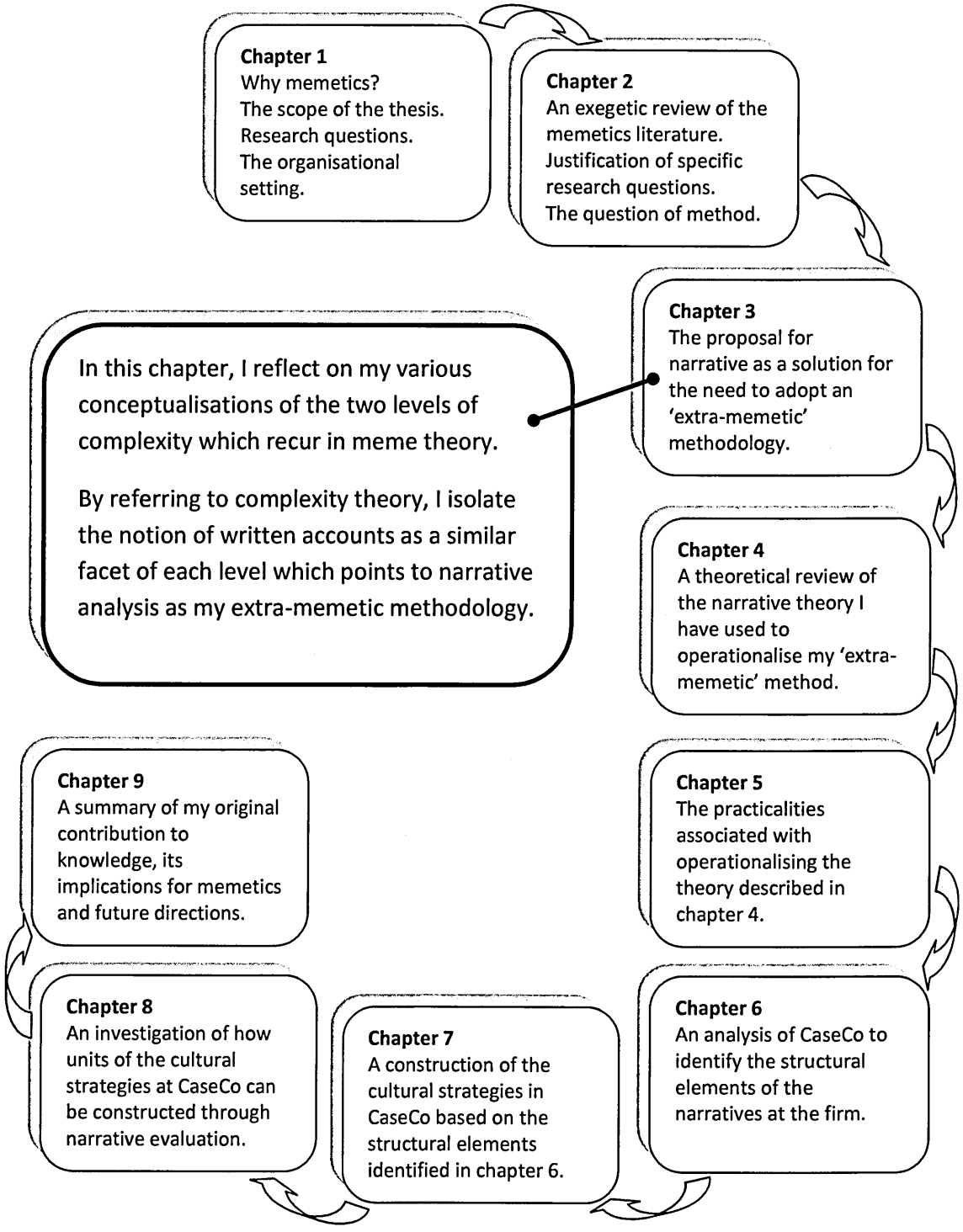

Figure 3-1: Thesis Structure Showing the Role of Chapter 3

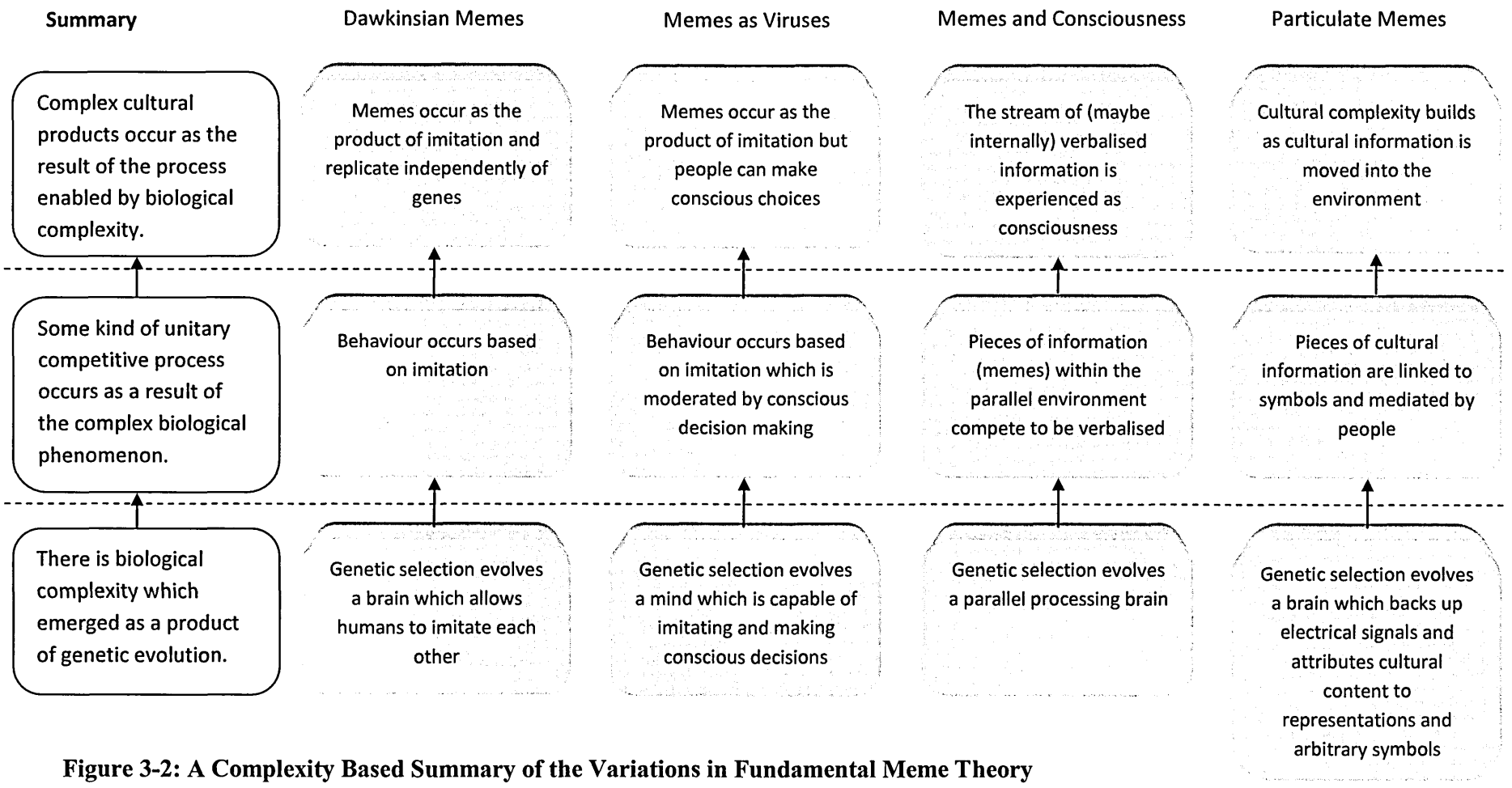

Figure 3-2: A Complexity Based Summary of the Variations in Fundamental Meme Theory

My review of the memetics literature in chapter 2 has helped me to develop my research questions. However, it has also made me aware of the need for an extra-memetic methodology through which I can test, rather than embed, theoretical assumptions. By adopting an exegetic approach to the literature, I have been able to construct a meta-view of memetic theory, presented in Figure 3-2, which summarises the four alternative conceptualisations I identified in fundamental meme theory.

Figure 3-2 demonstrates that the unifying factor of each version of fundamental memetics is that of complexity. At each lower level of the models there is a view of the biological complexity which enables culture. At each of the upper levels there is a view of cultural complexity which is reached by way of some kind of intermediate process that involves memes. In the following sections of this chapter, summarised in Figure 3-3, I explain how, by using the notion of complexity, I abducted narrative analysis as my extra-memetic method.

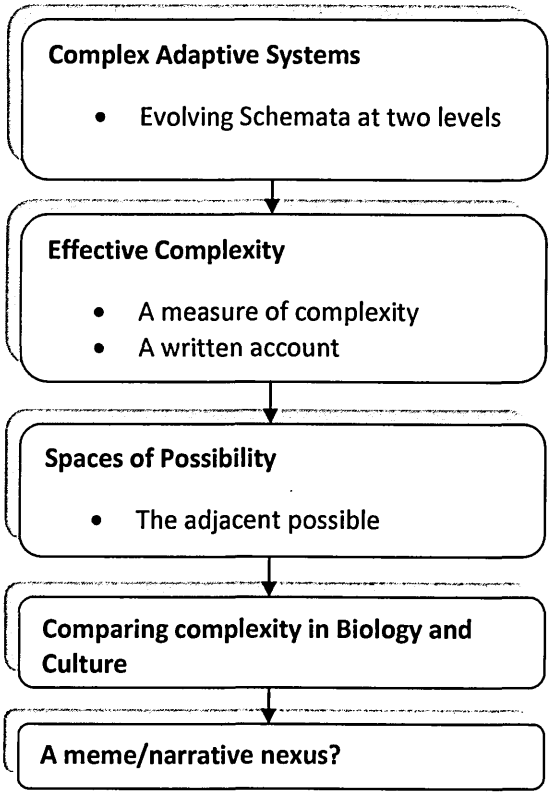

Figure 3-3: Structure and Content of Chapter 3

Complex Adaptive Systems

Gell-Mann (1995) identifies both biological and cultural complexity as the products of Complex Adaptive Systems (CASs) and I have modelled his description of a CAS in Figure 3-4. The system begins when an observer, perhaps a person, encounters a portion of a data stream from an observed phenomenon in the CAS's environment (point 1A). Regularities in the data are identified and compressed by the observing CAS to form a schema, a summary of the regularity.

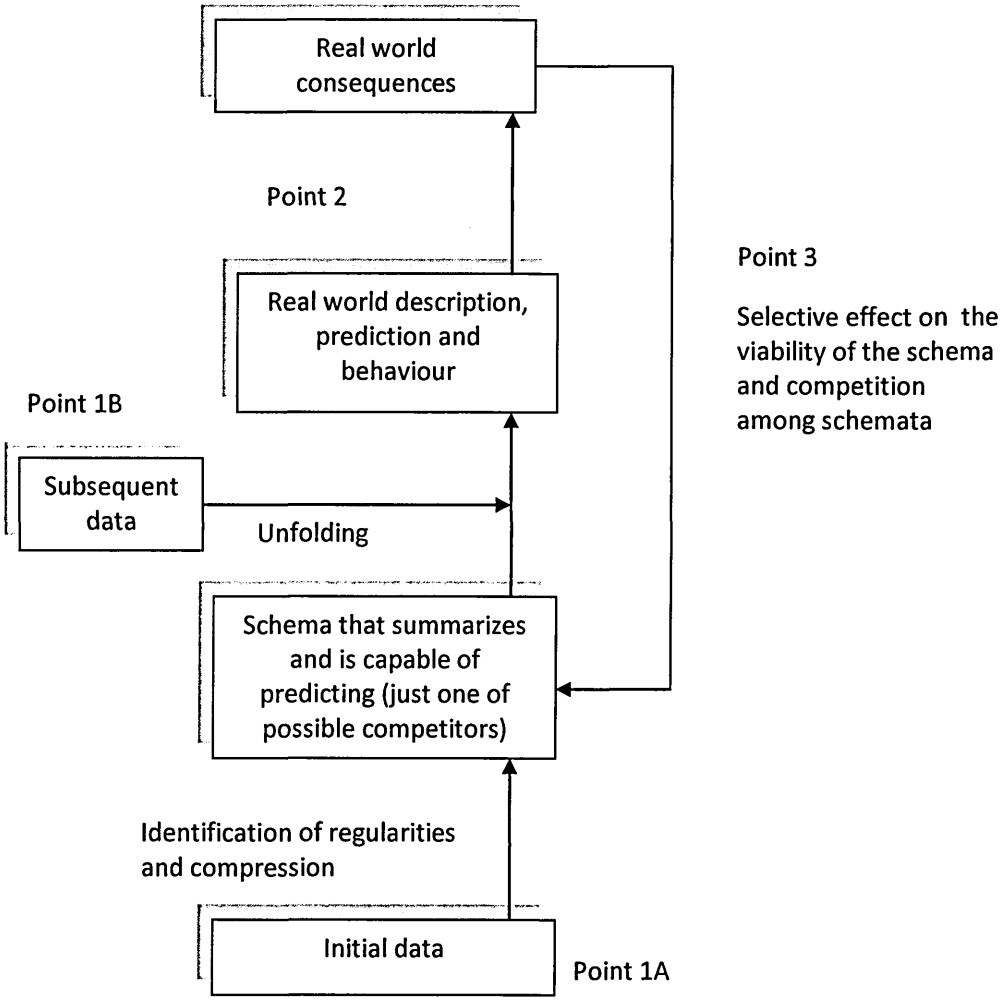

Figure 3-4: A Complex Adaptive System (CAS), Adapted from Gell-Mann (1995)

The schema can then be used by the observing CAS as a strategy for acting in relation to the observed phenomena by predicting the consequences of actions when the schema

encounters the next portion of data[38]. Having deployed the schema as the basis for behaviour in its environment (point 2), the observing CAS encounters the consequences as feedback from the environment so the schema is open to selective pressure. It may be either adapted or changed for an alternative in readiness to react to the next stream of data to be encountered.

When each portion of subsequent data is encountered (point 1B) the schema is used to manage/react to the new data in the unfolding process and the results are once again exposed to feedback. Consequently, an iterative feedback loop is established which runs each time new data is encountered and responded to. Therefore, schemata are rejected, promoted or modified over data (point 3), becoming more complex as more regularity is recognised and included, i.e. they evolve (Gell-Mann, 1995).

The CAS describes the macro evolutionary algorithm because genotypes record the schemata which are deployed through organisms in their environment as strategies for survival. They are selected blindly through the feedback of death, survival and reproduction (Gell-Mann, 1995). However, CASs can also describe the schemata in organisations. For example, a data stream which could be encountered by people working at CaseCo is the orders which are received from customers, or in Gell-Mann's (1995) terminology packets of 'mutual information'[39] representing the needs of customers.

The process of a CAS could be said to begin when an employee receives their initial batch of orders and develops a schema for processing the work required to satisfy the customer. The first orders to be processed by the original tentative schema will subsequently be produced and supplied to customers. Then, feedback from the production department, van drivers, sales people and customers will be used to either confirm the schema or initiate its adaptation or rejection. This order handling schema would constitute a 'partial schema' that addresses packets of mutual information sent as orders. It would operate alongside and within other schemata at the firm (Gell-Mann, 1995). Consequently, the concept of evolved schemata can be used as a generic way of

[38] Subsequent data is often, but not always, a latter portion of the original data stream (Gell-Mann, 1995).

[39] A CAS typically divides the observed data stream into mutual information, i.e. parts that are in some way comparable to one another, and searches for their common features (Gell-Mann, 1995).

considering the levels of complexity which I identified in my meta-view of meme theory, as demonstrated in Figure 3-5.

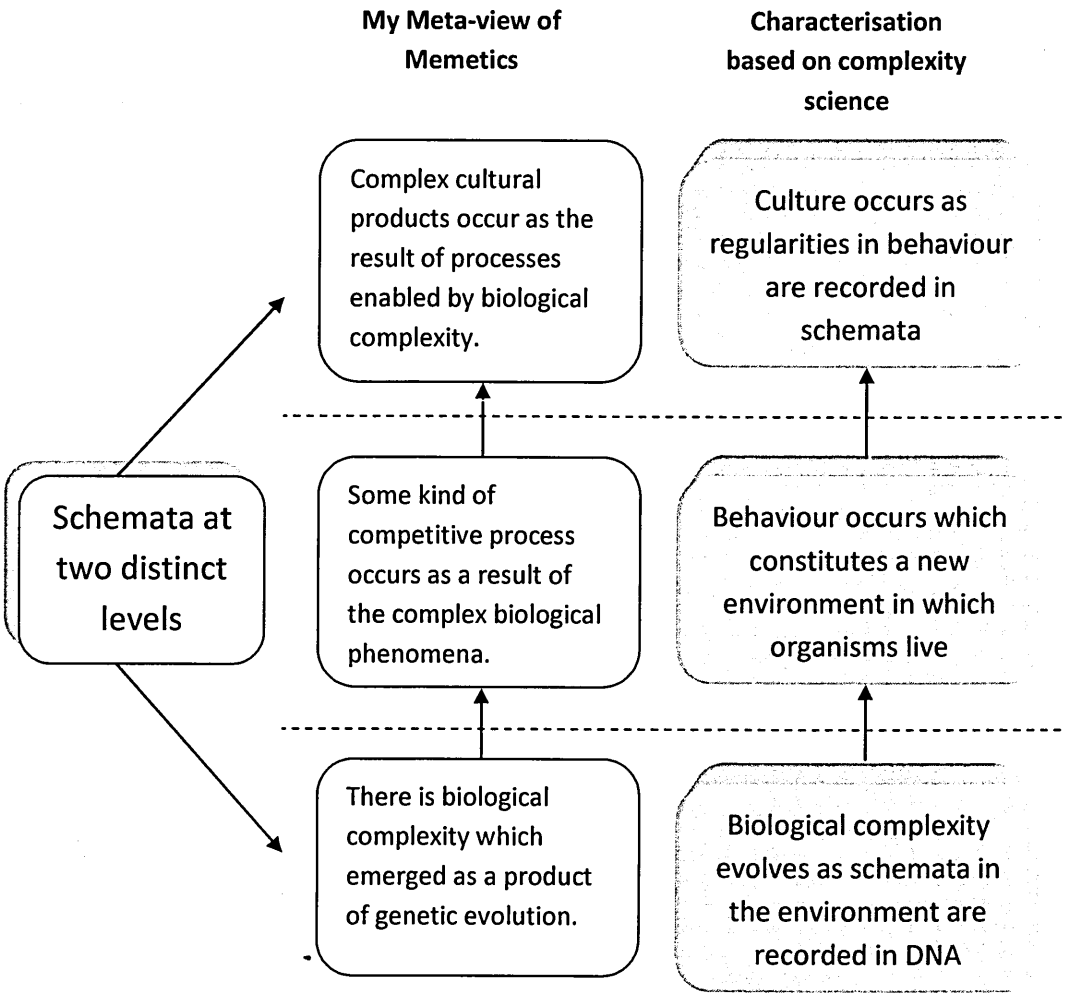

Figure 3-5: Complexity in Biology and Culture Unified at the Level of the Schema

However, despite the potential for describing both biological and cultural phenomena via the schemata of CASs, in culture, Gell-Mann (1995) reserves space for human free will, albeit subject to bounded rationality and resistance to change. By similarly adopting the complexity perspective, Stacey (2010) suggests that the reality of organisations will be typified by uncertainty because, although people can choose their next action, they cannot choose outcomes because of the complex interactions of micro choices. From the memetic perspective, of course, incorporating micro agency into culture refutes replication, making it an 'ontological category mistake' (Mitleton-Kelly, 1997). Indeed, Stacey (2010) resists the rejection of agency implied by the replicator concept, because he accepts that managers do have significant influence on

organisations. However, he also suggests that the assumption of management control, which I found to be evident in much of the memetic theory applied to organisations and management, is no more than a false assumption embedded in a dominant managerialist discourse.

Effective Complexity

The concept of complexity is understood differently by varying groups of scholars (Stacey, 2010)[40] and Price (2004) points to the way the terms 'complicated' and 'complex' tend to be used interchangeably. Gell-Mann (1995) defines the complexity which emerges via the operation of a CAS as 'effective complexity' (EC). Consequently, any degree of EC is a measure of the regularity in any observed phenomenon.

> *In fact, it is just the non-random aspects of a system or a string that contributes to its effective complexity, which can be roughly characterised as the length of a concise description of the regularities of that system or string.*
>
> Gell-Mann (1995, p50)

Through Gell-Mann's (1995) suggestion that EC should be measured by way of its concise description, a conceptual link can be made to Dawkins's (1999) suggestion of studying the genetic strategies of organisms' by writing them down in a language such as English. In Gell-Mann's (1995) terms the strategies are the product of evolved partial schemata recorded in DNA. Indeed, Axelrod (1990) suggests that the complexity of the behavioural strategies he game theoretically models can be measured via the length of their description. Therefore, such descriptions are recounting an estimate of EC. It is possible to apply this conceptualisation to the memetic view of culture because diCarlo (2010b) suggests that his notion of memetic equilibrium, which directs people's actions, leads to cognitive schemata in their brains.

However, such measures of EC are contingent on the ability of the observing CASs to identify the regularities in a stream of data and its familiarity with any technical language which may be associated with the system in question (Gell-Mann, 1995). Examples might be, in biology, the degree of familiarity with an animal and biological

[40] Stacey (2010) notes the variation in the 'complexity sciences' but characterises their common feature as a concern for nonlinear interactions.

terminology or, in culture, the degree of familiarity with an industry and its technical language. Therefore, any judgement of EC can never be considered complete because there is no way to know what constitutes the total EC of any phenomenon; it must be discovered by the observing system (Gell-Mann, 1995), a process Pratchett, Stewart and Cohen (2002) describe as a 'black art'.

Consequently, in a manner similar to that of subjectively describing an observed phenotypic effect, to construct an optimon definition of a gene, there will always be a degree of subjectivity inherent in any measure of EC (Gell-Mann, 1995). It is as if optimon type genes are partial schemata of an organism's wider survival strategy/schema encoded in its genotype. This proved a crucial insight for my analysis and it underpins my approach to my data in chapters 6, 7 and 8.

The Space of Possibilities

The variability in schemata which may occur through the operation of a CAS means that complexity can also be considered through the concept of 'insteads' (Pratchett, Stewart and Cohen, 2002). Insteads are the alternative states a CASs could reach that together constitute a 'possibility space'. The possibility space of any CAS is the total number of possible alternative schemata that might emerge through the system's operation. Therefore, CASs contrast with fully determined systems where there is only one observable state.

Any observed state depends on the contingencies of the observing CAS and its interaction with the environment (Gell-Mann, 1995) but the space of all possible states of a system could be huge (Pratchett, Stewart and Cohen, 2002). Indeed, Guttman et al. (2002) describe all the potential combinations of amino acids, synthesised by DNA, as the possibility space of proteins used in bodies. The genotypes of evolved organisms provide the information regarding what specific combination, of all the possible insteads, should be synthesised. In organisations, such as CaseCo, the possibility space of cultural schemata would be all the possible cultural patterns of the firm (Price and Shaw, 1998).

By taking inspiration from the study of fully determined systems, Pratchett, Stewart and Cohen (2002) suggest that, considering the range of the possible states of a CAS might help to describe the observed state. However, in place of tackling all the possible states, which might be huge in number, they suggest considering only the immediate changes which might occur in the current state. The subsequent subset can be considered as the local possibility space or the space of the 'adjacent possible' (Kauffman, 2000).

The adjacent possible is the range of states which can be reached in one move from the actual state which currently exists and so, moving through successive stages of the adjacent possible describes a trajectory through the space of possibilities (Kauffman, 2003). Once a move has been made into the adjacent possible, new possibilities for further moves are opened up (Mitleton-Kelly, 2003). In applying the concept of the adjacent possible to organisations, Lissack (1999) suggests that the use of language is crucial in how organisations define their space of possibilities and the nearby adjacent possible.

> *... the possibility space of an organisation is constrained by the language of interpretation available to its members – for it is in language that their reality will be constructed.*
>
> Lissack (1999, p121)

Lissack's (1999) view reiterates the importance of language which I found to be evident in the memetics literature (Price and Shaw, 1998; Deacon, 2004; Distin, 2005).

Comparing Complexity in Biology and Culture

Both biology and culture constitute complex adaptive rather than fully determined systems (Gell-Mann, 1995). In both domains CASs operate to generate one of many schemata 'insteads' used to direct behaviour/actions, for example, the genetic strategies for survival in biology and routines for handling work in organisations. Therefore, parallels between the two domains, which I have illustrated in Figure 3-6, can be drawn on the basis of the written accounts of schemata.

In biology a written description of a survival strategy can be used to investigate the actions of the optimon type genes responsible for it, because optimons are small partial schemata. They are small units of survival strategies linked to a piece of DNA.

Therefore, as explicated in Figure 3-6, such a written description can be used to search for optimon type instances of replication in culture. In the social sciences a written account of actions and events can be conceived of as a narrative (Czarniawska, 2004). Indeed, although they do not offer a technical definition, Pratchett, Stewart and Cohen (2002) suggest that the study of a complex system should use a narrative of the system dynamic. They suggest that the power of narrative, as a tool for managing the social world, is its ability to consider 'insteads'. In reciprocation, despite assuming human agency, Gell-Mann (1995) characterises myths, along with traditions, customs and laws as cultural DNA.

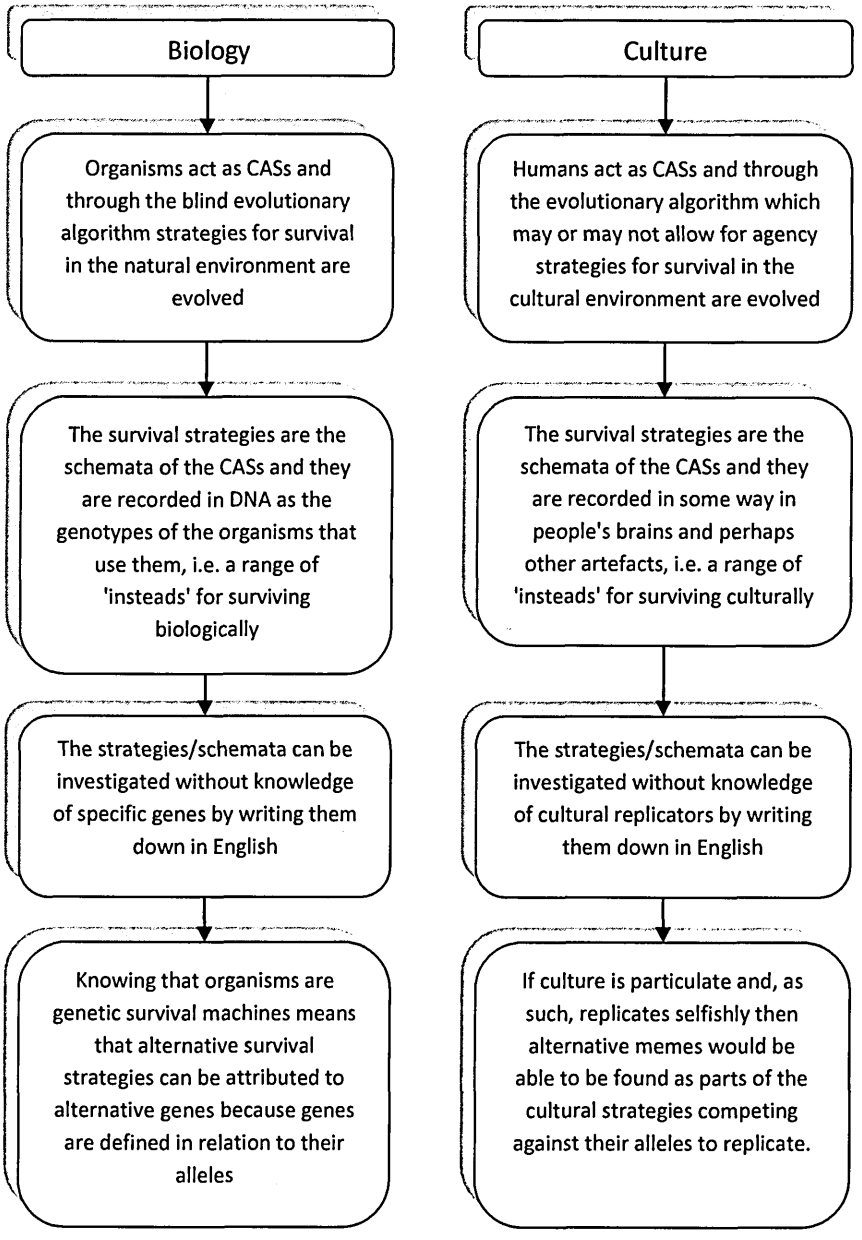

Figure 3-6: Comparing Biology and Culture from the Complexity Perspective

Consequently, Pratchett, Stewart and Cohen (2002) suggest that humans use stories to invent 'insteads' with a range of embedded cause and effect assumptions. Therefore, a range of possible narrative 'insteads' can be considered as an 'I' space (instead space) of possibilities and the stock of stories known to a person or group can be considered an 'L' space (library space) of possibilities. So fundamental is storytelling to Pratchett, Stewart and Cohen (2002), that they contextualise humans as 'Pan narrans', the storytelling chimpanzee[41].

Abducting Narrative as an Extra-Memetic Methodology

In this chapter, I have shown how complexity science provides a generic perspective of biology and culture, from which to consider the issues I have raised through my exegetic review of the memetics literature. Consequently, it has enabled me to reach the decision to adopt narrative analysis as an abducted best solution (Blackburn, 2008) for the empirical stages of my project, as summarised in Figure 3-7.

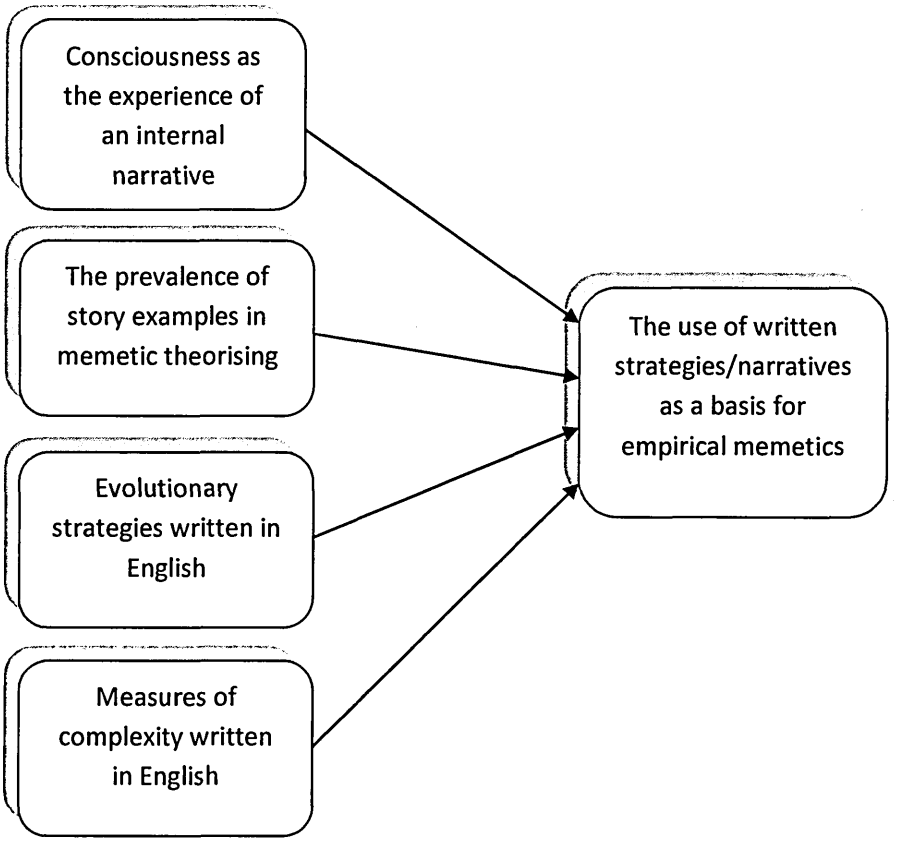

Figure 3-7: Factors Suggesting a Meme/Narrative Nexus

[41] In characterising humans as Pan narrans rather than Homo sapiens Pratchett, Stewart and Cohen (2002) ironically question the degree to which humans should be considered wise.

The elements shown in Figure 3-7 constitute a congruence of conceptual elements which suggest a nexus between memetics and narrative analysis. The concept of narrative and examples of storytelling are used a number of times in the memetics literature, to help explicate the theory. Dawkins's (1982; 1999) proposal of a written account of genetic strategies constitutes a measure of the complexity encoded in genotypes and, therefore, biological schemata generated by CASs. The written accounts of schemata can also represent the complexity of cultural systems and both can be considered as narratives.

Chapter Conclusions

To answer my research questions, I will have to produce written accounts of the cultural strategies at CaseCo and use them to search for instances of replication. Consequently, I have adopted narrative analysis as my extra-memetic methodology and I discuss the narrative theory I have used in my study in the next chapter.

Chapter 4 – Methodology 1, Narrative Theory

In this chapter, following my reaffirming of the meme/narrative nexus which I proposed in chapter 3, I present the narrative theory which I use during the empirical stages of my project, as shown in Figure 4-1.

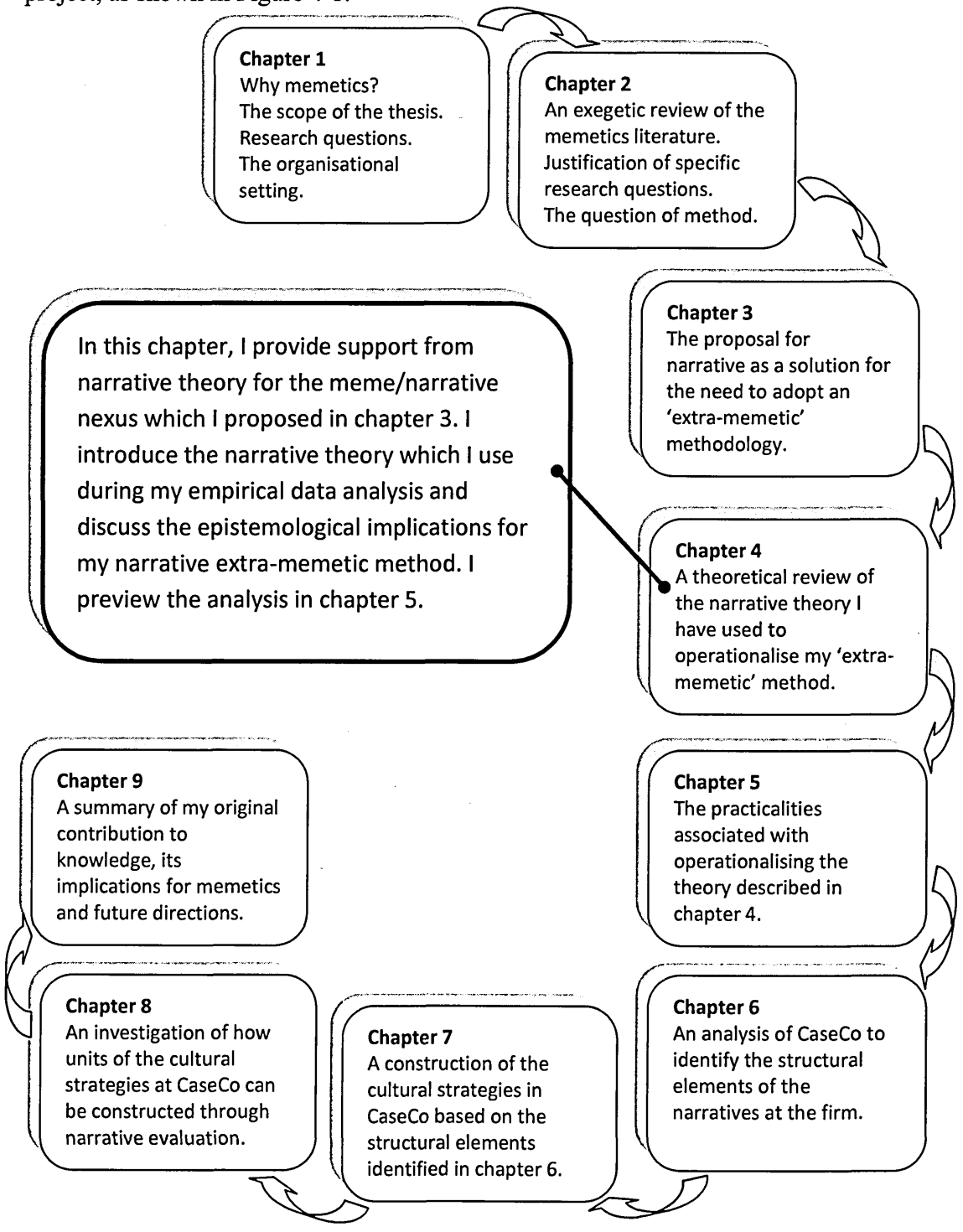

Figure 4-1: Thesis Structure Showing the Role of Chapter 4

Whilst concluding chapter 3 I recognised that, to address my research questions my abducted choice of narrative methodology must first accomplish the preliminary task of identifying and enabling written descriptions of the culture at CaseCo. If successful, it should then facilitate a response to my first two research questions.

1. **Can the organisational culture at CaseCo be divided into units?**
2. **If so, can such units be seen to selfishly replicate?**

In this chapter, I describe the theory which has facilitated my empirical work aimed at addressing my research questions through the stages shown in Figure 4-2.

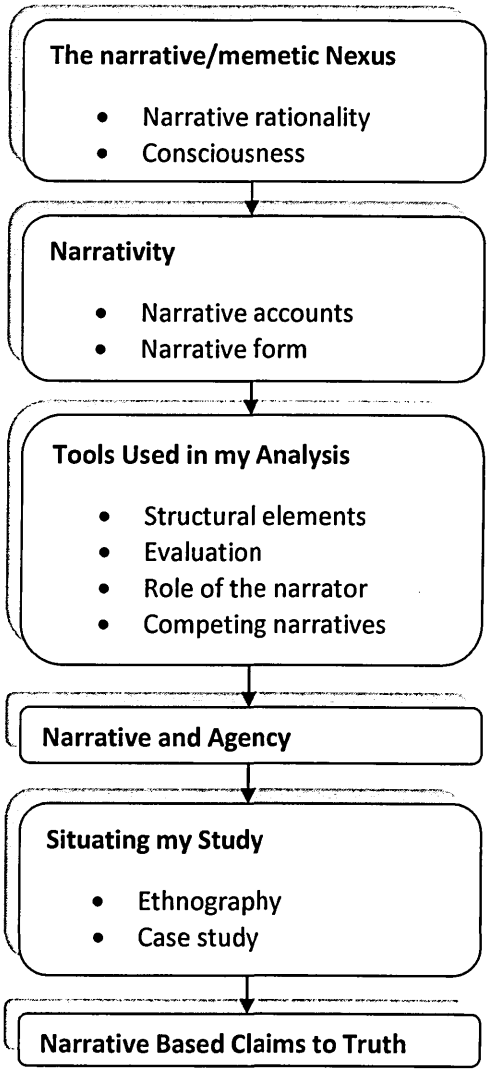

Figure 4-2: Structure and Content of Chapter 4

I begin this chapter with a reflection, from the narrative theory perspective, on the links between memetics and narrative I proposed in chapter 3. Next, I discuss the nature of

narrative as a concept and the analytical tools which I have adopted for the study. I go on to set narrative in the context of ethnographic participant observation at a case study organisation and finally, I consider the epistemological and ontological assumptions of my narrative approach to the subject of memetics.

By addressing questions of subject and method during the same study, my analysis and methodology developed in tandem during the empirical stages of the project. Therefore, in this chapter, I present and discuss the theory which I adopted during the analysis. In chapter 5, I discuss the process of undertaking the empirical stages of the project and I present the joint development of analysis and method in chapters 6, 7 and 8. I have included a retrospective overview of the approach I have designed, as the first extra-memetic methodology to accompany theoretical memetics, in the final chapter of the thesis. There, it appears as part of my original contribution to knowledge, thereby addressing my third research question[42].

3. **Can an 'extra-memetic' research methodology be designed that can test the fundamental tenets of the meme concept?**

Reciprocating the Links between Memetics and Narrative

To validate my choice of narrative method, the first aim of my review of the narrative literature was to reflect, from the narrative perspective, on the memetic/narrative nexus that I have proposed. I have discovered reassuring reciprocal support for the validity of my abducted proposal for narrative method as an appropriate solution for the problem of how to design extra-memetic empirical work. In this section, I explicate the connections I have found between memetics and narrative. Indeed, I describe how the underpinning rationale for much narrative theory is attributable to the faculties of humans' sense-making abilities and, therefore, the biologically evolved traits of people.

Narrative as a Consequence of Human Evolution

[42] To avoid making assumptions regarding replication in culture, similar to those in applied and empirical memetics, which I have criticised in chapter 2, I resist drawing attention to specific similarities between genetics and culture until my final chapter. In my final chapter, I reflect on the degree to which my findings support the notion of a similar replicating entity in both the biotic and abiotic domains.

In chapter 2, I have discussed how memetics makes theoretical claims about the nature of human cultural knowledge, where cultural complexity is the product of a fundamental process of cultural evolution facilitated by biology. In fact, narrative theory similarly regards narrative as a fundamental component of human experience (Levi-Strauss, 1955; Labov, 1972; Latour, 1991; Gould, 2000; Cobley, 2001; Czarniawska, 2004; Abell, 2004). Consequently, enacted narrative can be conceived of as a basic form of social life where it acts as both a form of knowledge and a form of communication (Czarniawska, 1998; 2004; Abell, 2004). After all, oral traditions of narrative were the ways in which cultural ideas and values were preserved by people before the advent of writing and printing (Cobley, 2001).

By drawing on the work of evolutionary biologist Stephen J Gould, Cobley (2001) indicates a direct biological influence on narrative. The connection between biology and narrative which Gould (2000) makes is based on the suggestion that evolution has tuned the human brain for a sensitivity in recognising patterns, in a manner similar to that described in Price and Shaw's (1998) theory of memetic patterns. The emergence of consciousness has extended this trait into a propensity to organise patterns as a small range of canonical stories (Gould, 2000). Consequently, the origins of narrative can be sought both via a phylogenetic approach, related to the diversity of human cultural heritage, and an ontogenetic approach, related to psychology and biology (Cobley, 2001).

Human's language ability, which is obligatory to both our experience and storytelling, supports the ontogenetic view of narrative (Cobley, 2001) and because *"... phylogentic approaches put the conscious self as the reason why a person conceives of "I", the actions of this I are then seen as part of a narrative"* (Cobley, 2001, p23). Indeed, Czarniawska (2004) suggests that the human species has developed an inherent proto-linguistic readiness for narrative as our consciousness emerged. However, as Abell (2004) notes, the matter of whether narrative method constitutes a distinctive form of explanation is still the subject of debate[43].

Such a grounding of narrative in humans' biological makeup indicates narrative as an evolved trait which influences the social world. Indeed, the phylogenetic/ontogenetic

[43] Narrative explanation might constitute a 'sketching' role which may, in principle, be reduced to covering law concepts (Abell, 2004).

dualism mirrors Cloak's (1975) internal/external theory of i-culture and m-culture from which Dawkins (1976; 1989) draws some of his original ideas for a cultural replicator, as I described in chapter 2. Narrative theory, therefore, suggests that telling stories is a defining characteristic of intelligence, comprehension and the human species itself (Landau, 1984), a view sympathetic with Dennett's (1991) narrative centre of gravity concept and Blackmore's (1999) selfplex concept, because each link a narrative element to their memetic accounts of consciousness.

Narrative and Human Rationality

Based on the view that narrative is fundamental to human sense making, Fisher (1984) contrasts the often assumed 'rational world paradigm', where argument reveals logic, with his proposal of the 'narrative paradigm', as the basis on which people usually act. The narrative paradigm is based on peoples' inherent awareness of two components which lead to 'narrative rationality' (Fisher, 1984):

1. **Narrative probability** – constituted by a coherent story and people's constant habit of testing.
2. **Narrative fidelity** – whether the stories people experience ring true with the stories they know to be true in their lives.

For Fisher (1984), humans acquire narrative rationality in the natural processes of socialisation, therefore, pertaining to Cobley's (2001) phylogenetic component. Consequently, narrative is a universal feature of human nature that accompanies language and helps people understand each other's minds. Narrative rationality subsumes the logic of traditional rationality, although it does not eliminate its situated value (Fisher, 1984) and although traditional, or scientific rationality, is not a natural state, all humans have narrative rationality (Czarniawska, 2004).

Narrative rationality can support what might be seen by some as the irrational risks associated with activities such as entrepreneurialism, because narratives of entrepreneurialism include notions of cause and effect which support risk-taking activities (Smith and Anderson, 2004). In incorporating putative causality in his view of narrative coherence, Abell (2004) points to four ways in which Fisher's (1984) narrative probability can be said to occur:

1. The unity of subjects over time
2. The cumulative causality of a narrative account
3. A common goal, objective or plan
4. Generative structures which make certain sequences of actions permissible or not permissible

Of course, as I have explained in chapter 1, the notion of bounded rationality has been used to account for the agency question in evolutionary theories of organisations (March and Simon, 1958; McKelvey, 1982). However, seen from the perspective of narrative rationality, bounded rationality can be regarded as an attempt to maintain the rational world paradigm, in the face of evidence for its limited validity, in a manner grounded in its own epistemological and ontological assumptions. Conversely, Fisher's (1984) narrative paradigm challenges the underpinning assumptions of the rational world paradigm. As part of his theory Fisher (1984), like Cobley (2001), identifies language as fundamentally important to human experience, based on the premise that humans are distinguished by way of their use of symbols and it is this ability which enables storytelling. Indeed, he goes on mirror Pratchett, Stewart and Cohen's (2002) metaphor of 'Pan narrans' by employing the metaphor of 'Homo narrans' because human action is closely associated with language and language with narrative (Fisher, 1984).

Narrative as a Human Universal

The subsuming of the rational world paradigm into the narrative paradigm suggests narrative as a universal concept which is ubiquitous in human social life (Levi-Strauss, 1955; Fisher, 1984). Narratives record cultures, legitimise them and re-present them (Cobley, 2001) so narrative analysis is an act of cultural analysis (Bal, 1997). Indeed, Barthes (1975) illustrates this phenomenon by suggesting that stories, unlike poetry or essays, can be understood regardless of cultural background because *"... like life itself, it* [narrative] *is there"* (Barthes, 1975, p237).

Therefore, practically everything in culture has a narrative aspect to it (Bal, 1997). Narratives are the main carriers of knowledge in modern societies, so consequently, the greater part of organisational learning can be conceptualised as the circulation of stories (Czarniawska, 1998). Smith (2002), for example, shows how social capital relating to behaviours such as entrepreneurialism is embedded in narratives. Such a view of

organisational narrative concurs with Price and Shaw's (1998) view that memetic patterns, if they exist, will be suffused with organisational stories.

Narrative and Consciousness

Cobley (2001) proposes that the temporal experience of successive events that people encounter are interpreted by them via the triad of expectation, memory and attention. People draw on the stories held in memory to guide their interpretation of the events, upon which their attention is focused and they attribute meaning, based on the expectations of the future which are embedded in the stories they know. Therefore, there is a natural tendency for people to emplot the events they encounter so *"... there can be little doubt that human consciousness is now suffused with narrative"* (Cobley, 2001, p209). The connection of narrative theory to human consciousness, therefore, seems to lend support to Dennett's (1991) memetic theory of consciousness based on a narrative centre of gravity.

Indeed, Dennett (2003) recognises the constructed nature of what people believe to be facts and causal relationships, based on the tendency to see sufficiency as necessity and assume inevitability, often based on the temporal ordering of events. In fact, the temporal ordering of events in a narrative is widely indicated as important for the meaning that the narratives might hold (Propp, 1968; Labov, 1972; Czarniawska, 2004). Attributing causality by way of the temporal ordering of events, where one event is taken to lead to the next, constitutes a synchronic view of narrative rationality (Greimas and Courtés, 1979). Indeed, where the temporal succession of events indicating causality can be found to reoccur in larger numbers of narrative accounts, there is a possibility of narrative based predictions (Abell, 2004). However, matters are complicated because the interpretive act of narrating means that a number of alternative subjective accounts might be offered which relate to the same series of actual events (Ricoeur, 1973; Bal, 1997; Czarniawska, 1998; Cobley, 2001).

By adopting the narrative perspective, Ricoeur (1973) suggests that, as a basis for scientific analysis of social phenomena, human action itself should be considered as a text, because it inscribes meaning in persisting social patterns; doing is a kind of utterance. Indeed, Bal (1997) suggests connected series of human actions, recorded as film, theatre and news reports, as sources of narrative data, alongside written texts.

Consequently, each account of a series of events and the mode selected to record it constitutes a narrative text (Cobley, 2001) with its own plot or story scheme (Propp, 1968; Czarniawska, 2004).

At a more abstracted level, therefore, the notion of a narrative as a textual account of how people interact with the events they encounter mirrors Dawkins's (1982; 1999) suggestion of operationalising the survival strategies of animals by making a written account of how they act with respect to the events they encounter. In sociological terms, he is proposing a narrative account of an organism's survival strategy. Similarly, through the story scheme concept, links can then be made to Gell-Man's (1995) concept of schemata which are proposed to operate at both the biological and social levels, via CASs. Indeed, stories are said to gradually evolve around the basic functions which make up their structure (Propp, 1968; Cobley, 2001) and they can facilitate the social inheritance of ideas and behaviours (Smith, 2002). Propp (1968) goes so far as to liken narratives types to genera, species and varieties, asserting that narratives have kinship.

Of course, having eliminated a place for the naive use of genetic and biological analogies in memetics, it would be hypocritical for me to take the rhetorical use of metaphor alone as an indication that narrative supports the proposition of replicator-driven evolution in culture. However, confidence can be taken from the indication that narrative theorists recognise the same dynamics in culture which have led memetic theorists to posit a cultural replicator. Indeed, biological terminology is used by narrative scholars to illustrate, by analogy, the structuration of narrative rather than to suggest any technical similarity with genetics.

Conclusions Regarding the Meme/Narrative Nexus

My discussion of the narrative literature so far indicates how narrative theory provides reciprocal evidence for the memetic/narrative nexus I have postulated. I have summarised the connection in Figure 4-3 which shows how the elements of both disciplines can be linked, through the use of written accounts. Each element of the memetics literature which prompts the use of narrative is complemented by narrative theory.

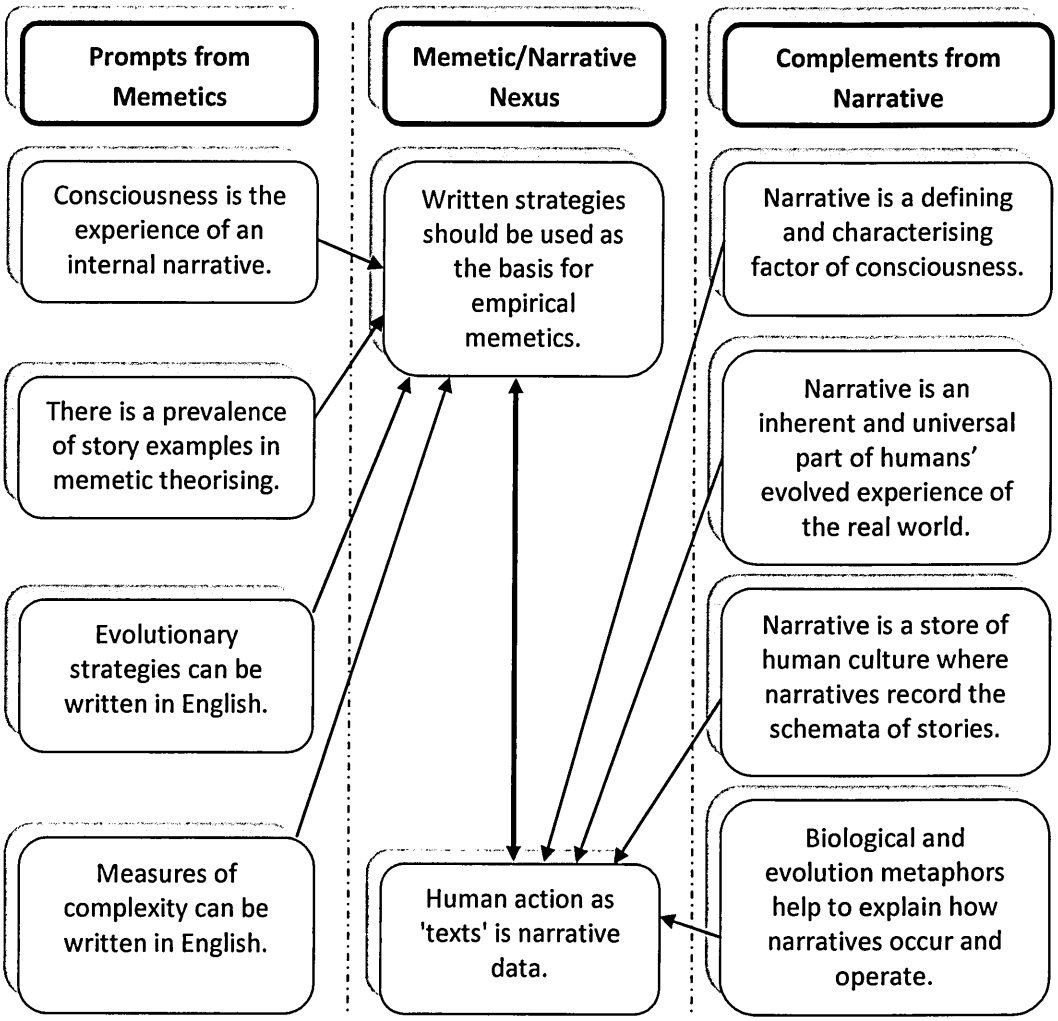

Figure 4-3: A Theoretical Nexus between Memetics and Narrative

In this section, I have demonstrated that there is evidence to support my decision to search for replication via narrative theory. Indeed, concepts such as the narrative paradigm and story schemata suggest that narrative can broach the agency issue raised by the cultural replicator concept. Therefore, with confidence that my approach to method has been validated, in the next sections, I move on to review the analytical tools of narrative analysis which I have used during my empirical work. To facilitate the move from theory to praxis, in the next part of my discussion, I investigate 'narrativity' in more detail.

Narrativity

At its simplest, narrative is a movement from a beginning point to a finishing point (Labov, 1972; Cobley, 2001) and any series of events which achieves such a movement, no matter how it is depicted, can be treated as a narrative (Bal, 1997). However, usually a narrative is understood as a spoken or written text which recounts a chronologically connected series of events and actions (Czarniawska, 2004). 'Narrativity' is the narrative features of such texts (Bal, 1997) and, in this section, I discuss what constitutes these narrative features to help set the scene for my discussion of the analytical tools I have adopted for my study.

Narrative Accounts

In defining the part narrative plays in storytelling, Cobley (2001) makes a distinction between three associated elements, story, plot and narrative. All the events which might be depicted as a story moves from its beginning to its end constitute the story itself and the set of causal connections, which show how the events of the story are linked, is the plot. Therefore, from the perspective of Fisher's (1984) narrative paradigm, the plot can be thought of as a manifestation of narrative rationality linked to a certain narrative account.

The narrative is the *selective account* of the story events told by a particular narrator (Cobley, 2001; Czarniawska, 2004), so it is narration which leads to the possibility of alternative narratives relating to the same story events, as mentioned above and noted by Ricoeur (1973), Bal (1997), Czarniawska (1998) and Cobley (2001). The commentary of sporting events (Czarniawska, 2004) and the recounting of historical episodes (Cobley, 2001) provide good examples of the scope for such variation. Indeed, by way of cases as diverse as the 1836 siege of the Alamo in Texas and the baseball World Series in the twentieth century, Gould (2000) shows how narrative accounts which have been taken to be definitive stories, are in fact, selective re-presentations of the story events. The accounts privilege the importance of some events over others and ignore some events altogether.

More specifically then, the qualities which make a text a narrative, relate to how story events and the actions of the actors involved are re-presented, with respect to time and

space (Cobley, 2001). Where an agent tells a story and such accounts are written or recorded as a text, or in some other way (Bal, 1997), that text is a 'narrative text' and a text which exhibits this set of qualities can be considered to have narrativity (Bal, 1997). The context of the account in terms of space and time is important, because each factor influences the set of putative causal connections which relate to the underpinning narrative rationality (Fisher, 1984; Dennett, 2003; Abell, 2004) and constitute the plot (Cobley, 2001; Czarniawska, 2004).

In considering the interactions between the story events and actions of the actors that are involved in a narrative text, Czarniawska (2004) identifies a reciprocal duplicity. The two notions merge conceptually because the action of an actor will be experienced as an event by other actors. Using the action/event dualism as a basis for analysis leads to a unitary approach to narrative which is manifested in much of the narrative literature as analytical methods based on structure. Analytical practice based on such methods is known as narratology (Bal, 1997) and is a continuation of the work of scholars such as Vladimir Propp, A. J. Greimas, Claude Levi-Strauss and Northrop Frye, each of whom adopted a structural study of narrative (Cobley, 2001). By considering the building blocks of narrative, such as narrative levels and functions, narratology explores their various combinations (Bal, 1997).

Narrativity and Structure

The proposed universality of narrative and the structure which can be identified in series of action/events leads some to propose an inherent underlying structure to the narrative form, for example, Levi-Strauss (1955), Propp (1968), Labov (1972) and Barthes (1975). The similarity in narrative forms as diverse as mythology (Propp, 1968; Levi-Strauss, 1955), modern culture (Labov, 1972) and modern fiction (Barthes, 1975; Bal, 1997), points to a higher level of meaning above the ordinary level of language (Levi-Strauss, 1955; Barthes, 1975). For example, in recognising a similar structuration in examples of myths gathered from disparate parts of the globe, Levi-Strauss (1955) suggests a canonical formula of myth which unfolds in their narration[44].

[44] The validity of the canonical formula of myth remains the subject of recent debate. See Miranda (2001) for a summary and Morava (2003) for a review of its mathematical credibility.

The structuralist theories of narrative provide a basis for Fisher's (1984) narrative rationality, because a narrative tends to establish confusion between consecutiveness and consequence, i.e. between the temporal ordering of the units of narrative and logic (Barthes, 1975; Czarniawska, 2004). It is akin to Dennett's (2003) suggestion that people tend to misinterpret sufficiency for necessity. The notion that the narrative rationality and an associated form of logic embedded in universal structures indicates that the agency question, raised by memetics, can be addressed by a narrative methodology.

Narrativity, Plot and Emplotment

Plot is *"... the intelligible whole that governs the succession of events in a story ..."* (Cobley, 2001, p19) and the process of emplotment turns, what would remain a chronicle into a meaningful sequence of events. Plot manifests itself in both non-fictional and fictional narratives and there are no structural differences between the two domains (Czarniawska, 2004). Consequently, in 'real' accounts, those which relate purportedly true events, it is only the events which are depicted that are true in an extra-textual sense (Cobley, 2001). Therefore, there can be degrees of truth related to both the events which are depicted in a narrative account and degrees of truth in the telling, by way of the causal connections which are applied or implied (Cobley, 2001; Ricoeur, 1973). In society, narrativity is introduced by people as a way to demonstrate processes and causality in non-fictional accounts. Consequently, they re-present an extra-textual reality, based around the events that have actually occurred (Cobley, 2001).

Plot therefore, is the overarching coherence of the series of causal links involving actors and events in a narrative account (Abell, 2004). In narrative study, it is the plot rather than truth, that is discovered as the researcher investigates hypothetical connections. Consequently, the narrative mode of knowing is an alternative to the logico-scientific mode in which, instead of underlying general laws, there are underlying human projects where the emploted motives can be equated with causality (Czarniawska, 2004).

The emplotment process occurs naturally in social situations where different parties may battle to emplot situations (Czarniawska, 2004). Recent events reported in the UK news media surrounding the Hillsborough football disaster, for example, *The Guardian* (2012) and *The Daily Telegraph* (2012), can be conceived of as such a battle. The

families of the victims of the disaster have succeeded in having the initial police emplotment, and therefore textual truth of the matter, overturned and their own installed in its place. Each account carries its own validity distinct from the truth or falsity of the actual events they depict.

The view that chronology is crucial in indicating meaning suggests, for some, that it is the temporal, or synchronic, arrangement of the events that are depicted which indicates the putative causal connections that form the plot (Propp, 1968; Barthes, 1975; Czarniawska, 2004). However, whilst maintaining a structuralist position, Levi-Strauss (1955) has suggested that emplotment exists at an overarching diachronic level of meaning, as well as the synchronic level manifested in the telling of narrative accounts. Such a view might more easily accommodate the ubiquitous phenomenon of Fisher's (1984) narrative paradigm.

Indeed, seeing narrative coherence as the outcome of a common intention, goal or plan indicates that diachronic norms would require that synchronic norms are consistent with each other over time (Abell, 2004). In my analysis, the diachronic level of meaning emerges as dominant over the synchronic events at CaseCo. I report this part of my analysis in chapter 7.

Post-Structuralist Narrative Theory

There are a range of post-structural approaches to narrative, such as interruption and deconstruction, which do not depend on the tenet of universal structure (Czarniawska, 2004). Indeed, Cobley (2001) critiques the universality of Levi-Strauss's (1955) theory on the basis that narrative imbues difference and the putative universal structures are, in fact, constructed by the observer rather than discovered. Consequently, there are a number of alternative analytical approaches available to the researcher which do not assume universal structure (Bal, 1997; Czarniawska, 2004), for example, stylistics, semantics (Bal, 1997), thematic analysis and the study of rhetoric (Todorov, 1969). Structuralism and post-structuralism do converge in many of their basic goals and concepts, because each treats literature as a cultural system governed by a set of conventions and codes. However, they remain distinct in respect of the structuralist search for regularity in the text and the post-structuralist search for meaning (Landau, 1984).

Narrativity and Engaging with Method

In acknowledging the diversity of narrative theory, Czarniawska (1998) identifies that, strictly speaking, there is no single method in the social sciences, so the work of others should be used by each researcher as a source of inspiration from which they can devise their own approaches to fieldwork. However, whatever the analytical approach to narrativity, the aim of the narrative researcher should be to demonstrate a novel account of some social phenomena (Czarniawska, 2004). Instead of simply demonstrating that narrative methodology can be applied, the tools of narratology should be used to move beyond the identification of narrativity. Rather, they should enable the writing of a meaningful description for others (Bal, 1997).

Consequently, once a text is identified as a narrative text, the methods of narratology should be considered to be a toolbox and the researcher should feel at liberty to choose the analytical tools which best suit the purpose of the study at hand (Bal, 1997). However, Bal (1997) goes on to stress that, because the outputs of narrative research can themselves be considered as narrative accounts, and because other descriptions might be provided by other authors, the use of a systematic approach to analysis should be adopted. Doing so facilitates a discussion of the proposed description.

This systematic, yet instrumental approach, to the use of method means that the apparent divisions between the analytical approaches to narrative analysis mentioned above can be accommodated in a single study. For example, structuralist analysis might be used to orientate the initial stages of an analysis, which then moves into a more critical stage (Larty and Hamilton, 2011). Indeed, Ricoeur (1973) suggests that an initial review of narrative structure, through the approach designed by Levi-Strauss (1955)[45], can enable the move of an interpretive analysis from surface to depth semantics.

I have followed the advice of Ricoeur (1973) and Larty and Hamilton (2011) in the development of my own analyses by beginning with a structuralist analysis and then moving to an evaluation of the points of view at CaseCo. I describe my approach to the fieldwork stage of my project in more detail in chapter 5. Similarly, I have adopted the toolbox approach in developing my extra-memetic methodology and, in the next

[45] I describe Levi-Strauss's (1955) theory in detail, later in this chapter.

sections of this chapter, I describe the narrative theory that I have adopted for my own analysis.

Narrative Theory and Tools Adopted for the Study

In completing the empirical work which addresses the research questions of my study, I have developed my analysis through a dialectic process of alternating between the data and the stock of narrative methods. Consequently, I discuss the developing methodology alongside my analysis of my data in chapters 6, 7 and 8. In the following sections of this chapter, I present and discuss the set of narrative tools which I have adopted through the course of my analysis, the purpose being to describe and explain the 'toolbox' I have developed in theoretical terms before applying it later[46].

Minimal Plot

To enable the process of engaging with narrative data, Czarniawska (2004) proposes the identification of the smallest narrative units, what Todorov (1969) terms a 'minimal plot'. Minimal plots are each instance of the action/event dualism which occurs as a narrative moves from its beginning to its end (Czarniawska, 2004). Each minimal plot is equivalent to the linguistic concept of a 'clause' where events are represented by nouns, and actions are represented by verbs (Todorov, 1969; Labov, 1972). The minimal plot, therefore, supports Ricoeur's (1973) notion of social action considered as a text and, consequently, narrative social science can proceed *"... by matching a verbal sequence of clauses to the sequence of events which have actually occurred"* (Labov, 1972, p359).

Each minimal plot serves to move the narrative from one starting state of equilibrium to another state of equilibrium, via the imbalance of the action or event which has been re-presented in the narrative (Todorov, 1969). Todorov (1969) attributes the term 'equilibrium' to genetic psychology and he uses it to represent the existence of a stable, but not static, relation between the members of a society. Subsequently, larger narrative units can be built because a number of minimal plots and intermediate states of

[46] I have included theory taken from work orientated towards both non-fiction and fiction because, as Landau (1984) argues, there are no structural differences between the two and in each case emplotment operates in the same manner (Czarniawska, 2004). The only difference is the truth or falsity of the extra-textual events and actions which are depicted (Cobley, 2001).

equilibrium can be chained together to describe a narrative trajectory which ends in a final equilibrium state (Czarniawska, 2004). Consequently, the plot of a narrative is distributed across the minimal plots which form it (Todorov, 1969). A minimal narrative, therefore, is *"... a sequence of two clauses which are temporally ordered"* (Labov, 1972, p360).

For Labov (1972), temporal ordering is vital, because it enables the putative cause and effect links engendered by narrative rationality, as one event or action can be seen to lead to, and by implication cause, the next. Therefore, the connection with linguistics can be extended because a succession of narrative clauses can be seen to form a 'syntagmatic' pattern, where a syntagm is a combination of elements which co-present an utterance like a sentence (Greimas and Courtés, 1979). Consequently, although a product of language, narrative meaning exists at a level higher than that described by structuralist linguistics (Levi-Strauss, 1955; Barthes, 1975). Narrative is like a large sentence, or a macro level syntagm, so although narrative cannot be reduced to sentences, a sentence is the outline of a little narrative (Barthes, 1975).

The identification of minimal units provides the basis for a more complex structural approach to the analysis of narrative (Todorov, 1969; Czarniawska, 2004). This is because an entire syntagmatic sequence can be rewritten as a 'function' of a larger narrative leading to another level of generality (Todorov, 1969), with the initial unitary level embedded in it. This approach is demonstrated in Propp's (1968) analysis of Russian Folktales. I adopt the notion of narrative functions in the stage of my analysis which I report in chapter 6 and I review Propp's (1968) theory later in this chapter.

Basic Narrative Syntax

Despite the indication that narrative meaning occurs at a level above the sentence (Levi-Strauss, 1955; Barthes, 1975), Labov (1972) favours analysis focused on the narrative clause, on the basis that it would be difficult to make progress in the analysis of complex narrative until the simplest and most fundamental structures are analysed (Labov and Waletzky, 1967). He prefers to study oral versions of personal narrative as they occur rather than the more formulated products of storytellers (Labov and Waletzky, 1967; Labov, 1972). However, whilst acknowledging that simple narratives consisting only of narrative clauses do occur, Labov (1972) suggests that, should a

narrator be given the opportunity to recount in detail, a broader universal structure of narrative will be employed because narrative is an innate mode of knowing and communicating (Czarniawska, 2004) which is universal to humans (Cobley, 2001; Levi-Strauss, 1955).

Labov (1972) models this 'basic narrative syntax' as the six structural elements shown in Table 4-1. The model shows how it is usual for narrators to begin their account with an abstract of the whole story followed by an orientation in terms of times, places and the people involved. The series of complicating actions constitute the narrative clauses and it is within this third element, therefore, that the extended sequence of action/events, which intervene between states of equilibrium (Todorov, 1969; Czarniawska, 2004), will be recounted. Evaluative clauses which accompany the narrative clauses may well be included by the narrator to indicate the point or *raison d'être* of their account. The resolution and coda signal that the narrative account has ended (Labov, 1972).

Structural Element	Description
1. Abstract	A summary of the whole story
2. Orientation	Identification of time, place, situation, etc.
3.Complicating action/s	A series of narrative clauses
4.Evaluation	The means used by the narrator to indicate the point of the narrative
5.Result or resolution	What actually happened (why the story was told)
6.Coda	A signal that the narrative is finished

Table 4-1: Labov's (1972) Basic Narrative Syntax

Evaluation

Labov (1972) identifies the importance of evaluation as second only to the narrative clause itself. Evaluation answers the question, 'so what'? Therefore, it is the means by which a narrator indicates the point of their narration and there are a number of ways evaluation might be incorporated into a narrative account. First, as a structural element separate to the narrative clauses where feelings and views, etc. at the time of the events are recounted and second, as part of the expression of the narrative clauses themselves.

Therefore, evaluation can occur throughout the text, not solely through separate evaluative passages, but also by way of specific lexical items and grammar (Thompson and Hunston, 2003). For instance, the lexical items used to express narrative clauses might be inherently evaluative. The word 'terrible' indicates something very bad, for example, but context may play a part because 'terribly good' indicates something very good. Thompson and Hunston (2003) suggest building 'noun groups', where each instance of a lexical item is taken from a corpus and listed in context, to enable an assessment of the evaluative meaning attached to the item in question. Similarly, grammar might act to intensify, compare, correlate or explicate the action of the narrative (Labov, 1972).

By characterising evaluation as the opinion of the narrator which reflects the value system of that person and their community, Thompson and Hunston (2003) reinforce the notion that narration will be grounded in Fisher's (1984) narrative rationality and the associated putative cause and effect links.

> *Evaluation is the broad cover term for the expression of the speaker or writer's attitude or stance towards, viewpoint on, or feeling about entities or propositions that he or she is talking about.*
>
> Thompson and Hunston (2003, p5)

They suggest four dimensions which might be reflected through evaluation. They are the good/bad dimension, the expectedness (modality) dimension, the certainty of the narrator dimension and the importance dimension. However, the good/bad dimension can be seen as the primary basis for a narrator's evaluation, each of the other three dimensions making a contribution to some overarching position on it. Through their evaluations, narrators place entities and propositions on points along the evaluative dimensions, based on the desired goal of the speaker. Therefore, because ideologies are built and transmitted through texts rather than expressed overtly, analysis of the evaluative components of a narrative can identify what the writer thinks, thereby revealing the ideology of the society that has produced the text (Thompson and Hunston, 2003).

Narrative Functions and Gross Constituent Units

In applying the structural analytic approach to a study of Russian folktales, Propp (1968) goes beyond the unit of the narrative clause to identify larger semantic units, or 'functions', which constitute the recurring elements of his sample of folktales. Functions therefore, are the result of grouping a number of minimal plots which tend to pre-suppose each other (Barthes, 1975). However, like Labov (1972), Propp (1968) maintains synchronic chronological order as the manner in which meaning is embedded in the narrative. Consequently, he provides a number of ordered functions which are required to lead the narrative from beginning to end and he terms this structure of functions the *fabula*[47].

Propp (1968) identified a *fabula* of twenty two structural functions[48] which he recognised as recurring elements in a sample of one hundred tales taken from a collection of four hundred and forty nine (Czarniawska, 2004). To illustrate Propp's (1968) work, Table 4-2 shows the first 5 functions along with a summary of each one provided by Czarniaswka (2004).

Function	Description
1. ABSENTATION	One of the members of a family absents himself from home
2. INTERDICTION	An interdiction is addressed to the hero
3. VIOLATION	The interdiction is violated
4. RECONNAISSANCE	The villain makes an attempt at reconnaissance
5. DELIVERY	The villain receives information about his victim
... 22	

Table 4-2: Examples and Explanations of Propp's (1968) Narrative Functions Identified in Russian Folktales

The narrativity of the action/event dualism is maintained in Propp's (1968) analysis because human and non-human objects (actors, locations and things) and processes (events) are required for the construction of a *fabula* (Propp, 1968; Bal, 1997; Cobley, 2001). Indeed, functions are the transition from one state to another caused or

[47] Propp (1968) acknowledged that stories might be told in an alternate order to the *fabula* for dramatic reasons, i.e. a *sjuzet*, however, he maintained that narrative logic is inherently linked to the temporal ordering of events (Cobley, 2001).

[48] Propp (1968) identified a further nine functions which occurred in more complex tales (Czarniawska, 2004).

experienced by actors (Bal, 1997) so the concept of a minimal plot can be extended to the larger unit of a function. Despite the structural similarity which might exist between two or more narratives there remains scope for much variation in their telling because a range of different actions and actors might accomplish the same function from story to story (Landau, 1984). However, although the function 'violation', for example, may be fulfilled by a different set of action/events from tale to tale and, therefore, raise a number of themes, the function 'interdiction' leads to the function of 'violation' as the temporal logic of the tales unfolds around the chronological ordering of the functions (Propp, 1968).

In further developing the concept of structural functions, whilst maintaining the importance of chronological ordering, Barthes (1975) points to two categories, 'cardinal' functions and 'catalyses' functions. Cardinal functions constitute actual hinges of the narrative whereas catalyses fill in the narrative space separating the cardinal functions. Cardinal functions open, maintain or close alternatives, thereby directly affecting the continuation of a story, so their functionality is both chronological and consequential because they resolve an uncertainty. What comes after tends to be read as 'caused by' (Barthes, 1975).

However, in also adopting a structural approach for the narrative study of myths, Levi-Strauss (1955) relegates temporal sequencing as the primary generator or arbiter of meaning. Instead, he suggests that people comprehend a level of meaning which exists at a third level above that of Saussurian *langue*, the system of signs, and *parole*, a particular utterance. In Levi-Strauss's (1955) theory the meaning of a narrative is located in its *overall* structure (Cobley, 2001).

> *It* [myth] *is language functioning on an especially high level where meaning succeeds at practically "taking off" from the linguistic ground on which it keeps rolling.*
> Levi-Strauss (1955, p430)

Rather than the meaning of narratives being beholden to temporally organised syntagmatic sequences, Levi-Strauss (1955) proposes that meaning is diachronically distributed and only appears as a synchronic manifestation in a particular telling of a narrative[49]. Therefore, the meaning of a narrative lies in the story, so it is the

[49] The term 'diachronic' indicates that meaning is distributed across time and the term 'synchronic' indicates that meaning is time bound (Greimas and Courtés, 1979).

underpinning narrative logic which should be investigated in narrative study. In myths, meaning is associated with the reconciliation of apparently irreconcilable oppositions (Levi-Strauss, 1955).

Consequently, in place of Propp's (1968) synchronically ordered functions, Levi-Strauss (1955) proposes the Gross Constituent Unit (GCU) which is a semantic unit formed from story elements. In Propp's (1968) terminology, GCUs are functions which are diachronically distributed throughout a myth and its variants (Cobley, 2001). As a synchronic narrative account is told, contributions to the GCUs will be made as the series of functions unfolds sequentially as a syntagm. The notion that meaning might be diachronically distributed means that narrative is reducible to a summary or an argument whilst still preserving the individuality of the message (Bathes, 1975).

I have demonstrated conceptually[50] the analytical approach for constructing GCUs, proposed by Levi-Strauss (1955), in Table 4-3 which shows how four GCUs have been formed from eight story elements or functions. Reading the table row by row would constitute the normal telling of the narrative but reading the columns from left to right would expose the meaning of the story. This is because the columns are organised to show how an apparent opposition, such as life and death, is reconciled by the story.

GCU pertaining to the first of the oppositions	Intermediate GCU	Intermediate GCU	GCU pertaining to the second of the oppositions
Function 1			
		Function 2	
			Function 3
		Function 4	
	Function 5		
Function 6			
	Function 7		
			Function 8

Table 4-3: How Synchronic Narrative Functions are distributed to Diachronic GCUs

The exposition of the story makes semantic contributions to the GCUs which express each side of the opposition, but also similar contributions to a number of intermediate

[50] Levi-Strauss (1955) illustrates his own analysis via the Oedipus myth.

GCUs, in this case two. The intermediate GCUs mediate the opposition by making intermediate analogies with elements from each of the oppositions. In fact, Levi-Strauss (1955) draws special attention to the role of mediating figures in myth which reconcile the oppositions on which the myths are based. However, because of the assumed universality of the narrative mode of knowing, he goes on to suggest that this role of mediators may well go beyond the organisation of myth and correspond to a way of organising daily life.

The theory proposed by Levi-Strauss (1955) indicates that the meaning of narrative accounts is not immediately obvious, because it is fragmented and distributed throughout the actual account a narrator might recount. Indeed, in recognising that the identification of GCUs is a laborious interpretive task, he suggests that time and resource is necessary in constructing an analytical account. Consequently, the search for GCUs should proceed on the basis of economy of explanation, unity of solution across different accounts of a story, and the ability to reconstruct the whole from a fragment. However, by taking time to describe the diachronically distributed meaning of narratives, the researcher can move beyond the bounds of the apparent content of the story. Indeed Ricoeur (1973), in developing his theory of human action as a text, likens Levi-Strauss's (1955) theory to *erklaren*[51] and, therefore, an enabler of a later stage of deep semantic analysis.

My discussion so far in this chapter has concentrated on the structural elements which might be discovered within or constructed from the text of a narrative. However, as Barthes (1975) notes, the structure of how the narrator narrates an account is also available for analysis and is a contributing factor to the meaning which might be described by the reader. Indeed, I have found my own role as narrator to be important during my data analysis. Therefore, in the next sections I consider the theory concerning narration which I have used as part of the empirical stage of my project.

The Narrator

The narrator is the linguistic agent, an 'it', which tells a story and is identified by Bal (1997) as the most central concept in the analysis of narrative texts. This is because the

[51] *Erklaren* refers to the process of applying an *a priori* logic to a set of circumstances (Johnson and Duberley, 2000).

identity of the narrator, and the choices it makes in re-presenting the events of the story in question, lend the text its specific character. The narrator makes a 're-presentation' of the real world in their narrative accounts, because they cannot be omniscient.

Consequently, the narrator presents just one from the range of accounts which might be recounted. They might choose to present some events and not others, for example (Cobley, 2001). Therefore, there is a relationship between the narrator and the recipient of their narrative (Barthes, 1975) and Cobley (2001) models this relationship as the number of levels which can be identified relating to the giver and receiver of narrative.

Narrative Levels

I have modelled the levels Cobley (2001) associates with narration in Figure 4-4, which describes how Bal's (1997) narrative agent is the product of an author and understood by a reader. It shows how the exchange of narrative is distinct from the real people who are involved, due to the intervening levels between the real author and real reader, which introduce gaps that might aid or interfere with the transmission of narrative meaning.

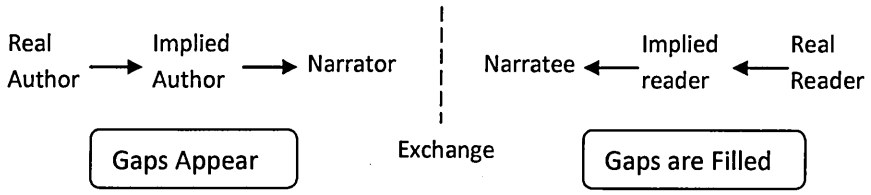

Figure 4-4: Narrative Levels, Adapted from Cobley (2001, p138)

The real author and real reader are empirical entities, i.e. human beings, which appear at each pole of Figure 4-4. The implied author is not a person but rather the organising principle of the text responsible for the re-presentation in question, e.g. the selection of events, their ordering and the structure of the plot. The narrator is the voice which tells the narrative in the first or the third person, possibly as a character in the story itself. In the move from real author to narrator, gaps occur in what can be understood about the real author and their story by a reader of the narrative (Cobley, 2001).

The narratee is the ideal reader who is likely to accept the narrative uncritically. However, through the level of implied reader, meaning will be ascribed by the real reader, by way of a process of gap filling based on their own pre-understandings. Consequently, alternative readings of a narrative will occur due to the variation amongst real readers, in terms of their attitudes, values and experiences. An interpretive community will occur where groups of people, who share sociological factors in common, fill in gaps in a similar manner (Cobley, 2001).

The associated phenomena of gaps and gap filling eliminates the possibility of a wholly realist narrative account. Even if the events which are depicted were real, no account can re-present a full picture of what actually happened. Realist readings of narratives naively ignore the underlying philosophy of the narrator and the gaps which the reader needs to fill in (Cobley, 2001). Texts are uttered by the narrator and only the text is available to the narratee (Bal, 1997) so *"... the one who speaks (in the narrative) is not the one who writes (in real life) and the one who writes is not the one who is."* (Original emphasis) (Barthes, 1975, p261).

Such a conceptualisation of narration casts doubt on the researcher's ability to neutrally present an account in the manner of Dennett's (1991) proposed heterophenomenology, which I described in chapter 2. The real author cannot be wholly known via their narrative; they are a subject and their narrative is the expression of that subject (Cobley, 2001). Narration can only receive its meaning from the world which makes use of it (Barthes, 1975). The act of re-presentation by a narrator means that events which impact on actors and the actions of actors are 'shown' to or 'imitated' for the narratee through mimesis (Cobley, 2001) and Bal (1997) shows how mimesis can be used to identify an alternative set of levels in a text.

Levels of Mimesis

In proposing four levels of mimesis, Bal (1997) explains that recognising the manner in which a narrator shows the events and actions of a story can be important, because the justice done to the voice of the actors who are re-presented varies with the form of mimesis that is used. Table 4-4 lists the four different ways in which mimesis might be achieved by a narrator. The degree to which an actor's own voice, and therefore their perspective, is captured in a narrative text diminishes as the narrator moves from direct

speech to indirect speech, then again as the narrator moves to free indirect discourse and finally as the narrator chooses to re-present the actor's contribution as an act. Where direct speech and indirect speech are recognisable by way of inverted commas or a declarative verb, it is harder to distinguish between free indirect discourse and narration, because it can be difficult for the reader to distinguish the text of the actor from the text of the narrator (Bal, 1997). Through mimesis, actors' texts become embedded at a second level in the narrator's primary level of the text, which means they are coloured by the narrator's primary level.

Type of Mimesis	Nature of the Text where Each Type of Mimesis Occurs
Direct Speech	Quotations of the actors' actual words.
Indirect Speech	Indirect re-presentation of the actors' actual words through the use of a declarative verb, e.g. she said.
Free Indirect Discourse	Indirect re-presentation of an actor's perspective given without a declarative verb and the degree to which the original direct speech of the actor is difficult to ascertain.
Narration	The re-presentation of an actor's contribution to the narrative as an act.

Table 4-4: Four Levels of Mimesis, Adapted from Bal (1997)

Consequently, the narrator's and the actors' perspectives are not of equal status (Bal, 1997) when presented to Cobley's (2001) narratee. Indeed, the less direct a re-presentation of actors' discourse is, the greater the degree of the narrator's evaluation at the primary level of the text, because the narrator has more influence in deciding the manner in which an actor's contribution is described (Labov, 1972). Therefore, the narrator sets the tone for interpreting the meaning of the voices which are narrated and consequently, there is a degree of 'focalisation' in the text (Bal, 1997).

Focalisation

Focalisation is the point of view from which a narrative agent tells their narrative account and, although focalisation is not part of the narration, it colours the *fabula* and privileges the point of view of the narrator (Bal, 1997). Where objects or actors are presented by the focalisor, an 'image' of them is presented which says something about the focalisor (Bal, 1997). Focalisation can be equated with mood in fiction (Genette, 1980).

However, the more direct forms of mimesis can enable a move to the point of view of the actor who is being re-presented, at the second level of the text (Bal, 1997). Consequently, if the focalisation lies with a character, that character has an advantage because their point of view is more likely to be privileged by Cobley's (2001) uncritical narratee. Therefore, there are three possible layers to the narrative agent, the narrator, the focalisor and the actor. Each utterance in the fabula can be made up of combinations of each layer (Bal, 1997). Matters are complicated for the narratee where narrative levels intertwine. For example, when the narrator appears as an actor in the text, it may not be clear whether they are addressing other characters in the text or the reader, a phenomenon known as 'text interference' (Bal, 1997). Text interference occurs when there is a mixing of narrative levels in the same passage and during such passages the degree to which one text 'colours' the other may be indeterminate.

However, as Bal (1997) notes, in the social world, there is always an intertwining of different points of view coming from a variety of backgrounds and so, a single text provides access to bits and pieces of culturally different environments. Therefore, *"... to realise that any text is a patch work of different strata, bearing traces of different communities and of contestations between them, is an essential insight"* (Bal, 1997, p66). I have reflected on the narrative levels in my data during my analysis to help recognise the alternative views of the sales and production orientations at CaseCo and I present this part of my work in chapters 6, 7 and 8. Indeed, the subject of my thesis is characteristic of the contestations between communities and I have found Latour's (1991) work useful in addressing the issues of focalisation and opposing points of view during the analysis of my empirical data.

Representing Competing Perspectives as Opposing Narratives

Focalisation recognises that points of view will be embedded in the various levels of a narrative account (Bal, 1997). Also, as previously mentioned and illustrated with the use of the Hillsborough disaster as an example, people may battle to emplot the events and actions of a social context, based on their points of view (Czarniawska, 2004). Latour (1991) synthesises the two concepts of focalisation and emplotment with the notion of alternative narrative 'programmes of action'. By doing so, he shows how competing behaviour may occur as people act in social situations based on the underlying assumptions and expectations they hold, Abell's (2004) underlying goal component of

narrative rationality. Through an example based around an hotelier and the hotel guests, Latour (1991) suggests that actors add 'load' to their programme of action to encourage or manipulate other actors to comply with it.

In Latour's (1991) example, the hotelier's programme of action is that he would like the guests to leave their room keys at reception when they leave the hotel during the day, whereas the guests 'anti-programme' is to keep the room key with them for security and convenience. To achieve his goal, the hotelier progressively loads his programme of action by first verbally reminding his guests, then putting up a sign to remind them, then adding a large key ring to make it difficult to carry the keys. As load is progressively added to the hotelier's programme of action, the number of guests who abandon the anti-programme of action, in favour of the programme of action, will grow.

To identify the narrative logic which underpins peoples' programmes of action, Barthes (1975) suggests that analysts might either, trace the choices an actor has to face, identify the paradigmatic oppositions in the functions and then "project" them onto the syntagmatic axis of narrative, or analyse the rules which attend to actors actions. I adopt each of Barthes's (1975) three suggestions for analysis at times during my analysis. To help describe the sales and production perspectives at CaseCo as opposing narrative programmes, I focus on the paradigmatic oppositions which emerge from my data throughout the analysis. In chapter 7, I project the choices made by actors at CaseCo onto two opposing syntagmatic axes to help construct written accounts of the cultural strategies at the firm.

Whether a goal is regarded as a programme or an anti-programme depends on what point of view is adopted for the analysis (Latour, 1991) so the reader must make a decision about the focalisation which underpins their interpretations. As Barthes (1975) notes, in reading a narrative text a decision is required in terms of who is the narrating subject. Latour (1991) suggests that the programme be attributed to the enunciator so, in Bal's (1997) terminology, the narrator of the primary level of the text, unless the narration is passed to a secondary level and associated with another actor. After all, in their own narratives, people often play the part of the hero (Barthes, 1975).

In the process of loading a narrative programme, a range of actors will be attached to it to form the strategy of that programme and Latour (1991) suggests that this is akin to

the concept of a syntagm but by way of a diachronic rather than synchronic conceptualisation. In the example of the hotelier and his guests, it is the verbal request, sign and key ring which constitute the syntagm. Other combinations such as verbal request and sign, but no key ring, constitute alternative paradigms (Latour, 1991). Therefore, such a conceptualisation of a syntagm has more in common with the GCUs of Levi-Strauss (1955) than the chronological functions of Propp (1968).

However, Latour's (1991) theory does maintain some similarity to that of Propp (1968) because it recognises the potential for non-human actors. The syntagms which load the narrative programmes are said to become chains (or networks)[52] of human and non-human actors. Both theories allow for agency to be appropriated by non-human actors, such as a heavy key ring and, therefore, they provide an indication of how narrative might engage with the human agency issue raised by memetics.

Narrative and Agency

Although the term actor seems to suggest human action (Greimas, 1971), the theory of Latour (1991), by way of printed signs and key rings, and the theory of Propp (1968), by way of objects such as rings and towels, introduces the notion that non-human actors may play a similar role to that of human actors. In fact, the concept of non-human actors occurs more widely throughout the narrative orientated literature. Non-human actors such as machines, concepts (Czarniawska, 2004) and animals (Bettany and Daly, 2008) can be seen to play similar roles to those described by Propp (1968) and Latour (1991). Indeed, by recognising the potential significance of non-human actors, the distinction between humans and non-humans in a narrative account can be dissolved by replacing the term 'actor' with the term 'actant' (Greimas, 1971; Greimas and Courtés, 1979).

When considered in tandem with the argument that narrativity plays a large part in facilitating human apprehension of the world (Fisher, 1984; Cobley, 2001; Czarniawska, 2004), the notion of actants, in place of actors, raises implications for the degree to which human free will might be exercised. As Czarniawska (1998) points out, the action element of the action/event dualism does not necessarily imply agency.

[52] Czarniawska and Hernes (2005) identify Latour's work as a foundation of Actor-Network Theory (ANT) which looks to analyse how networks of human and non-human actors form, in combination, 'macro' actors in situated social contexts.

Rather, it is because narrative recognises actions rather than behaviour that there is an assumption of intentions, purposes and reasons, all characteristics which are particular to humans (Czarniawska, 2004). Conversely, humans inhabit narrative and so are compelled to occupy those roles offered to them so it is narratives, which may include non-human actors, that define what has the right to be said and done in the culture in question (Cobley, 2001).

Consequently, Bal (1997) characterises the process of the *fabula* as the execution of a computer-like program, so the operation of actants is facilitated in a programmed manner. She goes on to echo Latour's (1991) identification of narrative programmes and anti-programmes by suggesting that actants can be considered to be either anti-actants or co-actants, depending on whether they support or contradict the focalisation of the narrative account in question. Indeed, Latour (1991) also adopts a programme-like characterisation, and hints at an evolutionary type algorithm, by suggesting that the syntagmatic chains of actors in his theory co-evolve in a manner which *"... is no more teleological than Darwinian evolution"* (Latour, 1991, p120). Similarly, Levi-Strauss (1972) identifies game theory as an outstanding achievement which is underutilised by social scientists. Consequently, by adopting the narrative view, it is possible to reconcile 'motives' with 'causes', so in organisations people's choices can be passive, following the logic of institutional appropriateness (Czarniawska, 2004).

Moving to Practical Considerations

So far in this chapter, I have described the type of data required for narrative analysis and the tools which I have used in my own analytical stages of this study. However, in order to proceed I need to collect some data, of course. To gather my data, I conducted a period of ethnographic participant observation at CaseCo and in the next sections I discuss the rationale for this part of my project.

Locating Narrative in the Ethnographic and Case Study Elements of My Study

Although my review of narrative theory has indicated the nature of narrative data and the possibilities for its analysis, the question of collecting my data remains. Therefore, I

should also consider the manner in which I gathered my data. I completed this element of my project through a period of ethnographic participant observation at CaseCo and consequently, in this section, I discuss the issues relating to participant observation at a single case study firm.

Participant Observation

An extended period of watching, listening and asking questions in a research setting (Hammersley and Atkinson, 1983; Van Mannen, 1988) to gain first-hand experience of it (Atkinson et al, 2001) through participant observation, is seen as central to ethnographic research (Tedlock, 1991; Hymes, 1996; Davies, 1999; Gill and Johnson, 2002). Such research may be carried out either overtly or covertly (Hammersley and Atkinson, 1983; Porter, 1993; Davies, 1999; Gill and Johnson, 2002). Whilst collecting my data, I adopted the covert approach where the researcher conceals their identity as a researcher and their intentions to do research (Hammersley and Atkinson, 1983; Davies, 1999).

The immersion of the researcher in the research setting through participant observation means that ethnography can provide a 'thick' description of actors' interpretive procedures which goes beyond the 'thin' description of simply reporting an act (Johnson and Duberley, 2000). It is the ecological validity associated with feeling what is actually happening through experience which is the product of participation (Hammersley and Atkinson, 1983; Davies, 1999; Gill and Johnson, 2002). However, the specific nature of participant observation may vary from study to study, in terms of the emphasis on either observation or participation (Hammersley and Atkinson, 1983; Davies, 1999). Some scholars warn that a greater emphasis on participation risks the researcher discarding the researcher element of their field role and 'going native' (Hammersley and Atkinson, 1983; Gill and Johnson, 2002).

Participant observation in itself can be limiting because it is not privy to data that is not available to the researcher's own involvement (Mintzberg, 1970), hence the use of a range of data collection methods in ethnographic fieldwork. In a manner similar to that of the 'narrative toolbox' (Bal, 1997; Czarniawska, 2004) ethnographers may collect data in a number of ways (Hammersley and Atkinson, 1983) including surveys (Davies, 1999; Gill and Johnson, 2002), interviews (Hammersley and Atkinson, 1983;

Schwartzman, 1993; Davies, 1999; Chang, 2008), documents (Mintzberg, 1970), and visual media (Davies, 1999). Interviews can be used to acquire data about events from actors' points of view (Czarniawska, 1998).

Despite the range of possible data collection methods, the diarying of field notes is often favoured by ethnographers (Mintzberg, 1970; Gill and Johnson, 2002; Emerson et al., 2001). Diary data collection might be structured or a freer account (Chang, 2008) and the data might include a combination of the direct speech of actors and researcher notes (Hammersley and Atkinson, 1983; Porter, 1993) which record the actions and events typical of narrative data (Iverson, 2009). Porter (1993), for example, collected data in a note book and, due to the pressure of work and the need for discretion, data was often recorded some time following collection. Indeed, Hammersley and Atkinson (1983) recognise that covert research usually precludes note taking until later. They suggest that notes should be made as soon as possible, but acknowledge that there will be an unavoidable trade-off between detail and scope.

The subjects of an ethnography are also participants so their accounts, which might be gained through either solicited or unsolicited interviews, can provide important data (Hammersley and Atkinson, 1983; Chang, 2008). Therefore, others in the research setting might be recruited as informants or interviews might be managed by way of simply asking questions as the chances to do so arise (Hammersley and Atkinson, 1983; Davies, 1999). Indeed, Czarniawska (2004) urges the narrative researcher to collect pertinent story fragments as opportunities, which suit the personal talents and preferences of the researcher, occur.

Such questions might pertain to underlying hypotheses or be confrontational to help elicit data in line with the objectives of the study (Hammersley and Atkinson, 1983). Conversations in naturally occurring circumstances might be undertaken with questions in mind which direct the conversation and explore topics (Davies, 1999). Indeed, Hammersley and Atkinson (1983) point to the work of Labov as illustrative of such an approach. As part of his ethnographic data collection, Labov (1972) would ask variations of the 'danger of death' question to elicit narrative data pertinent to both the ethnographic context and his study.

> *Were you ever in a situation where you were in serious danger of being killed, where you said to yourself – 'This is it?'*
>
> Labov (1972, p 354)

Labov (1972) recognises that, in his approach, the data collection is clearly influenced by the observer but he asserts that the respondent is less likely to monitor their own speech, as they might do during a more formal interview. Consequently, the validity of the data is strengthened. However, faced with the opportunity of collecting large amounts of data, through participant observation, the ethnographer may choose to study individual episodes in a comprehensive way or may relate sequences of episodes which might be structured to seek certain types of data (Mintzberg, 1970). They may be selective, based on what are taken to be key events in light of the aims of the study (Hammersley and Atkinson, 1983; Chang, 2008), using early data collection and initial analysis to guide later data collection (Chang, 2008).

The Suitability of Participant Observation for My Study

Ethnography has been used extensively in shop floor studies (Schwartzman, 1993; Gill and Johnson, 2002) and, because problems of access in ethnography loom large (Hammersley and Atkinson, 1983), it is common for part time students to study their employer (Gill and Johnson, 2002). Indeed, although the period of ethnographies is typically unspecified (Van Mannen, 1988) and may last for several years, where the researcher is already a part of the native culture, the period of research can be shorter (Davies, 1999). Participant observation at my employer, CaseCo, facilitates easy physical access to the research setting although the issues relating to permission still need to be addressed, unless covert research is adopted to avoid the influence of gatekeepers (Hammersley and Atkinson, 1983).

There is an established link between narrative and ethnography (Hymes, 1996; Gubrium and Holstein, 1999; Iverson, 2009) which supports my use of the two disciplines in combination. Ethnography provides access to the indigenous narratives of everyday experience and researchers may find themselves using ethnography and narrative in combination, having begun from either discipline (Gubrium and Holstein, 1999). The prolonged period in the field, facilitated by participant observation, enables a diachronic approach to narrative (Iverson, 2009), such as that described by Levi-Strauss (1955).

Ethnographic writing itself is storytelling (Hammersley and Atkinson, 1983) and, as such, it can provide a systematic comparison of how narrative accounts compete, thereby revealing social patterning (Gubrium and Holstein, 1999). Indeed, Goodall (2004), in supporting the use of self-narratives in ethnography, reflects the view that narrative is fundamental to human experience by suggesting that stories teach people how to live. The use of self-narrative in ethnography has become known as autoethnography (Tedlock, 1991; Reed-Danahay, 1997; Goodall, 2004; Chang, 2008; Taber, 2010).

Autoethnography

In ethnography there can be a failure to recognise that what is studied as a construction of the subjects is also a construction by the researcher (Johnson and Duberley, 2000). Similarly, the difficult to assess notion of reactivity means that the concepts of 'fly on the wall' or 'full participant' must be rejected because all ethnographic data are the product of social interactions which include the researcher (Hammersley and Atkinson, 1983; Davies, 1999). Indeed, such a view is in concordance with Bal's (1997) proposition that any narrative account will be a focalised re-presentation of actors and events.

Recognising this context supports a move towards autoethnography where the observation of participation facilitates the portrayal of both the 'self' of the researcher and the 'other' of the subjects in one account, an approach also known as 'narrative ethnography' (Tedlock, 1991; Goodall, 2004). By adopting autoethnography, the researcher makes use of their own narrative account to explore their self and their social setting together (Chang, 2008; Taber, 2010). Therefore, the method emphasises the association of narrative and ethnography (Taber, 2010) because autoethnography is *"... a form of self-narrative that places the self within a social context"* (Reed-Danahay, 1997, p9).

Autoethnography therefore, provides a window through which the cultural interaction of the researcher and others can be investigated and understood (Chang, 2008), by way of a scholarly approach to personal narrative (Taber, 2010). Therefore, participant observation is the ideal way to grasp the unfolding plot of a social setting and the actors' reactions to it (Czarniawska, 1998). Consequently, in contrast to the view that a

bias towards participation rather than observation risks 'going native' (Hammersley and Atkinson, 1983), Tedlock (1991) points to the oxymoronic combination of participation and observation and suggests that, the negativity attached to 'going native' should be dismissed in favour of tapping into the human inter-subjectivity that distinguishes the human sciences from the natural sciences.

Autoethnography is the culmination of debates of representation and the trend towards reflexivity (Reed-Danahay, 1997; Chang, 2008) and, therefore, can claim greater validity in light of questions regarding voice (Reed-Danahay, 1997), thereby countering the risk of the approach being dismissed as self-indulgent and narcissistic (Davies, 1999). However, autoethnography must be reflexive (Tedlock, 1991; Taber, 2010). Rather than going native, the ethnographer becomes bi-cultural and acknowledges the choices involved in data collection and writing (Tedlock, 1991). After all, autoethnographers are familiar with both the original context of the data and the context of the interpretation (Chang, 2008).

The Case Study Element of Ethnography

Basing my project on an ethnographic study of my employer's firm locates my research within a single case study organisation (Gill and Johnson, 2002), although there will be interaction with other organisations, of course, especially customers. However, an employee becoming a researcher can be ideal as it mitigates problems of participation, time, space and invisibility (Czarniawska, 1998). Indeed, sometimes the research problem is so closely related to the research setting that the selection decision hardly arises (Hammersley and Atkinson, 1983) and case study research can be appropriate when little is known about a topic (Gill and Johnson, 2002).

Memetics therefore, is amenable to research though the case study approach because there has been very little empirical work completed. After all, in the early days of evolutionary thinking and experimentation on heredity Gregor Mendel, having recognised something interesting in relation to the flowers of pea plants, studied the flowers not the roots or a different plant altogether (Guttman, 2005). Similarly Darwin (1859; 1985), having recognised something interesting in the variation of animals which might be linked to Malthusian selection, studied his own pigeons. Indeed, as mentioned

in chapter 2, one of the three challenges posed for memetics by Edmonds (2002) is to provide a conclusive case study that demonstrates a replication mechanism.

However, single case ethnography has attracted critique. Snow, Morrill and Anderson (2003), for example, suggest that ethnography has been limited to situated descriptions due to a limitation to either grounded theory or haphazard discovery. They advocate 'analytical ethnography' as a route to theory development, through a greater emphasis on analysis and call for researchers to develop new systematic approaches. There are similar calls for greater analytical rigour through analytical induction (Hammersley and Atkinson, 1983; Gill and Johnson, 2002).

> *Field researchers do not follow through on the analytical tasks they set out to perform during and in the aftermath of field work and thus they do not really engage in the time-consuming, detailed data analysis for conceptual development.*
>
> Snow, Morrill and Anderson (2003, p185)

Such analysis can be supported through analytical notes, memos and journals which, in combination with careful reading of the data, aid a reflexive approach (Hammersley and Atkinson, 1983). Consequently, ethnographic findings may be interpreted in more general collective or structural terms (Davies, 1999), through the qualitative testing of hypotheses, for example (Porter, 1993). However, generalisations should be limited to theoretical generalisations, not empirical generalisations (Davies, 1999).

Conclusions Regarding Ethnography and Case Study

My consideration of the theory relating to participant observation has revealed that it provides a widely accepted opportunity to collect narrative data and, bearing in mind the small number of previous memetic empirical studies, the case study element of my approach can be fruitfully applied to address my research goals. Indeed, there is support for the generation of theory from a single case where the approach can be demonstrated as systematic. However, due to the role played by the researcher in constructing the data they analyse through ethnography, I should recognise the implications my methodological approach has for the claims to truth I make following my analysis. Therefore, I consider the issues of epistemology and ontology in the next section.

Philosophical Considerations

I began this chapter by discussing the similarities between memetics and narrative theory and concluded that, there is reciprocal support from each discipline for a theoretical nexus between the two conceptualisations of human culture. However, by reviewing the narrative literature in detail it has become apparent to me that, in terms of their philosophical commitments, the nexus between memetics and narrative is not necessarily maintained.

The Memetics/Narrative Philosophical Schism

Memetic theory claims validity largely from biological analogue so, by association, it invokes the epistemological tenets of the natural sciences as part of its *raison d'être*. After all, Dawkins's (1976) inspiration for the meme was genetics and the evolutionary algorithm, and he overtly links his ideas to 'the scientific method' as the key process by which warranted knowledge can be attained (Dawkins, 2003). Such a philosophy invokes the positivistic epistemology, generally associated with the natural sciences, which is based on the tenets shown in Table 4-5 and adopts a correspondence theory of truth, i.e. both an objective ontology and an objective epistemology (Johnson and Duberley, 2000).

	Tenets of Positivistic Epistemology
1	Research should search for foundational laws which are deterministic
2	There is an external reality which exists independently from the observer
3	A dualism between the observer and the observed can, and should, be maintained
4	Objectivity and a rejection of the metaphysical in favour of sense data
5	The adoption of a theory neutral observational language
6	The natural sciences should provide the model for all science

Table 4-5: Summary of the Tenets of Positivism, Adapted from Johnson and Duberley (2000)

Dawkins's (1976; 1989) conceptualisation of a cultural replicator is grounded in the sixth positivistic tenet listed in Table 4-5, thereby invoking points one to five. Similarly, those who have developed fundamental memetics seem to adhere to the same philosophical commitments. Dennett (1991; 2003) and Aunger (2002) invoke experimental evidence, typical of positivistic research (Gill and Johnson, 2002), to

support their claims that memes ought to be defined via the material of the human brain. Indeed, the memetic theories of consciousness suggest that the selfish replicator concept implies that people might simply be receptacles for memes which determine their behaviour and give the impression of consciousness. Similarly, although Brodie (1996; 2009) disavows claims to absolute truth, his theory invokes the foundations of the natural sciences via biologically determined motivational factors. Point one in Table 4-5. Of course, the meme as virus concept in itself suggests that people's behaviour is determined by the pernicious cultural traits with which they have been infected.

However, the underpinning assumptions of positivism have been shown to be problematical when applied to human social phenomena (Johnson and Duberley, 2000). Indeed, Stacey (2010) criticises the dominant managerialist discourse in organisations for its dogmatic allegiance to theories grounded in the philosophy of the natural sciences, despite people's negative experience of their effectiveness in complex workplace settings. More specifically, the notion of narrativity contradicts the assumptions of positivism listed in Table 4-5 because, whilst the objects of natural science 'behave' due to deterministic universal laws, the subjects of social science 'act' on the basis of their internal logic (Johnson and Duberley, 2000; Czarniawska, 2004). Indeed, the concept of Fisher's (1984) narrative paradigm subsumes the rationality associated with an observer/observed dualism and Cobley's (2001) recognition that the same real events may be presented through a range of narrative accounts, rejects the assumptions of a neutral observational language and objectivist epistemology.

Consequently, in contrast to 'the scientific method' extolled by Dawkins (2003), the narrative perspective offers no uniform method (Czarniawska, 1998). Similarly, although early ethnography maintained some positivistic tenets such as the observer/observed dualism (Hammersley and Atkinson, 1983) much of the recent theory in support of ethnography, such as that related to autoethnography, assumes a situated, subjective view of social science. In social science which embraces the subjectivity of the observer it must adopt a consensus theory of truth, rather than a correspondence theory of truth, where claims are validated by agreement amongst the scientific community (Johnson and Duberley, 2000).

Indeed, from the narrative point of view, it is possible to recognise what Johnson and Duberley (2000) refer to as the socialisation of science, even in ostensively positivist

orientated disciplines. Landau (1984), for example, discusses alternative narratives of the story of human evolution which vary by way of the ordering of events such as bipedalism, terrestriality, encephalization and civilization. Similarly, historians introduce narrativity to demonstrate processes of causality in real events, so a linguistic truth may be found in the narrative form alongside the truth or falsity of the extra-textual events (Cobley, 2001). Although the assumption of real events implies an objectivist ontology any set of real events can be narrated (Landau, 1984), so narrative implies a subjectivist epistemology.

Relativism

In addition to the rejection of objectivist epistemology, the recognition of the potential for language to be wholly self-referential has led some to also question the possibility of an objective ontology, leading to the conclusion that all claims to truth are subject to relativism (Johnson and Duberley, 2000). Of course, such an ontological commitment would undermine much of the validity claimed for memetics, as a ubiquitous and fundamental process. Dawkins (2003) specifically rejects the relativism of some post modern social science. The core commitments of memetics assume an entity which is separate from people's brains so it requires an extra-textual reality.

An approach to studying memetics which adopts relativism as an underpinning value would seem to reject the possibility of real self-replicating units of culture at the outset. However, the narrative literature that I have reviewed in this chapter reserves space for a reality beyond the narrative account (Levi-Strauss, 1955; Labov, 1972; Barthes, 1975; Landau, 1984; Fisher, 1984; Czarniawska, 1998; 2004; Latour, 1991; Cobley, 2001), thereby maintaining an objective ontology.

A Realist Ontology and Subjectivist Epistemology

Although some narrative theory suggests that there are no structural differences between fictional and factual narratives, it still distinguishes between the ontological status of fictional and nonfictional accounts (Landau, 1984; Czarniawska, 1998; 2004; Cobley, 2001). Indeed, amongst the structuralist orientated scholars there is an assumption of the universality of structure (Levi-Strauss, 1955; Labov, 1972; Barthes, 1975; Cobley, 2001), a view which maintains an extra-textual element embedded in the claim for an

ontogenetic component of narrative (Cobley, 2001). Similarly, Latour (1991) invokes the notion of a reality separate from social actors by suggesting that the syntagmatic chains of his theory become distinct from their constituent members.

Consequently, Latour (1991) and Levi-Strauss (1955) propose a 'relationist theory of truth' which depends on the degree of alignment or dispersion of the different versions of narrative accounts given by successive informants. This position implies a measure of truth beyond the bounds of each individual text. Fisher (1984) goes further by suggesting that 'better' stories are those which demonstrate a higher value of a 'coherence theory of truth', through social convergence and corroboration, which suggests some kind of interaction between the narrative accounts and an extra-textual reality. Where similar narratives occur, it can be assumed that something extra-textual must exist for people to be able to describe it in different ways (Johnson and Duberley, 2000), i.e. a common noumenal referent (Czarniawska, 2004), which mediates the account provided by the narrator (Cobley, 2001).

Landau's (1984) critique of the narratives of human evolution, for example, does not question that the evidence on which the accounts are based is ontologically real. Rather, people can only know their worlds via texts which represent an extra textual reality (Ricoeur, 1973). Indeed, as I have noted above in this chapter, narrative is posited as the outcome of humans' biological evolution and, as I discussed in chapter 3, complexity theory suggests that culture itself emerges via a CAS which arose from, and is facilitated by, a more fundamental biological CAS. Gell-Mann (1995) suggests that each level of complexity generated by CASs should be addressed at its own level but that bridges between the levels might be built as knowledge about them grows. The combination of subjective epistemology and objective ontology which is evident in the narrative theory I have adopted for my project appeals to a realist philosophy of science (Johnson and Duberley, 2000), the tenets of which I have summarised in Table 4-6.

Researcher Values of a Realist Philosophy

The realist assumption that intransitive entities which act to give rise to generative mechanisms, point 1 in Table 4-6, is congruent with the generative mechanisms of CASs and the fourth component of Abell's (2004) view of narrative coherence, i.e. that it is generative structures which make certain sequences of actions permissible or not

permissible. Similarly, both Porter (1993) and Davies (1999) suggest that realist ethnography can be used to make theoretical assertions concerning generative social structures and that such theory-building can be reached through situated ethnographies. Of course, adopting such a subjectivist epistemological perspective necessitates a reflexive approach to my empirical work to recognise my part in constructing the account I provide (Johnson and Duberley, 2000), point 3 in Table 4-6.

Tenets of Realist Philosophy	
1	Social and natural reality consist of intransitive entities which exist independently of human knowledge and via their 'essences' act as generative mechanisms
2	Different people may apprehend different realities according to the varying paradigmatic, metaphorical or discursive conventions people deploy
3	The subjectivity inherent in peoples' apprehension of reality means the rejection of a theory neutral observational language and a correspondence theory of truth
4	Science is about something other than science itself
5	The goal of realist inquiry is the identify causality but through retroductive argument rather than constant conjunctions.

Table 4-6: Summary of the tenets of Realism, Adapted from Johnson and Duberley (2000)

Through the adoption of a realist philosophy based on the combination of an objectivist ontology and subjectivist epistemology my own position and values at the outset of my empirical research can be aligned with the tenets listed in Table 4-6. Such issues point to a concern for axiology, i.e. the considerations for how I ought to act as the researcher in my project (Ruona and Lynham, 2004). My study will be focused on the cultural level manifested at CaseCo which can be assumed to exist beyond my own construction of it, point 4 in Table 4-6. This position is grounded in the assumption that the culture is facilitated by the generative mechanisms of people's biological makeup but not reducible to the biological level, point 1. It is congruent, therefore, with the notion that memes operate at a level distinct from biology and consequently the matter at hand, an evaluation of memetics is facilitated.

Similarly, as mentioned earlier in this chapter, narrative theory can accommodate questions of agency but the narrative position is less definitive than that of memetics. Consequently, narrative provides a standpoint distanced from the assumptions of meme theory from which to evaluate memetics, where the nature of human agency is regarded as an open question. Therefore, my research must maintain and respect the notion of

free will, at least at the outset, and consider the people at CaseCo to be involved participants rather than passive subjects, point 2 in Table 4-6. Similarly, my adoption of a subjectivist epistemology indicates that my findings, although pertaining to an objectivist ontology, will be the product of my subjective involvement in the project and choice of tools taken from the narrative toolbox (Bal, 1997; Czarniawska, 1998; 2004), points 2, 3 and 5 in Table 4-6. Such a position demands that I consider my ethical stance towards those involved in the study and I discuss the particular ethical issues related to the operationalisation of my research in the next chapter of my thesis, beginning on page 137, following my description of my adoption of covert autoethnography.

Chapter Conclusions

In this first of two methodology chapters, I have supported my decision to adopt narrative analysis for my project on the basis of the meme/narrative nexus I proposed in chapter 3. I have subsequently introduced the narrative theory and tools which I apply during my analysis. By reflecting on the philosophical implications of the theory, I have noted that my methodology can be accounted for through a realist philosophical position. In the next chapter, I discuss how I addressed the empirical stages of my project through the application of the theory I have discussed above.

Chapter 5 – Methodology 2, Operationalisation

To preview the empirical stages of my project, in this chapter, I show how I applied the narrative approach at CaseCo through ethnography, as illustrated in Figure 5-1.

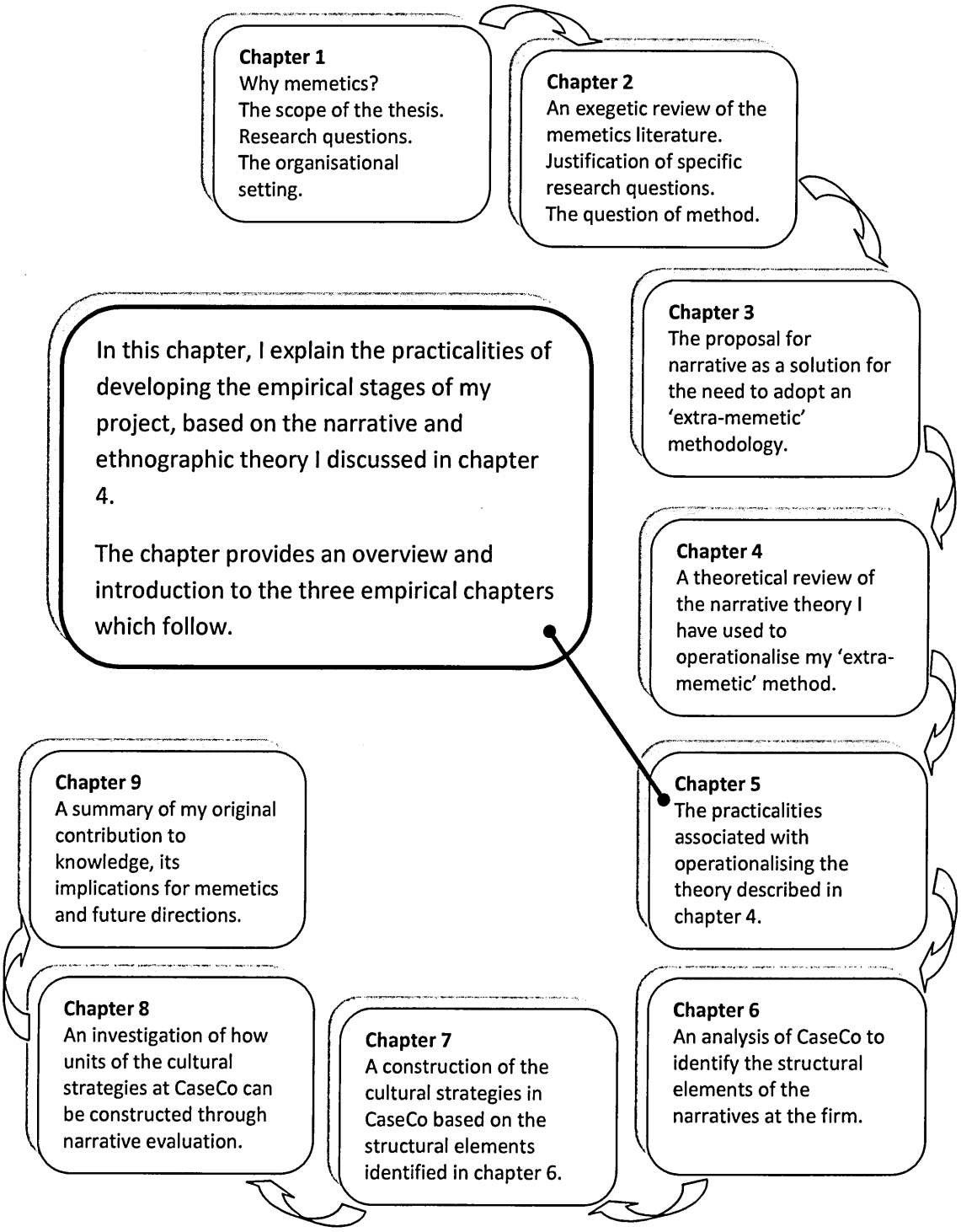

Figure 5-1: Thesis Structure Showing the Role of Chapter 5

By addressing the need for an extra-memetic approach, many of my methodological choices were made through working with my data in combination with the narrative tools I have discussed in chapter 4. Consequently, to help explain both my analysis and my methodology, I have included sections of formative discussion in my empirical chapters 6, 7 and 8. Each chapter demonstrates how my empirical work progressed through a dialectical interaction between data and method. The result is an original contribution to knowledge in both the subject area and the method, which I summarise in chapter 9.

Therefore, in this chapter, I set the scene for chapters 6, 7 and 8, by discussing the topics shown in Figure 5-2, to explain how I approached my empirical research. First, I discuss the process of data collection through participant observation at CaseCo, including my use of covert research and the associated ethical considerations which are raised by such an approach. Then, I introduce my approach to the analytical stages of my project and preview the following three empirical chapters.

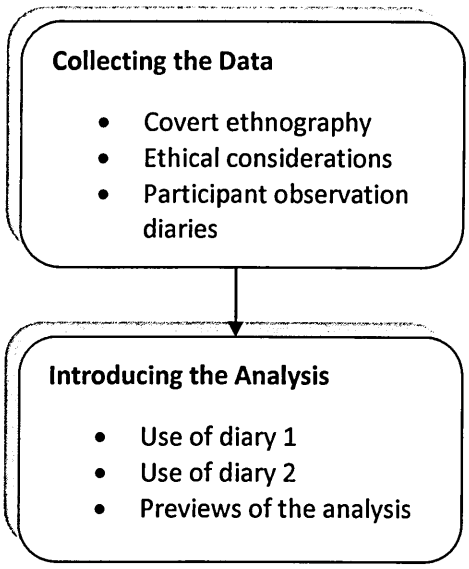

Figure 5-2: Structure and Content of Chapter 5

Collecting My Data through Participant Observation

The situation at CaseCo, as I described it in chapter 1, provided me with the opportunity to examine a situation of alternative organisational perspectives at first hand (Atkinson et al., 2001). Indeed, it was the impetus for my study. However, following my previous

research (Gill, 2007) and my experience of the recent insolvency of CaseCo, I had doubts over the future prosperity of the firm. Consequently, during the Christmas holidays of 2007[53] I reflected on my personal and professional circumstances. It seemed to me that, for my career prospects, I ought to move to a more secure working situation but I wanted to continue to work at CaseCo for sufficient time to complete my doctoral project[54]. I had already committed myself emotionally and intellectually to basing my work on the firm.

Having, at that time completed an initial review of narrative method, I felt sufficiently able to commence my data collection and, therefore, I began my period of participant observation on my return to work at CaseCo in January 2008. I chose to apply an ethnographic approach because my research interest so directly reflected my own experience that my day to day involvement at the firm would constitute relevant data. I would be able to reflect the feelings associated with being a participant (Hammersley and Atkinson, 1983; Davies, 1999; Gill and Johnson, 2002) and selectively collect data which I judged to suit the goal of my research (Mintzberg, 1970; Hammersley and Atkinson, 1983; Czarniawska, 2004; Chang, 2008). As discussed in chapter 4, ethnography is well suited to collecting narrative data (Hymes, 1996; Gubrium and Holstein, 1999; Iverson, 2009), it has been used successfully in similar studies (Swartzman, 1993; Gill and Johnson, 2002) and I had gained some experience of the approach during my previous study (Gill, 2007).

Consequently, I felt comfortable that I would be able to successfully complete the data gathering task and, I subsequently collected an autoethnographic account (Tedlock, 1991; Reed-Danahay, 1997; Goodall, 2004; Chang, 2008; Taber, 2010) of the actions and events I encountered as I conducted my role at the firm, which also included the points of view of others (Czarniawska, 1998). My goal for the data collection was to collect example minimal plots (Todorov, 1969; Czarniawska, 2004) or narrative clauses (Labov, 1972) temporally organised as a *fabula* (Propp, 1968), to build a narrative account of my experiences.

[53] CaseCo closed all its operations for the period between Christmas Eve and the 2nd of January.
[54] During the summer of 2008 CaseCo became insolvent for the second time during my employment and the firm was sold by the administrators. Although I continued to work with the new owners for several weeks, I left the firm at the end of September.

However, I was the only full time sales person at CaseCo during my period of data collection and I had already identified that the sales perspective was dominated by a production orientated culture (Gill, 2007). Consequently, there were 'gatekeeper' risks to making my research overt (Hammersley and Atkinson, 1983) so I decided to collect my data covertly[55]. The project might have otherwise been rejected out of hand by the directors as being inconsequential to my job function, or it may have been closely identified with the sales perspective itself. Therefore, even if informed consent were to be granted there would be a risk of reactivity (Hammersley and Atkinson, 1983; Johnson and Duberley, 2000) from my colleagues and potential for compromise during writing up. Blocking tactics might have been employed at either stage (Hammersley and Atkinson, 1983). After all, the topic of my research has a confrontational aspect to it.

Covert research enabled me to record the instances of conflict at the firm, confident that the knowledge of my project had not influenced the behaviour of my colleagues. Of course, as my discussion of narrative and ethnography in chapter 4 highlighted, my own influence on the data collection could not be avoided and I systematically reflect on this issue as part of my analysis in chapters 6, 7, and 8. Consequently, between 2 January 2008 and 11 March 2008 I collected details of the events and actions which seemed to reflect the instances where the sales and production activities at the firm conflicted.

The method I used to record the data varied depending on my circumstances. Sometimes I could sit in the open plan office which included all the office staff, except the accounts people, and write notes as the day's events occurred. At other times, when I felt my privacy might be compromised, I made short notes as *aide memoires* and wrote up more detailed notes soon afterwards. I took care to capture what I thought might be illuminating quotations verbatim (Hammersley and Atkinson, 1983; Porter, 1993).

When I found myself in circumstances where writing was impossible, for example, during meetings/informal conversations or when driving, I wrote up notes from memory as soon as the opportunity afforded itself. I followed the advice of Mintzberg (1970), Gill and Johnson (2002) and Emerson, Fretz and Shaw (2001) and used the diarying method of data recording. I typed up all the notes from each day's recording of events in the form of a diary usually during the evening of the same day.

[55] I discuss the ethical implications of covert data collection later in this chapter.

With hindsight the pragmatic approach to my data collection might better be described as a 'data grab'. Indeed, part way through the process, and on reflection of the quality of the data collected, I modified my approach in an effort to generate richer data. Although I had a record of the events with which the employees at the firm interacted, there was little in terms of the supporting rationale, attitudes, and beliefs which might hold the cultural content of the firm, in the form of people's evaluation of their circumstances (Labov, 1972; Thompson and Hunston, 2003).

My modified form of data collection took advantage of my immersion in CaseCo to record a thick description of my colleagues and customers interpretations (Johnson and Duberley, 2000). It involved recording the content of conversations rather than simply recording the conversation as an act or an event. To do this, I continued to record data as a passive observer but at other times I took advantage of natural conversations to provoke a discussion (Czarniawska, 2004) about the events which had occurred or the actions which had been taken. I used reactivity to prompt data (Gill and Johnson, 2002) by asking my colleagues questions as the opportunities to do so arose, or by simply making sales-orientated statements about the events which were occurring. This often resulted in a reply which offered an alternative perspective (Labov, 1972; Hammersley and Atkinson, 1983; Davies, 1999; Chang, 2008).

However, I made an effort to only react to situations rather than instigate them in order to avoid strong reactivity. At no time did I feel that I had engaged in a way which might not have happened during my normal work. At the end of my period of participant observation, due to my modified 'data grab', my data consisted of two participant observation diaries, diary 1 and diary 2.

Ethical Considerations

Although my decision to conduct covert research supports the ecological validity of my study (Gill and Johnson, 2002), particular ethical considerations are raised, because I have not gained the informed consent of my colleagues who were also working at CaseCo, or the customers which were involved in the firm's commercial interactions. Informed consent is seen as a pre-requisite for overt research (Davies, 1999; Atkinson et

al., 2001; Gill and Johnson, 2002; Chang, 2008) but ethnographers cannot genuinely ask for informed consent because the direction of an ethnographic study cannot be charted at the outset (Hammersley and Atkinson, 1983; Irvine, 1998; Davies, 1999) and, there may be difficulties in communicating informed consent due to differences in understanding (Davies, 1999). However, I have followed Irvine's (1998) advice and restricted my data gathering to only the circumstances which would have occurred as a matter of course. Thus, my behaviour remained overt; only the data recording was covert. Porter (1993) adopted similarly partially covert research in terms of the objectives of his workplace study which involved racial attitudes.

The more the researcher legitimately belongs to the context, in which the study is based, the less problematic are covert methods (Davies, 1999). However, in the recording and analysis of my data, I have applied pseudonyms and recognised other voices in place of informed consent (Chang, 2008; Murphy and Dingwall, 2001), to avoid any negative impact on the people involved. At no time do I suggest that anyone at CaseCo or the customer firms was acting with malicious intent. Indeed, overt research may risk greater negative impact on informants as they reflect on their own life through being a subject/informant (Davies, 1999). In contrast, the autoethnographic component of my project can be used with little social impact (Chang, 2008). Indeed, my recognition of narrative rationality and the linking of agency to narrativity acts to offset the responsibility for individual actions and attitudes somewhat. I am attributing them to the narrative accounts.

Bearing the ethical issues in mind, I have based my ethical stance on the avoidance of risk for those who appear in my data (Davies, 1999; Gill and Johnson, 2002), thereby protecting, in turn, the wider academic community (Miles and Huberman, 1994). Indeed, the deception of covert research can be seen as part and parcel of the impression management that is integral to social life so, as most ethical codes acknowledge, covert research is just one end of a spectrum of openness about research (Davies, 1999). However, ethical approval should be sought as usual (Chang, 2008) and my approach has been approved by the Sheffield Hallam University research ethics committee. See appendix 1 for a copy of the ethical approval form, relating to this project. To ensure the

anonymity of my colleagues at CaseCo[56], when they appear in the data I have referred to them only via an acronym of their job title, as summarised in Table 5-1.

Acronym in the Data	Job Title
MD	Managing Director
PD	Production Director
PM	Production Manager
CS	Company Secretary
CAM	Customer Account Manager
CAE	Customer Account Executive
E1	The first Estimator
E2	The second Estimator
Art worker	The one of three art workers who appears in the data

Table 5-1: Summary of Acronyms Based on Job Titles at CaseCo

I have similarly maintained the anonymity of the firms which appear as customers in the data. They are referred to by the first letters of their company names, as described in Table 5-2.

Acronym in the Data	Company Description
A___	A small newly formed firm manufacturing washing powers.
C___ F___	A large gift and greetings cards retailer (several hundred UK stores).
D___	A sportswear and equipment retailer with a small number of large scale stores in the UK.
F___ D___	A UK regional group of motor vehicle dealerships.
E___	An importer and distributer of power tools.
F___ M___	A timber merchant.
P___ H___ D___	A regional advertising agency.
P___ B___ C___	A regional budget book and gift retailer.
S___ F___	A UK furniture manufacturer.
T___ C___	A trade partner to CaseCo specialising in small format digital printing.

Table 5-2: Summary of Acronyms Based on the Company Names of Customers

My Approach to Analysis

Due to the adjustments I made during my data collection activities, to collect richer evaluative data, on the completion of my period of ethnographic participant observation

[56] I introduced the people who work at CaseCo, and the nature of my interactions with them, in chapter 1.

I had data recorded in two diaries. Therefore, in this section, I first outline the nature of each diary before explaining how I developed my analysis. A detailed description of the data in each diary and the details of my emergent analytical approach are provided alongside the presentation of my analysis in chapters 6, 7 and 8. Throughout the remainder of my thesis I refer to the two diaries by way of their chronological ordering, i.e. diary 1 and diary 2.

Diary 1 begins on Wednesday 2 January and includes entries up to Friday 18 January. There are approximately 10,500 words of data in total arranged in paragraphs which relate to temporally ordered actions and events which occurred at CaseCo. There are 176 such paragraphs each one including at least one narrative clause. However, in some cases the paragraphs involve extended sets of clauses amounting to upwards of ten lines of text. The recorded actions and events relate to CaseCo's interactions with ten customer organisations[57]. The diary 1 data can be found in appendix 2.

Diary 2 begins on Monday 28 January and includes entries up to Tuesday 11 March. There are approximately 14,500 words of data arranged in paragraphs which recount discussions between various combinations of my colleagues and me. There are 203 such paragraphs which usually extend to several lines of text. In contrast to my first diary, due to my change in emphasis during my data collection period, the data in diary 2 records people's points of view about the actions and events in which CaseCo is involved. The diary 2 data can be found in appendix 3.

With my diaries safely transcribed, I began to review my data whilst continuing to develop my knowledge of narrative theory, beyond that which I had used to direct my data collection. To help build my understanding and manage the data, I used the NVivo, version 8, software package throughout my analysis. However, to complete a structural stage of my analysis, I found the review function of Word more useful. The coding stripe function of NVivo proved to be awkward to use, due to its inaccuracy in highlighting specific text and I have avoided letting the software direct my analysis (Bazeley, 2007), by maintaining the primacy of my use of analytical tools to answer my research questions.

[57] On reflection, during my analysis, it occurred to me that, based on Ricoeur's (1973) view that social life can be considered a text, I had captured a series of utterances of life at CaseCo and recorded them as a text.

However, during my analysis, I used the coding to nodes, annotation, memo and modelling functions of NVivo to help explore how I might apply the narrative theory I have discussed in chapter 4. My aim was to concoct my own methodological device (Czarniawska, 1998) by making a selective use of narratological tools (Bal, 1997) in a manner which would facilitate answering my research questions. The detail of my analytical approach, including coding and specific instances where the use of tools such as memos or models helped to support my work is included in chapters 6, 7 and 8. Indeed, at times I also include 'formative discussion' sections to help explain how I used each partial analysis and description of the data as the basis for further analysis (Bal, 1997).

Following a period of reviewing my data in light of the narrative theory, I decided to follow the advice of Ricoeur, (1973) and Larty and Hamilton, (2011) by dividing my analysis into two parts. A first structuralist stage based on the form of the action/events at CaseCo would enable a second deep evaluative stage, based on an assessment of people's points of view about the action/events they experienced. After all, a structuralist approach can ease the initial analysis of narrative data (Landau, 1984; Larty and Hamilton, 2011) through the identification of minimal plots (Czarniawska, 2004). The nature of my two diaries meant that diary 1 was suitable for the first structuralist analysis and diary 2 was suitable for the second evaluative analysis. Consequently, I present my analysis in three chapters, as shown in Figure 5-3.

I use the analysis of diary 1 to facilitate the intermediate aim of writing an account of the cultural strategies at CaseCo, which I identified as necessary during my discussion of the written accounts of schemata in chapter 3. To do so, I analyse the data based on its structural units in chapter 6. In chapter 7, I use the patterns of the structural units I have identified to construct both an account of the strategy of the sales perspective and the strategy of the production perspective of life at CaseCo. I then analyse the evaluative data of diary 2 to search for units of the strategies which might be considered to be replicating, thereby addressing my first two research questions.

1. **Can the organisational culture at CaseCo be divided into units?**
2. **If so, can such units be seen to selfishly replicate?**

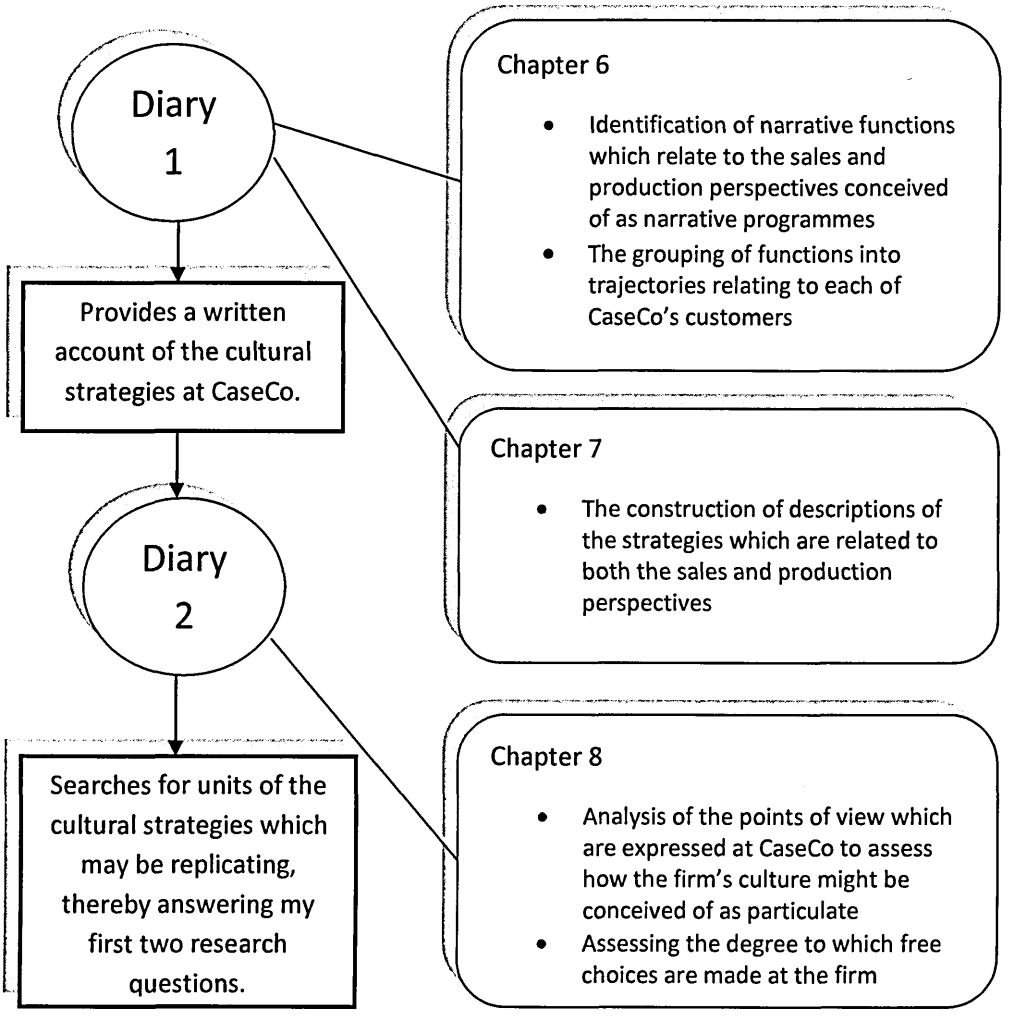

Figure 5-3: The Format of My Empirical Analysis

Previews of My Empirical Chapters

In chapter 6, I begin my analysis of the diary 1 data by reviewing its narrative quality and find that my diary can be described by Labov's (1972) narrative syntax, although much of the data constitutes narrative clauses (Todorov, 1969; Labov, 1972) and, therefore, minimal plots/narratives (Labov, 1972; Czarniawska, 2004). By reflecting on the data as my narration of life at CaseCo I recognise that, through my participant observation, it is focalised from my perspective as a sales orientated actor. I subsequently recognise the levels associated with my narration (Cobley, 2001) and the manner in which I have re-presented others through Bal's (1997) levels of mimesis. Consequently, I apply Latour's (1991) notion of alternative narrative programmes to the

sales and production perspectives which are re-presented in the data and the approach enables me to identify the role of non-human actors at CaseCo. I go on to attribute a range of narrative functions (Propp, 1968) to the action/events attributable to each perspective and summarise them as narrative trajectories (Czarniawska, 2004), linked to each of CaseCo's customers.

In chapter 7, I synthesise the temporally organised narrative functions identified in chapter 6 with Levi-Strauss's (1955) notion of oppositions, to distribute the functions between the opposing sales and production perspectives. By overtly adopting the role of an observing CAS (Gell-Mann, 1995), I review each of the narrative trajectories synchronically and diachronically to construct a written account of the strategy of the sales perspective at CaseCo and the strategy of the production perspective at CaseCo. The result is two alternative syntagmatic chains (Latour, 1991) within each narrative trajectory and each chain looks to embed the non-human actors at CaseCo into its own strategy.

In chapter 8, following a review of the diary's narrative quality (Labov, 1972; Bal, 1997; Cobley, 2001; Thompson and Hunston, 2003), I analyse the evaluative data of diary 2 to directly address my first two research questions. To do so, I analyse the points of view of both sales and production as opposing perspectives (Levi-Strauss, 1955), noting the part played by the non-human actors (Propp, 1968; Latour, 1991) which I identified in chapters 6 and 7. I address the issue of replication and human agency by investigating the narrative rationality (Fisher, 1984) at CaseCo, through the analysis of instances where actors support their explanations through putative cause/effect links and apparent facts (Propp, 1968; Labov, 1972; Cobley, 2001; Dennett, 2003; Czarniawska, 2004; Abell, 2004). The analysis enables me to provide a model of the narrative rationality at CaseCo.

My analysis indicates that the non-human actor 'proof' plays an important part in the competition between the sales and production perspectives at CaseCo and I make an assessment of the meaning attributed to proofs by adopting each perspective, by way of an adaptation of Thompson and Hunston's (2003) noun group method. The result is the identification of an important unit of culture at CaseCo which can be construed as replicating by way of the narrative rationality at the firm. I conclude by presenting the

putative meme 'proof', as one might model Mendelian genetic heredity, in a punnett square (Guttman et al., 2002).

Presenting the Data

I have used excerpts taken from the data of each diary to illustrate my analysis and to reference the data that I have quoted I have used the NVivo paragraph numbering function. However, the software assigns a number to each carriage return in the data so blank lines have a paragraph number assigned. Consequently, what are actually consecutive paragraphs can appear to miss a section of data, as shown in Figure 5-4. Where this effect appears when I report my empirical analysis, the reader can assume that passages of data which appear to miss a paragraph are, in fact, consecutive unless I state otherwise.

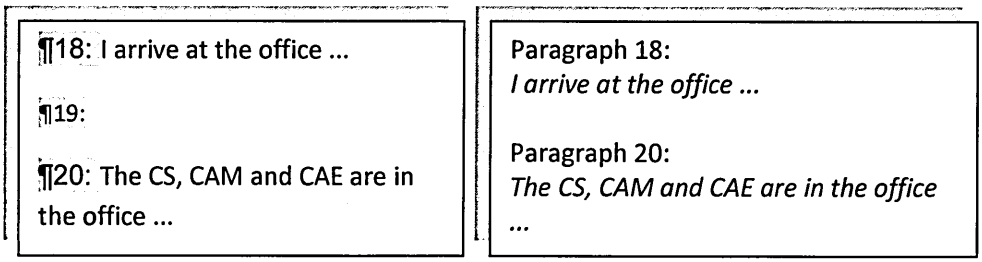

Figure 5-4: My Presentation of the Data

The Logic of my Choice and Use of Narrative Theory

During my review of narrative theory in chapter 4 I noted that, in acknowledging the diversity of narrative theory, Czarniawska (1998) suggests that the work of others should be used by each researcher as a source of inspiration from which they can devise or 'concoct' their own approaches to fieldwork. However, instead of simply demonstrating that narrative methodology can be applied, the tools of narratology should be used to move beyond the identification of narrativity. Rather, they should enable the writing of a meaningful description for others (Bal, 1997).

Consequently, once a text is identified as a narrative text, the methods of narratology should be considered to be a toolbox and the researcher should feel at liberty to choose the analytical tools which best suit the purpose of the study at hand (Bal, 1997).

However, Larty and Hamilton (2011) note that the wide ranging uses of narrative theory which appear in the literature can make the adoption of the narrative perspective daunting for the new researcher. They point to thirty three approaches, based on a range of narrative perspectives, which have been published in the field of entrepreneurship research alone since the year 2000 and suggest that new researchers might begin their analyses with an initial review of narrative structure to help them orientate their work. Similarly, Czarniawska (2004) suggests that the identification of minimal plots can prove to be a useful way to begin a narrative analysis.

Therefore, I have followed the advice of Larty and Hamilton (2011) and Czarniawska (2004) by first reviewing my diaries for their narrativity before moving on to identify minimal narrative units (Todorov, 1969; Labov, 1972), a process which then enabled further adoption of elements taken from the narrative tool box (Bal, 1997). Bearing in mind the wide ranging uses of narrative theory in recent organisational theorising I have returned to the original sources which are indicated as pivotal to much narrative thought by contemporary scholars such as Bal (1997), Czarniawska (1998; 2004) and Cobley (2001), in the same manner one might return to the work of Barney Glazer and Anselm Strauss when adopting grounded theory. Consequently, I have developed my analysis based on the theories of Propp (1968), Levi-Strauss (1955), Labov (1972), Todorov (1969), Barthe (1985) and Latour (1991), each of which I reviewed in chapter 4.

There is a tendency for the theories of narrative described in the original works mentioned above to be explicated alongside the analysis which led to their development. I have found this form of presentation useful in coming to my own understanding of the theories in question and this has influenced my decision to describe the detail of my analytical approach alongside my data analysis in the coming chapters. I hope that it will be similarly useful to others. However, here I summarise the logic of my analysis and use of narrative tools to help orientate the discussion for the reader. In general terms, once I had begun my analysis through the identification of minimal narrative units, further narrative theory was implied by each antecedent stage leading to a number of iterations of analysis. I link each stage of analysis with formative discussion in chapters 6, 7 and 8 as well as summarising them here.

I have described my approach to analysing my two diaries above and summarised the structure of the analysis in Figure 5-3. I begin the analysis of diary 1 by reviewing its

narrativity and finding that the data can be described via Labov's (1972) narrative syntax model, in particular the complicating factors associated with narrative clauses and minimal plots (Todorov, 1969; Labov, 1972; Czarniawksa, 2004) which can be summarised as the action/event dualism (Czarniawska, 2004). Czarniawska (2004) points to the work of Latour (1991) as helpful in analysing how narrative accounts might compete and I have been able to synthesise the concept of Latour's (1991) narrative programmes with that of the minimal plot (Czarniawska, 2004) to concoct a starting coding system with which to make an initial analysis of the diary 1 data.

I have subsequently, attributed action/events in the data to either a narrative programme which supports the sales perspective of life at CaseCo or a narrative anti-programme which acts against the narrative programme. I identified the focalisation of my data (Bal, 1997) as that related to the sales perspective and this insight helped me to adopt the reflexivity required through my adoption of a realist philosophical standpoint. I introduced this approach to my analysis to help raise the instances of competition which are necessary when constructing optimon units.

Throughout my review of this first coding exercise it became apparent to me that some of the actions/events seemed to 'function' in ways which facilitated or implied further action/events. Consequently, I returned to the narrative tool box to draw on the theories relating to narrative functions, i.e. the theories of Propp (1968), Levi-Strauss (1955) and Barthe (1985). Subsequently, the next stage of my analysis enabled me to classify portions of the data as cardinal and catalyses functions (Barthe, 1985). By synthesising the theory with my data I was able to map a range of narrative trajectories (Czarniawska, 2004) related to each of CaseCo's customers and plot both their synchronic distribution over time (Propp, 1968) and their diachronic distribution between the sales and production perspectives (Levi-Strauss, 1955).

At this stage of the analysis I synthesised the notion of narrative trajectories with that of mutual data (Gell-Mann, 1995) and adopted the role of an observing CAS to review each trajectory in turn. This part of the analysis enabled me to construct, and write, cultural strategies for both the sales and the production perspectives at CaseCo, the preliminary task I have identified during my discussion in chapter 3 which is required to enable the search for option units. Acting in this manner is facilitated by the adoption of a subjectivist epistemology which acknowledges my part in constructing the analysis.

I then turned to the more evaluative data of dairy 2 to analyse the manner in which optimon units of culture might be identified. To do so I first reviewed the data as I had done so for diary 1 and found that once again the data could be classified in the terms suggested by Labov's (1972) narrative syntax. However, the evaluative component of narrative syntax constituted the bulk of diary 2. Consequently, I turned to the methods of assessment of evaluation provided by Labov (1972) and the more contemporary development provided by Thompson and Hunston (2003). By coding and analysing how the people at CaseCo describe causality and facts I constructed a model of the narrative rationality (Fisher, 1984, Abell, 2004) at the firm.

Thompson and Hunston's (2003) suggestion of forming a 'noun group', which I reviewed in chapter 4, proved to be useful in evaluating how cultural phenomena, represented by language, might be bounded as units. However, I have adapted the noun group model to suit my data which is largely indirect speech and free indirect discourse rather than the direct speech indicated by Thompson and Hunston (2003). Linking putative cultural units described in this way to the strategies of sales and production I had already described enabled me to conceive of them as competing unitary components of each strategy. Therefore, my work achieves the goal of moving beyond the identification of narrativity to provide a meaningful description (Bal, 1997).

Alternatives to a Narrative Approach

I have arrived at my choice of a narrative basis for my extra-memetic method largely through the process of abduction I have described in chapters 2 and 3, where 'abduction' is the identification of a best solution, based on the available evidence and the insights I have generated (Czarniawska, 1998; Blackburn, 2008). However, there are other approaches to social science method, some of which are implied or adopted in the memetic literature and a number of which I practised prior to my doctoral project, as part of my study towards the Sheffield Hallam University, MA in Social Research Methods. In this section I note my reasons for nevertheless maintaining my choice of narrative.

In chapter 1 I have noted that much of the broader based organisational evolutionary theory addresses the same topics as discourse theory, so some kind of discourse analysis

could have been adopted. However, discourse theory might, from the outset, threaten the assumption of an objectivist ontology due to the concept that discourses organise the otherwise free play of arbitrary signifiers (Johnson and Duberley, 2000; Mills, 2004). It is the realist assumptions of evolutionary orientated management scholars such as Aldrich (1979) and Hull (1988), and their appeal to universal Darwinism which sets the theories of organisational evolution apart from much social science theory in the first place. As I have illustrated above narrative, whilst associated with the concept discourse, perhaps more easily provides a standpoint from which to evaluate memetics through its appeal to an objectivist ontology. After all, my study aims to evaluate memetics rather than find an alternative to memetics with which to study CaseCo.

Grounded theory offers an alternative qualitative methodology which is not so closely associated with the problem of relativism. However, having adopted grounded theory for the analysis of interview data during my study towards the MA Social Science Research Methods, which pre-empted my doctoral study, I had become uncomfortable with the approach. In particular whilst 'micro analysing' interviewees' text to attribute meaning, I had become concerned about the possibility of naively introducing the assumption of a theory neutral observation language which is not compatible with the realist assumptions I have listed in Table 4-6, in particular point 2. In contrast, narrative theory, in particular the recognition of narrative levels (Cobley, 2001) and levels of mimesis (Bal, 1997), provides the opportunity to overtly recognise the researcher's part in the recording and analysis of textual data, as I have described in chapter 4.

There are a number of indications for how a memetic methodology might be designed throughout my review of the memetics literature. Deacon (2004), Price (2012) and Distin (2005) raise a debate over the role of words in meme theory, and Aunger (2002) and Blackmore (1999) suggest that signals or behaviours might act as some kind of sign for a cultural unit. Such conceptualisations point to semiotics as a possible avenue for research. However, an analysis of the signs which are important at CaseCo could lead to the problems I have associated with Deacon's (2004) theory. The sign could be taken to be directly representative of a particulate unit of culture. Therefore, such a view risks collapsing any putative replicator/phenotype distinction into one entity and consequently, it does not afford the opportunity of developing the optimon concept of units which resolve underlying pleiotropic complexity.

Indeed, during the early stages of reviewing my data, before the problems of meme definition had become fully apparent to me, I attempted to identify portions of the text of my diaries, which might constitute a unit of the culture at CaseCo, in a manner similar to that proposed by Shepherd and McKelvey (2009). However, this approach faltered as the number of putative units grew and mutated without any underlying rationale for the way in which I identified any particular portion of text. The narrative perspective, on the other hand, has emerged as an approach which can avoid the collapsing of the replicator/phenotype pitfall through the conceptual links to complexity which I have described in chapter 3.

Some scholars, who have contributed to the debates surrounding memetics, have adopted quantitative methods, notably by way of cluster analysis (Lord and Price, 2001; Best, 1997) or game theoretic modelling (Gatherer, 2004; 2006; 2007; Conley Toossi and Wooders, 2006). However, as I have noted during my discussion of the memetics literature in chapter 2, each approach introduces problems for the validity of the findings because assumptions must be made regarding either the micro or macro (or both) nature of putative evolutionary processes in culture. The weaknesses of quantitative approaches are highlighted by Aunger (2002) who points to the difficulties encountered when attempting to identify what ought to be counted to provide quantitative data. Indeed, I have summarised my own critique of such measures of meme frequency in Table 2-3. Consequently, I have favoured a qualitative approach through which the nature of particulateness and replication in culture can be evaluated. In summary, although the methods indicated in the memetics literature can point to memetic methods, I do not feel they can facilitate an extra-memetic method in the same manner I have demonstrated for narrative via complexity theory, in chapter 3.

Chapter Conclusions

In this chapter, I have described the approach I have taken to conduct the empirical stages of my project and introduced the three chapters of my thesis which describe my analysis. Each empirical chapter includes a discussion of the analysis and the development of my extra-memetic methodology, beginning in the next chapter where I identify structural units in the diary 1 data.

Chapter 6 – The Structural Elements of the Diary 1 Data

In this chapter, I present the first stage of my analysis of my diary 1 data. The analysis is based around the identification of structural narrative units, as shown in Figure 6-1.

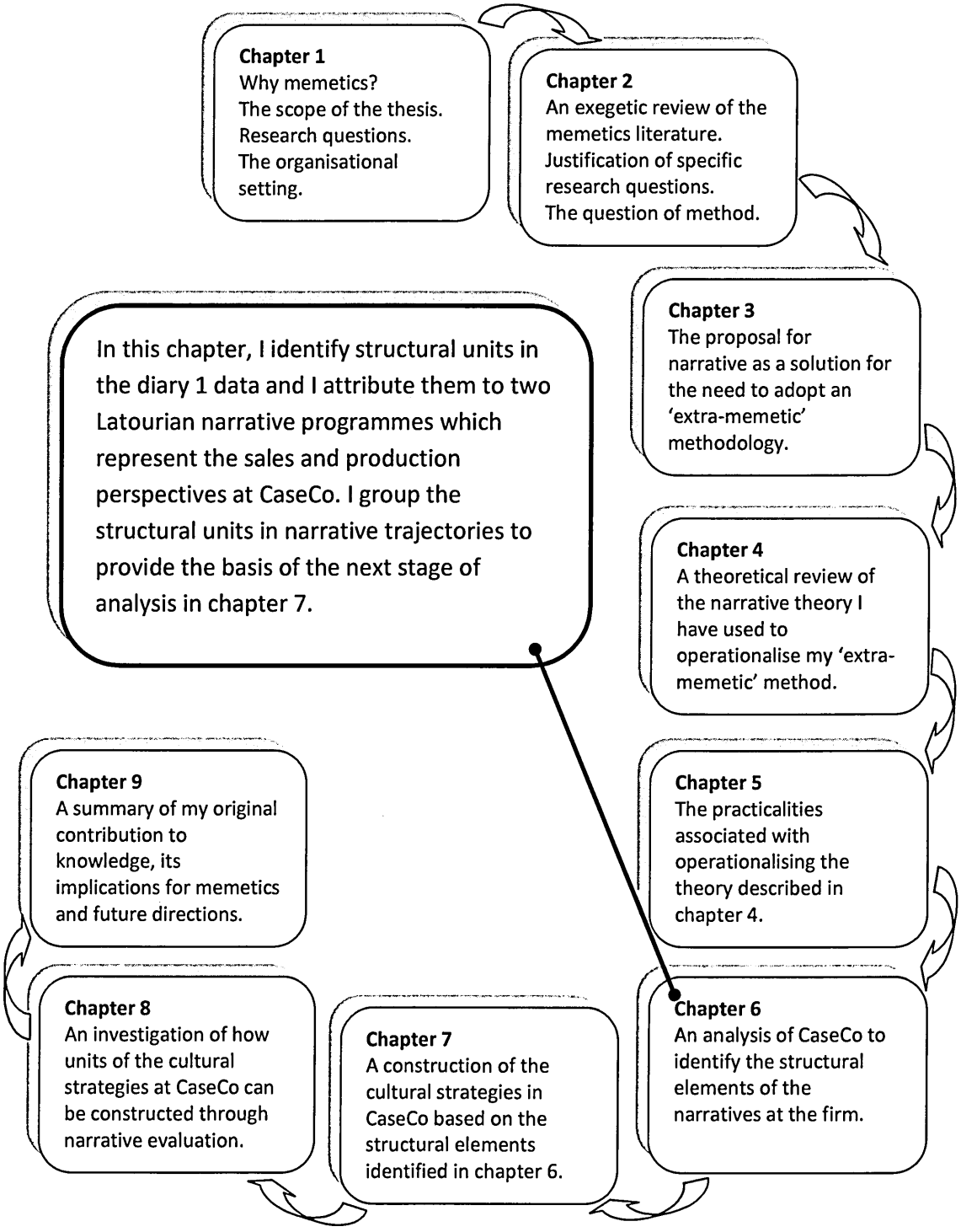

Figure 6-1: Thesis Structure Showing the Role of Chapter 6

Addressing the Diary 1 Data

The analysis of diary 1 aims to address the preliminary goal which I have identified as a precursor for addressing my research questions, the need to construct a written account of the cultural strategies at CaseCo. I present the analysis as an unfolding process of my interactions with the data using a range of the structural analytical tools I reviewed in chapter 4. The structure of the chapter, as shown in Figure 6-2, includes my initial review of the narrativity of diary 1, my approach to developing a coding format, based on structural units and narrative programmes, and then a review of the findings which I have illustrated with examples from the data[58].

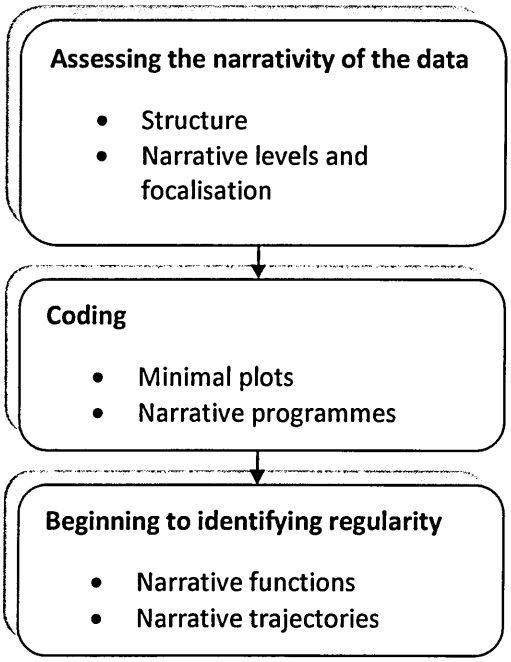

Figure 6-2: Structure and Content of Chapter 6

During my presentation of my analysis, I link the sections of the chapter with formative discussions. I close the chapter by sorting the structural units I have identified[59] into narrative trajectories, which I use to continue the analysis in chapter 7, where I construct accounts of the cultural strategies at CaseCo.

[58] The examples of the data I have included to illustrate the analysis are presented with the paragraph numbers assigned by NVivo in the manner I described in chapter 5.

[59] I choose to say that I 'identify' rather than 'discover' or 'construct' my structural units to avoid a commitment to their ontological status at this stage of the thesis. I discuss the philosophical basis to my conclusions in chapter 9.

Assessing the Narrativity of the Diary 1 Data

Bearing in mind the opportunistic data collection process, which I had undertaken at a relatively early stage of this project, I decided to pre-empt my analysis proper by systematically assessing the suitability of diary 1 for the application of narrative method. I had collected the data with a narrative approach in mind, chronicling the events and actions I had witnessed and experienced during my period of participant observation at CaseCo. However, I felt it prudent to confirm that I had collected data with sufficient narrative quality with which to make a narrative analysis that might facilitate an account of the cultural strategy or strategies at the firm.

To assess the narrativity of the data, I reread diary 1 a number of times, whilst bearing in mind the concepts of narratology. Using NVivo, I annotated the data where I noticed connections between the action/events at CaseCo and the methodological literature. I recorded ideas in an NVivo memo to support my reflections. I present my pre-emptive analysis of narrative quality in this section, to help support the following analysis which is directed towards writing an account of the cultural strategies at CaseCo.

Evidence of Narrative Structure

By revisiting the data with narrative method in mind, it became clear to me that there are characteristics of narrative structure throughout diary 1. Of course, some narrative elements ought to be expected due to the nature of my data collection because, after all, I set out to collect events and actions. However, I found the degree of narrativity to be more extensive than might be expected in a simple chronicle (Czarniawska, 2004). I begin the diary, for example, with a passage recorded in paragraphs 16 to 22 which can be characterised as two elements of Labov's (1972) basic narrative syntax model, those of 'abstract' and 'orientation'.

> Paragraphs 16 to 22:
> *My day – Working from the office, store visits.* **(Abstract)**
> *I arrive at the office at 8am and spend the day getting back up to speed with orders etc after the Christmas break.* **(Abstract/Orientation)**
> *The CS, CAM and CAE are in the office as well. The MD and E1 are still on holiday and the PM is working a late shift.* **(Orientation)**
> *There's general post Christmas chat and good natured banter in the office.* **(Orientation)**

This passage of data shows that when recording my diary on the first day back at work following the firm's closure during the Christmas and New Year period, I set the timing, tone and location for the forthcoming events before going on to introduce some of the people who take part in them. In fact, I continue the 'my day' introductions for each date on which diary data was recorded, thereby maintaining an on-going abstract and orientation component to the data.

Similarly, despite my concerns during my early data collection that, I might have a lack of richness in the data with which to access the meanings attributed to the actions and events I had collected, on review, I had recorded instances of 'evaluation' (Labov, 1972). In paragraph 61, for example, I include an evaluative passage about my realisation that I had been unaware of some interactions between my colleagues and a customer for whom I was responsible, in terms of their customer service[60].

> Paragraph 61:
> *I had no idea this had been suggested and ask the CAE to ask the supplier to 'hang fire' until I can check the store and speak to the customer for two reasons, 1 to ask permission for photography knowing something about the project and 2 to try and sell the project as well. I feel like I have been by-passed. I go to check the store this afternoon to check the store set up and also check some print that a competitor recently supplied.*

In this example, I evaluate the actions of my colleagues and my own reaction to the circumstances. By recording that I feel 'by-passed', I have included a value laden opinion, so it appears that, as might be expected in an autoethnographic account (Chang, 2008; Taber, 2010), the data has been recorded with my perspective embedded within it. My autoethnographic immersion in CaseCo has enabled me to *feel* the impact of the events in question, from the perspective of a sales orientated actor (Hammersley and Atkinson, 1983; Davies, 1999; Gill and Johnson, 2002) and this is reflected in the data via the evaluative statements. It seems that I have naturally narrated my data as a product of my own narrative rationality (Fisher, 1984).

In addition to the broader range of structural elements indicative of Labov's (1972) basic narrative syntax, the majority of diary 1 constitutes an extended set of the complicating factors component, or minimal plots (Todorov, 1969; Czarniawska, 2004), by way of the temporally recorded succession of action/events involving the people

[60] The sales value received from customers for whom I held responsibility were used to calculate my bonus payments and such payments could constitute a significant proportion of my income.

working at the firm. Therefore, when each is considered together with its antecedent or subsequent clause, the data can be considered as a sequence of minimal narratives (Labov, 1967).

Such a conceptualisation suggests that the emplotment of the actors at the firm should be distributed across the minimal narratives as minimal schemata, where the equilibrium at the firm might be said to move from one state of imbalance to another by way of each action/event (Todorov, 1969). Consequently, where each minimal plot is taken to 'lead' to the next, there is an opportunity for the actors to ascribe the putative causality of a minimal narrative (Labov, 1972), indicative of Fisher's (1984) narrative rationality. Therefore, there is support for the notion that, not only have I recorded my own narrative rationality by way of evaluation, but also that of the other actors.

Paragraph 24, for example, illustrates how the events and actions at the firm are recorded by combinations of nouns and verbs in the data to form two narrative clauses, indicative of minimal plots, which then form a minimal narrative (Todorov, 1969; Labov, 1972). Where the action of the CS is experienced as an event by the CAE it leads to an action on her part.

> Paragraph 24:
> *The CS asks the CAE to process some paper work so a van can be despatched.*
>
> Paragraph 24:
> *The CAE insists on having a cigarette first despite being asked a number of times to do the job before taking a break.*

In an organisational setting characterised by the rationality of team working and common goals, one might expect a request, such as that made by the CS, in paragraph 24, to be followed by an act to fulfil it by the CAE. However, because of the CAE's failure to comply with the request of the CS, this minimal narrative suggests an alternative rationality more typical of the conflict I have set out to investigate in this project, following my earlier research at the firm (Gill, 2007), as discussed in chapter 1.

Formative Discussion

My identification of basic narrative syntax, narrative clauses/minimal plots and minimal narratives (Todorov, 1969; Labov, 1972; Czarniawska, 2004) in my data provided me

with the confidence to further develop my narrative analysis of diary 1. However, my recognition that I have included evaluative aspects which colour the data, due to my ethnographic involvement, highlights that the data is focalised (Bal, 1997) from my perspective. Therefore, I have not neutrally recorded the events and actions at CaseCo in the way Dennett (1991) suggests via heterophenomenology. Rather, through the mimesis of life at CaseCo, in data such as paragraph 24, I have recorded a narrative re-presentation to suit the objectives of the study, one of perhaps many potential alternative re-presentations (Cobley, 2001; Czarniawska, 2004).

Bal (1997) identifies the form of narration as important in the meaning which might be embedded in a narrative and subsequently identified through analysis. Therefore, my initial review of the data has highlighted that it is incumbent on me to acknowledge how the data presents my perspective, thereby helping me to heed the call for a reflexive approach in research with an autoethnographic component (Tedlock, 1991; Taber, 2010). Consequently, in the next stage of my analysis I investigated how I have re-presented CaseCo in the data.

My Re-Presentation of CaseCo

By reflecting on my re-presentation of CaseCo, I have been able to identify evidence for all four forms of mimesis (Bal, 1997), which I discussed in chapter 4, in my data. Paragraphs 27, 38 and 33 provide illustrative examples.

> Paragraph 27:
> *"Why are you cluttering my desk with jobs?"* – CAE **(Direct Speech)**
>
> Paragraph 38:
> *The CAM says she doesn't understand and then says do you mean Yell rather than Yeller before doing the task.* **(Indirect Speech)**
>
> Paragraph 33:
> *I tell the CAE and CS that a delivery we pushed to make to E___ before the Christmas break was appreciated by the customer because they could use the brochures while we were shut. The CAM and CS acknowledge this as a good thing; the CS seems more personally pleased.* **(A combination of narration of an act and free indirect discourse)**

In paragraph 27, direct speech is recognisable through my recording of a quotation and, in paragraph 38, indirect speech is recognisable through my use of a declarative verb (Bal, 1997), in this case 'says', followed by a re-presentation of the actual words said by

the CAM. In both instances, therefore, the contributions of the CAE and the CAM are represented at a secondary level in the text by my narration at the primary level, but their own words and actions are closely re-presented.

The text in paragraph 33 is more complicated. In the first sentence, at the primary level of the text, I narrate myself through indirect discourse as an actor at the second level. At the second level, I narrate the actions of the customer E___ by summarising what an employee at that firm has said to me. The re-presentation of the customer could be free indirect discourse or narration of an act because of the inherent relativity of these two kinds of mimesis (Bal, 1997), the distinction being whether or not I have faithfully re-presented the customer's own perspective, as they may have expressed it. Similarly, the first clause of the second sentence highlights the same difficulty because it is difficult to determine how I have used the verb 'acknowledge' *post hoc* from the text alone. Making an assessment in each of these cases, therefore, depends on the credibility of the ecological validity I can provide by way of my ethnographic immersion in CaseCo and the process of my data collection.

During my participant observation, my aim was to collect the perspectives of the other actors involved in life at CaseCo. However, although I have been able to capture the naturally occurring actions and events at the firm, the covert nature of my study meant that it was difficult to record direct speech. By writing up my diaries from brief notes following periods of participant observation, I tended towards recording the perspective of others through free indirect discourse. Therefore, instances in the data which are difficult to categorise as either free indirect discourse or narration of an act, such as those I have highlighted in paragraph 33, are more likely to be free indirect discourse.

The one instance in paragraph 33 which is clearly narration of an act is the final clause. Through my use of the word 'seems' I am re-presenting the actions and words of the CS through my own evaluation. This final clause and my choice of words, such as 'acknowledge' in free indirect discourse, indicate how the focalisation of the narrator more definitively colours the text, the more indirect is the re-presentation of the actors. Indeed, my appearance as an actor in the text, alongside my re-representation of others, means there is the possibility of text interference (Bal, 1997) during my analysis, if the analysis remains naively at the level of Cobley's (2001) uncritical narratee. Therefore, the purpose of this part of my analysis was not to simply categorise each part of the data

but to recognise its nature.

Following my review of my mimesis of the data, it occurred to me that at no time do I record my own contribution as an actor in direct speech. Yet, each example of direct speech that I have recorded illustrates an issue pertinent to my role at the firm. Subsequently, although there are instances of neutral or illustrative quotations to add weight to a point, on a number of occasions I have used direct speech to demonstrate comments which are negative or confrontational, when considered from my own perspective of a sales/marketing person. The following extracts from the data illustrate how I have used direct speech to record an interaction between the CS and the CAE:

> Paragraphs 26 and 27:
> *The CAE returns to her desk and addresses the CS*
> *"Why are you cluttering my desk with jobs" – CAE*
>
> Paragraphs 29 to 31:
> *And a little later the CS asks again for the delivery paperwork*
> *The CAE answers "I'm waiting for you" – CAE*
> *So the CS goes over to her desk.*
>
> Paragraphs 35 and 36:
> *The CS makes the point to the CAE again that we need to get work through the office so orders can be progressed.*
> *The CAE replies "It's you that's sat pissing around" – CAE to the CS*

Through my mimesis in these passages, I associate the CAE with the responsibility for subverting the smooth processing of customer requests in two ways. First, I locate the pro-customer actions of the CS with my primary level of narrative by re-presenting them as free indirect discourse or an act. Secondly, I locate the actions of the CAE, which are negative to customers, at the secondary level of the text through examples of direct speech. Therefore, the text helps to characterise the request of the CS as normal because it forms part of my narration, whereas the comments of the CAE are characterised as a challenge to the norm. By choosing to indicate a secondary level of the text by re-presenting direct speech in this way, I put the responsibility for its content and tone onto the actor who has uttered the comments (Bal, 1997) so I have used the levels of narration to distance myself from alternative views to my own.

However, later I choose to re-present the CS through direct speech when it adds weight to my narration of the actions of the CAM.

> Paragraph 277:
> *During this time the CAM is harrying the CS. I hear him say "I'm trying to juggle hot coals here."*

Here, the choice of the word 'harrying' to re-present the actions of the CAM as an act is mine. I could have used an alternative such as urging or encouraging which has less of a pejorative dimension, so this is an instance of my use of language colouring the text with my evaluative stance (Labov, 1972; Thompson and Hunston, 2003). The direct speech I have re-presented is potent due to its inclusion of colourful rhetoric which emphasises the dilemma of the CS, who is trying to complete work which will lead to the completion of a customer request.

Formative Discussion

My analysis of my own use of structure for re-presenting CaseCo has emphasised how the text is coloured with my perspective. It is focalised from my viewpoint (Genette, 1980; Bal, 1997). The impact can be noted in:

- The selection of which events and actions have been recorded
- The selective use of direct speech to support my perspective
- Text interference between my role as narrator and as an actor embedded in my re-presentation of the firm

Recognising my role in the construction of the data reinforces the need for me to be reflexive throughout the developing analysis. After all, I have narrated an account of CaseCo and I am also systematically reading that account by way of my analysis. It would be easy to naively report my own viewpoint if I conduct the analysis only at the level of the narratee. Consequently, to help make my role as both narrator and narratee overt, I have considered the impact of Cobley's (2001) narrative levels, as shown in Table 6-1 and Table 6-2.

Narrative Levels and Focalisation

Table 6-1 shows how, through Cobley's (2001) author levels, my status as the real person who authored the data becomes limited in the actual transcript available for analysis. Firstly, through the set of ideas and priorities related to my role at CaseCo and career background which constitute my implied authorship. The implied author is the

organising principle through which I have narrated the data, rather than me as a person. Secondly, the particular account of actions and events re-presented in the data is a selective account of the story of CaseCo. By reflecting on this conceptualisation, it is apparent to me that I have constructed a dataset to illustrate the difficulties of a sales/marketing orientated person working in a firm, which they take to be production orientated. A particular re-presentation of certain circumstances has been recorded for analysis.

Level	Role
Real Author	Me as an employee at CaseCo but also with other interests, priorities, etc. including collecting data for my research degree
Implied author	Me as a sales/marketing person primarily interested in achieving sales targets for my own security/success at CaseCo
Narrator	My voice as it appears as both narrator and actor in the text

Table 6-1: Levels of Authorship in My Diary 1 Data

Conversely, my role as analyst can be described by way of Cobley's (2001) reader levels which reciprocate those of the author, as a narrative is read. Table 6-2 shows how, by overtly adopting the 'real reader' role of an analyst, a systematic use of narrative method can enable the construction of an organising principle for analysing the narrative account in my diaries: the implied reader. A systematic approach to my analysis will, in turn, support me as a reflexive narratee. Consequently, I can respond to Bal's (1997) call for researchers to convince the reader of their thesis through a systematic account.

Level	Role
Real reader	Me as the analyst looking to describe my research to a third party reader who will need to be convinced of the validity of my qualitative account
Implied reader	The systematic approach I adopt to understand my data via selective narratological tools
Narratee	My engagement with the text of my data and the need to avoid Cobley's (2001) characterisation of an uncritical reading because this would result in me naively reporting the focalisation in the data as my findings

Table 6-2: Levels of Readership to be acknowledged in My Analysis of Diary 1

The use of Cobley's (2001) narrative levels enables me to actively reflect on myself as both the real author, who has narrated the data, and real reader, who must access the text as a narratee. I can avoid a naive objectivity when reporting my analysis by incorporating this understanding in the unfolding analysis.

Concluding Formative Discussion Regarding the Narrativity of the Data

Despite the opportunistic nature of my data collection there is narrative structure evident in the text of my diary. In particular, there are a number of minimal narrative plots (Czarniawska, 2004; Labov, 1972) which are chronologically linked. The evidence of what seems to be my intuitive inclusion of the wider array of structural narrative components suggested by Labov (1972), gives credence to the suggestion that narrative is an innate way of representing knowledge (Fisher, 1984; Czarniawska, 2004). Consequently, I have generated sufficient confidence in my data to proceed with developing the analysis.

The focalisation of my data can be taken as evidence that my data collection has benefitted from my autoethnographic immersion at CaseCo. I have captured an account of life as a sales/marketing person in the firm. The challenge for the next stage of the analysis is how to move from an analysis of my construction of the data to an analysis of its meaning, whilst recognising the focalisation described above. I tackled this issue by overtly building the focalisation of my data into the coding system I applied.

Designing a System for Coding the Structure of My Diary 1 Data

Having confirmed narrativity in the diary 1 data, my analysis can be developed through the selective and systematic use of the tools of narratology (Bal, 1997; Czarniawska, 2004). To begin the process of achieving the preliminary goal of describing the cultural strategies at CaseCo, thereby enabling me to address my research questions, I designed an initial system for coding the data, based on the narrative units I had identified during my review of the narrativity of diary 1. However, to overtly recognise my focalisation of the data, I also organised the coding around Latour's (1991) concept of narrative programmes.

I noted and described the conceptual fit between Latour's (1991) narrative programmes and Bal's (1997) description of focalisation in chapter 4. By recognising that the data is focalised from the organising principle of my implied authorship (Cobley, 2001) and making that perspective the narrative programme I can, in turn, identify any alternative perspective as the narrative anti-programme. Consequently, I not only recognise the focalisation of my data but use it to help organise my analysis in a systematic manner.

The action/events represented in the data can be attributed to either narrative programme on the basis of their support or otherwise for sales orientated activities and goals associated with my implied authorship. The action/events supporting the sales perspective should be attributed to the narrative programme because I am the enunciator of the text (Latour, 1991). Such an approach recognises, incorporates and uses to its advantage, the focalisation I have identified in the data. My identification of structural narrative units and the opportunity to apply the concept of narrative programmes led me to derive the set of NVivo nodes listed in Table 6-3, which incorporates the notion of actions/actants and anti-actions/anti-actants (Latour, 1991; Bal, 1997) with that of a minimal plot (Todorov,1969; Czarniawska, 2004).

Node	Description
Equilibrium	An element in the data which represents the state antecedent to the impact of an event or an action.
Action	An action/event which has the impact of supporting the narrative programme (my sales perspective).
Anti-action	An action/event which has the impact of conflicting with the narrative programme so can be considered to support a narrative anti-programme.
Re-equilibrium	An element in the data which represents the state of equilibrium subsequent to an action or an anti-action.
Reaction[61]	An action or event which progresses the narrative but without supporting the narrative programme or narrative anti-programme.

Table 6-3: My Initial Coding Scheme for the Diary 1 Data

My plan was to make an initial coding of the data using NVivo to code for the starting and ending states of equilibrium before and after each action/event. I intended to code each action/event in the text as either an action or anti-action by way of an assessment of whether it supported or conflicted with the narrative programme, the sales

[61] I added a node labelled 'reaction' during the coding. A full explanation of its rationale is included as the analysis proceeds.

perspective. However, at times during coding it was difficult to clearly decide whether some action/events were actions or anti-actions. Such instances seemed neutral so I coded them to an emergent node, 'reaction'. Subsequently, I coded the diary 1 text using NVivo by allocating the data to 'nodes' set up in the software to represent each code in Table 6-3 and, in the next section, I present and discuss the diary 1 data that I coded at each node.

Review of My Initial Coding Exercise

In this section, I describe the data coded at each of the *a priori* nodes and the one emergent node which I have listed in Table 6-3. To help demonstrate the nature of the data coded at each node, I first describe an example of data from the opening section of diary 1, paragraphs 22 to 31.

> Paragraph 22:
> *There's general post Christmas chat and good natured banter in the office.* **(Equilibrium)**
>
> Paragraph 24:
> *The CS asks the CAE to process some paper work so a van can be despatched.* **(Action)**
>
> Paragraph 24:
> *The CAE insists on having a cigarette first despite being asked a number of times to do the job before taking a break.* **(Anti-Action)**
>
> Paragraph 24:
> *The CS keeps a banter-like attitude despite being knocked back.* **(Reaction)**
>
> Paragraph 26:
> *The CAE returns to her desk and addresses the CS*
> *"Why are you cluttering my desk with jobs" – CAE* **(Anti-Action)**
>
> Paragraph 29:
> *And a little later the CS asks again for the delivery paperwork* **(Action)**
>
> Paragraph 30:
> *The CAE answers "I'm waiting for you" – CAE* **(Reaction)**
>
> Paragraph 31:
> *So the CS goes over to her desk.* **(Re-equilibrium)**

Paragraph 22, which I have already used as an example of orientation, illustrates the starting 'equilibrium' that is disturbed when the CS acts to fulfil a customer delivery, an 'action' in favour of the narrative programme. Consequently, the rejection of the CS's request by the CAE constitutes an 'anti-action'. Where action/events seem to be neutral

I have coded them to the emergent node, 'reaction'. In the third extract from paragraph 24 and paragraph 30, for example, the action/events move the interaction between the actors onwards without either supporting or contradicting the narrative programme. The successive actions, anti-actions and reactions continue as complicating factors until the situation is resolved by the CS abandoning his first request and acting instead in response to the CAE, 're-equilibrium'.

Having found my coding scheme practical, once modified with the additional 'reaction' node, in terms of its application to the opening portion of my diary 1 data, I continued to code the whole of diary 1. In the next sections, I present the findings of my review of the data which I coded to each node.

The Equilibrium and Re-Equilibrium Nodes

Throughout the process of coding and reviewing the two equilibrium nodes, it became clear to me that the *a priori* logic of both codes was not as valid as I had hoped for when designing the coding scheme. Although I had found it straightforward to code the opening state of equilibrium in paragraph 22, it became awkward to code further instances. Indeed, once I had coded the whole of the diary, there were relatively few passages coded at either the equilibrium or re-equilibrium nodes and, on review, the data did not directly reflect states of equilibrium. In fact, the validity of the equilibrium nodes was suspect in two respects.

Firstly, what seemed like clear-cut instances of equilibrium during coding were, on reflection, little more than the instances where I had paused whilst recording the events and actions at CaseCo, by making the primary level of narration obvious in the text through passages of abstract, orientation or evaluation. It is tempting, for instance, to regard the 'my day' abstracts which I had used to open each new day's diary entries as equilibriums. However, such instances do not accurately represent equilibriums between the action/events, they simply represent pauses in the diary due to the working week and the way I collected and recorded the data. Similarly, passages of orientation and evaluation are only available for analysis because I chose to record an internal reflection and then code it as if it were an enunciation in the interactions at CaseCo.

Secondly, some of the passages of data I had coded to the two equilibrium nodes were, in fact, more representative of action/events. However, these instances of apparent miscoding did allude to implicit states of equilibrium which were not directly recorded in the data. For example, I initially coded paragraph 207 at the equilibrium node, but the data in question alludes to an equilibrium of a customer waiting for their delivery and a quotation *by way* of the action that is depicted in the data, i.e. the customer makes a request by telephoning me.

> Paragraph 207:
> *I am called by F_ M___ who says they still haven't received their data sheets. They also want me to arrange pick up of their stand for estimating purposes.*

The data in paragraph 207 also indicates the desired equilibrium that the customer wants to achieve. They would like their order delivered and a quotation for their new request. The action of the customer not only implies their desired state of equilibrium; it also disturbs what might be called a sales equilibrium, my feeling that I have a satisfied customer which has contributed fully to the achievement of sales targets. The opportunity to deliver an item on time can mean greater customer satisfaction and the opportunity to provide a quotation can mean a new sale. Paragraphs 78, 235 and 345 similarly depict actions which point to an implied state of sales equilibrium, achieved through the satisfaction of customer requests.

> Paragraph 78:
> *I'm concerned about making a good start to work in the New Year. Not least because of my own sales performance figures so I decide to call A___ and see if there's a copy of the drawing.*

> Paragraph 235:
> *I start the day by calling some sales prospects, with some success. A firm that was due to close is being restarted by some of the staff and there will be opportunities to quote for work over the next few weeks.*

> Paragraph 345:
> *I have left my phone on today rather than diverting to the office in case anything crops up that I don't want to miss out on.*

In each case, my actions indicate that there is an implicit state of equilibrium which leads me to act in a manner which will return me to it. Indeed, in paragraph 335, I record the impact on me of gaining orders. The action of a customer sending an order, experienced by me as the event of receiving the order serves to achieve the sales equilibrium state and reduces my perception of job related stress.

Paragraph 335:
Towards the end of the afternoon I receive a couple of orders which serve to reduce the stress levels for the weekend

My review of the equilibrium nodes also revealed diary entries which hint at alternatives to the sales equilibrium. In paragraphs 40 and 42, for example, the CS suggests that fulfilling a quick delivery for a customer, would disturb the production facilities and the procedures surrounding them. He goes so far as to endow one of the printing presses with human qualities by suggesting that it might experience stress if asked to do something out of the ordinary, to satisfy a customer request.

Paragraph 40:
The CAM asks the CS if we can manage to produce an item quickly for delivery today but it seems that one of our presses isn't working and needs servicing.

Paragraph 42:
"It's like us and doesn't want to come back to work" – CS

It seems that what might be called a 'production equilibrium' constituted by the avoidance of disturbance to machinery and procedures is implicit in the data. Of course, fulfilling the customer request, even at the expense of disruption to the production facilities and processes would help to achieve the sales equilibrium so it seems that the production and sales equilibriums might be mutually exclusive. Indeed, in paragraph 442, where both the sales and production states of equilibrium are implied in relation to the same action/events, the inability to fulfil the customer's requirements results in rejection of the products supplied in response to their order.

Paragraph 442:
Despite the customer acknowledging that the CAE was helpful in talking her through making changes to the bleed, due to the low-res' images which the customer restates she flagged to the CAE and this new problem she says they won't be using any of the data sheets. I say that I need to return the entire product to my office for our system to recognise that, so the customer rejects the whole job.

The data in paragraph 442 describes how an order has not been supplied to the standard expected by the customer who placed it and they have complained. Although the customer raised concerns at the proofing stage, before their item was produced, the firm's production procedures had been followed and the item was nonetheless manufactured incorrectly. It is implicit that the production equilibrium engendered through correctly followed procedures has been maintained at the expense of the

customer's equilibrium and, therefore, my sales equilibrium, i.e. an acceptable level of product quality.

In fact, it is my action of invoking CaseCo's procedural requirement for a rejected item to be returned for review by the production people, before a remedy can be made, which leads to the customer's decision to ultimately reject the item in this instance. I have maintained the production equilibrium at the expense of the customer's equilibrium. Consequently, my sales equilibrium is disturbed by way of an unhappy customer. However, a contrasting example is described in paragraph 438 which demonstrates that when the firm's production facilities happen to coincide with a customer's requirements, both the production and sales equilibriums can be maintained by way of the same action/events.

> Paragraph 438:
> *When the quotation is sent to me the E1 has acknowledged the note by helpfully giving an INCA and a litho version. The litho version is cheaper so I am able to quote the customer by stating we can supply a 'cracking' photographic image. The customer calls later to check some detail and says we should receive an order tomorrow.*

Here, the benefits offered by the firm's particular range of production facilities enable me to offer the customer an appropriate outcome for their needs. Consequently, both the sales equilibrium, through the satisfaction of the customer, and the production equilibrium, through the comfortable use of the firm's production facilities, are accommodated. The two states are not mutually exclusive, after all.

Formative Discussion Regarding Equilibriums

My attempt to code data which directly reflected states of equilibrium or re-equilibrium was problematical. In fact, with hindsight it is clear to me that it would be very difficult to capture equilibriums at all, because they only become apparent once they have been disrupted by action/events that can be noticed and recorded. Indeed, following my review of the equilibrium nodes, I recoded much of the data to the nodes which more directly represent the action/event elements of the data, the 'action', 'anti-action' or 'reaction' nodes.

However, some of the action/events I had first coded to the equilibrium nodes did *imply* the state of equilibrium which had been disturbed and two alternative states of

equilibrium within CaseCo are indicated, one related to the sales perspective and the other related to the production perspective. In Barthes's (1975) terminology, they are paradigmatic oppositions reminiscent of those reconciled through the operation of narrative in Levi-Strauss's (1955) theory. Consequently, despite the coding problems I had encountered, my review of the two equilibrium nodes had nevertheless proved to be informative and I modelled my new understanding using the NVivo tools, as shown in Figure 6-3, which shows how the observable events at CaseCo imply either the sales or production equilibrium.

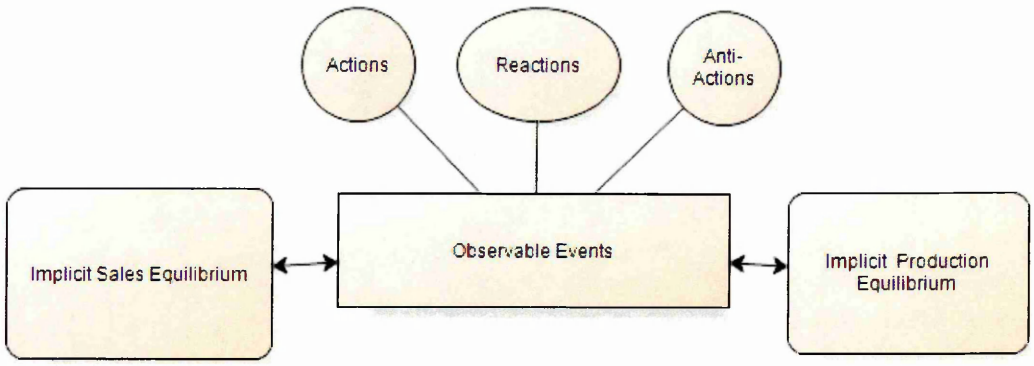

Figure 6-3: Conceiving of Equilibriums

By coding action/events as actions or anti-actions I am characterising the states of equilibrium as the motivation for two narrative programmes (Latour, 1991). Consequently, the actors at the firm should be expected to act in ways which 'load' either narrative programme in order to realise the associated state of equilibrium. Indeed, the indications in the data which suggest that achieving a state of equilibrium reduces stress, link conceptually to the psychological underpinning of Todorov's (1969) notion of equilibrium and diCarlo's (2010a; 2010b) concept of memetic equilibrium. Therefore, bearing in mind the insights I had generated from the analysis of the equilibrium nodes, I next reviewed the data that I had coded to the action, anti-action and reaction nodes. I present this part of the work in the next sections.

Data Coded to the Actions Node

The data I coded to the 'actions' node was that which constituted action/events supportive of the sales perspective and, therefore, representative of the narrative programme. My review of the action node data helped me gain a number of insights

related to the notion of implicit equilibriums. In particular, there are instances where the people at CaseCo add 'load' (Latour, 1991) to achieve outcomes related to the sales equilibrium. For example, in paragraphs 24, 29 and 35 the CS can be seen to add load to his request for some paperwork to be processed by the CAE.

> Paragraph 24:
> *The CS asks the CAE to process some paperwork so a van can be despatched.*
>
> Paragraph 29:
> *And a little later the CS asks again for the delivery paperwork*
>
> Paragraph 35:
> *The CS makes the point to the CAE again that we need to get work through the office so orders can be progressed.*

In paragraph 24, the CS makes a request which I have coded as an action because it will enable a delivery to be made to a customer, therefore, it is supportive of the narrative programme. However, because the request does not lead to a similar action from the CAE, despite its repetition in paragraph 29, the CS adds load by giving an explanation which invokes the customer's perspective through the use of the word 'order' rather than simply the despatching of a van. Consequently, the notions of an 'order' and a 'van' can be seen as non-human actors[62], or actants (Greimas, 1971; Bal, 1997) recruited to the narrative programme (Latour, 1991).

However, the alignment between the actors and either the programme or anti-programme is not clear cut. Where the CAE seems to frustrate the narrative programme in the example above, in paragraphs 63, 78, 237 and 257, she acts to add load in favour of the narrative programme by prompting me to request information, in the form of a drawing from a customer, so that their order can be produced. The CAE similarly prompts me when further information is required and I add load to the request by calling on the customer to ensure that the information is provided. There is a syntagm (Latour, 1991) consisting of the prompt by the CAE, my call to the customer, the call from the CAE, my visit to the customer and the drawing which is adding load to the narrative programme's goal of receiving information from the customer.

> Paragraph 63:
> *The CAE has prompted me that we haven't had the artwork for a job from A___.*

[62] The role of non-human actors becomes increasingly important as my analysis progresses. In the analysis of chapter 8 the word order, as the signifier of a non-human actor, reoccurs.

Paragraph 78:
Not least because of my own sales performance figures so I decide the call A___ and see if there's a copy of the drawing.

Paragraph 237:
I receive a call from the CAE about the drawing from A___ that we are setting up on our artwork system. There are some missing dimensions.

Paragraph 257:
I finish the day by visiting A___ to sort out the drawing queries

Of course, the same passage could be regarded as supportive of the production equilibrium, because the information required from the customer will help the smooth running of the production facilities at the firm. However, the action/events have been coded to the action node, because they are concordant with the narrative programme on the basis that it is the sales perspective which has been attributed to the narrative programme. The anti-programme is simply an alternative to what might achieve the sales equilibrium.

In this example, the actors and their actions come together to form a syntagm in favour of the narrative programme. It is the dominant paradigm in this instance (Latour, 1991). However, each individual action or actor could load alternative syntagms, i.e. different Latourian paradigms, as described in chapter 4. Throughout the data such syntagms tend to be linked to specific customers. After all, it is customers who usually initiate a set of actions by making a request to the firm, as demonstrated in paragraphs 82 and 335, where customer actions seem to serve a function (Propp, 1968) in a chain of action/events.

Paragraph 82:
There's also another problem with a carton mock-up supplied this week which hasn't been cut to shape so isn't able to be used by the customer.

Paragraph 335:
Towards the end of the afternoon I receive a couple of orders which serve to reduce the stress levels for the weekend.

In terms of the sales perspective, paragraph 82 implies disequilibrium, so functions to open up a new chain of action/events and paragraph 335 implies equilibrium, so functions to close a chain of action/events. Both passages reinforce the potential for non-human actors to play a part in the narrative, for example mock-ups and orders.

Data Coded to the Anti-Actions Node

I coded action/events which disrupted or frustrated the narrative programme to the 'anti-actions' node and my review of the anti-action data, once again, revealed a number of insights related to the notion of implicit equilibriums. In fact, it is possible for the anti-programme to occur simply through withholding actions in favour of the narrative programme. The data in paragraph 400 includes two such anti-actions.

> Paragraph 400:
> *The CAM says that she still hasn't looked at the job.*
>
> Paragraph 400:
> *but the CAM has seen my email but not read it.*

Having previously asked for input concerning a customer complaint, thereby prompting an act from the CAM to help clarify the situation from CaseCo's point of view, I have not received a reply. Without a response, I have prompted on two further occasions, each time receiving the anti-actions recorded in paragraph 400. However, on some occasions load is more actively invoked in support of the anti-programme, for example, in paragraph 235, the CAM acts to recruit the authority of the MD.

> Paragraph 235:
> *and she* [the CAM] *checks if I've asked the MD.*

Here, the CAM has challenged my instruction to resolve a customer complaint at no further charge to the customer. The decision to do so had already been made by the MD and there is no reason why the CAM should be concerned about pricing, beyond noting the items as free of charge in the paperwork. Also, in a manner similar to that which I recognised during my review of the data coded at the action node, some action/events add load to the narrative anti-programme through the invocation of non-human actors. Paragraphs 106 and 402 both indicate the nature of such anti-actions.

> Paragraph 106:
> *"You know I can't send artwork through without an order" – CAM.*
>
> Paragraph 402:
> *The art worker is not very receptive saying that he can't do any work without a job bag.*

Both these instances respond to action/events in favour of the narrative programme with a subsequent anti-action which frustrates its antecedent and, in each case, a non-human

actor is invoked to support the response. The anti-actions function to disrupt moves towards satisfying the request of a customer, by invoking a requirement of the production process manifested in its procedures or artefacts. In paragraph 106, it is the procedural requirement that work should not be undertaken without an order to which the working time can be attributed. In paragraph 402, it is the paperwork required to instruct an art worker to spend time processing a customer's artwork file. The procedural policy and the job bag[63] load the narrative anti-programme.

Paragraph 74 presents a similar but more complicated example where the narrative programme and anti-programme compete to load their perspectives with the non-human actor, proof[64].

> Paragraph 74:
> *The CAM says that the MD is not very happy thinking that the customer has decided to proof a low res' PDF rather than a printed proof which would show the artwork as it is sent to the press. A PDF in his mind is a lower level of proofing. He apparently thinks in light of this and the fact that we rushed to deliver before Christmas that £700 is far too much a discount to ask for.*

The data in paragraph 74 records the action/events related to a customer's complaint. The customer is unhappy about the print resolution of the artwork reproduced on their printed items, despite the artwork being presented to the customer via a proof. The customer's complaint has been used to load their request for a discount. The item in question had indeed been printed with a 'blocky' image but, where the narrative programme might prompt acts aimed at resolving the problem, the CAM's response to me rejects the customer's perspective, thereby introducing the narrative anti-programme. She invokes the customer's choice to proof their artwork in a manner which supported a quick delivery, thereby accepting greater risk, and reminds me that we did achieve a quick delivery. By adding the view of the MD, the CAM further loads the narrative anti-programme. In this case, the non-human actor 'proof' is pivotal because the decision of whether the customer view of the proof or the production view of the proof should prevail is indicative of which perspective, or narrative programme,

[63] A 'job bag' is the collection of paperwork prepared by the CAE and the CAM which converts the requirements of a customer's order into the instructions for CaseCo's production process. It is literally held in a plastic bag so the related elements both remain together as a set and in a sufficiently clean state so as to be usable as the paperwork passes through the factory.

[64] As mentioned in chapter 1, proofs are images of customers' artwork which are approved by the customer prior to production and used during production as an example of how the finished item should look.

should take responsibility for the standard of the product supplied by the firm[65].

However, it would be misleading to suggest that only those employees at the firm who are closely associated with production tasks act in a way which supports the narrative anti-programme. Indeed, both customers and I are recorded acting in such ways, for example, in paragraph 171, I contribute an anti-action as does a customer in paragraph 418.

> Paragraph 171:
> *I decide that I can't make a call back to her* [the CAE] *because I'm already driving my car.*
>
> Paragraph 418:
> *The customer has decided that they don't want to trade with us anymore if all we will offer is 10% off the original price of their brochure. They are not interested in the extra order/quantity option. He says that the door would be open again if, on hearing the news, the MD wants to reconsider but otherwise it isn't a problem for them to move on.*

In paragraph 171, following an anti-action constituted by the CAE not taking my phone call to her to pass on a customer request, I decide to reciprocate by not calling back at the end of the day while I am driving home. In paragraph 418, a customer who is not satisfied with CaseCo's suggested remedy for a complaint decides to suspend their trading relationship with the firm. Therefore, the production equilibrium at CaseCo is achieved but at the expense of the customer's equilibrium, because they have not resolved the complaint and lost a supplier. In turn, the sales equilibrium is disrupted because opportunities for meeting sales targets have been lost.

Of course, as I mentioned in relation to the data coded at the action node, those closely associated with the production processes at the firm will act to support the narrative programme, even if only in instances where the production and sales perspective can be served by the same actions. Consequently, the notion that the narrative programme or anti-programme might be supported by varying combinations of actors and action/events is reminiscent of Propp's (1968) analysis, where narrative functions can be similarly achieved in various ways. Therefore, my analysis suggests that the data might be fruitfully considered through Propp's (1968) narrative function concept. Indeed, in the examples I have discussed above, the actions and anti-actions do appear

[65] There are a number of instances in both my diaries where the non-human actor 'proof' is important. My analysis focuses on proofs in chapter 8 and they appear as a key element of my original contribution to knowledge in chapter 9.

to 'function' in favour of their respective narrative programmes.

Data Coded to the Reactions Node

The notion of action/events as 'reactions' emerged during coding as I recognised that some instances in the data did not clearly constitute either an action or anti-action. Therefore the action/events, that I coded as 'reactions', simply function to facilitate a move towards the next action/event. Paragraphs 398, 199 and 126 demonstrate examples of the reactions data.

In paragraph 398, I reply to the suggestion that a customer's artwork file will need adjusting before it is suitable for CaseCo's production facilities, by explaining that the customer accepts that they may be charged for artwork time. In paragraph 199, the MD acts to postpone acting directly on an issue raised by a customer complaint. In paragraph 126, the CAM acts to provide me with more information regarding the production of an item for which a complaint has been received. The action simply provides clarification on a point pertinent to how the item was ordered by the customer and processed by CaseCo.

> Paragraph 398:
> *This is fair enough in the sense that it will need special attention but I make the point that we need to look after the artwork for them, charging where needed.*
>
> Paragraph 199:
> *The MD tells me that he has to leave for a meeting so he will have a think and call me back later.*
>
> Paragraph 126:
> *She* [the CAM] *says we didn't get a cutter guide.*

The nature of the data coded as reactions is neutral to either the narrative programme or the narrative anti-programme. However, it still provides a function by facilitating moves to a point where an action or anti-action can be made. It is the lack of loading which makes these passages in the data distinct from the actions and anti-actions which directly support the narrative programme or anti-programme. Therefore, the reactions data indicates catalyses type functions, which in turn, indicates that the actions and anti-actions data is characteristic of cardinal type functions (Barthes, 1975), as discussed in chapter 4.

Formative Discussion Regarding the Narrative Programme Nodes

The adoption of the narrative programmes concept (Latour, 1991) has enabled me to conduct my initial analysis of diary 1 by synthesising the focalisation of my data and structural narrative units. Consequently, my review of the data coded as 'actions', 'anti-actions' and 'reactions', with respect to the sales and production states of equilibrium enabled me to further develop my understanding of the diary 1 data through the modelling tools of NVivo, as demonstrated in Figure 6-4.

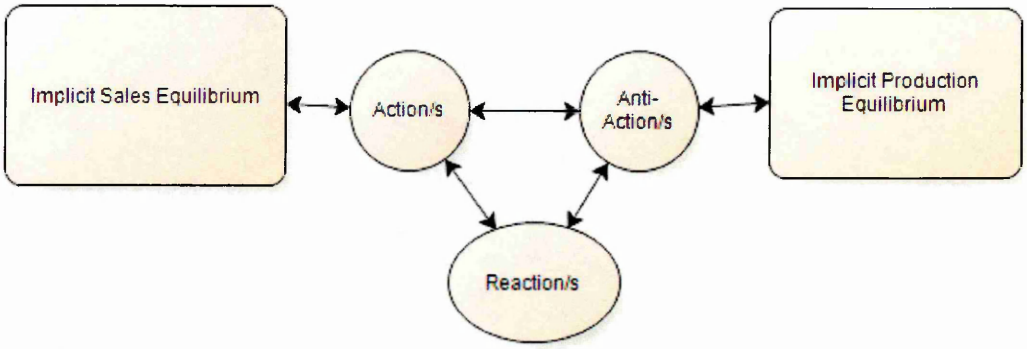

Figure 6-4: Interactions of Actions, Anti-actions and Reactions with Respect to the States of Equilibrium

Figure 6-4 shows how the sales and production equilibriums prompt action/events. Actions occur in light of the sales equilibrium and anti-actions, which are defined in relative terms to the actions, occur in light of the production equilibrium. Interactions at the firm occur as action/events compete to achieve either of the two equilibrium states, although they are mediated by the neutral reaction action/events which facilitate, but do not load, either narrative programme.

There is also evidence that the action/events recorded in the data function to enable further action/events in a manner reminiscent of Propp's (1968) concept of narrative functions. Propp's (1968) theory also recognises that non-human actors, such as those I have identified, might play a part in forming the narrative functions but also that, no actor will be fixed in their allegiance to one function, and by implication, either narrative programme. Indeed, Barthes's (1975) distinction of cardinal functions and catalyses functions is also indicated through the neutrality of the 'reactions' data which denotes them as catalyses functions. The categories of 'actions' and 'anti-actions' data

can, therefore, be considered to relate to cardinal functions because they constitute pivotal moments in the way the narrative progresses through the adding of load to either the narrative programme or the narrative anti-programme.

Consequently, to develop the analysis further, I decided to investigate the indication of narrative functions. To achieve this end, I reviewed the data coded to the 'actions', 'anti-actions' and 'reactions' nodes further, to identify the functions which occur. In the next sections, I present the results of this stage of my analysis.

The Narrative Functions at CaseCo

In this section, I discuss the narrative functions which I linked to the action/events of the narrative programme, the narrative anti-programme and the neutral reactions nodes. To identify the functions I reread the data coded at each node whilst asking myself, what is being achieved by the action/events in question. By 'coding-on' Bazeley (2007) to function nodes in NVivo I subsequently identified four cardinal functions in the data attributed to each of the narrative programmes and four catalyses functions in the reactions data.

I follow Propp (1968) by describing each function in turn, first by providing the definition of the function, taken from the description of its NVivo node and then, by way of illustrative passages from the data, I indicate their dimensions. I have labelled each function in a manner which sums up its nature (Propp, 1968). However, no assumption of meaning should be ascribed to the functions because of the wider meaning of the labels. They simply serve as shorthand for the function definitions.

The Functions of the Narrative Programme

I identified four cardinal functions in the data coded to the 'actions' node. Each of the functions, which are shown in the NVivo model in Figure 6-5, serves to add load to the narrative programme in a particular recurring manner and, in this section, I describe how each one occurs through various combinations of action/events and actors.

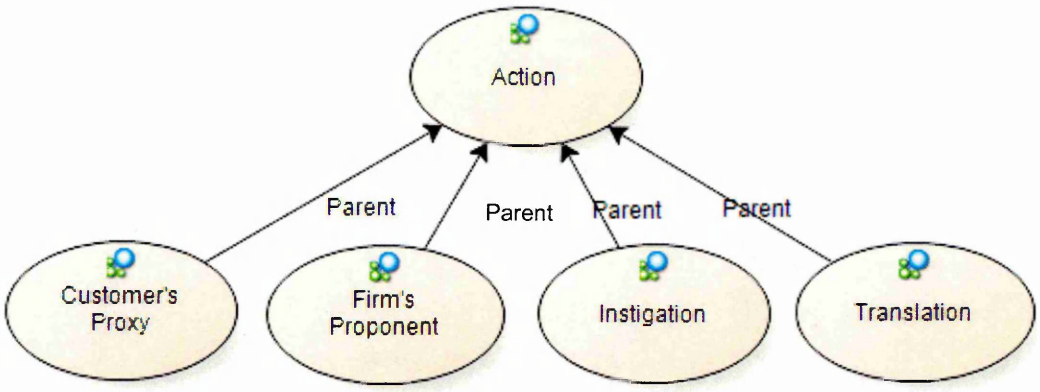

Figure 6-5: The Narrative Functions of the Narrative Programme

Definition of **Customer's Proxy:** Where an action at CaseCo is made to represent a customer by passing on a request in the form of an enquiry, order, complaint, etc.

This function occurs when a customer makes contact with CaseCo, because they are experiencing what might be considered to be a disequilibrium at their organisation, i.e. a customer need related to their own operations which needs to be resolved in order for their work to be completed. That need, which in turn implies a sales disequilibrium, is passed to an employee at CaseCo who then acts on behalf of the customer. Therefore, this function is aligned strongly with my own job role at the firm, but it is also associated with a number of other people, as demonstrated in paragraph 40, where the CAM acts to deploy the function by passing on a delivery request to the CS.

> Paragraph 40:
> *The CAM asks the CS if we can manage to produce an item quickly for delivery today*

It is usual for the customer's proxy function to be associated with some of the conventions of doing business in a printing firm, for example, in paragraph 363 both orders and enquiries play a part in the function. In this example, my acts combine with the non-human actor 'order' to form the function and the combination together adds load to the narrative programme.

> Paragraph 363:
> *I pick up emails from the previous day. There's a couple of orders to pass to the CAM and a quote in response to an enquiry from F_M___ I'd put to the E1 on Friday.*

Customer complaints similarly act to prompt the function, for example, in paragraph 400 a complaint is received following the despatch of a proof to the customer C_ F___. In this case the customer has rejected the previous actions at CaseCo. I must act by way of the customer's proxy function to generate a resubmission of the proof. Therefore, the function may occur as part of an established set of interactions between the firm and a customer as well as at the outset of a new customer request. The non-human actor 'proof' is interacting with me to generate the function.

> Paragraph 400:
> *I receive an email from C_ F___ saying that the sticker proof sent last week is not correct and that fonts have changed.*

Definition of **Firm's Proponent:** Instances where an action is taken to explain the perspective of CaseCo to a customer.

This function relates to instances where CaseCo's perspective is explained to a customer to try and demonstrate how their requirements are to be satisfied. For example, in paragraph 247, I go so far as to try and coach a customer in how they can complain in a way which may lead CaseCo to react positively towards them.

> Paragraph 247:
> *I explain, not least because of reflecting on this research, that maybe there's a cultural issue between our two firms and that a more print industry friendly solution might suit my MD. I suggest a future reorder which would include extra copies to compensate for the first print run problems.*

Definition of **Instigation:** Instances where actions at CaseCo are made which are congruent with the narrative programme but not prompted by a customer.

This function tends to occur through my own acts aimed at achieving the requirements of my sales role. I might, as described in paragraph 430, for example, contact a customer proactively as part of the sales effort associated with my job.

> Paragraph 430:
> *I spend the morning making sales calls and generate some litho enquiries from a customer (P_H_D) which has only used us to date for large format digital work.*

The instigation function, therefore, looks to co-ordinate the narrative programme and the needs of customers to help achieve the sales equilibrium. In paragraph 430, the non-

human actor 'enquiry' serves to facilitate this combination. The MD similarly acts to introduce the instigation function in paragraph 365 where he acts to facilitate contact with a prospective customer.

> Paragraph 365:
> *A little later the MD calls me, acknowledges my message and says he's got a new prospect for me to chase. It's S_ F__ which is next door to our new office. He's got as far as getting a name but in conversation with another trade printer has found that they supply this firm and they don't want us to tread on their feet. The MD says that there'll be less of a problem if I tread on their feet.*

The data in paragraph 365 reinforces the notion that functions, in this case 'instigation', might be fulfilled by alternate combinations of actors and actions. However, this extract from the data also shows the demarcation between what might be considered the mainstream operations of CaseCo and the 'sales' activities. The MD seems to indicate that CaseCo ought to privilege the relationship with another printing firm rather than a potential customer, because he avoids direct customer contact in favour of protecting a trade relationship. The trade partner can help the MD manage busy periods in production, thereby facilitating the production equilibrium. Consequently, the MD's involvement in the instigation function is somewhat detached and he introduces me as an additional actor through whom the function can occur.

On some occasions the 'instigation' function follows a stalled interaction with a customer. In such cases it appears as an attempt to offer, or search, for solutions by finding ways in which CaseCo can accommodate a customer's needs, for example, in paragraphs 195 and 251.

> Paragraph 195:
> *but I ask if he's* [the MD] *aware of the mock-up issue because it may be best to combine the jobs and offer a joint solution which takes the pressure off the main brochure issue.*

> Paragraph 251:
> *I ask the CS if there will be a van near to Nottingham so we can pick up F_ M___'s sample stand.*

In both paragraphs 195 and 251, I act to facilitate the customers' needs by suggesting combining CaseCo's response to them with other things that the firm will be doing. First, to solve a customer complaint, I suggest combining two orders and second, I suggest combining the need to pick up a display stand from a customer, for quoting purposes, with deliveries which need to be made.

Definition of **Translation:** Actions which serve to interpret customers' needs from the perspective of CaseCo and reflect that interpretation back to the customers.

This function serves to help CaseCo, as an organisation, understand customers' needs in a way which will enable them to be fulfilled by the firm's products. It can be seen as the actions taken to translate the way a customer describes their needs into a form which will not disturb the production equilibrium. Therefore, without the translation function the processes at the firm would be stalled and customers' needs would be left unsatisfied. Paragraph 78 demonstrates how the function occurs through actions which help to clarify information

> Paragraph 78:
> *Not least because of my own sales performance figures so I decide to call A___ and see if there's a copy of the drawing.*

In this example, CaseCo has insufficient information with which to understand the needs of the customer A___. I act to gather more information in the form of a drawing to help facilitate the firm's ability to understand the customer need, thereby invoking the translation function. Consequently, the non-human actor 'drawing' also plays a role in this example of the function.

Indeed, it is noticeable that non-human actors play a recurring role in the translation function. Paragraphs 205 and 335, for example, show how mock-ups of products and proofs of how CaseCo expects the customers' artwork to appear once printed, both help to translate the customers' needs into a form better understood at the firm. In both examples the CAM and I act to communicate the firm's understanding of what the customers have asked for, in paragraph 205 via a proof of the customer's artwork and, in paragraph 335, via a mock-up of a printed carton.

> Paragraph 205:
> *She* [the CAM] *remembers it's about a C___ F___ proof. She wants to know what to do with it and I ask her to send it to the customer for tomorrow morning.*
>
> Paragraph 335:
> *(...) then* [I] *receive an email from the CAM saying that the mock-up for E___ is left on my desk and it would be a big help if I could deliver it.*

In paragraphs 205 and 335, the non-human actors combine with the human actors to invoke the translation function. The function helps to reflect the customers' needs back to them in their translated form. Subsequently, CaseCo asks the customers' to accept its translation of their needs which were originally articulated in the terms of the customer.

Formative Discussion Regarding the Functions of the Narrative Programme

Considering together the functions attributable to the narrative programme, which I have summarised in Table 6-4, begins to hint at the strategy of the narrative programme.

Function	Definition
Customer's Proxy	Where an action at CaseCo is made to represent a customer by passing on a request in the form of an enquiry, order, complaint, etc.
Firm's Proponent	Instances where an action is taken to explain the perspective of CaseCo to a customer.
Instigation	Instances where actions at CaseCo are made which are congruent with the narrative programme but not instigated by a customer.
Translation	Actions which serve to interpret customers' needs from the perspective of CaseCo and reflect that interpretation back to the customers.

Table 6-4: Summary of the Narrative Functions of the Narrative Programme

Based on the set of functions shown in Table 6-4, a description of the strategy of the narrative programme can be written down in the manner suggested by Dawkins (1982; 1999) which constitutes a measure of the EC (Gell-Mann, 1995) for which the narrative functions have accounted. My written description of the strategy of the narrative programme is as follows:

The strategy of the narrative programme ...

> ... tries to match the equilibrium state of salespeople and customers and, therefore, speaks on behalf of customers at CaseCo. To do so it uses industry conventions such as enquiries, proofs, etc. to communicate the needs of customers in a way production can understand. Such non-human actors are used by the narrative programme to translate customer needs into sales needs and production needs. The narrative programme will explain the production

perspective to customers and it will act in lieu of customer prompts to initiate customer enquiries and orders.

The Functions of the Narrative Anti-Programme

I identified four cardinal functions in the data coded to the 'anti-actions' node. Each of the functions, which are shown in the NVivo model in Figure 6-6, serves to add load to the narrative anti-programme in a particular recurring manner and, in this section, I describe how each one occurs through various combinations of action/events and actors.

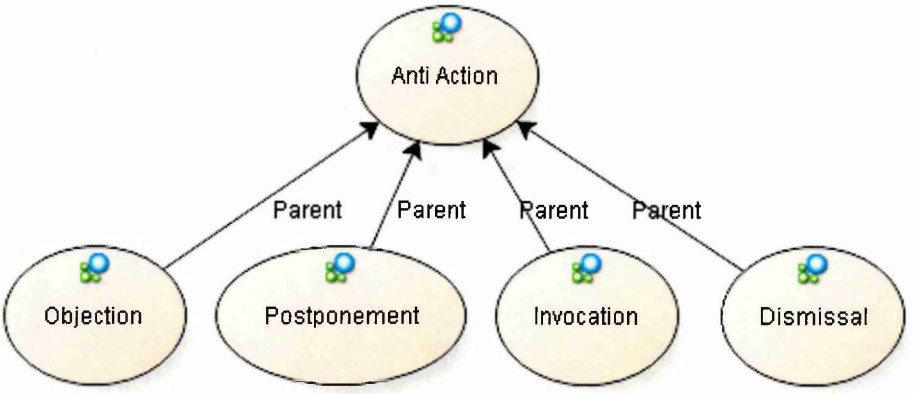

Figure 6-6: The Narrative Functions of the Narrative Anti-Programme

Definition of **Objection:** Negative responses to an antecedent action/event associated with the narrative programme due to doubts about the efficacy of the antecedent in question.

This function occurs when an actor reacts with scepticism to a preceding action/event because it seems to be self-evidently wrong or unhelpful. Therefore, the antecedent action/event does not lead to the next logical act that it implies or presumes. For example, in paragraph 209, the MD objects to the manner in which a customer has requested a printed carton which was mistakenly produced as printed individual flat boards.

> Paragraph 209:
> *The MD calls me back late in the afternoon about the E___ issues. He says we weren't asked for a carton but we've included the cutting in the price so we'll redo the job FOC.*

The MD objects to the way a customer has asked for the carton because a separate drawing showing the way the carton would be made-up has not been provided. Such a drawing is the usual way the production process at CaseCo would handle this type of request. The objection is based on the customer's failure to conform to the firm's expectations for how such an enquiry should be phrased. However, a carton had been specified on the customer's order paperwork and one of the estimators at CaseCo had recognised the request and included cutting the carton to shape in the quotation. In this case, therefore, although the objection still occurs, it is insufficient to stop the MD authorising an FOC[66] remake of the order because of the clear acknowledgement of a carton request in the estimator's paperwork. In this example, the objection function has added insufficient load with which to overcome the narrative programme.

A similar objection arises in paragraph 477, where a customer has received a printed item they have ordered and some of the artwork has not printed as clearly as they had expected. The CAE knows that some of the artwork files supplied by the customer are not high resolution but CaseCo has printed them, on the assumption that the customer knows about the resolution requirements of images.

> Paragraph 477:
> *Later I receive an email from the CAE she says she doesn't know what I mean about the F_M___photos, they are unclear because the files are low-res.*

However, when CaseCo provided a proof showing low-res images, the customer has assumed that this facet of the proof is so obviously wrong that it will be corrected on the final printed product. Indeed, the CAE also noticed that the images were low-res but has taken the customer's approval of the proof to mean low-res images are acceptable and, therefore, she acts to object to the customer's complaint. The objection in this case is due to the CAE's expectations that customers do/should know about CaseCo's procedures and practices. However, much of the authority for the outcome has been invested in the non-human actor 'proof'.

Definition of **Postponement:** Instances where actions are taken in place of those in favour of the narrative programme, thereby postponing an immediate response to an antecedent act or event in favour of the narrative programme.

[66] The acronym FOC was used at CaseCo as shorthand for 'free of charge'.

This function manifests itself when actions occur which block the progression of the narrative programme. It tends to be the consequence of the people who work at CaseCo taking steps to manage their own workloads as part of the operations of the firm. Paragraphs 24, 126 and 327 demonstrate examples of the 'postponement' function.

In paragraph 24, the CAE postpones acting to progress work towards satisfying a customer by instead acting to take a break. In paragraph 126, having noticed a number of overt declarations by the CAM regarding her workload I decide to delay my own request for her time, to try and avoid a negative response to my need to pass on details of a customer request. Similarly, in paragraph 327, I again postpone my own action before requesting the CAM to act in favour of the narrative programme. However, my action in this case is itself met with the postponement function, because my delivery request does not fit with CaseCo's delivery schedule.

> Paragraph 24:
> *The CAE insists on having a cigarette first despite being asked a number of times to do the job before taking a break.*
>
> Paragraph 126:
> *I wait for a bit before briefing the CAM on the E___ Carton job.*
>
> Paragraph 327:
> *I wait until 10am before calling the CAM to see if the E___ mock-up can be delivered on Monday. She says the job is just being finished now but we have a van in Lancashire on Monday and she doesn't know what else needs to be delivered so asks if I can do the delivery.*

Definition of **Invocation:** Instances where an action associated with the narrative programme is denied by invoking the authority of a person or the requirements of CaseCo's processes/procedures.

This function invokes an idea of 'correctness' to counter the narrative programme. To do so, support is provided based on the authority of CaseCo's working practices or people in authority. For example, in paragraph 106, the CAM asserts the correctness of the way in which customer needs should be addressed by invoking working practices related to the non-human actor, 'order'. Indeed, the invocation of correctness highlights differences of opinion over the meaning of the non-human actors which occur more widely in the data.

Paragraph 106:
"You know I can't send artwork through without an order" – CAM.

Where an act of invocation is not wholly successful in adding sufficient load to demonstrate the correctness of the narrative anti-programme, additional load may be added through further invocation. The authority of the MD and the meaning of a proof are invoked together in paragraph 74, where the 'correct' view of the variation in proofing methods[67] is presented by the CAM, with further load invoked by way of the authority of the MD.

Paragraph 74:
The CAM says that the MD is not very happy thinking that the customer has decided to proof a low res' PDF rather than a printed proof which would show the artwork as it is sent to the press. A PDF in his mind is a lower level of proofing.

Indeed, in paragraph 471, the MD acts to bolster the meaning of a proof by reaffirming that customers should submit to its primacy in deciding how their artwork should look once printed. The MD, therefore, passes the authority for CaseCo's correct understanding of customers' artwork to the non-human actor 'proof'. Such a move facilitates the later invocation of signed proofs in support of the narrative anti-programme, should a customer complain about the outcome of their printed artwork.

Paragraph 471:
"We need to make sure we get proofs signed in future" – MD

Definition of **Dismissal:** Instances where a customer or an employee acting on behalf of a customer rejects a proposal of CaseCo.

This function occurs when CaseCo's response to customers' needs has insufficiently matched their requirements. When dismissal occurs it signals that the narrative anti-programme has overcome the narrative programme. In paragraph 440, for example, a customer rejects the firm's explanation for a printing problem.

Paragraph 440:
The customer has found another problem with one of the four items. She shows me an email she has sent to the CAE asking for a line of text to be removed and shows me the

[67] In recent years, changes in technology which have impacted on the way printing machines work and how artwork can be processed, has led to new ways to proof customers' artwork. Traditionally, proofs would be created once the artwork had been prepared for the printing machine but it can now occur earlier in the manufacturing process.

> *proof that she has signed off which has the line of text removed. However the line has reappeared on the actual supplied items. As a result of this the customer says she wants more of a compensatory solution from us.*

Here, it is the failure of the non-human actor proof to adequately represent what has actually been supplied which is the justification the customer uses for acting to instigate the dismissal function. The dismissal function is the antithesis of the outcome desired by the sales perspective because it means orders are lost due to poor performance and, therefore, new enquires are jeopardised, thereby causing sales disequilibrium.

Indeed, customers draw wider meaning from their acts of dismissal, for example, in paragraphs 239 and 241 a customer evaluates the meaning of their inability to have their needs responded to in a way which they see fit, concluding that their firm must be an insignificant customer of CaseCo's. Of course, as demonstrated in paragraph 388, there are pressures likely to be acting on the people working for the customer organisations, such as the monitoring of their performance, which they experience, but which are not directly experienced by the people working at CaseCo.

> Paragraph 239:
> *The customer is at pains to reiterate that he is not happy with our response suggesting that he doesn't know how big my firm is but maybe he is an insignificant customer.*
>
> Paragraph 241:
> *"Is your MD the kind of bloke who'd cut is nose off to spite his face" – customer*
>
> Paragraph 388:
> *Unfortunately the supplied data sheets have been seen by their directors and we will have to find a new solution.*

Formative Discussion Regarding the Functions of the Narrative Anti-programme

Considering together the functions attributable to the narrative anti-programme, which I have summarised in Table 6-5, begins to hint at the strategy of the narrative anti-programme.

Function	Definitions
Objection	Negative responses to an antecedent action/event associated with the narrative programme due to doubts about the efficacy of the antecedent in question.
Postponement	Instances where actions are taken in place of those in favour of the narrative programme, thereby postponing an immediate response to an antecedent act or event in favour of the narrative programme.
Invocation	Instances where an action associated with the narrative programme is denied by invoking the authority of a person or the requirements of CaseCo's processes/procedures.
Dismissal	Instances where a customer or an employee acting on behalf of a customer rejects a proposal of CaseCo.

Table 6-5: Summary of the Narrative Functions of the Narrative Anti-programme

Based on the set of functions shown in Table 6-5, a description of the strategy of the narrative anti-programme can be written down in the same manner as that written for the narrative programme.

The strategy of the narrative anti-programme …

> ... is relative to, and competes with, the narrative programme, It holds a sceptical view of the validity of the narrative programme leading to action/events which disrupt it. The narrative anti-programme invokes the production state of equilibrium and claims authority from it, expecting customers to conform to its correctness. Where action/events in favour of the narrative programme do not conform they are objected to and further actions are postponed. To do so, the narrative anti-programme recruits various combinations of the human and non-human actors at CaseCo, thereby adding load.

The Functions of Reactions

I identified four catalyses functions in the data coded to the 'Reactions' node. Each of the functions, which I have shown in the NVivo model in Figure 6-7, does not directly add load to the narrative programmes but facilitates the next cardinal function. In this

section, I describe how each one occurs through various combinations of action/events and actors.

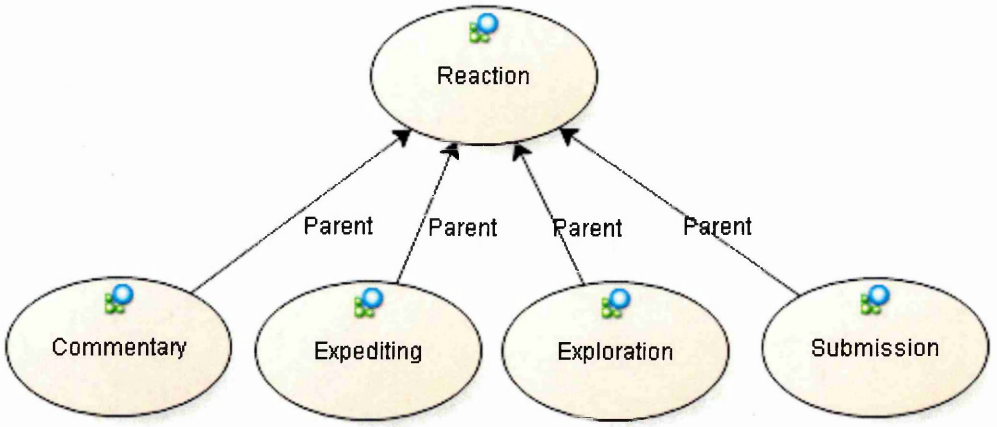

Figure 6-7: The Narrative Functions of the Reactions Node

Definition of **Commentary:** This function involves actions of commentating on, or reasoning about, other action/events to make sense of them.

The commentary function can be seen to equate with evaluative passages at the second level of my data which serve to share information between the actors at CaseCo, thereby enabling subsequent acts based on that information. For example, in paragraph 53, the CAM provides information to me about a set of previously unknown events, so I have more information with which to base my subsequent action. However, her evaluation is coloured by the words 'too busy' which suggests that the customer did not see the need to travel to view a proof, because it was not a high enough priority for them. Therefore, although the narrative anti-programme is not actively supported in paragraph 53, the reaction function shows some tendency towards it.

> Paragraph 53:
> *She* [the CAM] *says she asked the customer to come up and proof the job as they had offered to do but they said they were too busy and so we sent a low res' PDF proof via email.*

Indeed, in some instances, actors commentate on previous action/events to clarify the meaning in a way which might influence the next action to be taken by another actor. For example, in paragraph 48, the CAE, having acted in favour of the narrative anti-programme, suggests that her previous act was not wanton. Similarly, whilst acting

from the sales perspective, in paragraph 418, I commentate on previous action/events experienced negatively by a customer, to suggest that their negative experience had not been intended. In both instances the commentary function serves to facilitate and influence future acts. Conversely, in paragraph 398, the CAE commentates on potential future actions of a customer in a manner which anticipates actions at the firm that would support the narrative anti-programme, based on maintaining the production equilibrium.

> Paragraph 48:
> *"I'm trying to help you" – CAE to the CS*
>
> Paragraph 418:
> *I concede that I would rather have done more to make sure the relationship continues and promise to try one last approach to the MD 'when the time is right'.*
>
> Paragraph 398:
> *The CAE says that they can't expect things to be right if they use Corel draw rather than an industry standard artwork package.*

Definition of **Expediting:** The non-contentious aspects of work carried out in response to the needs of customers.

The expediting function occurs as the normal way of processing customer requirements at CaseCo. Therefore, action related to the non-problematical processing of orders/enquires, and steps taken to rectify previous complaints can constitute this function. A range of circumstances are illustrated in paragraphs 86, 78 and 167.

In paragraph 86, the CAM has checked that a price for a reprint of a previous job will remain as before, so I then relay this to the customer. In paragraph 78, I have contacted a customer proactively in an effort to gain the information required to print a previously received order. Although a delivery is not urgent, the customer acts to enable the expediting function by making a copy of their product drawing available. In paragraph 167, a number of actors contribute a range of acts in response to a customer's complaint about late deliveries, thereby completing the deliveries in quick response.

> Paragraph 86:
> *She* [the CAM] *sends me prices which I quote on.*
>
> Paragraph 78:
> *The customer isn't too concerned about a quick delivery but says I can pick up a copy.*

Paragraph 167:
The company is using our own vans, same day couriers, including the CAE's father, the MD in his car and me in my car.

The expediting function involves interactions amongst employees at CaseCo and customers which could be characterised as teamwork because of the co-ordination of interaction in respect of a common outcome. Such acts enable the expression of expertise and commitment, as demonstrated in paragraph 438, where a customer has assumed the type of production method that will best suit their needs but an estimator takes it upon himself to offer a second option, based on his own understanding of the need and the alternative methods of production. The choice I am subsequently able to present to the customer resulted in an order for the method proposed by the estimator.

Paragraph 438:
I note to the estimators that INCA print is assumed when forwarding the enquiry. When the quotation is sent to me the E1 has acknowledged the note by helpfully giving an INCA and a litho version.

Definition of **Exploration:** This function occurs where actions are taken to explore possible solutions because there is insufficient information to act decisively in favour of either, the narrative programme or narrative anti-programme.

The exploration function serves to investigate gaps between expectations and the events which have occurred, as demonstrated in paragraph 100. Here, following the notification from a customer that an expected delivery had not been made, the CAE acts to explore the circumstances of the missing delivery. The acts related to the function in this case involve requesting a POD[68] from the third party courier which, on this occasion, has been used to deliver the item in question, instead of CaseCo's own van.

Paragraph 100:
she [the CAE] *says it should have arrived but will get a POD and call me back.*

The result of the exploration function can be the clarification of antecedent action/events. For example, in paragraph 311, I respond to a customer query about an apparent difference between the appearance of a logo on a proof and the logo on the subsequent finished printed item, by acting to find out how the item had been manufactured.

[68] The term POD was used at CaseCo as shorthand for 'proof of delivery'.

Paragraph 311:
I say that I'll make sure there isn't a problem on our part first and see what we can suggest.

Paragraphs 347 and 438 demonstrate how the 'exploration' function can lead to an understanding of potential solutions. In paragraph 347, a buyer at a customer acts to explore ways in which CaseCo might help her improve the quality of her artwork, in terms of how easy it is to process using printing industry software. In paragraph 438, I respond to an enquiry from another printer for an item which requires some artwork to be printed close to photographic quality. I act to explore CaseCo's ability to fulfil the request by offering to print a sample which the trade customer will be able to show to their own customer, to demonstrate the potential solution.

Paragraph 347:
The colleague (who has supplied their artwork) has had no experience in this kind of work and the customer says she wants us to help her learn how to get better results in the future.

Paragraph 438:
We talk about how photographic our digital option would be and I promise to provide a printed sample if it would help him with his customer.

Definition of **Submission:** This function occurs when the programme or anti-programme is abandoned in favour of its alternative.

Although there are few instances of submission in the data, those which occur tend to involve the MD, perhaps by way of his level of authority. For example, in paragraph 465, the MD's actions invoke the submission function following a failed attempt to find evidence for rejecting a customer complaint. The MD wishes to dispute a customer's claim that CaseCo is at fault for what they see as an incorrectly produced item, but on finding that the customer has not formally accepted the proof related to the item in question, he acts in submission to the complaint. The non-human actor 'proof' has failed to sufficiently load the narrative anti-programme and, therefore, the narrative programme has persisted. However, the unwilling or forced abandonment element of this function means that no equilibrium state is strongly supported, if at all.

Paragraph 465:
"Well we haven't got a signed proof so it's a reprint" – MD

Formative Discussion Regarding the Functions of Reactions

I have summarised the catalyses functions related to the reactions node in Table 6-6. Although this set of functions does not contribute directly to the strategies of the narrative programme or anti-programme, considering them together, begins to hint at some strategic influence[69].

Function	Definition
Commentary	This function involves actions of commentating on, or reasoning about, other action/events to make sense of them.
Expediting	The non-contentious aspects of work carried out in response to the needs of customers.
Exploration	This function occurs where actions are taken to explore possible solutions because there is insufficient information to act decisively in favour of either the narrative programme or narrative anti-programme.
Submission	This function occurs when the programme or anti-programme is abandoned in favour of its alternative.

Table 6-6: Summary of the Narrative Functions of the Reactions Node

Based on the set of functions shown in Table 6-6, a description of the strategy of the neutral functions can be written down in the same manner as that written for the two narrative programmes.

The strategy of the reactions functions …

> ... is to help make sense of life at CaseCo by facilitating the exploration of uncertainties and investigating possibilities. In doing so it enables further actions which might indicate or encourage the narrative programme or anti-programme. Where there is no competition between narrative programmes, it processes work and enables teamwork. In instances where there has been competition between differing perspectives, it indicates the persistence of one narrative programme over another with the involvement of non-human actors, such as 'proof'.

[69] In chapter 7, my further analysis of the cultural strategies acts to distribute the strategic influenced of the reactions functions to the narrative programmes. The role of the non-human actors in these neutral catalyses functions emerges as important.

Summative Discussion Regarding My Identification of Narrative Units

My review of the diary 1 data has resulted in the identification of its focalisation and a range of narrative units. The focalised sales perspective has facilitated my analysis based on competing narrative programmes and subsequently, I have identified a range of narrative functions which can be summarised to suggest the strategies of the narrative programmes at CaseCo. However, where one might expect the narrative rationality of the strategies to be embedded in the functions' temporal ordering (Propp, 1969; Labov, 1972), circumstances at CaseCo seem more complicated. Interactions with different customers occur in parallel throughout the diary 1 data, so there are a number of narrative trajectories, each linked to a specific customer, mixed in my temporal recording of the data. Therefore, rather than a synchronic temporal ordering, a diachronic distribution of functions, akin to Levi-Strauss's (1955) theory is suggested.

Indeed, my construction of the narrative functions is based on a diachronic view across the narrative trajectories, rather than Propp's (1968) synchronic collection of presupposing action/events. Also, my identification of the opposing equilibrium states of the sales and production perspectives is reminiscent of the two opposing states on which Levi-Strauss's (1955) theory is based. Therefore, although I have been able to make an attempt at writing accounts of the strategies at CaseCo, by simply reviewing the functions I have attributed to the narrative programmes, the situation is surely more complex.

The data provides examples of how the two narrative programmes compete to achieve either the sales or production equilibrium and there are indications that the apparently neutral action/events, which I coded to the reactions node, facilitate or even encourage either narrative programme. Therefore, so far, my analysis and my descriptions of the strategies at CaseCo, do not address how the cardinal functions of the narrative programmes and the catalyses functions of the reactions node combine and interact. After all, the game theoretic modelling of the genetic strategies of animals, by Axelrod (1990) and Maynard Smith (1982), addresses instances of competition and the possibility of co-operation over iterated interactions.

At CaseCo, it is within the narrative trajectories related to each customer where the competition between narrative programmes occurs[70]. Therefore, in chapter 7, I extend my analysis of the diary 1 data to assess the interactions of the narrative functions, as they occur in the parallel trajectories related to each of CaseCo's customers. To enable this part of the analysis, I coded the data to nodes in NVivo which represent each of the ten customers that appear in diary 1. Consequently, the progression of narrative functions related to each customer, which I have summarised in Table 6-7, can be considered separately as examples of Gell-Mann's (1995) mutual data. The goal of chapter 7 is to complete my preliminary task of writing accounts of the cultural strategies at CaseCo, thereby facilitating the addressing of my first two research questions, as discussed in chapter 3.

[70] I have discounted individual enquires or orders as the basis for analysing the interactions of the narrative programmes because, in a number of cases, interactions with customers involve combinations of more than one enquiry or order.

Customer	Trajectory of Functions
A___	A:Instigation - R:Exploration - A:Customer's Proxy - A:Instigation - R:Exploration - A:Instigation - A:Instigation - R:Commentary - R:Exploration - A:Translation - A:Customer's Proxy
C___ F___	A:Customer's Proxy - R:Expediting - R:Expediting - R:Commentary - A:Instigation - R:Expediting - R:Exploration - A:Translation - AA:Invocation - R:Commentary - R:Expediting - A:Customer's Proxy - A:Customer's Proxy - R:Expediting - R:Commentary - A:Customer's Proxy
D___	A:Instigation - R:Exploration – AA:Postponement - R:Commentary - R:Exploration - R:Commentary - A:Customer's Proxy - R:Commentary - A:Instigation - A:Instigation - R:Exploration - AA:Postponement - A:Customer' Proxy - R:Commentary - AA:Postponement - A:Firm's Proponent - A:Customer's Proxy - AA:Postponement - A:Instigation - AA:Postponement - A:Customer's Proxy - AA:Invocation - R:Expediting - R:Commentary - R:Commentary - R:Expediting
F___ D___	A:Instigation - AA:Objection - R:Commentary - R:Commentary - A:Instigation - R:Expediting - R:Commentary - R:Expediting - R:Exploration - AA:Postponement - R:Exploration - R:Commentary - R:Expediting - AA:Postponement - R:Expediting - R:Commentary - R:Commentary - R:Commentary - R:Commentary
E___	A:Customer's Proxy - R:Commentary - A:Customer's Proxy - R:Commentary - R:Commentary - R:Commentary - R:Exploration - R:Commentary - A:Firm's Proponent - R:Commentary - AA:Invocation - AA:Objection - R:Exploration - AA:Dismissal - R:Commentary - A:Customer's Proxy - R:Exploration - A:Customer's Proxy - R:Commentary - AA:Postponement - AA:Invocation - R:Exploration - A:Instigation - R:Exploration - A:Customer's Proxy - AA:Objection - R:Exploration - R:Exploration - R:Commentary - AA: Postponement - R:Exploration - R:Commentary - R:Submission - A:Customer's Proxy - R:Submission - AA:Dismissal - A:Firm's Proponent - AA:Dismissal - A:Translation - AA:Innvocation - A:Customer's Proxy - A:Customer's Proxy - AA:Objection - R:Commentary - R:Exploration - A:Customer's Proxy - A:Customer's Proxy - AA:Invocation - A:Firm's Proponent - AA:Postponement - R:Expediting - R:Exploration - R:Commentary - A:Firm's Proponent. - R:Exploration - R:Commentary - R:Expediting - AA:Dismissal - R:Exploration - A:Customer's Proxy - R:Commentary
F___ M___	A:Customer's Proxy - R:Exploration - AA:Postponement – A:Instigation - R:Commentary - AA:Invocation - A:Customer's Proxy - R:Exploration - A:Firm's Proponent - R:Exploration - AA:Postponement - R:Exploration - R:Expediting - A:Customer's Proxy - A:Instigation - AA:Postponement - A:Customer's Proxy - R:Exploration - A:Translation - AA:Objection - R:Exploration - A:Customer's Proxy - A:Customer's Proxy - R:Commentary - R:Commentary - A:Firm's Proponent - A:Translation - R:Exploration - R:Exploration - R:Exploration - AA:Dismissal - R:Commentary - R:Exploration - A:Customer's Proxy - R:Exploration - R:Commentary - AA:Invocation - A:Customer's Proxy - R:Expediting - R:Commentary - A:Instigation - AA:Objection - AA:Dismissal - R:Commentary - R:Commentary - A:Firm's Proponent - AA:Dismissal - R:Commentary - A:Customer's Proxy - R:Exploration - R:Submission - R:Commentary - R:Exploration - AA:Invocation - R:Customer's Proxy - R:Commentary
P___ H___ D___	A:Instigation - R:Exploration - R:Exploration - R:Commentary - R:Expediting - A:Firm's Proponent
P___ B___	A:Instigation - A:Customer's Proxy - A:Customer's Proxy - R:Commentary - R:Exploration - R:Commentary
S_ F___	A:Instigation - R:Commentary -A:Instigation - AA:Postponement - A:Instigation
T___ C___	A:Customer's Proxy - R:Exploration - A: Translation

Table 6-7: Summary of Customer Defined Narrative Trajectories

Chapter 7 – The Strategies of the Narrative Programmes

In this chapter, I complete the preliminary task of writing accounts of the cultural strategies at CaseCo, as shown in Figure 7-1.

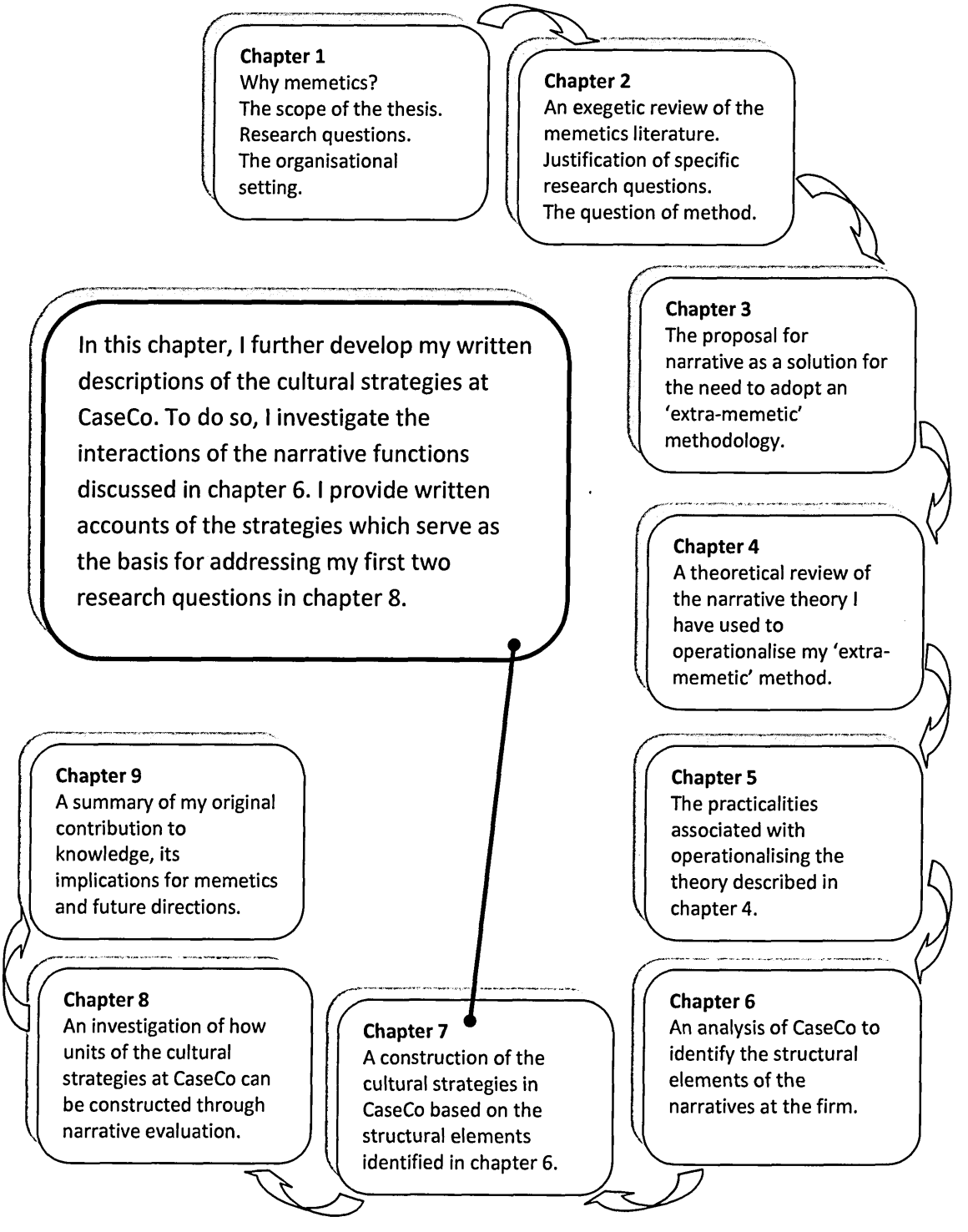

Figure 7-1: Thesis Structure Showing the Role of Chapter 7

Having identified a range of structural narrative units in the data of diary 1, I was able to begin to address my preliminary goal of writing accounts of the cultural strategies at CaseCo. Through the analysis presented in this chapter, I complete that task by addressing the interactions between the narrative functions of the narrative programmes at the firm. Where, in chapter 6, I divided the description of the firm recorded in the data into units, in this chapter, I rebuild a description as an account of cultural strategies, based on narrative theory. Consequently, I add more detail of the cultural complexity at CaseCo to the descriptions of the cultural strategies I began in chapter 6 and I have illustrated the process of achieving this aim in Figure 7-2.

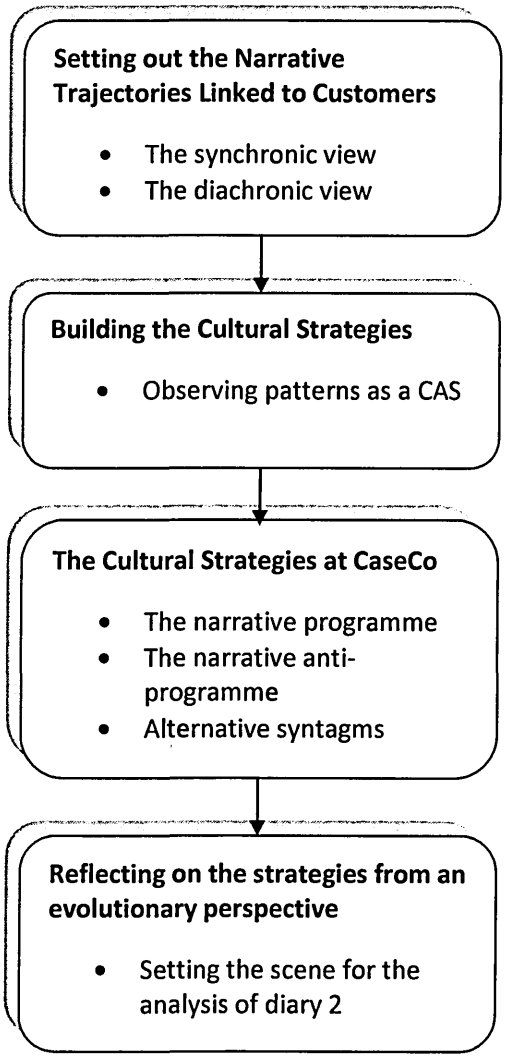

Figure 7-2: Structure and Content of Chapter 7

Figure 7-2 shows how I base this part of my analysis around the narrative trajectories linked to CaseCo's customers, by taking both a synchronic and diachronic view. The

narrative trajectories constitute mutual data (Gell-Mann, 1995) and indeed, I overtly adopt the role of Gell-Mann's (1995) observing CAS to search for patterns in them. Each such 'fragment' of the culture at CaseCo can then be used to build an account of the overarching cultural strategies (Levi-Strauss, 1955) at the firm. My approach enables me to provide extended versions of the cultural strategies of the narrative programme and narrative anti-programme which I began in chapter 6.

Data Preparation for Constructing the Cultural Strategies

To begin to construct the strategies of the narrative programme and anti-programme, I took each of the narrative trajectories, summarised at the end of chapter 6 in Table 6-7, and tabulated them separately, as shown in Figure 7-3. Each row in the tables constitutes a temporal move as one function follows another over time and each column constitutes the orientation of the function, in terms of either of the narrative programmes or the neutral set of functions associated with the reactions node.

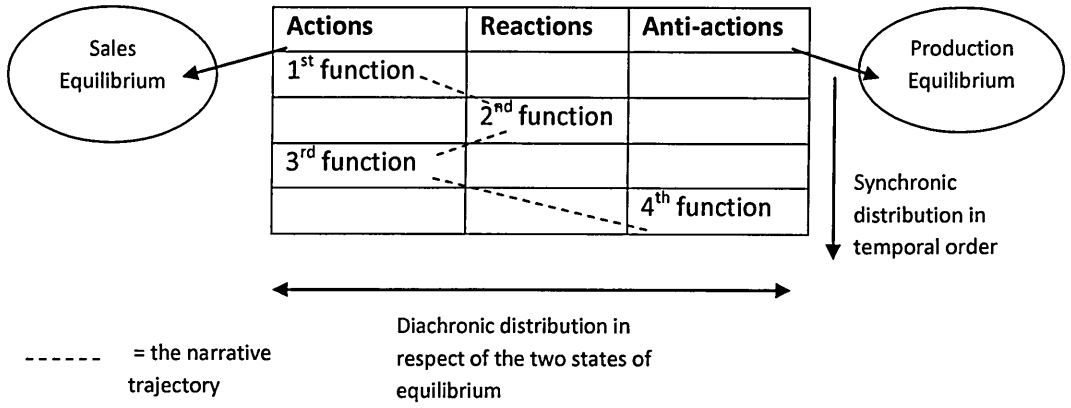

Figure 7-3: Synchronic and Diachronic Dimensions of the Narrative Trajectories at CaseCo

By adding the states of equilibrium implied by the narrative programme and the narrative anti-programme to Figure 7-3, both the synchronic progression of the functions highlighted by Propp (1968) and the diachronic distribution of the functions indicated by Levi-Strauss, (1955) can be conceptualised[71]. The narrative trajectory can be seen to move through both dimensions as it progresses, function by function.

[71] I have discussed the detail of both Propp's (1968) and Levi-Strauss's (1955) theories in chapter 4.

I have provided an example of one of the customer related narrative trajectories in Table 7-1, to help illustrate my approach to the data. Table 7-1 shows the tabulated narrative functions related to the customer D___ and demonstrates how the trajectory they form moves both synchronically across time as it descends each row and diachronically across the narrative programmes as it traverses the columns.

Actions	Reactions	Anti-actions
A: Instigation		
	R: Exploration	
		AA: Postponement
	R: Commentary	
	R: Exploration	
	R: Commentary	
A: Customer's Proxy		
	R: Commentary	
A: Instigation		
A: Instigation		
	R: Exploration	
		AA: Postponement
A: Customer' Proxy		
	R: Commentary	
		AA: Postponement
A: Firm's Proponent		
A: Customer's Proxy		
		AA: Postponement
A: Instigation		
		AA: Postponement
A: Customer's Proxy		
		AA: Invocation
	R: Expediting	
	R: Commentary	
	R: Commentary	
	R: Expediting	

---------- = the narrative trajectory

Table 7-1: The Narrative Trajectory of Functions Related to the Customer D___

Having tabulated each of the ten narrative trajectories in the manner demonstrated in Table 7-1, I reviewed the actual data of each of the trajectories in turn. However, although NVivo automatically presents my data in temporal order, because it is recorded that way in my diary, I found the NVivo coding stripe function inadequate for the purpose of indicating the text coded to each function, because it does not specifically indicate divisions in the coding. Therefore, I exported NVivo reports of

each narrative trajectory into Word and used the 'comment' function to code and indicate each narrative function, as shown in Figure 7-4.

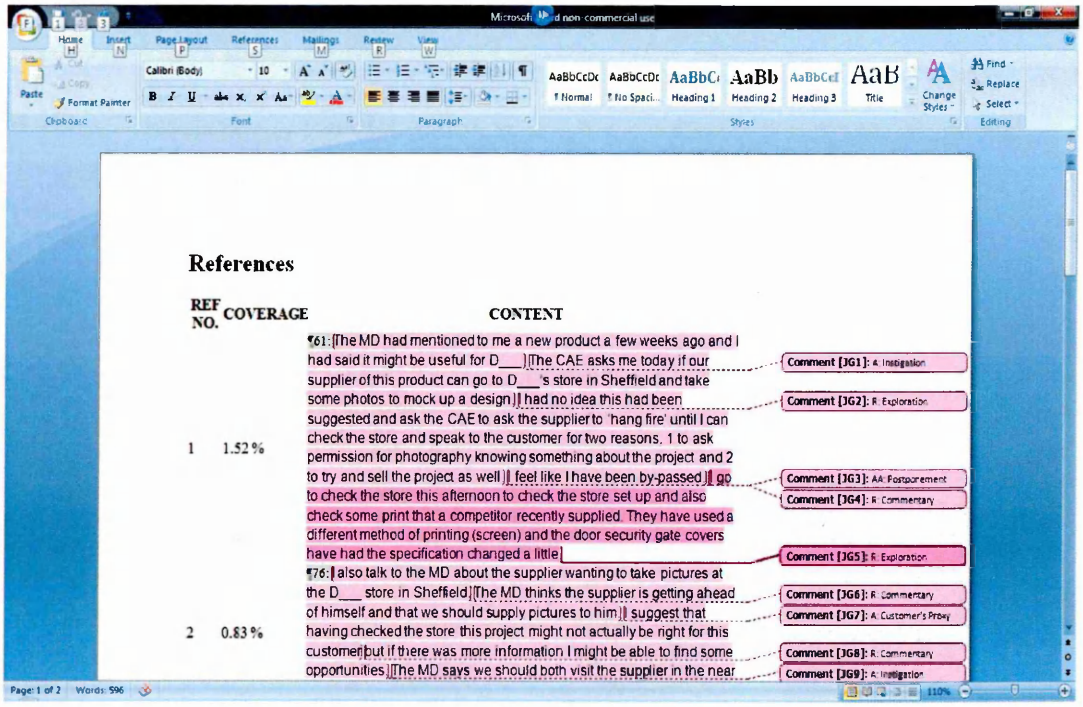

Figure 7-4: Data of the Narrative Trajectory Related to the Customer D___ Coded by Narrative Function

Figure 7-4 shows a screen shot of the Word document which includes the data of the narrative trajectory for the customer D___. The first two portions of the diary 1 data pertaining to D___ are shown, as indicated on the left, and the comments listed on the right indicate the data coded to each of the narrative functions. By selecting a comment, the data to which it relates is highlighted and, in the case shown in Figure 7-4, the comment 'JG5' is selected and highlighted, thereby helping me to isolate the boundaries of that instance of the exploration function in the data. Consequently, to support my further construction of the cultural strategies at CaseCo, I could draw upon a tabulated list of functions and the actual data coded to those functions for each narrative trajectory, as well as the definitions of each narrative function described in chapter 6.

My Approach to Building the Narrative Strategies

To conduct my construction of the strategies of the narrative programmes, I drew upon my identification of the conceptual connections between cultural strategies, narrative

accounts and the schemata of CASs, which I described in chapter 3. By identifying the narrative trajectories as mutual data, each can be considered as different parts of a larger stream of data which might be observed by a CAS (Gell-Mann, 1995). Therefore, to construct the narrative strategies, I adopted the role of an observing CAS reviewing each narrative trajectory in an iterative engagement with the larger stream of data, to build a schema representing my interpretation of the strategies of the narrative programme and narrative anti-programme. My role as an observing CAS is described by way of the four steps I have summarised in Table 7-2.

Step No.	Process
Step 1	Prepare the individual trajectories as mutual data
Step 2	Select a trajectory with which to form a tentative schema of the narrative programme
Step 3	Construct the schema of the narrative programme by reviewing each trajectory in turn and construct a schema of the narrative anti-programme as a counterpoint to that of the narrative programme.
Step 4	Add the new strategy descriptions to those developed in chapter 6.

Table 7-2: Four Steps in Adopting the Role of an Observing CAS

In step one, to prepare for my role as an observing CAS, I first reviewed each narrative trajectory separately by reading the tabulated functions, the associated data and the function definitions together. Whilst doing so I noted the ways in which one function followed another, the connections between them, their ordering and the moves between the two programmes, or moves between the programmes and the neutral functions. I wrote a summary of the findings for each of the ten trajectories.

In step two, I selected the text of one of the summaries of the narrative trajectories with which to form my tentative schema of the narrative programme. I chose the summary based on the customer A___ because its trajectory was of medium length and only contained functions of the narrative programme and those of the neutral set. Consequently, my tentative schema constituted a straightforward operation of the cardinal functions of the narrative programme and their interactions with the catalyses functions.

In step three, I began to amend the text of my tentative schema by reviewing, in turn, each of the summaries I had written for the separate trajectories, making changes and

additions to the tentative schema as I noticed new factors or ways in which the schema could be refined. I ordered the iterations of my operation as a CAS by first reviewing the progressively longer trajectories which included more interactions between the functions and also introduced the functions of the narrative anti-programme. As the functions of the narrative anti-programme appeared I began to construct a schema based on them to accompany the schema of the narrative programme. Next, I reviewed the shorter trajectories which tended to support the already constructed schemata because most of the detail had already been incorporated.

Indeed, the number of new amendments to the schemata began to wane in the early iterations of my review, thereby supporting the notion that the trajectories constitute mutual data. To complete step four, I added the description of my newly constructed schemata/cultural strategies, based on the interactions of the functions, to the non-interactive strategy descriptions which I constructed in chapter 6. I present my completed narrative strategies next.

The Strategy of the Narrative Programme

The strategy of the narrative programme carried forward from chapter 6 ...

> ... tries to match the equilibrium state of salespeople and customers and, therefore, speaks on behalf of customers at CaseCo. To do so, it uses industry conventions such as enquiries, proofs, etc. to communicate the needs of customers in a way production can understand. Such non-human actors are used by the narrative programme to translate customer needs into sales needs and production needs. The narrative programme will explain the production perspective to customers and it will act in lieu of customer prompts to initiate customer enquiries and orders ...

... can be extended based on the *interaction* of functions to include ...

> ... the narrative programme communicates the needs of customers to CaseCo. It responds to internal and external information needs and monitors progress, prompting action when moves to respond to customers' needs stall or when the

customers encounter a problem. To do so, it explores options and commentates on them to enable the instigation of action to achieve sales goals, to act on customers' behalf and to translate between customers and production, so that production can be forewarned of customer requirements and customers can be updated on progress. In doing so, non-human actors related to the customers, such as drawings, are translated into non-human actors at CaseCo, such as cutter guides. The narrative programme authorises the expediting of work at the firm as one action leads to another; for example gaining customer artwork leads to the production of proofs, which leads to customer authorisation of proofs; or, gaining customer samples/enquiries leads to estimates which lead to quotations.

A lack of opportunities to act as customer's proxy leads the narrative programme to instigate proactive sales activity which, in turn, leads to the exploration of new opportunities. Where the narrative anti-programme might impose something detrimental to the sales outcomes on a customer, the narrative programme will instigate action on behalf of customers which contradicts the production perspective. However, when the narrative programme encounters the objection or the postponement functions of the narrative anti-programme, it explores for solutions and instigates further action by highlighting the needs of customers. When the narrative programme encounters the invocation of the needs of non-human actors by the narrative anti-programme, it commentates on them, leading to the expediting of actions in favour of the sales perspective by upholding the customers' view of non-human actors, such as proofs. The exploration of options leads the narrative programme to instigate further actions on behalf of customers which includes insisting on the production perspective when there is no prospect of an alternative.

The Strategy of the Narrative Anti-Programme

The strategy of the narrative anti-programme carried forward from chapter 6 ...

... is relative to, and competes with, the narrative programme, It holds a sceptical view of the validity of the narrative programme, leading to action/events which disrupt it. The narrative anti-programme invokes the production state of

> equilibrium and claims authority from it, expecting customers to conform to its correctness. Where action/events in favour of the narrative programme do not conform they are objected to and further actions are postponed. To do so, the narrative anti-programme recruits various combinations of the human and non-human actors at CaseCo, thereby adding load ...

... can be extended based on the *interaction* of functions to include ...

> ... the narrative anti-programme rejects the sincerity of customer requests and invokes the requirements of non-human actors to object to the narrative programme, for example, orders should come before proofs and proofs cannot be produced without a job bag. The narrative anti-programme invokes the production view of non-human actors such as proofs and cutter guides. It objects to the narrative programme's use of alternative views which leads to the dismissal of, or objection to, customer requests. Such dismissals lead the narrative anti-programme to postpone further action before it moves to explore alternative solutions. However, the narrative anti-programme will submit to customer pressure if an alternative solution is not accepted.
>
> The narrative anti-programme acts to slow the progression of events to allow time to explore uncertainties which might adversely affect the production equilibrium. Commentary on the postponement of actions and the invocation of non-human actors then leads to further postponement. The narrative anti-programme waits for the narrative programme to begin acting again rather than instigating action of its own volition.

Conclusions Regarding the Cultural Strategies at CaseCo

In chapter 3 I noted that, by adopting complexity theory to consider culture and biology as the products of the same generic process of CASs, I would need to pre-empt my research questions with a written account of the cultural strategies at CaseCo. In this chapter, I have completed my accounts of the cultural strategies which can be attributed to the narrative programme and the narrative anti-programme at the firm. Indeed, I have done so by adopting the role of a CAS myself. Therefore, the strategies I have written

can be considered as descriptions of cultural schemata. They are measures of EC equivalent to the description of genetic survival strategies in biology.

By exposing both the synchronic and diachronic dimensions of the narrative trajectories in my data, the cultural strategies can be seen to display both the temporal logic, proposed by Propp (1968), and the diachronic logic based on the mediation of oppositions, proposed by Levi-Strauss (1955). There are a number of 'leads to' connections in the strategies which demonstrate how one function tends to lead to the next over time but the strategies also indicate how the narrative programmes are influenced by their respective implied states of equilibrium. It is as if the two narrative programmes and the neutral reactions functions are GCUs[72] bridging the gap between the sales and production equilibriums.

Where the narrative programme effectively accommodates both the sales and the production equilibriums, the narrative anti-programme does not intervene. Consequently, contributions to the narrative programme by elements of the production process and the people at CaseCo closely associated with production are vital to the strategy of the narrative programme. Indeed, the strategy of the narrative anti-programme is also concerned with responding to customers, but it appears in instances where the two states of equilibrium are irreconcilable through the narrative programme alone. It seems that the narrative programme is trying to fit the firm to the customers' needs and the narrative anti-programme is trying to fit the customers' needs to the firm. The GCUs operate in the manner described by Levi-Strauss (1955) to reconcile the two apparently irreconcilable oppositions.

Consequently, rather than single narrative trajectories, each portion of the mutual data, which I used to construct the two cultural strategies, can be considered as two alternative syntagms (Greimas and Courtés, 1979; Latour, 1991). I have modelled this conceptualisation in Table 7-3 which shows the tabulated functions for the customer D___, once again, but now with a syntagm for both the narrative programme and anti-programme indicated. In Table 7-3 the cardinal functions of both narrative programmes interact with the neutral catalyses functions of the reactions node to add Latourian load via each syntagm. The narrative programme adds load to the customer needs in a way

[72] Gross Constituent Units (GCU) are an integral part of Levi-Strauss's (1955) theory, as discussed in chapter 4.

they need to be understood at CaseCo for production purposes. The narrative anti-programme adds load to the production perspective when the production equilibrium is disturbed.

Actions	Reactions	Anti-actions
A: Instigation		
	R: Exploration	
		AA: Postponement
	R: Commentary	
	R: Exploration	
	R: Commentary	
A: Customer's Proxy		
	R: Commentary	
A: Instigation		
A: Instigation		
	R: Exploration	
		AA: Postponement
A: Customer' Proxy		
	R: Commentary	
		AA: Postponement
A: Firm's Proponent		
A: Customer's Proxy		
		AA: Postponement
A: Instigation		
		AA: Postponement
A: Customer's Proxy		
		AA: Invocation
	R: Expediting	
	R: Commentary	
	R: Commentary	
	R: Expediting	

---------- Syntagm of the Narrative Programme

———— Syntagm of the Narrative Anti-Programme

Table 7-3: Syntagms of the Narrative Programmes in the Data Relating to the Customer D___

By way of the alternative syntagms related to each of CaseCo's customers, there is competition between the two narrative programmes, particularly over the way the neutral catalyses functions contribute to their respective syntagmatic chains. Therefore, as the narrative trajectories progress, there are occasions when the competition between the narrative programmes involves the definitions of the non-human actors such as proof, order, etc. Indeed, in chapter 6, I noted that the strategic influence of the neutral

catalyses functions seemed to be associated with the non-human actors. However, having constructed just the two strategies of the narrative programmes, the strategic contribution of the catalyses functions is now distributed between them. Whether a trajectory proceeds with the narrative programme's view of a non-human actor or the narrative anti-programme's view of a non-human actor is contingent on the competition between the two narrative programmes trying to achieve their respective states of equilibrium.

It is the competition between strategies in biology that has been modelled through the application of game theory, especially the application of the concept of the iterated Prisoners' Dilemma (Maynard Smith, 1982; Dawkins, 1989; Axelrod, 1990). My case study meets two of the circumstances for an iterated prisoner's dilemma. First, there is a long shadow of the future with assured repeated contacts with the same people and second, based on my review of CaseCo in chapter 1, there is a lack of overt managerial control, i.e. no central authority (Axelrod, 1990). However, as discussed in chapter 2, the introduction of human free choice threatens the possibility of applying game theory to culture. As Maynard Smith (1982) points out, biological evolution occurs through the blind inheritance of naturally selected traits, leading to strategies that are amenable to game theoretic modelling and he stresses that, extending the approach to culture ought to be based on an equivalent replicator to the gene. Without assuming a cultural replicator the construction of my cultural strategies has provided me with an equivalent to the genetic strategies of biology. Therefore, I have isolated the area in which to search for cultural replication.

To avoid the problems associated with memetic modelling, which I discussed in chapter 2, there must be replication. As Aunger (2002) pointed out, memetics needs to demonstrate replication to make sense as a science. Based on Dawkins's (1976; 1982; 1989; 1999) selfish replicator theory, as it applies in biology, it would be the elements of my descriptions of the cultural strategies at CaseCo that compete, which would indicate replication in culture, similar to that demonstrated by Mendelian heredity, if it exists. Indeed, my cultural strategies do compete and the role of the non-human actors offers the possibility of interventions which are not wholly based on the human actors' free choices.

Chapter Conclusions

In this chapter, I have completed my preliminary aim of writing an account of the cultural strategies at CaseCo which can be used as the basis from which to search for replicating units of culture. In chapter 8, I directly address my first two research questions, by analysing the evaluative data I recorded in diary 2 of my period of participant observation at CaseCo.

Chapter 8 – The Possibility of Replicating Units of Culture

In this chapter, I directly address my first two research questions through an analysis of my diary 2 data, as shown in Figure 8-1.

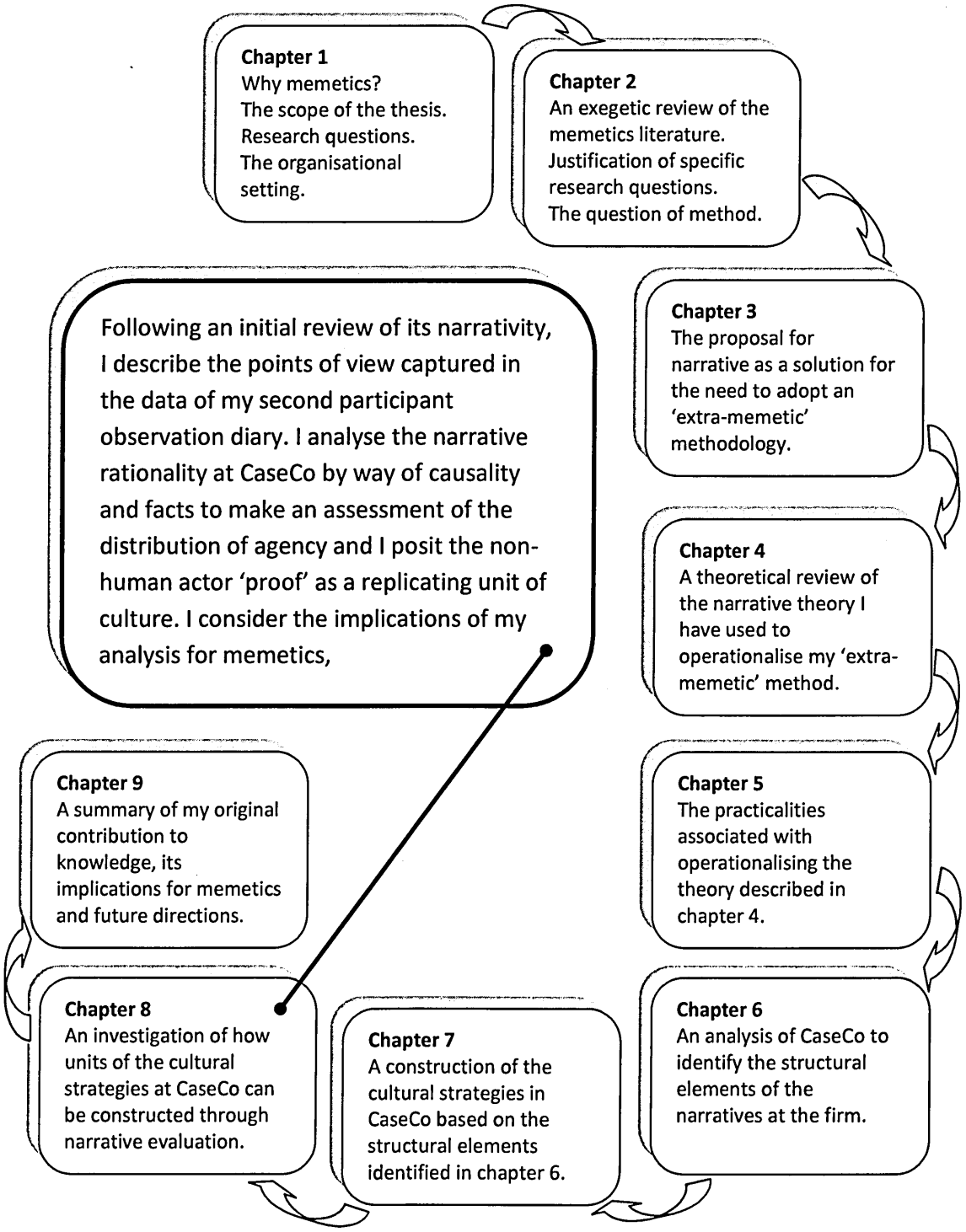

Figure 8-1: Thesis Structure Showing the Role of Chapter 8

By completing the task of constructing written accounts of the cultural strategies at CaseCo, I have mirrored, in culture, Dawkins's (1982; 1999) proposed method of studying the effect of genetic replicators through a written account of organisms' biological survival strategies. I have identified the approach, in chapter 3, as generic for instances where complexity emerges through the operation of Gell-Mann's (1995) CASs. However, where Dawkins (1982; 1999) makes the assumption that, in biology, the strategies are genetically programmed, I am using my account of the cultural strategies at CaseCo to search for the possibility of replication in culture, thereby addressing my first two research questions. To do so, the chapter develops through the stages shown in Figure 8-2.

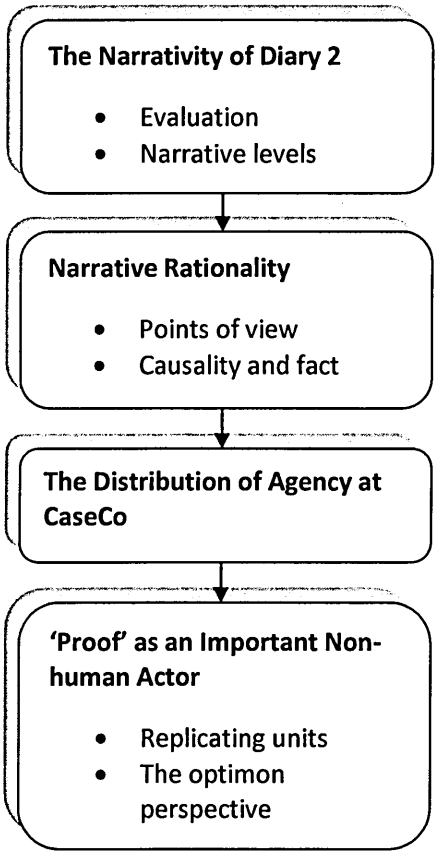

Figure 8-2: Structure and Content of Chapter 8

Having completed my account of the cultural strategies of the narrative programme and narrative anti-programme at CaseCo in chapter 7, I noted the competition between the sales and production conception of the non-human actors at the firm. Figure 8-2 shows how, following a review of my data to confirm its narrativity, I adopt the evaluative tools of narrative theory to analyse the narrative rationality at CaseCo, to investigate the

role of the non-human actors. More specifically, I review how they play a part in the ascribing of causality and fact. I subsequently identify the non-human actor 'proof' as pivotal in the competition between the sales and production states of equilibrium, before assessing whether competing notions of proofs can be considered as optimon type replicating units of culture, by applying the punnett square model. I discussed how the punnett square model is used in genetics, in chapter 2. Consequently, in this chapter, I directly address my first two research questions.

1. **Can the organisational culture at CaseCo be divided into units?**
2. **If so, can such units be seen to selfishly replicate?**

Addressing the Diary 2 Data

The change in the nature of my data collection, described in chapter 5, which resulted in my second participant observation diary, was based on my early analytical reflections whilst immersed in my period of participant observation. At that time, I had yet to systematically review the data and finalise my approach to the analysis. Consequently, as was the case when analysing diary 1, I felt I ought to review the narrative quality of diary 2 before commencing the second stage of my analysis. To begin the analysis, I read the diary 2 data a number of times whilst bearing in mind the concepts of narrative theory. In light of my goals for the analysis of diary 2 being based on the competition between the cultural strategies at CaseCo, I concentrated on theory relating to evaluation (Labov, 1972; Thompson and Hunston, 2003), narrative rationality (Fisher, 1984) and the putative causal connections, or coherence, of plot (Fisher, 1984; Abell, 2004), to analyse the points of view embedded in each strategy.

As the review of my data progressed I used the annotation facility in NVivo to make notes about ideas and connections between the data and narrative theory. Subsequently, I used the memoing facility of the software to record more abstract thoughts about connections between the data and the theory which occurred to me during the later readings. I then used the modelling facility of NVivo to graphically illustrate my interpretation and I have included the models in this chapter to help support my discussion.

Assessing the Narrativity of the Diary 2 Data

My initial review of diary 2 revealed a number of narrative features similar to those I identified in diary 1. Firstly, the data can be matched to the structural elements of Labov's (1972) narrative syntax, and there is evidence for Cobley's (2001) narrative levels and Bal's (1997) levels of mimesis. Therefore, to help set the scene for the analysis to come, in the next sections, I present a review of the narrativity of the diary 2 data.

Despite the similarities between my two diaries, in some respects they are different. Where diary 1 largely consisted of actions and events, emblematic of Labov's (1972) complicating factors component of narrative syntax, I found the diary 2 data to be much more characteristic of Labov's (1972) evaluation component. In fact, the majority of diary 2 consists of evaluative passages, including evaluative contributions from the other actors at CaseCo. Consequently, it is less restricted to my perspective and instances which relate to 'my customers'.

Nevertheless, the evaluative passages are related to action/events similar to those recorded in diary 1. Indeed, the data includes interactions with some of the same customers and, in some cases, continuations of the same narrative trajectories I used for building the strategies of the two narrative programmes in chapter 7. Therefore, in diary 2, there are more indicators towards the narrative rationality at the firm. The data of paragraphs 228, 230 and 232, which relate to a customer managed by the MD, illustrates the typical features of the diary 2 data. The passage recounts the events surrounding the customer visiting CaseCo to make a complaint. To help illustrate my analysis I have added sentence numbers to the longer passages of the diary 2 data.

> Paragraph 228:
> *[1] On returning to the office there has been a problem with the same customer that the MD had abused previously.*
>
> Paragraph 230:
> *[2] The customer (a print broker, middleman) has visited our firm this morning to complain about some print jobs and she has argued with the CS in the middle of our works. [3] The MD is speaking to various people in the office. [4] I hear him say that whatever's happened she shouldn't be dressing down the CS in the works in full view of the production staff. [5] When I ask the MD about what's happened he tells me that the customer had placed two orders with very tight deadlines which he had agreed to. [6] The artwork had subsequently been late so we had run the jobs quickly to maintain the deadlines. [7] This had meant sending the jobs quickly to an outsource finisher. [8]*

*There was only one firm that could do the jobs at that short notice. **[9]** The MD had come in to pack one of the jobs taking out some spoiled prints but the customer had found some of the spoiled prints with her delivery.*

Paragraph 232:
***[10]** "Ok so they shouldn't have been there" - MD*

Sentence 1 of this passage summarises the data which follows so can be identified as the 'abstract' structural element of Labov's (1972) narrative syntax. Sentences 2 and 3 provide details of the circumstances of the data so indicate the second structural element of narrative syntax, 'orientation'. Then the passage re-presents a set of complicating factors, similar to the action/events of diary 1, such as the MD's action of speaking in sentence 4 and my act of asking the MD a question in sentence 5.

However, paragraphs 228, 230 and, 232 also demonstrate richer examples of evaluation. Indeed, the temporal arrangement of the action/event narrative clauses is disrupted because much of the data is constituted by the actors recounting and reflecting on previous action at CaseCo. This quality of the data is a product of the informal interviewing (Hammersley and Atkinson, 1983; Davies, 1999; Chang, 2008) I used during the second part of my ethnographic participant observation. In response to my prompting, in sentence 5 for example, the MD recounts such a set of action/events related to a customer order in sentences 5 to 9.

This reflective element to the data means that there are examples of Labov's (1972) evaluative elements, both internal and external to the narrative clauses. Sentence 4 is an external evaluation where the MD declares his opinion about how customers should behave when they visit CaseCo. It indicates that he assumes the need to maintain respect for management in the minds of those who work in the factory. Indeed, the lexical item 'dressing down' itself evaluates on the overarching good/bad evaluative dimension (Thompson and Hunston, 2003) because of the connotations of authority and scolding with which it is associated.

There are similar examples of Labov's (1972) evaluation that are internal to the narrative clauses, for example, when the MD recounts the action/events relating to the customer's visit. In sentence 5, the use of the words 'very tight' indicates that there was a degree of jeopardy inherent in the request of the customer. The likelihood of a

problem caused by the customer's demands, emphasised through the modifier 'very', reflects the modality dimension of evaluation (Thompson and Hunston, 2003).

Grammatical evaluation (Thompson and Hunston, 2003) is also evident, for example, in sentence 10, what would have been a straightforward declaration of what the MD takes to be the facts surrounding the spoiled prints is modified by the use of the term 'OK'. Through this modification the phrase becomes an admission of culpability for the poor quality of product experienced by the customer. The MD's evaluation of the customer's complaint continues in paragraph 234.

> Paragraph 234:
> ***[11]*** *The customer had also complained about the other job 'offsetting'.* ***[12]****The MD says that this job had had a large area of solid black print which hadn't dried before the job was trimmed leading to print being passed from one sheet to another, marking it.* ***[13]*** *All this is due to the rush to deliver the jobs.* ***[14]*** *The MD says that he is particularly angry because the customer now says there's time to redo the job because she had built in extra time on her deadline and the print wasn't actually needed yet by her customer.* ***[15]*** *The MD says that the reaction of the customer has been compounded by the way that our guys in the works have seen her there and said things like, Oh don't worry H___ its only work.*

Paragraph 234 demonstrates more generally how, in diary 2, I have captured data which re-presents extended evaluative contributions from the other actors at CaseCo, which illustrate their points of view (Labov, 1972). Consequently, the actors narrative rationality (Fisher, 1984) and the manner in which they emplot the action/events at the firm is indicated. For example, in sentences 12 to 15 the MD provides his point of view regarding the customer's complaint by explaining how he makes sense of the situation. He characterises his feeling as anger and explains that he feels that way because he has been misled.

Therefore, as well as the statements of apparent fact such as a customer had built in extra delivery time, the data includes the putative cause and effect links typical of emplotment (Propp, 1968; Labov, 1972; Cobley, 2001; Dennett, 2003; Czarniawska, 2004; Abell, 2004). In sentence 12, the MD proposes that it is the nature of the customer's artwork that *leads to* the offsetting problem. In sentence 13, the problems have been *caused by* the rush to deliver the order. In sentence 14, there is time to correct the problem *because* the customer gave false delivery deadline information. Of course, the deadline also *caused* the rushed production process in the first place.

The culmination of the MD's evaluation is that the culpability for the customer's problem lies with the customer. It is their artwork which has meant the printed items would need to dry for longer than usual. Yet, it is the customer who has put pressure on the delivery time for spurious reasons. There is a cumulative causality (Abell, 2004) in the sum of the MD's point of view which indicates the customer has caused the problems. The MD relegates CaseCo's responsibility to no more than leading the customer to emphasise their displeasure, through the cause and effect link described in sentence 15, where the MD suggests that the actions of the production staff have caused the customer to complain more vociferously.

Narrative Levels

Although the diary 2 data includes the points of view of other actors, my recognition of narrative structure in it indicates that, as was the case for diary 1, the data of diary 2 should still be regarded as my own narrative account. I have intuitively imbued the data with narrative structure in its recording and I am the narrator at the primary level of the text. Consequently, the role of Cobley's (2001) narrative levels relating to both the authorship of the data, in terms of its collection, and the readership of the data, in terms of its analysis, ought to be recognised when I reflect on my findings.

Similarly, I also use a combination of the levels of mimesis noted by Bal (1997). In terms of the examples of data reviewed above, sentence 10 is direct speech but, like diary 1, due to the nature of my data collection, which meant keeping rough notes that I later recorded in my diary, this form of re-presentation is relatively rare. More common, is the indirect speech of sentence 5 where I re-present the MD's contribution via the declarative verb 'tells', and the free indirect discourse of sentences 6 to 9 where I continue to re-present the MD's story, but without the clearly exhibited use of his own language, through a declarative verb. Sentence 2 is narrated because the clause is not attributed to an actor. It is my summary of a set of action/events.

Despite the levels of my own authorship and narration, my recording of direct speech, indirect speech and free indirect discourse supports the notion that, the accounts recorded at the second level of my narrative maintain, in varying degrees, a valid representation of the other actors' perspectives and opinions (Bal, 1997). Although my scope for investigating the evaluative use of lexical items and grammar is limited in less

direct re-presentations of the other actors, I have captured their narrative rationality through my recording of the putative causality and apparent facts used to express their points of view.

There is also evidence in the data that the actors re-presented at the second level of the text, have themselves intuitively used narration to relate past action/events as examples with which to illustrate their points of view. Indeed, there are recurring examples of where the actors recall past action/events, both at CaseCo and from their wider experiences in life. In paragraphs 473 and 475, for example, the PD uses stories from the past to help illustrate his point of view with respect to sales orientated people and production orientated people.

> Paragraph 473:
> ***[1]****The PD says that it can be irritating to have someone who isn't positive to customers he says that some years ago at a previous premises there were only a few of them in the office and the E2 used to always rush to answer incoming phone calls before anyone else.* ***[2]****The PD says that the E2 then used to get irate when people asked about or for things saying that he was too busy to sort out silly things for people and would show his irritation in the tone of his voice.* ***[3]****The PD says he asked him to stop answering all the incoming calls but the E2 kept doing it.* ***[4]****The PD says that he felt insecure when the E2 was irritable to someone on the phone but then didn't say what it was about.* ***[5]****The PD wanted to know what was happening.*

In this passage of largely indirect speech, the PD uses several elements of Labov's (1972) narrative syntax to tell a story. He begins, in sentence 1, by making an evaluative comment based on a putative cause and effect link (evaluation), i.e. working with someone who is not positive to customers causes one to become irritated. Sentence 1 also summarises the point of the story (abstract) and introduces the context (orientation). To support his assertion of causality, he narrates a short story based on previous events at CaseCo, from the second half of sentence 1 through to sentence 3 (complicating factors). Sentence four evaluates (evaluation) the story and then the point of the story is reaffirmed (resolution and coda), in sentence 5. Indeed, in sentence 4, the PD narrates the actions of the E2 at a third level of the text (Bal, 1997) and adds evaluation by way of the lexical item 'irritable'. The PD narrates a similar account in paragraph 475 related to sales.

> Paragraph 475:
> ***[1]*** *The PD says that sales can sometimes live up to the opinion some people have of it.* ***[2]****He gives the example of a sales person they employed some time ago who came to the job saying that he had access to a lot of business but then spent all day reading the*

yellow pages. ***[3]****The PD thinks that if he knew the individuals at places already then there would be no need to read the yellow pages.* ***[4]****He says that this sales person was also full of work when they were too busy to take more orders but never had any work when they were quiet.* ***[5]****He thinks the sales person was being manipulative and was covering up his inadequacies.* ***[6]****The PD says that the salesman used to arrive at the office and report that he had had 'very good' meetings with new prospects but then no orders or enquiries followed.* ***[7]****The PD thinks that if the meetings were good then there would have been some further communication.* ***[8]****The PD says that in the end he questioned in his own mind whether the meetings were even happening at all.* ***[9]****The sales person left after twelve months and the PD thinks that he had just been using their firm as a stop gap while looking for somewhere else to work.*

Once again, in sentence 1 of this passage, the PD begins to recount a story by making an evaluative comment about the sales function which summarises the points to come. Next, the context is introduced in sentence 2. The PD then recalls a series of action/events followed by the meaning he has derived from each one. Sentences 2 and 3 are used to show how knowing people who are potential customers of CaseCo means a salesperson should not need to do research. Sentences 4 and 5 are used to show that sales people lie about their prospects for achieving orders. Sentences 6 and 7 are used to suggest that effective sales work will in itself lead to orders, irrespective of other factors, such as the competition and the production capabilities of CaseCo. Finally, in sentences 8 and 9, the cumulative meaning of the plot (Abell, 2004) is summarised as the PD's point of view that the sales person in question was being selfish and duplicitous.

Where, in the examples of the PD's narration, the stories relate to previous action/events at CaseCo, paragraphs 362 and 382 illustrate how stories based outside life at the firm are sometimes used to express a point of view about life at the firm.

Paragraph 362:
[1] *"I know what it is. Its women and their hormones" – MD*

Paragraph 382:
[2] *The MD gives another instance of his view about the differences between woman and men. He says that he is doing a charity event to raise money and has already raised £2000 pounds.* ***[3]*** *The next event is a mystery journey where you have to make your way back to a rendezvous point after being dropped off from a bus with blacked out windows.* ***[4]*** *The MD thinks this is a great idea and a lot of fun.* ***[5]*** *He says that it's got competitive because he is doing it with a male friend and his wife is doing it with her female friend.* ***[6]*** *The MD has told his wife that the men will be able to complete the task quicker than the woman but his wife disagrees because they will be able to use their 'feminine ways' to get lifts and things.* ***[7]*** *The MD says that he replied by saying "yes but men have got the ability to organise and plan".*

In this passage of data the MD contributes to a discussion about my working relationship with the CAE and the CAM. First, in sentence 1, the MD suggests that difficulties in communication can be the result of differences in gender because the difficulties I encounter are due to the female hormones of the CAM and the CAE. The MD goes on, in paragraph 382, to support this causal connection by recounting a story of life away from CaseCo.

After some orientation (Labov, 1972), in sentences 2 to 4, the MD suggests in sentence 5, that the differences in gender have caused a competitive situation. Sentences 6 and 7 suggest that men and women have wholly different ways of completing a task. However, where women can draw on mysterious 'feminine ways' the men can use skills such as organising and planning which are, of course, more readily transferred to the management of an organisation. The MD uses the story to express a point of view that men are good managers and women frustrate the smooth operation of CaseCo, in ways which are attributable to their gender so beyond his ability to manage them.

Formative Discussion

My review of the diary 2 data has supported its validity, in terms of offering a source for the investigation of the narrative rationality which underpins the strategies of the two narrative programmes I have identified and described in chapters 6 and 7. By encouraging the actors at the firm to reflect on the events at CaseCo, I have succeeded in recording their narrative accounts which are rich in evaluation. The data has captured an impression of each actor's voice through the explanations of their points of view, which include statements of apparent fact and putative cause and effect links. Such qualities are indicative of narrative rationality (Fisher, 1984) and emplotment (Cobley, 2001; Czarniawska, 2004). Indeed, there is evidence of the cumulative causality proposed by Abell (2004), which points to an overarching coherence to their points of view (Fisher, 1984).

However, the recognition that I have re-presented CaseCo with the use of both Cobley's (2001) levels of narrative and Bal's (1997) levels of mimesis, reinforces the need for me to adopt a reflexive approach to the analysis, to account for the impact of my own focalisation of the data. Despite this, the recording of evaluation in direct speech, indirect speech and free indirect discourse supports the notion that the evaluation can,

with varying degrees of confidence, be attributed to the actors being re-presented at the second level of my own narrative account (Bal, 1997). Indeed, the actors whose voices are re-presented at the second level of the text can be seen to intuitively narrate their own accounts of past events at CaseCo, and events in life outside the firm. In doing so, they also re-present others at a third level in the text. However, throughout the analysis, I have tried to limit my interpretation based on lexical items and grammar to instances where I am confident that the data has recorded a fair representation of the actor, through either direct speech, indirect speech or where I have specifically highlighted the use of a specific term.

My review of the narrativity of diary 2 has demonstrated that the data is suitable for an analysis which addresses my first two research questions. Consequently, I continued my analysis by investigating the narratively organised points of view evident in the data. I present this part of the analysis in the next sections.

Investigating the Narrative Rationality at CaseCo

Based on the characteristics identified during my review of its narrative quality, I developed my analysis of diary 2 by investigating both the sales and production points of view about life at CaseCo. To do so, I looked to the data which provided explanations for the action/events that the actors experienced. Examples indicating the two perspectives are illustrated in paragraphs 15 and 17 of the diary 2 data which discuss action/events surrounding the proofing process.

> Paragraph 15:
> *[1] The MD reminisces about the period before he took over my previous firm and remembers it as a more straightforward organisation. [2]There were less people working for him and this meant the whole team was more in touch with orders and customers. [3]These days things like proofing have become sloppy and he's not sure why. [4]He makes the point however that now we have two people working specifically in a customer service role (the CAM and CAE) and he never had that resource before. [5]He thinks that having this resource should mean we can generate a good level of customer care.*

In sentence 2 of this passage, the MD narrates a story from the past to help explain his point of view of how the firm has previously provided service to customers, on the good/bad evaluative dimension. The number of people working for him is posited as a causal factor with respect to the manner in which contact with customers is conducted.

Then, in sentence 3, he contrasts the situation at the time of my data collection with the story from the past as relatively negative. Through the lexical item 'sloppy', the negative connotation is emphasised as part of a statement of apparent fact.

The reason for the MD's uncertainty surrounding proofing, expressed in sentence 3, is addressed in sentence 4, where there is a causal connection made between the acquisition of the CAM and CAE, by way of the takeover of CaseCo which I described in chapter 1, and the value of a wholly customer service orientated role. Of course, this causal connection is at odds with the previous suggestion that fewer employers leads to a more holistic recognition of customer needs, thereby indicating the subjective nature of the MD's account. The MD is expressing his narrative rationality rather than an objective truth.

As part of the MD's narration the lexical term 'resource', used to describe the CAM and the CAE, intensifies his point of view that generating customer service is a good thing which CaseCo ought to pursue. The overarching view of the MD's point of view is that delivering good customer service is a positive goal to aim for and outcome to achieve. However, an alternative perspective is raised in paragraph 17.

> Paragraph 17:
> ***[6]****I say that that's interesting to me because I am surprised that we seem to change our approach to proofing depending on customer demands whereas when I've asked about proofing on behalf of customers the CAM and CAE are happy to tell me something needs signing or we need to wait for a hi-res proof before proceeding.* ***[7]****The MD says that he is surprised that proofing problems have occurred because he thinks everyone knows the issues around proofing and what should be made clear to customers.* ***[8]****He thinks that maybe we aren't making a big enough effort to "educate customers" about the printing process.*

The point of view I present in sentence 6 contradicts that of the MD. Although I have experienced the problems resulting from action/events surrounding proofing, because they involve my customers, my sales point of view is that the CAM and the CAE rigorously enforce the proofing procedures, even when customers would like to operate another way. Such a viewpoint suggests that the problems are not due to what the MD evaluates as sloppy proofing. The implication is, of course, that the CAM and CAE feel more confident in enforcing procedures with me than with the customers to whom they speak directly.

The MD develops his point of view regarding proofing in the remainder of paragraph 17. In sentence 7, for example, he evaluates the modality of a problem related to proofs. If the people working at CaseCo correctly explain proofing, then there should be very little likelihood of a problem resulting from customers' misunderstanding the proofing process. Therefore, the firm is cast as the expert and, as illustrated in sentence 8, the firm should educate the customers. The lexical term 'educate' indicates a didactic approach to communicating with customers which reinforces the firm as the superior arbiter of knowledge. The MD's point of view suggests that proofing is a clear cut exercise and customers should modify their behaviour in line with the teaching of CaseCo, the dominant partner in the relationship.

My analysis of paragraphs 15 and 17 illustrates that the points of view of the sales and production perspectives are embedded in the data. Indeed, they indicate that the sales and the production perspectives can be described in relation to the non-human actors, which I identified in chapters 6 and 7, as important areas of competition between the strategies of the narrative programme and the narrative anti-programme. There are also indications of the emploted narrative rationality through the putative causal connections and apparent facts which appear as the explanations are made.

Consequently, I designed my approach to the analysis of narrative rationality as illustrated in Figure 8-3. Using the coding tools in NVivo, I first reviewed the passages of data typical of Labov's (1972) evaluation associated with both the sales and production perspectives. This enabled me to model the way life at CaseCo is conceived by each point of view and facilitated my coding and reviewing of the emploted putative causality and apparent fact.

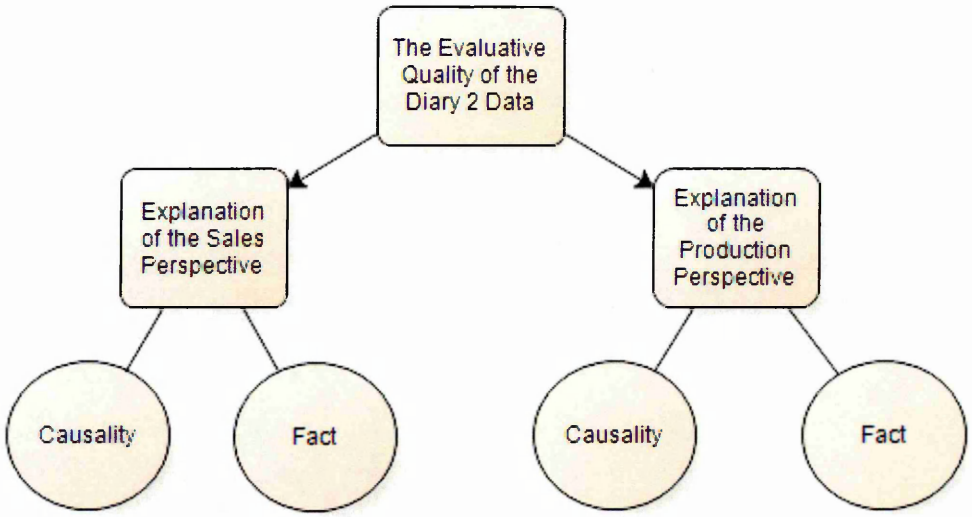

Figure 8-3: Approach to the Analysis of the Diary 2 Data

Points of View

My major finding from my analysis of the explanatory passages in the data was the use of lexical items used to represent customers' needs. It became evident as I reviewed the explanations recorded in diary 2 that, when customer needs were discussed in a sales context, for example, because a customer is involved directly or the data concerns gaining new business, the lexical item 'order' is used. However, when customer needs are discussed in relation to production, the lexical item 'job' is used. Having recognised this distinction, a word search in NVivo for each item revealed their context dependent recurrence throughout the text. Paragraphs 412 and 416 illustrate the point of view associate with 'jobs'.

> Paragraph 412:
> ***[1]*** *One of the art workers has printed the sample for the C_ F__ job and has changed the trimming because trimming in the colour on this job would cause the ink to crack and it would be obvious on this small item.* ***[2]****I say that I'm sure it will be OK but maybe making the coloured border thicker would offset the chipping if the customer needs it to be that way.* ***[3]****The art worker refutes this flatly saying that a chip is a chip it looks the same no matter what.*
>
> Paragraph 416:
> ***[4]****The PM overhears the above conversation and explains to me how the cracking happens.* ***[5]****I already know this because the PM (as well as others) has explained it several times before.*

Sentence 1 of this passage acts as an abstract of a set of action/events surrounding the preparation of a customer's artwork, supplied for printing at a specified size. My own use of the term 'job' indicates that the item to be printed is being considered from the production perspective and, as such, a decision has been made to change the specification sent from the customer, without informing them or gaining their approval. In sentence 2, I raise the possibility of an alternative solution which might enable the original specification to be maintained, but the art worker who made the decision to amend the specification refutes an alternative by way of a statement of apparent fact about production, "a chip is a chip". Indeed, the production manager reinforces the decision with an explanation of how the production process works and my reflection in sentence 5 records how this is a recurring type of response.

Consequently, much of the explanation about how CaseCo operates seems to focus on how the customers' needs, summarised as orders, become translated into jobs via a range of intermediate states such as artwork and estimates. In other words, the set of non-human actors identified in the analysis of diary 1, which tend to be linked to the neutral reactions functions with which the narrative programmes interact. An instance of the role of estimates in the production perspective is indicated in paragraph 90, for example.

> Paragraph 90:
> ***[1]****So I say that if the delivery request was logged and committed to at the earliest point possible we would have been able to keep a dialogue with the customer about the lead time and what we need from them in order to achieve it.* ***[2]****The E1 interrupts laughing and asks rhetorically "How can we give it a delivery time when there isn't an estimate yet"*

As part of a discussion about the best way to ensure CaseCo met its delivery commitments, in sentence 1 of this passage, I suggest that from the sales perspective, the customer's delivery request made with an order should be used for planning production and subsequent communication with the customer. However, in sentence 2, one of the firm's estimators rejects such an approach in a dismissive fashion, expressed through laughter, because from the production perspective, it is the details of how an item will be produced, i.e. an estimate, which determines the time at which it can be delivered. The role of artwork in the production perspective is similarly indicated in paragraph 178.

Paragraph 178:
[1] I ask the CS for input on the F_ M___ artwork. [2]There are some changes to make which we can do or ask the customer to supply new artwork for but which may not be to our normally expected standard. [3]The CS says that because fonts have been changed its better that we don't try and copy it, rather the customer should send a new file. [4]The CAE is listening in because she handles this order and says new artwork may cause issues because the customer uses a non-standard graphics package but the CS says he wants a new file.

In sentences 1 and 2 of this passage, I raise the dilemma of a customer's artwork not being supplied in a format preferred by CaseCo. However, by using the lexical items 'normally expected standard' I have myself indicated that the customer has fallen short of the norms of the firm. I have adopted the production perspective so the customer is characterised as being at fault. However, despite the evidence elsewhere to suggest that the firm is the expert and ought to educate customers, in sentence 3, the CS rejects the opportunity to intervene and change the customer's artwork. Rather the problem, as it is conceived at CaseCo, is deflected back to the customer. In sentence 4, the CAE reinforces the point of view proposed by the CS by suggesting that the customer uses 'non-standard' software. The firm is, therefore, presented as the arbiter of whether a customer is working in an appropriate fashion but the customer is left with an unsolved problem. Their order has failed to be transferred to a job.

Similar issues regarding artwork recur throughout the data because artwork is fundamental to having an image printed. Therefore, artwork plays an important role in the process whereby a customer's 'order' is transformed into a 'job'. I have modelled the process that recurs in the data in Figure 8-4, which shows how artwork supplied alongside an order is translated into artwork suitable for use on CaseCo's printing equipment. The artwork forms the links between the order/job dichotomy and the non-human actor 'proof' mediates the change.

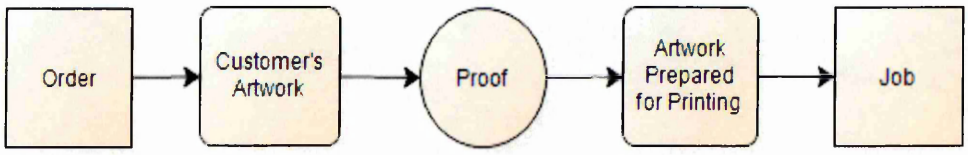

Figure 8-4: Customers' Orders become Jobs

Consequently, the responsibility for the customer service that is provided to customers by CaseCo tends to fall either side of the job/order dichotomy. Where the term 'order' is used the responsibility lies with the customer. Where the term 'job' is used the responsibility lies with the firm, as demonstrated in paragraph 230.

> Paragraph 230:
> *[1] When I ask the MD about what's happened he tells me that the customer had placed two orders with very tight deadlines which he had agreed to. [2]The artwork had subsequently been late so we had run the jobs quickly to maintain the deadlines.*

In sentence 1 of paragraph 230, the term 'order' is used by the MD in connection with the point of view that the customer has asked for delivery dates which will be difficult for the firm to achieve, although he has agreed to them. In sentence 2, following the MD's agreement to the delivery deadlines, the orders have become jobs, thereby moving under the responsibility of CaseCo. Consequently, attempts are made to accommodate the customer's late actions, in respect of supplying their version of the artwork. The underlying rationality of the production perspective is that, as the expert, CaseCo has recognised a difficult request and done its best to accommodate it. However, the customer has disrupted the best efforts of the firm and the MD.

In Figure 8-4 the non-human actor 'proof' is depicted as the mediator in the process whereby order artwork becomes job artwork. Therefore, it is in the process of proofing where competition between the order and job perspective occurs. Indeed, there are instances in the data where this role is strengthened, sometimes to the extent that proofs might arbitrate in legal disputes, for example, in paragraphs 62 and 70.

> Paragraph 62:
> *[1]The MD says that we have to hold back on offering delivery dates until artwork has been received and then production slots are only allocated on the basis of the proofs being approved by the time we need them approved in order to keep to the production slot allocated.*

> Paragraph 70:
> *[2] The MD is concerned about covering ourselves legally as far as being able to make our point in court if necessary. [3]Any customer not willing to proof in the way we suggest will be asked to sign a disclaimer thereby accepting any responsibility for incorrect print.*

In sentence 1 of this passage, the MD strengthens the notion that customers might disrupt the way CaseCo produces their jobs by suggesting that final production commitments should not be made until the order associated artwork has been translated

into the job associated artwork, by way of a proof that has been approved by the customer. This proposal suggests an underpinning point of view that customers should be responsible for the smooth running of CaseCo's production facilities, because it is they who must commit to signing a proof in time to facilitate production.

Indeed, in sentences 2 and 3, the MD goes further by suggesting that proofs should be regarded as legal documents, which can be formally used to demonstrate where the responsibility lies for problems encountered through printed items being produced incorrectly or supplied late. Therefore, any flexibility in helping customers, on a basis of trust or mutual understanding, is restricted by proofs acting as mediators, or an alternative legal document if the customer rejects the proofing process. Consequently, there is some transference of agency from the human actors to the non-human actor 'proof'.

The Job/Order Dichotomy and the Strategies of the Narrative Programmes

In chapter 7, I noted that non-human actors such as proofs played a part in the alternative cultural strategies at CaseCo. Therefore, my conceptualisation of orders becoming jobs, through the mediation of proofs, can be linked to the two narrative programmes I have used to construct the sales and production strategies, as illustrated in Figure 8-5.

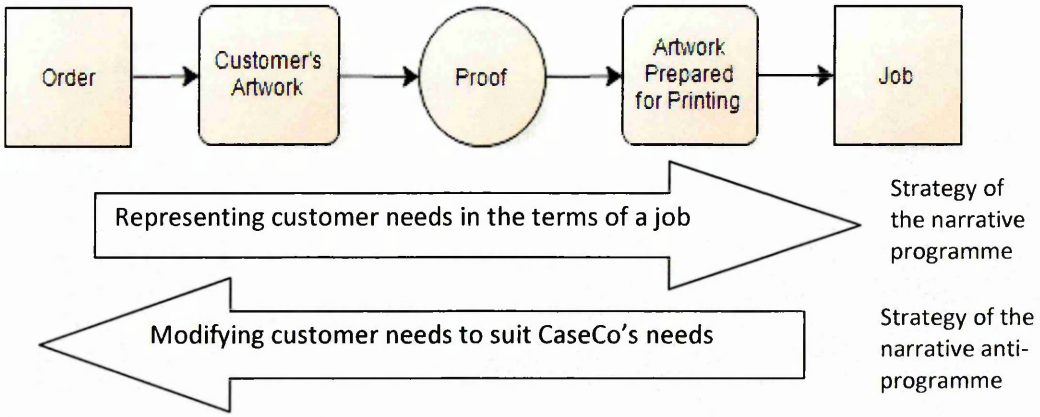

Figure 8-5: How the Cultural Strategies at CaseCo Influence Customer Orders

Figure 8-5 shows how the strategy of the narrative programme acts to embed the features of a customer's order into the job which is manufactured. In contrast, the strategy of the narrative anti-programme acts to modify the features of a customer order

to accommodate the needs of a job. Indeed, as I have noted above, the narrative anti-programme may act to block an order becoming a job, if it cannot accommodate the artwork through the proofing process.

Of course, the picture I have modelled in Figure 8-5 could be a representation of how the people at CaseCo consciously decide to act to complete the work in the way they see fit. However, as mentioned above, there is a degree of agency invested in the non-human mediator/arbitrator 'proof'. Indeed, throughout the data there are more indications that decisions are taken without a large degree of conscious involvement, on the part of the human actors. Examples are evident in paragraphs 368, 420 and 422.

> Paragraph 368:
> ***[1]*** *The MD restates that he felt our service dropped when he left the office more to start selling in the New Year.* ***[2]****I explain the previous 'anti-sales' feeling that sales considered they endured at the firm the MD took over and that maybe it's 'sales' as a function or idea that causes the poor reaction.* ***[3]****The MD agrees but doesn't add much to this. He says that he's got sick of "ramming the point home".* ***[4]****He says that he suggests more productive ways of doing things and "everyone agrees it's a good idea and starts to work differently then there's a weekend and everyone has forgotten" and reverted back to how things were before.*

Paragraph 368 records a discussion between the MD and me. The MD adopts the sales perspective in sentence 1 by recalling his own selling based activities. In sentences 3 and 4, he suggests he has proselytised the sales perspective to others at CaseCo, adding emphasis with the lexical items 'ramming the point home', which indicates a degree of commitment and effort. However, the result of his efforts seems short lived even though he achieves apparent consciously expressed agreement. Indeed, there are instances I have already related above which indicate that the MD himself readily reverts to a production, rather than a sales perspective. Paragraphs 420 and 422 demonstrate how this effect can occur with respect to the actions of one of CaseCo's estimators.

> Paragraph 420:
> ***[1]*** *The E1 has sent me a reply to an enquiry for a banner which needs a metal frame.* ***[2]****The quote doesn't include the metal frame.* ***[3]****I ask about options for quoting the frame and the E1 doesn't want to get involved in quoting the item. He says:*
>
> Paragraph 422:
> ***[4]*** *"This is not for us, we're a printer."*

In this passage a customer enquiry is amended by an estimator to only include the elements which can be produced at CaseCo. There is no discussion surrounding this

move until I question it in sentence 3. The estimator replies, in sentence 4, with a straightforward statement of apparent fact about the nature of the firm's activities. It is this apparent fact which has directed the approach to handling the enquiry. Consequently, there are indications in the data that the narrative rationality associated with assumed causality and apparent facts is directing the way decisions are made and interactions with customers handled. Therefore, in the next section, I investigate how such causality and fact plays a part at CaseCo.

The Expression of Narrative Rationality through Causality and Fact

In this section, I develop the hints about how agency may be offset to non-human actors, to present an interpretation of the distribution of agency at CaseCo, with respect to the action/events which take place at the firm. To build my interpretation, I examined the narrative rationality embedded in the explanations of the actors who contributed to the diary 2 data. My review of the data revealed that much of the explanatory passages of data are comprised of putative cause/effect links and statements of apparent fact, used by the actors to explain and validate their points of view. Therefore, to enable the analysis, I coded the data to nodes in NVivo set up to represent instances of causality and fact.

Having read the coded data a number of times, I summarised the points which had emerged in an NVivo memo and illustrated my interpretation in an NVivo model. Figure 8-6, which presents the model I generated in this part of my analysis, indicates that agency seems to be bound up in the underpinning components of narrative rationality, rather than the independent free choices of the human actors at CaseCo, taken as matters arise. I have also noted in Figure 8-6 which parts of the data I have used to illustrate each aspect of the model in the next stages of my discussion.

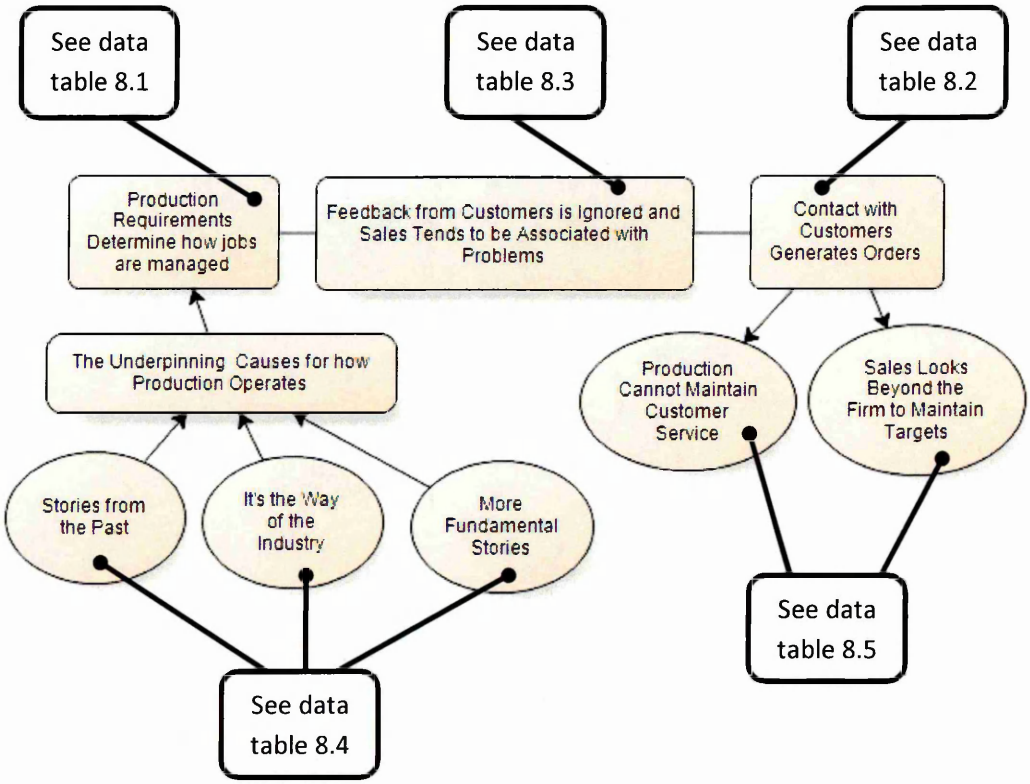

Figure 8-6: The Narrative Rationality at CaseCo

The rationality of the production perspective dominates the way CaseCo operates because, as shown in Figure 8-6 and supported by the examples shown in Data Table 8-1, the production process requirements determine how jobs are managed and manufactured. It is unavoidable that in some way customer requirements must be made to fit the production capabilities of the firm, of course. However, the dominance of the production process serves to decide customer priorities, set delivery dates and specify technical specifications.

Data Table 8.1		
Paragraph	Data Extracts	Element of Narrative Rationality
54	*The PM says that the job in question has been held up because we are prioritising another job for the same customer.*	The needs of production decide the customers' priorities.
64	*When I check that press time is directing priority of orders he confirms this is the case.*	The needs of production decide which customers are more important than others.
246	*I say that it seemed that we started to push the customer for approval of the proof to keep to our production time rather than the customer pushing us to maintain a delivery before Christmas.*	The needs of production rather than the delivery requirements of customers' decide delivery dates and cause pressure to approve proofs.
66	*Colours will be run to standard ISO densities*	The company knows what colours the customer wants printed.
178	*The CAE and CS think that the customer should not use the package they have.*	It is a fact that the customer designs the artwork they want printed in the wrong way.

Data Table 8-1: Illustrative Examples of the Production Component of Narrative Rationality

The production point of view remains insulated from the influence of customers and the sales perspective, because it views the process of selling and order generation as a simple process of maintaining contact with customers. The overarching causality is that the level of contact with customers determines the level of orders CaseCo receives, as illustrated in the examples listed in Data Table 8-2.

Data Table 8.2		
Paragraph	Data Extracts	Element of Narrative Rationality
212	*I give a rundown of what type of products we can offer and suggest that digital print means cheaper prices for small print runs.*	Customers who know the preferences of the production capabilities at CaseCo will send orders.
372	*The MD thinks that the CS doesn't understand that some people don't contact you or send orders unless you visit them.*	Sales visits to customers cause orders to be sent.
471	*The PD thinks that customers won't order anything unless a salesman is 'in front of them'.*	The physical presence of a salesperson at a customer will cause orders.

Data Table 8-2: Illustrative Examples to Show How Sales Contact Leads to Orders

Therefore, the point of view of production emphasises production planning and diminishes the importance of customer needs, beyond the extent to which they might facilitate a selection of jobs to manufacture. Data Table 8-3 provides examples of how the production perspective tends to ignore or reject the point of view of sales and the customers. Customer needs which would require modifications to the production process are ignored and customers are seen as difficult or untrustworthy. However, the result is that customers who would like to send orders do not do so because of concerns over the ability of CaseCo to fulfil their requirements.

Data Table 8.3		
Paragraph	Data Extracts	Element of Narrative Rationality
114	*He tells me that the bulk of their work goes through his colleague's department and we're not getting a chance at it at the moment because he doesn't feel confident enough to recommend us as a supplier.*	Customers do not send orders they would like to send if they are not confident in the service ability of CaseCo.
428	*I suggest that he sends it to a trade contact I have been talking to in the hope of generating reciprocal business but the E2 says that he'll send it to a place around the corner that he knows to be cheap.*	Suggestions by sales which request the production perspective to be amended to help generate sales are ignored.
72	*The MD, CAM and CAE react to this suggesting that we can't leave ourselves open to the whim of customers who are well known for being late with artwork.*	It is a fact that customers cannot be trusted.
92	*The CAM says that she can't see the approach working. She says that "some customers are just arses".*	It is a fact that customers are awkward and frustrate the smooth running of CaseCo.

Data Table 8-3: Illustrative Examples of How the Production Dominant Rationality Relates to Customers and Sales

Therefore, the rejection of the sales and customer point of view persists in the face of lost business, even when the managers at CaseCo suggest they would like to generate more orders. Indeed, there is a range of underpinning factors which are invoked as causal factors or statements of fact which limit the degree to which free choices about attracting new orders can be made, as demonstrated by the examples shown in Data Table 8-4. These manifest themselves as stories from CaseCo's past and more

fundamental stories, such as those related to gender traits or factors in the macro environment. Micro environmental factors including references to the way the broader industry works, with respect to processes such as proofing are similarly invoked.

Data Table 8.4		
Paragraph	Data Extracts	Element of Narrative Rationality
84	*... it will be consumer confidence if anything that drags the company down from now on*	It is a fact that only outside influences such as a weak economy will cause CaseCo to perform poorly.
364	*The MD says that he thinks the way the CAE and CAM respond to people both internally and with customers varies because they are women*	Things beyond the control of the management cause poor customer service and poor relations within the firm.
42	*Suppliers have got sloppy in proofing and the meaning of a proof has become diluted.*	Issues in the broader industry disrupt the smooth workings of CaseCo's production processes.

Data Table 8-4: Illustrative Examples of the Environmental Causal Factors Taken to Act on CaseCo

In light of the rationality of the dominant production perspective, the actions of the sales perspective are somewhat determined. The examples shown in Data Table 8-5, demonstrate that those who adopt the sales perspective must look beyond CaseCo to maintain sales targets because the production perspective cannot be trusted.

Data Table 8.5		
Paragraph	Data Extracts	Element of Narrative Rationality
449	*The CS doesn't address the issue of my bonus but says that he would prefer the job itself were credited because adjusting other quotes may lead to price inconsistencies the customer may not remember the reason for.*	Detrimental effects on customers and those who adopt the sales perspective lead to a reaffirming of the requirements of the production processes.
310	*I have had two jobs recently that I've had to place out with a supplier that has a smaller press, in order to be competitive.*	The domination of the production perspective causes those who adopt the sale perspective to depend on other firms.

Data Table 8-5: Illustrative Examples of How Sales Actions are Determined

Formative Discussion

My analysis of diary 2 has shown how the narrative rationality at CaseCo is expressed via the explanations, provided by the employees, which reflect the sales and production perspectives at the firm. The points of view embedded in the narrative rationality are indications of the states of equilibrium each narrative programme aims to achieve, as discussed in chapters 6 and 7, because the equilibriums influence the strategies of the narrative programmes. In chapter 7, I have already provided a description of how each perspective influences the manner in which CaseCo interacts with customers, by way of the cultural strategies manifested at the firm.

Consequently, the move from orders to jobs can be recognised as the context in which the narrative programme and narrative anti-programme compete. Each narrative programme wants to achieve the move from order to job but each competes to do so by maintaining its respective state of equilibrium[73]. The sales point of view wants to embed the customers' needs into jobs via the narrative programme, to achieve its state of equilibrium. The production perspective will facilitate this until its equilibrium state is threatened. Then, the narrative anti-programme will be deployed to reach a re-equilibrium. If, as diCarlo (2010a; 2010b) suggests, people's cultural equilibrium is memetic, the evaluative elements of my data should constitute the aggregate of the memes of the people at CaseCo.

Indeed, the putative causality and apparent facts that are embedded in the narrative rationality and evident in the data suggest that, actions taken to maintain the states of equilibrium are not based on wholly free choices. Agency is transferred to the non-human actors such as order, job, estimate, artwork and proof. Proofs, in particular, act in the instances where there is likely to be competition between the perspectives/narrative programmes because they mediate the way customers' artwork is translated and approved. Of course, where competing genetic agents occur in biology, it is possible to describe optimon type replicators. The importance of the role played by proofs is summed up by a passage of data in paragraphs 40 and 42, provided by one of CaseCo's art workers.

[73] By attributing the desire for a particular outcome to the narrative programmes, I acknowledge the indications in my analysis that agency seems to be distributed between the human and non-human actors at CaseCo.

Paragraph 40:
[1]I suggest that the word 'proofing' may mean something different to customers than it does to us and the art worker says that the definition of a proof is a representation of artwork after it has been prepared for printing. ***[2]****"That's what a proof is"*

Paragraph 42:
[3]*He* [the art worker] *goes on to say that this is why "the industry is in the state it's in today".* ***[4]****Suppliers have got sloppy in proofing and the meaning of a proof has become diluted.* ***[5]****There are now several levels of proofing because of this which aren't understood by people who buy print.* ***[6]****He thinks the problem is that errors occur in only a small proportion of the poorly proofed jobs so customers get a false sense of security and don't realise the risks they are taking.* ***[7]****He also thinks that a printer who tries to buck this trend, thereby introducing longer production times and costly proofing starts to lose competitiveness to other printers who take risks with proofing to cut costs and to speed up lead times.* ***[8]****This puts pressure on all printers to behave the same way so the behaviour spreads throughout the industry.*

During a discussion about some customer complaints, in sentence 1 of this passage, I suggest to the art worker that there may be some variation in what is understood by proofing. First, the art worker refutes any difference in a definitive manner, through a statement of fact which I have recorded in the direct speech of sentence 2. However, in sentences 3 and 4, through a number of assertions of cause and effect, he goes on to acknowledge that his firm definition of a proof does not persist in the wider industry. Although the customers make incorrect assumptions about proofs, it is the printing industry that has caused the misunderstandings.

In sentence 5, the effect of the situation is presented as variation in proofing and the notion of levels suggests that some proofs will be more accurate images than others, in terms of what a proof should be. In sentences 6, 7 and 8 the art worker offers three chained causal connections which serve to support the state of affairs he has described. First, the low level of risk causes customers to be complacent. Second, the reinforcement of risk taking causes conscientious printers to be uncompetitive. Finally, poor proofing practice spreads through the industry by way of the necessities of competing for orders. Together this chain of causality constitutes an example of Abell's (2004) cumulative causality which leads the art worker to propose that, "the industry is in the state it's in today".

The explanation in paragraphs 40 and 42 suggests that there is variation between the production conception of proofs and that of customers. The perspective of the customers will be adopted as the sales perspective by way of the narrative function 'customer's

proxy', which I identified in chapter 6. Therefore, the non-human actor proof both acts in conditions of competition and has agency invested in it. Proofs seem to embody an important piece of the culture at CaseCo, around which actions are taken by customers, sales and production. Therefore, in the next section, I focus my analysis on the instances where proofs appear in the data, to further investigate the role of this actor.

The Production and Sales Meanings of 'Proof'

I continued my analysis by reviewing the data relating specifically to the non-human actor 'proof'. To do so, I adapted[74] Thompson and Hunston's (2003) noun group concept by coding all the instances of the word proof which occurred in both of my data diaries to an NVivo node, 'Proof Noun Group'. By reviewing the evaluative evidence for what a proof means, I built a description for both a production and a sales definition. Paragraphs 53 and 55 of diary 1 demonstrate how the meaning can be interpreted.

> Paragraph 53:
> *I mention it to the CAM who handles the orders for this customer. She says she asked the customer to come up and proof the job as they had offered to do but they said they were too busy and so we sent a low res' PDF proof via email.*

> Paragraph 55:
> *It turns out that the artwork had been correct on the PDF but had changed when it was sent through our pre-press. The pre-press operative says that he had suggested a printed proof because of other concerns with the artwork file.*

In paragraph 53, a customer has rejected the proofing process suggested by CaseCo in favour of an approach more convenient to them. The customer sees the proof as an inconvenience and there is value in CaseCo providing a more convenient solution. However, paragraph 55 reveals the production point of view which can be contrasted with that of the customer. The production perspective sees the customer's responsibility for their order being fulfilled correctly increase in conjunction with the increase in convenience. The customer takes more responsibility for the job being produced correctly along with the greater convenience they receive. Therefore, the alternative points of view concerning proofs can be articulated in the form of a series of 'whereas'

[74] Thompson and Hunston's (2003) noun group approach is based on the evaluative nature of the direct speech in which the lexical item of interest appears. Due to the levels of mimesis used in the recording of my data, I have based my interpretation on the more general context in which the term 'proof' occurs.

dichotomies, i.e. "The customer/sales perspective is (...) whereas the production perspective is (...).

Consequently, I reviewed the data coded to the proof noun group node in NVivo and recorded my interpretation of the alternative points of view in an NVivo linked memo. I have presented my findings as the list of alternatives, summarised in Table 8-1. Each entry in the list is articulated as a 'whereas' dichotomy and the first entry relates to the example in paragraphs 53 and 55, which I have described above.

The Customer/Sales Perspective ...	Compared to	The Production Perspective ...
Sees proofs as an inconvenience and would like proofs to be more convenient	**whereas**	Sees a more convenient proof as a less accurate proof which transfers some responsibility for the quality of the 'job' to the customer
Sees proofs as the printer accepting that they can produce the items specified by their order	**whereas**	Sees proofs as the way a customer reconfirms the artwork element of their order.
Reissued proofs can be used to approve only the modified parts of artwork	**whereas**	Each proof is used to approve the whole artwork
Expect CaseCo to remain aware of possible artwork problems once they have approved a proof	**whereas**	Sees any further input as an extra benefit of the professionalism of production
Thinks that the proofs should be produced to suit their needs	**whereas**	Thinks that proofs should direct how customers behave
Looks for the printer to express their expertise via proofs	**whereas**	Looks to avoid liability for deficiencies in customers artwork via proofs
Sees proofs as an area where printers can compete with each other	**whereas**	Sees proofs as a way of deflecting complaints, perhaps legally
Thinks that the specification of a proof should be designed to meet their needs.	**whereas**	Thinks that the specification of a proof should be determined by the needs of the print production process.
Thinks that supplying their artwork in a format specified by CaseCo ensures a valid proof	**whereas**	Thinks that the pre-press preparation of artwork ensures a valid proof
Sees proofs as objective representations of their artwork	**whereas**	Sees proofs as a subjectively created impression of what the finished printed item will look like.
Sees proofs as the trigger for producing their order	**whereas**	Sees proofs as the trigger for manufacturing a job

Table 8-1: Components of the Sales/Customer and Production Conceptualisations of Proofs

Subsequently, by summarising the components listed in both the customer/sales and production columns of Table 8-1, I arrived at two alternative definitions of what a proof means. The customer meaning of a proof, which is likely to be adopted and articulated by the sales perspective via the function of 'customer's proxy' is:

> Proofs are how a printer accepts the artwork supplied with an order, thereby demonstrating that they have the expertise to fulfil the customer's request. The customer's approval triggers production of the ordered item, which will include correctly printed artwork. Proofs are produced to help indicate important factors in a way which enables them to be approved in a convenient manner and the printer will then use the proof to help produce the product.

Whereas the production meaning of a proof is:

> Proofs act as a way of attributing responsibility for the interpretation of a customer's artwork, which CaseCo can print as a job, within the bounds of the printing process. Proofs trigger production once the customer has taken a degree of responsibility for the finished item. The proof, as a representative of the printing process, sets standards and directs the way that customers should operate, in order to receive a good outcome for their orders.

By analysing the way proofs are conceived of as competing alternative bundles of meaning, which are part of wider competing strategies, each conception can be bounded by way of how they differ. The result is a cultural unit of meaning, which forms part of a wider cultural strategy, identified by an observer by way of its alternatives; in much the same way as an optimon type gene might be identified by the observer of a pea plant, for example.

Concluding Discussion

In chapter 3, I used complexity theory to conceive of evolution in both biology and culture through the generic concepts of CASs and emergent schemata. The approach enabled me to compare the two domains in Figure 3-6. Consequently, having completed my analysis I can update my model to demonstrate my findings, as shown in Figure 8-7.

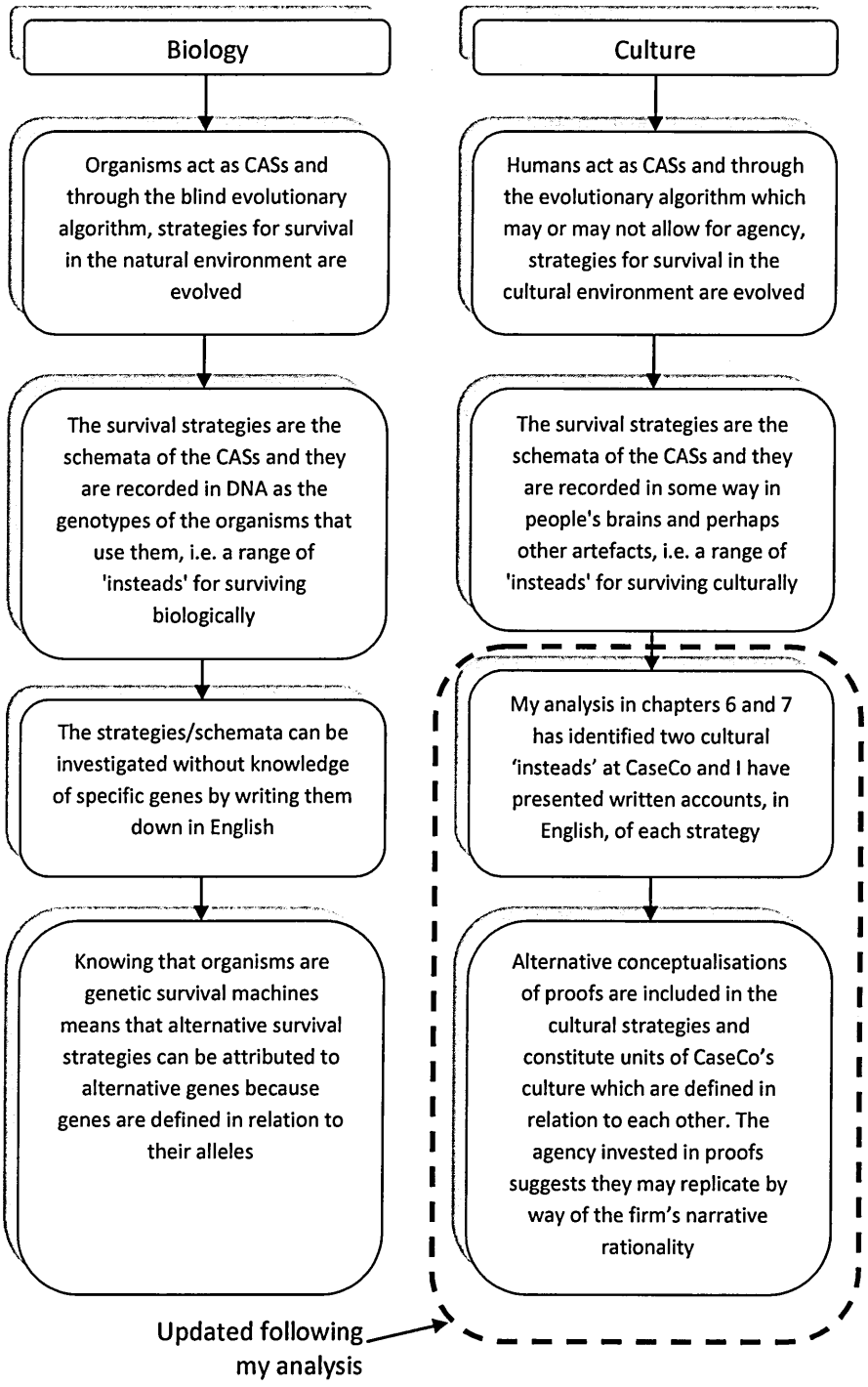

Figure 8-7: The Generic Basis for Comparing Biology and Culture, Adapted to Reflect My Analysis

Writing the genetic survival strategies for organisms in English can serve as the methodology for identifying optimon genes in biology, because the strategies are genetically determined (Dawkins, 1982; 1999). Where a phenotypic effect can be seen

to vary with respect to its alleles, when all else is equal, the piece of DNA responsible for the variation is the optimon gene. When the variation occurs in the fusion of genotypes in sexually reproducing species, then Mendelian heredity is demonstrated (Guttman et al., 2002). I have adopted the same approach to analysing the culture at CaseCo, as shown in Figure 8-7, to identify a unit of culture at the firm that varies, i.e. proofs.

I have identified two versions of proofs which compete to play the same role in the cultural strategies at CaseCo, by way of two alternative narrative programmes and, as demonstrated in my review of the narrative rationality at CaseCo, the production perspective can be seen to dominate the sales perspective. Consequently, the units of culture related to the non-human actor proof can be modelled in a punnett square, in a similar manner to competing genetic alleles, as shown in Figure 8-8 which models the interaction of two people at CaseCo.

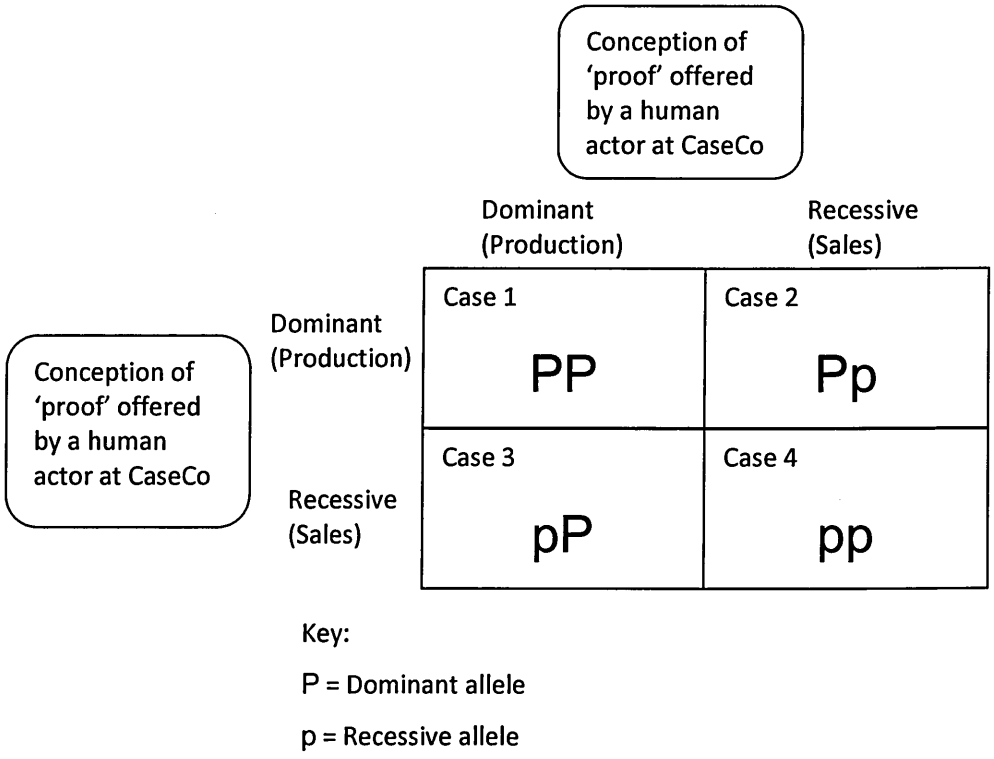

Figure 8-8: Punnett Square to Show the Possible Combinations of the Two Conceptualisations of Proofs at CaseCo

By characterising the production conception of a proof as a dominant cultural unit and the sales conception of a proof as a recessive cultural unit, the punnett square can model

the four outcomes possible when two human actors at CaseCo interact with each other in respect of proofing. Each human actor can, through the deployment of their narrative programme, offer either a dominant or recessive version of proofing. The model suggests that only in case 4, where both conceptions of a proof are the recessive sales version, does that version occur in the culture of the firm. In cases 1 to 3 the dominant production version of proofs persists. Hence, the model provides an explanation for the persistence of the production orientation at CaseCo, in the face of negative feedback from customers and poor sales performance.

Reflections on Meme Theory

My goal for this research was to evaluate memetics and in this section I reflect on my analysis to outline how my project can inform the debates relating to memetics, which I discussed in chapter 2. In particular, the variations in fundamental theorising, which have led to discrepancies in the applied literature, and the problems encountered when operationalising empirical research. I feel that it should be noted, however, that definitive support or rejection of the variants of meme theory ought to be tentative. There are wide ranging claims made in the fundamental meme theories, based on alternate perspectives and differing secondary evidence. A single case study project, despite responding to Edmonds's (2002) call for such work and its similarity to the early studies in biology, cannot wholly resolve such issues.

The cultural complexity I have modelled in my constructions of the cultural strategies and the narrative rationality, which I have summarised in Figure 8-6, is deployed by the people at CaseCo through their statements of fact and causal connections. For them to act to deploy the culture they must have knowledge of the putative causality and apparent facts which I have shown in my analysis and I have provided examples of such causality and fact in data tables 8.1 to 8.5. Indeed, narrative theory suggests, as mentioned in chapter 4, that the narrative mode of knowing and communicating is grounded in peoples' evolved faculties (Gould, 2000; Cobley, 2001; Czarniawska, 2004). As Cobley (2001) suggests, narrative is held in peoples' memory and used to manage their expectations of the future as events unfold.

The concept of culture as the product of a CAS spawned as the product of a lower level CAS which operated to evolve biology (Gell-Mann, 1995) supports this view from a

complexity perspective. However, as Gell-Mann (1995) points out, the schemata of higher level CASs, although emergent from more fundamental levels are not reducible to them. They are dependent but not determined. Consequently, any CAS should be studied at its own level whilst bridges might be built between the levels as knowledge grows (Gell-Mann, 1995).

Therefore, my research supports the notion that cultural information resides in people's brains and forms a part of who they are in social settings. In this respect the materialist theories of Dennett (1991; 1996; 2003; 2006), Blackmore (1999; 2000) and Aunger (2002), are supported. However, the notion that certain cultural aspects might be reduced to distinct neural structures (Delius, 1986; Dawkins, 1989) is not necessarily supported. My optimon units of culture are constructed as instrumental units by an observer, as is the case for optimon genes, based on the proviso of 'where all else is equal' in a genotype. Such a process cannot comment directly on what might constitute the actual cultural pleiotropy of people's knowledge and memory. However, based on this conceptualisation, neural connections could play a part in many different optimon units of culture so although Delius's (1986) theory of set physical patterns in the brain is not supported, Aunger's (2002) temporary electrical neuromemes could potentially be. Of course, my research cannot claim to contribute in terms of how the brain actually works.

My identification of two alternative optimon units attached to the word 'proof', suggests that Distin's (2005) rejection of words as memes may be premature[75]. Although my research does not suggest that arbitrary symbols replicate (Deacon, 2004; Price, 2012) because the conceptualisations of proofs arise from the narrative rationality at CaseCo, it points to the manner in which optimon type replicators must be described by an observer. Words are important but the words used simply indicate a constructed unit of the pleiotropic complexity that is being observed[76]. For sales proof and production proof, consider blue eyes and brown eyes. The labels of optimon units of culture simply identify a portion of culture, or in Distin's (2005) terminology the representational content held in people's brains, constructed by way of its competition with alternative

[75] Distin (2010) has acknowledged the emergence of natural languages as centrally important in the 'heredity' of human culture but chooses to not develop this view through memetics. She suggests that there is too much variation in meaning linked to the word 'meme' and that the term is not yet sufficiently acceptable in social science.

[76] There is no indication in my analysis that matters would be affected if proofs happened to be known by some other name, such as 'roofs' or 'noods'.

portions. Such a view means that my analysis appears to casts all the consequences of the cultural knowledge people have as phenotypic effects. However, in biology phenotypic effects are simply evolved forms of replicating machinery and for such a conceptualisation to be valid in culture, the cultural units I have identified would have to selfishly replicate in a Dawkinsian sense.

Although, through its dominance, which I have modelled in Figure 8-6 and supported with data tables 8.1 to 8.5, the production conception of a proof seems to be blindly selected by way of the cultural environment, at times the human actors do consciously consider what proofs should mean. After all, as noted in my analysis, the culture at CaseCo persists despite the occasions when the MD has tried to introduce changes aimed at achieving a more sales orientated approach. More specifically, during the passage of data concerning proofing, provided by the art worker, which I discussed on page 233, for example, the notion of proofs is reflected upon.

Indeed, my analysis of diary 2 is dependent on the evaluative nature of the contributions made by the people working at CaseCo as they reflect on their points of view. Such circumstances are not indicative of the behaviourist psychology which underpins Dawkinsian replication and the appeals to Cloak's (1975) concept of corpuscles of culture. Rather, evaluation tends to indicate higher levels of cognition, as indicated in examples of widely adopted learning theory, for example, Bloom et al., (1956). Indeed, I cannot agree with Blackmore's (1999) characterisation of writing as simply the product of memes fermenting in my head. During this project I have reflected on assertions, made comparisons between claims and even become angry about the inconsistencies I have spotted in both meme theory and, at times, my own ideas.

My application of the punnett square model in Figure 8-8 illustrates the problems raised by assuming selfish replication in culture. In the heredity demonstrated by Mendel, there is a 50% chance of either a dominant or recessive allele being passed on from a heterozygote parent, due to crossing over in the formation of gametes, hence the observed 3:1 proportions of Mendelian heredity (Dawkins, 1976; 1982; 1989; 1999; Guttman et al., 2002). However, with some degree of reflection and argument in culture, the same form of 'replication' cannot be assumed. To do so would be to naively invoke the replicating machinery of sexual reproduction which underpins the punnett square

model in genetics. In culture, rather than there being a 50% probability, people can reflect on what conceptualisation of a proof they hold and offer in social situations.

Therefore, it seems that before something as complex as sexual reproduction might evolve in culture, human agency is likely to intervene. As both Maynard Smith (1982) and Axelrod (1990) point out, the ability for people to consciously strategize undermines the notion of replication in culture. In Dawkins's (1999) terminology, through my adaptation of the punnett square model, I seem to be describing something akin to somatic rather than germ line replication which persists while people are distracted from reflecting on their actions.

Even though there may be social pressures for adopting a particular conception of proofs at CaseCo, there is scope to adjust the probability that a particular conception is adopted through people's conscious reflection on the cultural circumstances. By way of a thought experiment, if the MD were to change the remuneration package of the CAE and the CAM to reflect their impact on sales, then it is possible that the dominant/recessive relationship I have modelled might change[77]. Such change could be described metaphorically as a modification to the selection environment but, in fact, the change would be due to the MD's conscious decision making, along with the conscious recognition of the circumstances by the CAE and the CAM[78]. Therefore, my use of the punnett square model should be seen as a way to expose consistencies and inconsistencies between memes and genes. It should not be used to indicate that the processes are the same, simply because the model can be applied to both domains. Such an approach would encourage the perpetuation of naive genetic analogy in the study of culture.

Ruling out the conscious influence of those at CaseCo would lead to what amounts to a re-envisaging of Cloak's (1975) i-culture and m-culture, but this would mean ignoring both the instances in my data and the wealth of alternative theories of psychology (Malim and Birch, 2005) which indicate greater cognitive ability. Consequently, Blackmore's (1999) notion of replication based on the pre-eminence of behavioural

[77] The MD had made a similar change to my remuneration package when he took over CaseCo from the previous owners. I had reflected on what the change meant for me and I adapted my behaviour accordingly.

[78] Although there are no instances of its use in respect of the action/events in my data, in response to some of the proofing problems raised by customers, the MD did subsequently invest in a modified proofing system.

imitation is not supported by my analysis. However, in my study, I have bundled issues of psychology into the concept of narrative rationality so I cannot comment directly on matters of psychology. Consequently, there is scope to re-examine the possibility of selfish replication in culture through developments in the theories of psychology. However, my findings suggest that replication, as it is described in the Dawkinsian view of biology, ought to be rejected in culture.

It should be noted that there are more complex models of Mendelian heredity and some genes can be seen to blend (Guttman et al., 2002). However, the simple case of two competing units of culture, modelled in a punnett square, does not seem to support selfish replication because of a fundamental difference in the probability of outcomes due to human free choice. Consequently, pursuing the analogy further would seem to constitute another unwarranted reification of genetic metaphor in culture. Therefore, the notion of cultural phenotypes acting as no more than memetic replicating machinery ought to be abandoned, because there are no self-replicating units that might give rise to them. The units of culture people know are not simply selected by their effects in the environment, some element of design intervenes.

Consequently, my two definitions of proofs seem to be the culmination of the narrative rationality at CaseCo, which includes cognition, rather than the product of replicators selfishly copying themselves. Therefore, Aunger's (2002) four characteristics of replication cannot be met. Although 'similar' versions of proofs occur, I have not demonstrated that the direction of the 'causality', embedded in the firm's narrative rationality, runs from one version of proof to another which would support 'information transfer' and 'duplication'. Rather, each instance of proofs emerges from the complexity of people's narrative rationality at the firm. Consequently, the possibility of game theoretic modelling of putative memetic processes, in the same manner as those applied to genetics, remains limited to instances where unreflective actions are made. Of course, such circumstances might be amenable to modelling using the meme as virus concept, but to maintain their validity, only as a reflectively applied metaphor.

Chapter Conclusions

My analysis has enabled me to consider meme theory based on the optimon conceptualisation of a replicator. In the next chapter, I review my findings in light of my

research questions and I go on to summarise my methodology as an original contribution to knowledge. I also suggest possible future avenues for further research based on the implications of my findings.

Chapter 9 – Conclusions and Original Contribution to Knowledge

In my final chapter, I reflect on my research questions in light of the findings of my study and consider the contribution to knowledge made by my project, as shown in Figure 9-1.

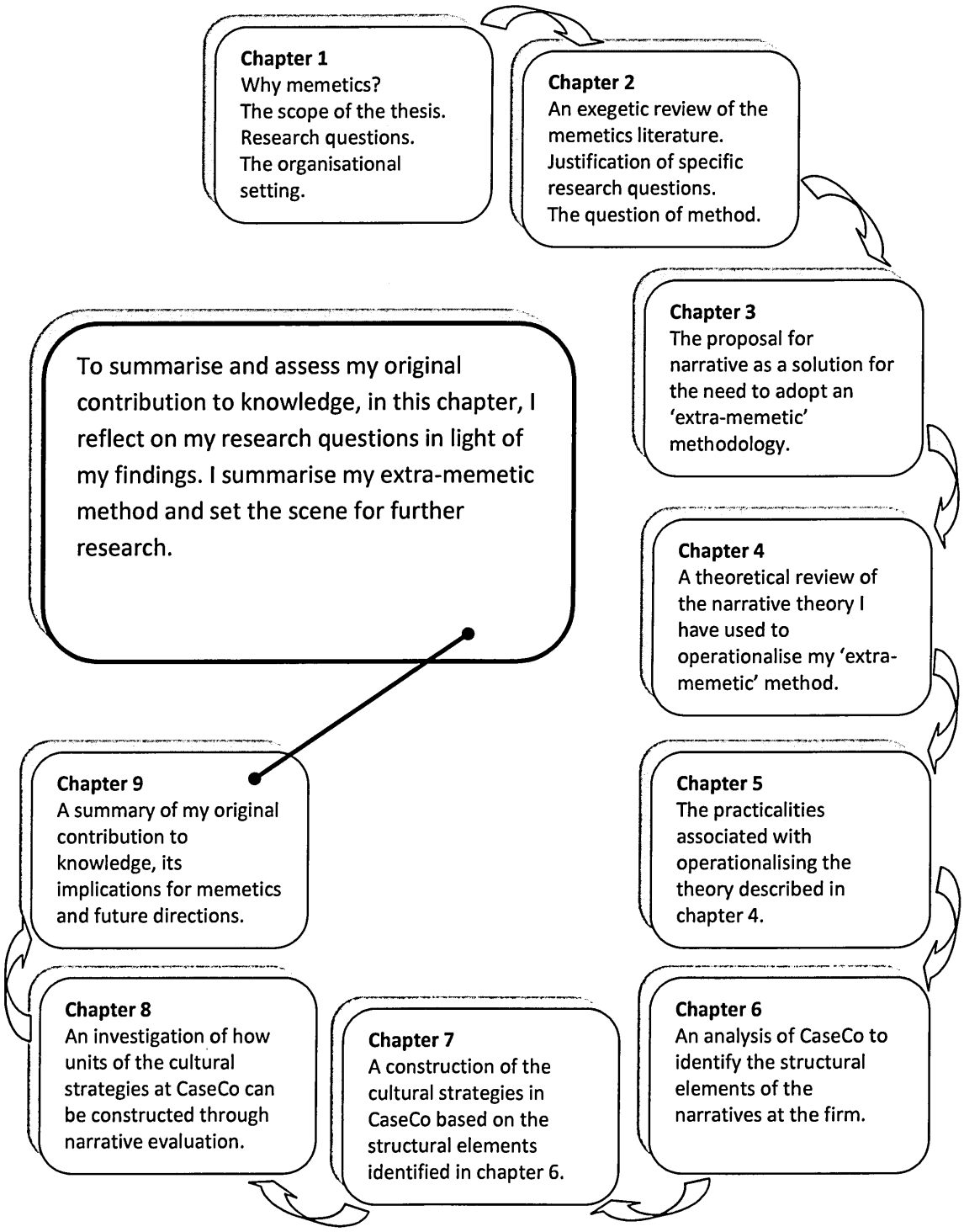

Figure 9-1: Thesis Structure Showing the Role of Chapter 9

Reflections on My Research Questions

To help me summarise my original contribution to knowledge, I first review the extent to which I have answered the three research questions I set for my project. Question 1 addressed the issue of whether or not it is possible to identify units of culture. Question 2 asked if such units, should they be found, might be said to selfishly replicate. Question 3 posed the need to form an extra-memetic methodology which did not presume the outcomes of questions 1 and 2 at the outset of my empirical work.

Research Question 1 - Can the organisational culture at CaseCo be divided into units?

My analysis in chapter 8 has shown that units of the cultural strategies at CaseCo can be demonstrated, through contrasting the points of view of sales and production. The particulateness of culture is a product of observing similar, but competing, cultural strategies to find parts of the strategies which vary. Where the observed cultural strategies can be considered as 'insteads' in the possibility space of cultural strategies at CaseCo (Gell-Mann, 1995; Price and Shaw, 1998; Pratchett, Stewart and Cohen, 2002), the units can be considered to be the parts of the 'insteads' through which competition between them is observed.

My approach is conceptually the same as that which provides optimon definitions of genes in biology, where the strategies located in a species might have alternative alleles which compete for loci in a chromosome (Guttman et al., 2002). However, as shown in Figure 9-2, my approach to identifying units of culture is based on a generic view of emerging complexity via Gell-Mann's (1995) CASs, rather than directly on genetic analogy. Units of complexity can be constructed in both biology and culture by observing which states, from all those possible, have occurred. If there is no variation in a trait, then it is unlikely to be identified as a unit by an observer.

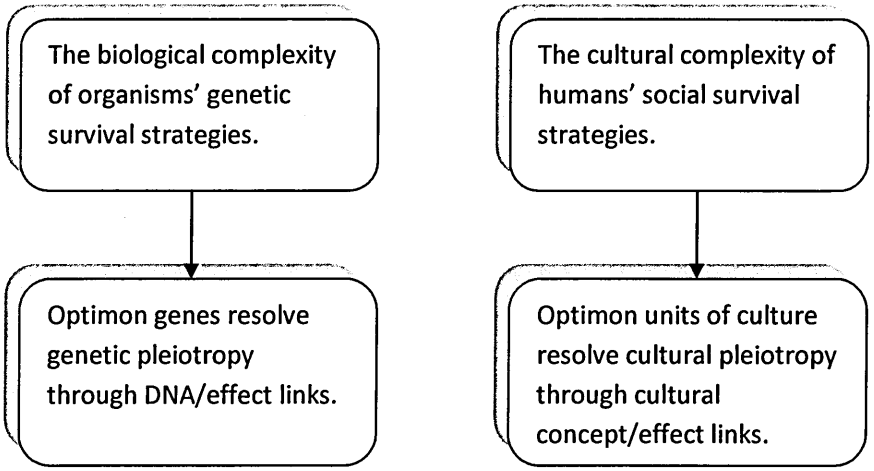

Figure 9-2: Two Levels of Complexity Resolved by Optimon Units

Such a conceptualisation, as that shown in Figure 9-2, suggests that my two definitions of proofs, provided in chapter 8, are just two possible definitions in a 'proof space', i.e. all the possible definitions of a proof at CaseCo. Indeed, I have identified eleven dimensions, listed in Table 8-1, on which the sales definition of a proof varies from the production definition, which can be considered as instances of Kauffman's (2000) adjacent possible. As Lissack (1999) points out, in organisations, the space of the adjacent possible is constrained by the language of interpretation available to its members and based solely on the eleven alternatives I have identified; there are 2048[79] mathematically possible states for proofs.

Of course, some of these states might be impossible, because they are internally inconsistent. Indeed, there may be some intermediate states between those I have identified, so the actual number which might occur is indeterminate. An observer must make an assessment of the existing states through observing the regularity (Gell-Mann, 1995; Pratchett, Stewart and Cohen, 2002) in proofing at CaseCo, and I have done this by reviewing the narrative trajectories linked to each of the firm's customers, as discussed in chapter 7.

[79] This total is calculated by assuming all the sales dimensions are zeros and all the production states are ones. Then, counting, in binary, from 00000000000 (eleven zeros) to 11111111111 (eleven ones) means that each combination of zeros and ones is accommodated. Binary 11111111111, plus zero in decimal is 2048, i.e. 2^{11}.

By identifying optimon units in culture, I have made the first assessment of potential memes by applying the underlying concepts of Dawkins's (1976; 1982; 1989; 1999) original selfish replicator theory. Consequently, I have avoided the type of assumptions, about the nature of memes, which I have identified as a weakness in the studies that have applied memetic theory to the management of organisations and similarly, the extant memetic empirical studies. My cultural units related to proofs do not depend on genetic analogy and a presumption of replication in culture at the outset.

Indeed, in order to maintain my extra-memetic perspective, I have actively resisted invoking genetic analogy during the project, such as suggesting that narrative is equivalent to DNA, or that my cultural optimons are equivalent to genetic alleles. Therefore, the issue of selfish replication which formed the crux of my second research question remains unaddressed by simply identifying cultural optimons.

Research Question 2 - If question 1 can be answered, can such units be seen to selfishly replicate?

Adopting a narrative approach to my analysis has enabled my consideration of the narrative rationality at CaseCo. By replacing the rational world paradigm with Fisher's (1984) narrative paradigm, I have been able to provide an account of the distribution of agency at CaseCo which is not dependent upon notions such as March and Simon's (1958) bounded rationality. At CaseCo, through the putative causality and apparent facts that are reflected in my data, it seems that a degree of agency has been invested in the non-human actors such as proofs and, therefore, when two people interact with proofs, certain meaning can be seen to be 'copied' with little reflective thought.

Indeed, the dominance of the production perspective, which I have modelled in Figure 8-6 suggests that when the sales and production conceptions of proofs compete, the production conception is adopted. Consequently, I have been able to model proofs in a punnett square, in Figure 8-8, showing the production definition of 'proof' as dominant and the sales definition of 'proof' as recessive. However, through such copying, I cannot claim to have discovered selfish replication in the sense it is applied in Dawkins's (1976; 1989) selfish gene theory, due to the reflection on the meaning of proofs which might occur from time to time and disrupt the stable 3:1 ratio which is observed in biology.

The apparent 'replication' of the conception of proofs might be difficult to change but it is not wholly self-interested, as is the claim in Dawkinsian genetic replication. The instances in the data where the meaning of proofs is discussed and arguments made in favour of each conceptualisation indicate that, there is the possibility of consciously moving to a new position in proof space, at the very least by way of an adjacent possible. Although I have been able to apply the punnett square model to culture, its application does not confirm a case of Mendelian-like heredity.

Research Question 3 - Can an 'extra-memetic' research methodology be designed that can test the fundamental tenets of the meme concept?

I have been able to successfully design an extra-memetic method with which to address my first two research questions. The approach is based on two stages. First, writing an account of cultural strategies and second, comparing the strategies to find elements of them which compete. The method is grounded in complexity theory which provides a generic basis from which to review biology and culture as similar CASs. The method I have developed at the level of culture is conceptually the same as that applied to identify optimon genes at the level of biology where units are constructed by an observer. Consequently, a realist philosophical position is implied which involves an objectivist ontology and a subjectivist epistemology.

I have adopted narrative theory, because a written narrative account of the biological and cultural schemata generated by CASs constitutes a measure of their effective complexity. It is complexity in both biology and culture which is purportedly accounted for through Dawkinsian replication. A first stage of structural analysis provides the opportunity to conduct the second stage of deeper semantic analysis, as suggested by Ricoeur (1973). Through analysing the evaluative component of narrative data, to identify competing points of view, the degree of agency invested in the competing versions of non-human actors, which constitute units of culture, can be assessed.

I have embraced the subjectivist aspect of my project by incorporating an autoethnographic component to my work. Indeed, by recording my own narrative account of life at CaseCo, I have been able to focalise the data, thereby capturing my conception of the competition between alternative views which is required to make

assessments of optimon units of culture. Consequently, my part in the construction of the findings of my study should be recognised to support their validity (Labov, 1972; Hammersley and Atkinson, 1983; Davies, 1999; Johnson and Duberley, 2000). However, through my systematic approach of developing my method alongside my analysis, as recommended by Hammersley and Atkinson (1983), I have responded to Snow, Morrill and Anderson's (2003) appeal for new systematic and explicit approaches to analytical ethnography.

Summary of My Original Contribution to Knowledge

I have succeeded in building the first extra-memetic methodology with which to investigate the heterogeneity of the memetic literature through a reflective use of narrative theory. By applying my extra-memetic method, I have provided the first optimon based view of culture. However, I have not supported the notion of selfish replication in culture. Rather, I have made more explicit how a gene based metaphor might be applied by those who would like to apply the story of evolution to help explain culture. Therefore, the value of my project is particularly related to the dismissal of the naive use of biological and genetic metaphor to explain culture. However, my identification of optimon type units of culture can help to address the complexity of social situations by simplifying circumstances for the needs of certain projects.

It would be easy for me to reflect on how sense could be made of my findings by reverting to the lens of biological evolution. As I have mentioned above, during my closing discussion of chapter 8, it strikes me that my modelling of the two variations of proofs could be characterised as replication similar to that in somatic division, rather than germ line division in cells. Similarly, it would be easy to characterise narrative as an equivalent to DNA, because it provides the loci for units of narrative or certain non-human actors. However, I reject re-invoking genetic analogy in favour of developing my work in the social domain, because I have not supported the basic notion of selfish replication.

Limitations of the Study

Having completed my study, I have identified a number of areas which could be developed in order to broaden the findings I have been able to describe in my thesis. These relate to elements of the data, the data collection and its analysis. Firstly, although, with the support of Edmonds's (2002) review of memetics and examples from early developments relating to heredity in biology, I have described how a small scale case study based project is well suited to addressing my research questions, there are inherent limitations associated with such a project design. As Davies (1999) points out, although I can claim to make a contribution to theory, claims to the broader empirical reality of organisations such as CaseCo should be avoided.

Similarly, despite gaining the benefits of immersion in the culture of CaseCo through an autoethnographic component to my study, I have located my findings closely with my situated experience of a single firm. Although there were a number of seemingly similar printing firms competing with CaseCo, it would be an overextension of my findings to suggest that my description of proofs would be found more widely in the printing industry. Indeed, the two conceptualisations of proofs I have provided are based on my own interpretation. However, I have taken care to reflexively recognise the manner in which I have narrated CaseCo via Cobley's (2001) narrative levels and Bal's (1997) levels of mimesis.

I have recognised that there was a significant pragmatic element to my data collection and although this enabled me to gather useful data in uncertain circumstances, there are some limitations which, if addressed, might lead to further insights. I collected data in two diaries as a result of modifying my approach to data collection part way through my period of ethnography and the data varies between them. Consequently, the data of diary 1 which I have used to construct accounts of the sales and production strategies at CaseCo predates the data of diary 2 which I have used to analyse the narrative rationality at the firm. Of course, my recognition that the diachronic dimension is pre-eminent over the synchronic dimension mollifies any adverse affect somewhat. However, it is possible that data which combines evaluative elements alongside the complicating factors (Labov, 1972) to which they relate, might offer further insights in terms of how the synchronic action/events occur.

Finally, in relation to my data, I have collected the evaluative points of view at CaseCo which relate to the non-human actors such as proofs, orders, estimates, etc. It would

also be possible to collect data related to the physical dimensions of such actors. For example, different types of proofing, such as pdf proofs and printed proofs are mentioned by the people at CaseCo and it would be possible to collect examples of each for analysis alongside the evaluations related to them made by people.

In terms of my analysis, I have adopted Latour's (1991) concept of narrative programmes of action and the competition highlighted by the notion of actions and anti-actions has enabled me to identify competing cultural strategies. However, by constructing the narrative anti-programme as relative to the narrative programme, the culture at CaseCo is funnelled into two alternatives. Consequently, it is possible that a number of different perspectives could have been collapsed into the narrative anti-programme. Following this stage of analysis such finer detail is not recoverable without returning to the original data.

Potential Avenues for Further Research

My insights gained through the process of completing my doctoral study point to a number of ways in which I might extend and develop my research. Each is linked to this thesis and based on my findings related to the construction of competing units of culture. I discuss a number of these potential avenues for research below.

Critical Realism

My review of the memetics and narrative literature has indicated that an appropriate view of the nature of the social world can be summarised as a realist philosophy. However, there are opportunities to extend my work by adopting a more developed view of what a realist perspective can say about the nature of, and possibilities for, social science. A number of scholars, for example Johnson and Duberley (2000) and O'Mahoney (2011a; 2011b), point to the growing adoption of Bhaskar's (1975) critical realist theory of science, which has established a degree of credibility in the social sciences and no longer requires repeated justification (O'Mahoney, 2011a).

In describing his critical realist theory, Bhaskar (1975) proposes a stratified ontology consisting of the empirical (what is sensed), the actual (the events which occur) and the

real (the underlying generative process). Of course, I have grounded my realist assumptions in the biological capacities people have for narrative and the generative process of Gell-Mann's (1995) CASs which give rise to emergent biological and cultural complexity. Indeed, O'Mahoney (2011a; 2011b) asserts that the critical realist position enables engagement between sociology and biology, without resorting to the positivistic views of foundationalism and reductionism that are eschewed by much of the extant social science theory. Rather, the critical realist view can facilitate theories of the self which can accommodate both biological and discursively constructed elements distributed over a stratified ontology.

Consequently, the critical realist view would suggest that the 'essences' (O'Mahoney, 2011b) of the physical embodiment of non-human actors such as proofs would contribute, as part of the open systems of firms, to the emergence of the two notions of proofs I have identified in chapter 8. I have already recognised that a limitation of my study is the lack of data pertaining to the physical embodiment of the various forms of proofs so adopting a critical realist position would point to further studies which would introduce their influence. A study can be envisaged, therefore, which through the process of 'retroduction' (Johnson and Duberley, 2000; O'Mahoney, 2011b) posits a range of generative influences, beyond the information in people's minds which I have recognised during my discussion at the end of chapter 8.

Rejecting the Assumption of an Objectivist Ontology

It would, of course, be possible to design further research which avoids the concern for accounting for an objectivist ontology. Indeed, the work of Bruno Latour, which I have used to introduce the notion of narrative programmes of action (Latour, 1991) is closely associated with Actor Network Theory (ANT). ANT aims to avoid the 'distractions' of philosophical issues in favour of providing instrumental insights which are useful in deciding actions in social situations (Czarniawska and Hernes, 2005). Such an approach could be facilitated by developing the autoethnographic component of my project in alternative research settings to help identify important situated notions of culture. Such an approach may facilitate links between the concept of the cultural optimon and Foucauldian discourse analysis.

A Study not Dependent on Autoethnographic Data

Alternatively, removing the autoethnographic element of my project might facilitate the identification of optimon type units of culture which are not dependent on the researcher's own experience and perspective, i.e. their personal focalisation of the data (Bal, 1997). Rather, such research could be orientated towards analysing alternative views embedded at the secondary level of ethnographic data, with the researcher as narrator of the data playing a more neutral role at the primary level. Such an approach might facilitate a study with the aim of testing the 3:1 ratio indicated by Mendelian heredity because a more natural frequency of the occurrence of cultural units could be justified.

Similarly, by abandoning the autoethnographic component of my study, or by conducting a set of autoethnographic studies in a range of research settings, more might be said about the persistence of optimon units of culture in cultures which are not bounded by single organisations such as CaseCo. It is possible to envisage a study which investigates the broader notion of proofs and proofing throughout the printing industry, for example. Such a study could shed light on the wider extent of the possibility space of proofing and raise the opportunity to manage a wider set of moves through proof space.

Adopting the Cultural Virus Metaphor

During my review of the memetics literature in chapter 2, I have identified the weaknesses of a realist theory of cultural viruses. However, having identified cultural optimons, and yet rejected their status as Dawkinsian replicators, a study might be designed which overtly adopts the notion of cultural viruses as a metaphor. Such an approach would need to be clear about its axiology in order to designate what constitutes a beneficial cultural trait and a pernicious cultural trait. However, with those assumptions borne in mind the investigation of why 'pernicious' traits persist in organisations could prove useful to managers, whilst avoiding the naive assumption of replication which I have noted in the applied memetics literature.

My Plans for Future Work

My findings have led me to reject the notion of Dawkinsian selfish replication in culture. Consequently, I see little prospect for me to conduct further work in relation to the concept of wholly self-replicating units of culture in the way they are described by the memetics literature. However, by considering the limitations of my study and the possibilities for further research, which I have mentioned above, I have identified the following avenues for my further work.

Developing the Notion of Units of Culture as a Component of Critical Realist Philosophy

In my thesis, I have noted the realist view of an objective ontology and a subjective epistemology, simply to accommodate the difficulties involved in transferring the concept of replication from biology to culture. However, a more detailed review of the connection between cultural optimons and the stratified ontology proposed by critical realism may facilitate further methodological developments. As O'Mahoney (2011b) suggests, the development of social science which acknowledges the influence of biology offers the prospect of future insights. By developing the connection at the philosophical level, the naive use of biological metaphor and analogy in specific practical contexts might be more easily avoided.

Linking Competing Optimon Units of Culture to Discourse Analysis

I noted in chapter 1 that the organisational theory which adopts the Darwinian macro evolutionary algorithm addresses phenomena which might otherwise be studied by way of Foucauldian discourse analysis. By seeing narrative as the *"linguistics of discourse"* (Greimas, 1971, p794), theories of organisations might be developed using optimon type units without the problems which might be encountered through the invocation of biological metaphor. Indeed, Greimas (1971) notes that a conceptual connection can be made between the narrative function and units of discourse. My analysis might facilitate a similar connection involving optimon units of culture.

Applying My Extra-Memetic Methodology to Further Case Studies

My study has revealed the nuances of how the production and sales perspectives compete within a single organisation. Indeed, the situation at CaseCo was often fraught

and sales performance did not match the targets set by the owners. Therefore, my approach to identifying the units of culture which are pivotal to internal conflict, along with the range of adjacent possibilities which might reconcile such conflict, may prove to be usefully employed in further organisational settings. I feel that my approach facilitates insights which might help managers, looking to take action aimed at introducing organisational change that is more effective than the approach adopted by the MD at CaseCo, i.e. 'ramming the point home' to his employees that a change must be made. Action research studies, designed with the aim of identifying important optimon-type units of culture in organisations, might offer a more constructive approach for managers.

Indeed, following my period of participant observation, CaseCo continued to struggle commercially and was bought by new management in the summer of 2008. The MD, who is recorded in my data, left to work at another firm as an employee and, having completed my data collection, I too left the company. The person who had been the Production Manager, during my period of employment, became a salesperson and, shortly afterwards, the firm entered administration again. If my approach to analysing organisations were to lead to better outcomes for firms similar to CaseCo, then significant practical impact could be claimed. Therefore, although I have not found evidence to support the concept of replication in culture, the opportunity to identify optimon-type units of culture in organisations offers an avenue for impactful research.

Approximate Word Count: 81,200

Glossary

Abduct	A term introduced by Charles Sanders Peirce for the process of using evidence to reach a wider conclusion, as in inference to the best explanation.
Algorithm	A set of rules or logical operations for the performance of a task.
Allele	Alternative forms of the same (optimon type) gene.
Cardinal Function	At term introduced by Roland Barthe to define the structural units of a narrative which constitute the 'hinges' of the narrator's account. Cardinal functions open, close or maintain alternatives.
Catalyses Function	A term introduced by Roland Barthe to define the structural units of a narrative. Catalyses functions link and facilitate cardinal functions.
Codon	A piece of DNA which encodes an amino acid.
Complexity Theory	The theory that non determined systems operate to evolve schemata which emerge to identify regularity in the environment. Such systems evolve one of what might be just one of a number of alternatives in a space of possibilities.
Critical Realism	A realist ontological perspective that distinguishes what exists (ontology) from what we know about it (epistemology). Critical realist ontology is both stratified and emergent (O'Mahoney, 2011b).
Diachronic	Distributed across time.
Equilibrium	In narrative, a term introduced by Tzvetan Todorov to indicate a stable but not static relation between members of a society.
Ethology	The adaptiveness of behaviour in respect of its survival value (Cloak, 1975).
Exegetic	A approach to reading a text which aims to focus on another author's text as an object or model of criticism against which the reader takes a stance, e.g. admiring, apologetic, critical, etc. (Czarniawska, 2004).
Fabula	The synchronic series of story events or functions in a narrative account (Propp, 1968).
Focalisation	The point of view from which the narrative agent tells their account.
Gamete	A sperm or egg cell.
i-culture	Relating to Cloak's (1975) theory of cultural corpuscles. i-culture is the set of instructions in an organism's brain which give rise to behaviour (m-culture).

Implied author	The organising principle of a narrative account (Cobley, 2001). The implied author decides the selection of events, order, plot, etc.
Implied reader	The gap filling principle of a reader of a narrative account based on their pre-understandings (Cobley, 2001).
Isomorphism	Similarity in organisms with different genotypes.
m-culture	Relating to Cloak's (1975) theory of cultural corpuscles. m-culture is the behaviour instigated by the instructions held in an organism's brain (i-culture).
Mimesis	Showing or Imitating to the reader (Bal, 1997).
Minimal narrative	Two minimal plots which are temporally ordered (Labov, 1972).
Minimal plot or narrative clause	Each action/event dualism (Todorov, 1969; Czarniawska, 2004).
Narrative Anti-Programme	The set of actors and actions opposed to a narrative programme.
Narrative Programme	The set of actors and actions grouped in favour of a point of view (focalisation) privileged by the reader of a narrative (Latour, 1991).
Narrative rationality	The narrative way of understanding the world, made up of Fisher's (1984) Narrative Probability (coherent story) and Narrative Fidelity (ringing true in the world people know).
Narrative Theory	The broad base of theory aimed at collecting, analysing and understanding the form and meaning of textual accounts (Czarniawska, 2004).
Neuromemes	Electrical patterns in short term memory which relate to a piece of cultural information.
Non sequitur	A conclusion which does not follow from the premise.
Optimon Gene	The phenotypic expression which is exposed to natural selection. The DNA which can be seen to exert a particular phenotypic expression in contrast to its allele when all else is equal is a gene 'for' that phenotypic expression (Dawkins, 1982; 1999).
Phenotype	The manifested attributes of an organism. The joint product of its genes and their environment during individual development (Dawkins, 1982; 1999).
Pleiotropy	The phenomenon of a single piece of DNA influencing many phenotypic effects Dawkins (1976; 1989).
Plot	The set of causal connections which make a narrative meaningful. The intelligible whole which governs events (Cobley, 2001) and makes a narrative account coherent (Abell, 2004).

Retroduction	Retroduction moves from a description of some given phenomenon to a description of a different type of thing - a mechanism or structure which either produces the given phenomena or is a condition for it. So once some regularity is identified, a scheme is then postulated which would explain it and then the scheme is somehow tested to see if it matches some real structure (Johnson and Duberley, 2000).
Schema	From complexity science. A schema is a summary of regularity identified by a Complex Adaptive System (CAS). It can be used as a strategy for action in the environment which the CAS observes (Gell-Mann, 1995).
Synchronic	Time bound (serially organised).
Tautology	The repetition of a statement as its own reason, or the identification of cause and effect. E.g. pea plants have yellow flowers because pea plants have yellow flowers.
Text Interference	The mixing of narrative levels.
Unitary	Pertaining to units.

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Appendix 1 – Ethical Approval Form

RESEARCH ETHICS CHECKLIST

This form is designed to help students and staff completes an ethical scrutiny of their proposed research. It also enables the University and Faculty to keep a record of research conducted that has been subjected to ethical scrutiny.

Name of student or principal investigator	JAMESON GILL
Name of supervisor (if applicable)	I F PRICE
Title of research proposal	UNDERSTANDING CULTURAL COMPLEXITY IN A UK SME: A MEMETIC APPROACH
Outline of methodology[1]	An ethnographic study in a small printing firm where I (the student) worked. Data collection is via my own participant observation journal which will be used to interpret my experience of the situated reality. In this way the study will be covert. However, at all times and stages anonymity of the firm and people involved will be assured.
What are the anticipated outcomes, impacts and benefits of the research? What are the plans for dissemination, and feedback to participants in the research/project?	PART OF PHD CONTRIBUTION IN RF1 NONE

	Question	Yes/No
1.	Does the research involve human participants?	YES

If NO please go to question No. 6.
If YES, then please answer the following questions No. 2 - 5:

2.	Will any of the participants be vulnerable? (E.g. Young people under 18, people with learning disabilities, people who may be limited by age or sickness or disability from understanding the research, people who are limited by knowledge of language, and people whose livelihood may be in jeopardy as a result of the research etc.)	NO
3.	Is there any reasonable and foreseeable risk of physical or emotional harm to any of the participants? (E.g. Distressing interview questions, experiments involving participants, asking participants to consume samples etc.)	NO
4.	Will anyone be taking part without giving their informed consent?	YES

[1] If the research has a number of distinctive phases where the full methodology or research subjects are not clear at the outset, a separate ethical approval may needed for each phase. In this case, the outline of methodology should make clear if approval is only being sought for an initial phase of work. Normally this requirement would only relate to Doctoral Students at the RF1 and RF2 stages of their research.

	(E.g. Research involving covert study, coercion of subjects, where subjects have not properly understood the research etc.)	
5.	Will the research output allow identification of any individual who has not given express consent to be identified?	No

If the answer to any of the questions 2 - 5 is YES then the research proposal should be submitted to the FREC for approval *unless* it falls into a category/programme of research that has already received **category approval. (See Section Three)**

6.	Does the research require approval from any external ethics committee, e.g. the NHS? For NHS research, this includes any work using NHS Patients (including tissues, organs, or data), NHS staff, volunteers, carers, NHS premises or facilities.	No

If the answer to question 6 is YES then the research proposal should be submitted to the relevant external body. For NHS Research Ethics Committees please refer to http://www.corec.org.uk

What are the possible benefits of this research to participants in it?

If the research proposal does not require submission to either the FREC or an NHS or other external REC then **standard approval** applies.

If the research proposal requires submission to the FREC please refer to the Faculty Research Ethics Policy, or contact a member of the committee for more information. **Approval awaited** applies until the proposal has been considered by the FREC.

ETHICAL APPROVAL (please tick):

- ☐ *(Standard approval)* This project does not require specific ethical approval.
- ☑ *(Category approval)* In my opinion this work falls within the category of 3 & 4 projects which has been previously approved bythe FREC and it does not therefore need individual approval (See Page 3 and Guidelines)
- ☐ *(Approval awaited)* This project should be referred to the FREC for individual consideration – the work should not proceed unless and until the FREC gives approval.

I can confirm that I have read the Sheffield Hallam University Research Ethics Policy and Procedures document and agree to abide by its principles (please tick). ☑

Signed..... Name JAMESON GILL Date 20/5/09
Student / Researcher/Principal Investigator (as applicable)

Signed..... Name I PRICE Date 20/5/09
Supervisor or other person giving ethical sign-off (as defined by O&M Research Ethics Procedures)

Note: University Research Ethics policy available from the following web link:
http://www.shu.ac.uk/research/ethics.html

Students - If standard approval applies, please return this form at the same time you submit your research project proposal form to your supervisor.

Categories of Research that will not require FREC Approval

These are the four categories of research that will not require Faculty Research Ethics approval:

1. The research involves direct access to subjects, through interview, questionnaire, focus groups or other group sessions. All subjects know the purpose of the research and give their consent both to their participation and to use by the researcher[s] of the output.
2. The research involves participant or non-participant observation of subjects. All subjects know that they are being observed as part of research activity, and give their consent both to their participation and to use by the researcher[s] of the output.
3. The research involves participant or non-participant observation of subjects. Some or all subjects may not know that they are being observed as part of research activity. Full anonymity of both subjects and organisations is guaranteed.
4. The research makes full or partial use of primary data, information and/or analysis originally obtained outside the research project (for example, through consultancy work, training events, teaching or previous research projects). Full anonymity of both subjects and organisations is guaranteed.
5. In addition there are a number of minor procedures that are awaiting category approval.

In relation to all the above categories the following conditions apply:

The research does not involve any subjects from vulnerable groups, and there are no health and safety implications for the subjects. The researchers[s] guarantee that the design, implementation, analysis and publication of their research will be in accordance with the Guiding Principles outlined in the Introduction.

Appendix 2 – Data Transcript, Diary 1[80]

Name: Participant Observation Diary

¶1: Participant Observation Diary – Part 1

¶2:

¶3: MD – Managing Director

¶4: CS – Company Secretary

¶5: PD - Production Director

¶6: PM - Production Manager

¶7: CAM – Customer Account Manager

¶8: CAE – Customer Account Executive

¶9: E1 – Estimator 1

¶10: E2 – Estimator 2

¶11: ?___ - Anonymised customer

¶12:

¶13:

¶14: Wednesday - 2 January 2008

¶15:

¶16: My day – Working from the office, store visits.

¶17:

¶18: I arrive at the office at 8am and spend the day getting back up to speed with orders etc after the Christmas break.

¶19:

¶20: The CS, CAM and CAE are in the office as well. The MD and E1 are still on holiday and the PM is working a late shift.

¶21:

[80] I have used my NVivo copy of the diary 1 data for this appendix because it includes the NVivo generated paragraph numbers used in the text of my thesis. The highlighted passages with endnote numbers relate to the annotations which I made during the analysis process. I have not included the actual annotations in this appendix because they are often speculative, notes to myself or represent directions in my analysis which turned out to be fruitless. At no time do I refer to an annotation in presenting my thesis. I have included the memos I wrote during my data collection period. Together, these passages highlight the need to collect richer data which is constituted in diary 2.

¶22: There's general post Christmas chat and good natured banter in the office.[1]

¶23:

¶24: The CS asks the CAE to process some paper work so a van can be dispatched. The CAE insists on having a cigarette first despite being asked a number of times to do the job before taking a break. The CS keeps a banter-like attitude despite being knocked back[2].

¶25:

¶26: The CAE returns to her desk and addresses the CS

¶27: "Why are you cluttering[3] my desk with jobs" – CAE

¶28:

¶29: And a little later the CS asks again for the delivery paperwork

¶30: The CAE answers "I'm waiting for you" – CAE

¶31: So the CS goes over to her desk.

¶32:

¶33: I tell[4] the CAE and CS that a delivery we pushed to make to E___ before the Christmas break was appreciated by the customer because they could use the brochures while we were shut. The CAM and CS acknowledge this as a good thing; the CS seems more personally pleased.[5]

¶34:

¶35: The CS makes the point to the CAE again that we need to get work through the office so orders can be progressed.

¶36: The CAE replies "It's you that's sat pissing around[6]" – CAE to the CS

¶37:

¶38: The CS then asks the CAM to look up some details on 'Yeller' meaning the Yell website. The CAM says she doesn't understand and then says do you mean Yell rather than Yeller before doing the task.[7]

¶39:

¶40: The CAM asks the CS if we can manage to produce an item quickly for delivery today but it seems that one of our presses isn't working and needs servicing.

¶41:

¶42: "It's like us and doesn't want to come back to work" - CS

¶43:

¶44: This is said in a good humoured banter type tone.[8]

¶45:

¶46: There is more banter a little later on which I pick up from ongoing chat.[9]

¶47:

¶48: "I'm trying to help you" – CAE to the CS

¶49: "You're hard work" – CS replies

¶50:

¶51: At 9.45 I get a call from E___ about the brochure mentioned above. There's a problem with the print.[10]

¶52:

¶53: I mention it to the CAM who handles the orders for this customer. She says she asked the customer to come up and proof the job as they had offered to do but they said they were too busy and so we sent a low res' PDF proof via email.

¶54:

¶55: It turns out that the artwork had been correct on the PDF but had changed when it was sent through our pre-press. The pre-press operative says that he had suggested a printed proof because of other concerns with the artwork file.

¶56:

¶57: The customer says they will accept the job but asks for a reduction in price from £1700 to £1000 unless we prefer to reprint, probably knowing that a reprint is by far the worse alternative for us.[11]

¶58:

¶59: I contact the customer to say we have found the problem and will discuss a discount with my MD when he returns from holiday tomorrow.

¶60:

¶61: The MD had mentioned to me a new product a few weeks ago and I had said it might be useful for D___. The CAE asks me today if our supplier of this product can go to D___'s store in Sheffield and take some photos to mock up a design. I had no idea this had been suggested and ask the CAE to ask the supplier to 'hang fire' until I can check the store and speak to the customer for two reasons, 1 to ask permission for photography knowing something about the project and 2 to try and sell the project as well. I feel like I have been by-passed. I go to check the store this afternoon to check the store set up and also check some print that a competitor recently supplied.[12] They have used a different method of printing (screen) and the door security gate covers have had the specification changed a little.

¶62:

¶63: The CAE has prompted me that we haven't had the artwork for a job from A___. On checking with the customer it turns out that we are required to provide a cutter

guide from a supplied drawing. I confirm this back to the CAE and ask her to have a look for the drawing which the E1 will have filed or passed back to my desk before his extended Christmas holiday.

¶64:

¶65: Memo- Thoughts while typing: The CS is taking on production management and organising deliveries. I don't think the banter is as nasty as it sounds typing it out but it seems to make the job of the CS difficult and processing jobs time consuming.

¶66:

¶67:

¶68: Thursday - 3 January 2008

¶69:

¶70: My day - working from home[13]

¶71:

¶72: On calling to check in with the office I find that the CAE hasn't found the A___ drawing and needs reminding of the situation. She says she'll have a look but I ask the E2 to help look as well.

¶73:

¶74: The CAM has mentioned the E___ complaint to the MD who has been in and left again, now due to return in the middle of the day. The CAM says that the MD is not very happy thinking that the customer has decided to proof a low res' PDF rather than a printed proof which would show the artwork as it is sent to the press. A PDF in his mind is a lower level of proofing. He apparently thinks in light of this and the fact that we rushed to deliver before Christmas that £700 is far too much a discount to ask for. When I speak to the MD personally over the phone later in the day he offers a good will gesture of 5% reduction on the price which I offer to the customer over the phone. The customer says he'll consider it with his colleague.

¶75:

¶76: I also talk to the MD about the supplier wanting to take pictures at the D___ store in Sheffield. The MD thinks the supplier is getting ahead of himself and that we should supply pictures to him. I suggest that having checked the store this project might not actually be right for this customer but if there was more information I might be able to find some opportunities. The MD says we should both visit the supplier in the near future.

¶77:

¶78: I'm concerned about making a good start to work in the New Year. Not least because of my own sales performance figures so I decide the call A___ and see if there's a copy of the drawing. The customer isn't too concerned about a quick delivery but says I can pick up a copy.

¶79:

¶80: The E2 has asked the MD about artwork times so we can price a job for D___ while the E1 is on holiday. They decide that it can wait until after the weekend.

¶81:

¶82: Later in the Afternoon, the colleague from E___ calls me to complain about our offer of 5% price reduction. He makes the point that they have seen an earlier version of the artwork proofed and the later pdf was just for changes. Although he accepts that there is scope for a problem to arise he expects that the kind of 'glaring error' that's appeared should be picked up by our artwork staff or press operator and suggests our solution is derisory. He says he could have pushed for a full reprint. There's also another problem with a carton mock-up supplied this week which hasn't been cut to shape so isn't able to be used by the customer.

¶83:

¶84: I say that I can see his point about the brochure and will check that the MD knows the full history of the proofing and will pass on the customer's comments.

¶85:

¶86: I have been asked to quote for a redo of a recent (outsourced) job for C___ F___ and send the details to the CAM so she can get the file, check the full specification from the previous job and check the current price with the supplier. She sends me prices which I quote on. Later it turns out that we haven't been back to the outwork supplier and checked the prices, just taken them from the previous job and the cost has actually gone up by £10 for finishing. Rather than make an issue I suggest that we finish the job ourselves to save some money.

¶87:

¶88: I call the office at the end of the day to see if we've been able to find out what went wrong with the E___ mock-up and I am told that we didn't receive a cutter guide. I say that I'll pick the supplied item up from the customer to see if it's viable to correct the job.

¶89:

¶90: Memo –Thoughts while typing: I feel like the CAM is invoking the support of the MD with the tone adopted telling me about his response to the E___ situation and although her account is borne out by his response to me later I still think there's a wider element of the blame being avoided.

¶91:

¶92: While talking to the second contact at E___ I feel that he has a good point. This could be because I'm the one having to explain our situation and feel personally pressured or it could mean that my colleagues are insulated from the impact of the issue as the customer sees it.

¶93:

¶94: Friday - January 4 2008

¶95:

¶96: My day - Working from home, customer visits, office, working from home

¶97:

¶98: I talk to F_ M___ first thing in connection the metal stand enquiry. There is a large sample product stand for us to pick up and base a price on which might need a van to be sent in to the customer. It is also mentioned that a delivery of data sheets due for delivery on 3/1/2008 hasn't been received so I offer to chase it up.

¶99:

¶100: I call the CAE at 8.40am and she says it should have arrived but will get a POD and call me back.

¶101:

¶102: Later in the morning I get an email (fortunately I'm not in the car) from the CAM asking which C___ F___ job needs the extra £10 costs adding to it. I call the supplier and ask them to check and call me back.

¶103:

¶104: Later when I receive a call from the E2 I ask the CAM to send the artwork to T__ C___ so they can be working on a proof which I could take to the customer today but the CAM refuses.

¶105:

¶106: "You know I can't send artwork through without an order" – CAM.

¶107:

¶108: We have been sent this artwork in advance of an order and I think this happens all the time.

¶109:

¶110: On the same call I ask if the CAE is available so I can get an update on the F_ M___ POD. The CAM says the CAE is working on a spreadsheet so can't speak and will call back. I offer to leave a message because I will be driving for a period.

¶111:

¶112: The CAE calls back in a couple of minutes to say the packages are still with the courier. She doesn't know why they've not been delivered but they will be delivered today.

¶113:

¶114: I visit E___ to pick up the problematic carton job. We have apparently had an instruction to make up a carton but have ignored or missed their instruction.

¶115:

¶116: "We're not carton makers" – Customer (combination of sarcastic and humorous tone)

¶117:

¶118: When I arrive at the office later in the day there seems to be some kind of emergency situation with a delivery problem.

¶119:

¶120: "You couldn't spend the weekend delivering to 150 stores could you?" – CS (Rhetorically)

¶121: "I think they (the customer in question) are just trying to get free deliveries" – E2

¶122: "I've got 150 address labels to write by hand" - CAE

¶123:

¶124: I notice that conversations and cigarette breaks fortunately have not been affected.

¶125:

¶126: I wait for a bit before briefing the CAM on the E___ Carton job. She says we didn't get a cutter guide so I suggest we've had some more basic instructions to make the job up and can we have a look back and see what's happened.

¶127:

¶128: A little later the PD approaches me for a 'catch up' chat which starts with him telling a yarn about a person who works for the firm that nearly took us over last year. The story consisted of the PD winding him up by saying "I know something you don't know" repeatedly until he was asked what? and then saying "I can't tell you because then you'd know what I know and then you'd know that I know you know"! I'm not sure how to take this and feel a bit awkward because I don't know what point he's making.

¶129:

¶130: The PD then moves on to tell me that the firm mentioned above has just bought too great pieces of equipment but he can't tell me what they are yet. I suggest that he's regretting not working for them but the PD says that the owner of the other firm told his workforce that he owns enough property to house a replacement work force of Poles if they don't want to work there anymore.

¶131:

¶132: "However the guy does know how to make money that way so you've got to hand it to him" – PD

¶133:

¶134: The PD goes on to say that he was telling the PM recently that good margins for print don't exist anymore but the PM didn't believe him

¶135:

¶136: "You know what he's like" – PD

¶137:

¶138: The PD tells me that he's happy now that he's settled after our move to new premises and back working on the press.

¶139:

¶140: I had hoped to speak to the MD today but he is away at a funeral. I ask the PD if he knows if the MD will be back today but he says he doesn't.

¶141:

¶142: "You know. It's called communication" - PD

¶143:

¶144:

¶145: Memo – Thoughts while Typing – I feel that I should have been more explicit with the details regarding the C___ F___ sticker quote but there's an element of irritation on my part because my original request for a quote wasn't acted on properly. Sloppiness begets sloppiness.

¶146:

¶147: Is the CAM attitude to sending artwork in advance of orders a manifestation of the firm's patterns restricting practice which would benefit the customer and outsource suppliers? Is it a meme acting in its own interest? The phraseology adopted "You know" seems to be a devise for avoiding personal responsibility in the decision of how to proceed or maybe for avoiding conflict.

¶148:

¶149: I tend to feel that the M___'s delivery hasn't been sent but I have no actual grounds to base this on other than 'instinct' (Does a memetic instinct similar to genetic instinct have a part to play? Presumably it would have to reside in my memeplex and work for its own ends.)

¶150:

¶151: It's only struck me now while typing up that the PD follows a strange anecdote about withholding information with a story he tells me about something which he can't tell me all the details about yet.

¶152:

¶153: The communications from the CAM and CAE don't take in to account the physical issues with contacting me while I'm out of the office.

¶154:

¶155: I think the customers tone when describing the carton is an effort to show that we're not empathising with his business.

¶156:

¶157: Sunday – January 6 2008

¶158:

¶159: The MD calls me at home, apologising for calling on a Sunday and asks if I can help with the delivery issues that were mentioned on Friday. There are a number of stores that the MD is going to deliver to; I am asked if I can deliver around South Yorkshire and Nottinghamshire. The balance will be delivered on our vans or via couriers.

¶160:

¶161: Monday – January 7 2008

¶162:

¶163: My day – Office, Deliveries

¶164:

¶165: I travel to the Leeds office to pick up some of the delivery items discussed with the MD on Sunday. It seems we have been let down by a courier.

¶166:

¶167: The company is using our own vans, same day couriers, including the CAE's father, the MD in his car and me in my car. I am to deliver to motor dealerships in Derby, Tamworth, Nuneaton, Coventry, Northampton and Mansfield. I deliver to all the drops apart from the Mansfield address which I don't have time to get to. I shall deliver this one tomorrow morning.

¶168:

¶169: I have to call the office and ask the CAE for help in finding two of the drops because the addresses I have aren't correct. On the first occasion the CAE quickly gets a number for me to call at the delivery site. On the second occasion the phone is answered by the E1 who says the CAE is just dialing out. I get the impression that she isn't connected yet because she asks who the E1 has on the phone but I still have to wait until she's made the call. I ask the E1 if she really had already been on a call and he says "Yes, she was just dialing the last number."

¶170:

¶171: When I speak to the CAE I say that making the Mansfield drop today is unlikely and she asks me to confirm what happens so she can keep up to date. I decide that I can't make a call back to her because I'm already driving my car.

¶172:

¶173: Memo – Thoughts while typing: It seems that the massive effort to correct a problem here is not viewed by the CAE as corrective action to be taken to correct a problem but good committed work. The meme for self interest seems to be catching when I imitate the CAE's behaviour. The unhelpful team worker meme seems to copy easily.

¶174:

¶175:

¶176: Tuesday – 8 January 2008

¶177:

¶178: My Day – Deliver to Mansfield, Work from Home

¶179:

¶180: I go to the Mansfield drop left over from yesterday so it's almost one and a half days for me personally to help sort out the deliveries.

¶181:

¶182: The customer comments "It's about time" when I arrive but unusually I am able to say that I'm just the delivery man and don't know anything about the lead times. It's interesting to reflect that I don't care as much as if it was my customer.

¶183:

¶184: I return to work from my home office. The email link to the office is down so I call to check it's not just my computer and the E1 tells me that our ISP has made some updates over the weekend and things are running very slowly. The email's back on about an hour later.

¶185:

¶186: On the same call I ask to speak to the CAM but she's had to take the CAE to hospital because she's cut her finger on a scalpel while packing a job.

¶187:

¶188: I call again later and this time speak to the CAM to see if she's been able to solve the E_____ mock up problem. She says she's not done anything yet so I ask her to look back on the correspondence because the customer had told me they had been clear about what they wanted and we ought to check if that is correct and either way can we see if we can work out what we need to do to put things right.

¶189:

¶190: About an hour later I call the MD to pass on E___'s response to our 5% discount. I tell him that they would expect their art worker to pick up on that kind of problem and they expect more of a gesture in terms of a discount.

¶191:

¶192: The MD replies:

¶193: "If their art worker would have picked up the problem then he should have come up and looked at the proof. We were pushing to deliver quickly for them" – MD

¶194:

¶195: I am holding back about pushing the issue because of the MD's tone, which it short tempered and irritated but I ask if he's aware of the mock-up issue because it may be best to combine the jobs and offer a joint solution which takes the pressure off the main brochure issue. I'm thinking that we're obviously culpable for the mock up problem.

¶196:

¶197: I hear the MD shout across to the CAM to ask what she's found out about the mock-up and she tells him that we only received four pieces of artwork and no carton instructions.

¶198:

¶199: The MD tells me that he has to leave for a meeting so he will have a think and call me back later.

¶200:

¶201: During this time I check back through the emails concerning the mock-up which were copied to me. I don't have everything because the whole communication took place between the CAM and the customer while I had meetings in London. This is the reason I couldn't take the proof to the customer quickly and why we asked them to come to us.

¶202:

¶203: The customer has clearly asked for a carton, sending a diagram. Also we have quoted for a carton as well.

¶204:

¶205: The CAM calls me, then asks me to hold, apologises, then can't remember why she's called. She remembers it's about a C___ F___ proof. She wants to know what to do with it and I ask her to send it to the customer for tomorrow morning.[14]

¶206:

¶207: I am called by F_ M___ who says they still haven't received their data sheets. They also want me to arrange pick up of their stand for estimating purposes. I say I'll check both issues. I call the CAE about the delivery and she checks for a POD on-line while I'm on the phone. It's been signed for so I call the customer to pass this on.

¶208:

¶209: The MD calls me back late in the afternoon about the E___ issues. He says we weren't asked for a carton but we've included the cutting in the price so we'll redo the job FOC. I tell him that we did receive carton instructions and that's why we've quoted for it but this doesn't get a response. He asks me to get a sample or further drawing. He still wants to be tough about the brochure but then says

¶210:

¶211: "Oh fuck it give'em 10%" – MD

¶212:

¶213: I say I'll pass it on and hopefully tie things up.

¶214:

¶215: I also ask about our approach to outsourcing stands for F_ M___ because I'm not sure we'll be competitive and don't want to be seen to be wasting my time on outwork jobs. The MD says he wants to quote the job but we probably won't be able to get a van to pick up the sample stand to quote on until next week.

¶216:

¶217: I then instigate a chat about the deliveries we did yesterday. The MD delivered along the south coast. We complain about the traffic. He says he stopped for a coffee just to 'reset' because of the stress. He agrees that it's good to be able to say "Sorry, I'm only a courier".

¶218:

¶219: It turns out that the problem had been caused by the outsourced print finishers. I'm not sure what we're claiming back from them!

¶220:

¶221: Finally we talk about the MD's new car.

¶222:

¶223: "I wouldn't have a Beemer if it wasn't a cheap deal but it's comfortable and I did 700 miles yesterday on one tank" – MD

¶224:

¶225: I spend the rest of this afternoon calling customers/prospects for new work but they all say it's still quiet after Christmas.

¶226:

¶227:

¶228:

¶229: Memo – Thoughts while typing: When the MD is replying to the E____ issue he is doing so from a limited perspective. The customer had asked about deadlines before placing the job and the MD had said we can deliver before Christmas if we have a week to work on the job. The customer wasn't actually pushing for a pre-Christmas delivery in the end because things got held up with the proof. We actually ended up working to the production slot that had been allocated by the CS and we were putting pressure on the customer to approve the job so we could keep to our production schedule rather than their deadline. The CAM and I got carried along with this, on my part mainly to make the best level of sales possible for the end of the year. In any case it has turned out that the MD told the CAM to invoice the job in January after all so the whole situation has been completely fabricated by our organisation.

¶230:

¶231: Wednesday - 9 January 2008

¶232:

¶233: My Day – Working from Home, customer visits, office, customer visits.

¶234:

¶235: I start the day by calling some sales prospects, with some success. A firm that was due to close is being restarted by some of the staff and there will be opportunities to quote for work over the next few weeks.

¶236:

¶237: I receive a call from the CAE about the drawing from A___ that we are setting up on our artwork system. There are some missing dimensions. I suggest that I can pick up some details and see the customer later today to sort out the details.

¶238:

¶239: I visit E___ to pick up the mock-up sample and talk about our offer of a discount. The customer is at pains to reiterate that he is not happy with our response suggesting that he doesn't know how big my firm is but maybe he is an insignificant customer.

¶240:

¶241: "Is your MD the kind of bloke who'd cut is nose off to spite his face" – customer

¶242:

¶243: I explain that the customer's work is valuable to me and that I think it is to the firm as well.

¶244:

¶245: The customer explains that my organisation has been their main supplier recently and held a price differential against other suppliers. Things will come to a head next week when his boss returns from holiday because without a satisfactory end to the issue he will tell my contact to stop using us and the customer says it will rebound on him personally because his boss is the MD and is very proud of their company image, an image which we have tarnished. Our slogan is "taking care of your image".

¶246:

¶247: I explain, not least because of reflecting on this research, that maybe there's a cultural issue between our two firms and that a more print industry friendly solution might suit my MD. I suggest a future reorder which would include extra copies to compensate for the first print run problems. The customer seems to warm to this suggestion.

¶248:

¶249: I reach the office just as the MD is leaving the car park. When I ask if the MD will return today, the CS says it might be four hours. The E2 says to me humorously that I

won't be around at that time. This alludes to a general attitude to sales in that salespeople don't work very hard and don't stay late at the office.

¶250:

¶251: I ask the CS if there will be a van near to Nottingham so we can pick up F_ M___'s sample stand. He says that there may be after the weekend but the CAE helpfully suggests that there may be a van available tomorrow. I ask if I can be kept up to date so I can forewarn the customer when we are going to arrive.

¶252:

¶253: When I give the E___ mock up sample to the CAM she asks if we are charging the customer for setting up the artwork. I say no and she checks if I've asked the MD. I confirm that we've agreed that we'd initially included a mock up in our quotation.

¶254:

¶255: When the MD arrives back towards the end of the day I recount the details of my meeting at E___. When I say that the customer sent the right instructions for the mock-up I see him looking past me in the open plan office presumable to check the reaction of the CAM. I dilute the point by suggesting that although the customer asked correctly for what he wanted he didn't do it in a way which is normal for us. I.e. he didn't send a readymade cutter drawing. I also suggest that we are about to lose their business over the brochure issue and that a reorder deal might help. The MD says that something like an order for 10,000 where we could supply 15,000 would be OK. I will get some quotation options from the E1.

¶256:

¶257: I finish the day by visiting A___ to sort out the drawing queries which the customer does immediately.

¶258:

¶259: Memo – Thoughts while typing: I am making a distinction between me and my firm when talking to E___. Is this a lack of loyalty, a desire for an easy life or just the nature of my job? What are my memes here?

¶260:

¶261: The E2 is friendly when joshing me about 'sales' but this attitude has been more political in the past when wielded by the PM, CAE and CAM and was the subject of previous action by the MD. I realise that this group of people have reined back this attitude somewhat since the MD confronted them about it.

¶262:

¶263: The comments of the CAM about the E___ mock-up show that she still hasn't looked back at the file or the estimate. Checking if I have included the MD in the decision to resupply FOC could mean a lot of things. Maybe she doesn't trust me, she just wants to assert herself, she wants to back up her initial stance on the subject or she harbours underlying negative memes about sales and sales people?

¶264:

¶265: When the MD looks to the CAM while talking about the mock-up I feel it is with a look of agreement with the CAM's view.

¶266:

¶267: Thursday - 10 January 2008

¶268:

¶269: My Day – Office, Working from home

¶270:

¶271: I visit the office to take in the updated A___ cutter details. The art worker has everything needed to finish the work now.

¶272:

¶273: I have received an email from E___ asking if we can deliver the corrected mock-up on Monday so I ask the CAM to check what we can do.

¶274:

¶275: While I'm making some sales calls there's the usual banter in the open plan office and it's quite noisy for making calls. The MD moves to the meeting room to take a couple of calls but this may be for privacy.

¶276:

¶277: During this time the CAM is harrying the CS. I hear him say "I'm trying to juggle hot coals here."

¶278:

¶279: I mention to the E1 that the fitting job he recently quoted for D___ Merryhill store will be ordered within the week with fitting needed during the week after next and does he need to update third party fitters.

¶280:

¶281: The E1 says that he's based the job on being fitting using our own staff but doesn't know who's going to do it because we're on 24hr shifts at the moment. He's says something will be sorted out but I can do it if I want.

¶282:

¶283: I ask the CAE if we've been able to get a van to Nottingham to pick up the stand from F_ M___. She's says we haven't.

¶284:

¶285: "We decided not to, sorry I meant to tell you" – CAE

¶286:

¶287: I ask her to fit it in at the next possible time.

¶288:

¶289: I call P___ B___ C___ because there is some POS work due to be placed soon. The customer says they are working on the designs at the moment but in the meantime can I come in to pick up some samples from the previous job we did because some of the items seem to be printed incorrectly. I say I'll be able to pick them up over the next couple of days.

¶290:

¶291: I ask the MD about producing a new company brochure now the company has rationalised and moved premises. He says that they've already started work on one and asks the art worker who's started to put some designs together to bring a copy of what's been produced so far. The MD says he'd be grateful for my input. I'd rather have been involved earlier but I don't think the MD sees a brochure as anything other than a functionally derived statement of what we are.

¶292:

¶293: The brochure as it strands is very much based around our perspective, pictures of presses, press specifications and categories of products divided by print format. I prepare a list of customer orientated points and pass them back to the art worker so they can be incorporated. I'd rather have rethought the whole approach based on customer groups but I'm happy to do it this way because there's less overt political impact and it may make the MD and the art worker think from my perspective.

¶294:

¶295: Discussing my thoughts with the art worker raises an interesting point. The main title for the brochure is "More than Print". I've not seen anything in the brochure at this stage that shows we do anything more than print but the art worker says that all the products included are more than print because they include, for example, cutting to shape or the item builds up into a 3D stand. I say that an average customer would just see all those things as print and that a customer would see things like collation/dispatch, creative artwork or some other kind of help with their own business issues as more than print. I suggest the definitive consideration would be that if a customer thinks of a particular product and would associate a printer as the best person to contact for that product, then we need to offer more than that to offer more than print. The art worker seems a little upset that I've questioned his design and says the MD came up with "More than Print" and points out more detail in the product pictures that he's included as showing more than print but as far as I'm concerned no one is going to look at a brochure long enough to pick out the kind of detail he sees there. I leave the brochure with him feeling quite happy that I've lobbed a spanner in to the thinking.

¶296:

¶297: Later I mention to the MD that the art worker seemed a bit challenged and I ask him to tell the art worker that I thought he'd done a good job if anything is said.

¶298:

¶299: The MD says he has the same issue with what print means to people. At a weekly BNI club he attends he has trouble convincing a woman member that we do anything other than business cards. I'm left thinking that if the woman only thinks of business cards in connection with a printer then that's probably all she needs to buy and the MD would be just justifying his ego by explaining more products rather than gaining any more business but I don't say anything.

¶300:

¶301: I try and sum up what I mean by invoking the old features/benefit cliché.

¶302:

¶303: I also ask the MD if he is still going to try the management coach. The MD says that the coach has been to see the directors once and they need to decide whether to go ahead with his input. The MD wants to try it but he says that the PD (his brother) is against it.

¶304:

¶305: "He doesn't like change" – MD

¶306:

¶307: The MD says that the coach has given a book to him which he has read over Christmas. It explains that there are 3 kinds of job role, entrepreneur, technician and manager. The MD says he always thought that being an entrepreneur was about getting a great idea and making millions but the coach has explained that it's more about having "the balls and drive to push a business on". The MD realises now that when he has to stop and manage or do a technical task like work on his computer it is interrupting his role as an entrepreneur who "just gets other people to do the work". He says that this role swapping is why his wife says he has mood swings.

¶308:

¶309: The MD says all the directors need to agree that they want to change for the coach to be successful (I think he's including the PM as a director here). If not it will be a waste of time and money because the coach costs £1500 per month which gets 2 hours a week input.

¶310:

¶311: I return to my office at home to finish the day and receive a call from F_ M___. The customer says that their logo on the recent data sheets has not printed very well. I say it sounds like a low res' logo has been used. The customer says that she can see the effect a bit on her proof but it's worse on the data sheets. She says she realises that they aren't very skilled in artwork there and wants our help to improve things. She isn't sending the job back but wonders if we can provide a few copies printed on a small run format with the logo corrected which she can show her directors because they're very proud of their image. I say that I'll make sure there isn't a problem on our part first and see what we can suggest.

¶312:

¶313: I call the CAM to see if she's been able to confirm a delivery on Monday for the E___ mock-up but she says she hasn't because the art worker has had to keep leaving that job to do other things. I ask her to confirm things as early as possible in the morning and call the customer to say we're doing our best and I will confirm a delivery time soon.

¶314:

¶315: Memo – Thoughts while typing: There's some interesting implications about signifier/signified issues surrounding the brochure. The way the MD approaches the brochure grounds his view in a production orientation.

¶316:

¶317: The ideas of the coach constitute memes external to the company and the adoption or otherwise by the directors will shine a light on the patterns of the firm. The way the MD has been flattered by the description of him as an entrepreneur may have helped them to be adopted by him but the suggestion that all the directors must agree on the way forward shows that the established pattern will still have the final say. If the option of change is avoided because of this it will give the MD the option to invoke an attitude of 'I wanted to change but you held things back' thereby passing on responsibility and contradicting his new view of himself as an entrepreneur who drives things through because of large ball size.

¶318:

¶319: Friday 11 January 2008

¶320:

¶321: My Day – Working from Home with a cold, customer visits cancelled

¶322:

¶323: I email the CAE with details of the complaint from F_ M___. I adopt a conciliatory tone so as to hopefully engender a positive response and ask for the artwork situation to be looked into with no presumption of fault.

¶324:

¶325: A little later I get a simple message back saying that the files were all low res'. I decide to make an appointment next week to visit the customer and look at their proof and the data sheets they received.

¶326:

¶327: I wait until 10am before calling the CAM to see if the E___ mock-up can be delivered on Monday. She says the job is just being finished now but we have a van in Lancashire on Monday and she doesn't know what else needs to be delivered so asks if I can do the delivery. I say that I may well be able to fit it in. I wonder why other deliveries seem to be taking priority over this one but I don't question this as I'm feeling shattered because of my cold.

¶328:

¶329: I contact the customer to say the delivery will be on Monday and he is happy.

¶330:

¶331: I contact the MD to talk about our reorder option for the E___ brochure and he says he will supply a new set of 15000 for the 10000 price. He doesn't want to offer a discount on the current job as well but I push him to maintain 5% which he does.

¶332:

¶333: I pass this on to the customer and as before he says he will discuss it with his colleague.

¶334:

¶335: Towards the end of the afternoon I receive a couple of orders which serve to reduce the stress levels for the weekend then receive an email from the CAM saying that the mock-up for E___ is left on my desk and it would be a big help if I could deliver it.[15]

¶336:

¶337: Memo – Thoughts while typing: There is a contrast in the approach to the F_ M___ artwork when it is compared to the approach to the E___ artwork. The CAE has not shed any light on how the artwork was handled or any conversations she had with the customer that may have tried to highlight our concerns before printing, in both cases though, we are assuming quite a high level of customer knowledge of the printing process.

¶338:

¶339: It seems almost like the MD sees sorting out the E___ brochure issue as a macho brinkmanship exercise. What memes could be causing this approach?

¶340:

¶341: Monday – 14 January 2008

¶342:

¶343: My day – Off ill

¶344:

¶345: I have left my phone on today rather than diverting to the office in case anything crops up that I don't want to miss out on.

¶346:

¶347: I receive a call in the morning from F_ M___ chasing up help on the data sheet issues. I explain that I'm off and that a digital option might appear very expensive next to the litho job we've supplied. The customer is upset because when her directors see the data sheets they will use it as a weapon against her and her colleague showing that they are incompetent. The colleague (who has supplied their artwork) has had no experience in this kind of work and the customer says she wants us to help her learn how to get better results in the future.

¶348:

¶349: I suggest that the immanent next batch of data sheets could be used to tag on reprints of this first job but the customer needs a quicker solution for the board.

¶350:

¶351: I also offer to still check the proofing but the customer is adamant that they are to blame and ask me to suggest the paper stock used so they can try and print a few off on their laser printer to placate the board.

¶352:

¶353: I say that I'll look into the costs of us amending the artwork and will check again for digital options. Following this I will visit the customer to help remedy future work.

¶354:

¶355: In the afternoon D___ Merryhill store call to say they want to order the recently quoted 'steps graphics' items. I thank the customer and ask her to confirm the details via email.

¶356:

¶357: Memo – thoughts while typing up: F_ M___ seem to be crying out for a relationship type approach to their print supply. I am finding it difficult to provide this relationship because of the minimalist input from the CAE in terms of information.

¶358:

¶359: Tuesday – 15 January 2008

¶360:

¶361: My Day – Back from illness, working from home

¶362:

¶363: I call the MD first thing to confirm that I'm back to work. There's no answer so I leave a message. I pick up emails from the previous day. There's a couple of orders to pass to the CAM and a quote in response to an enquiry from F_ M___ I'd put to the E1 on Friday. It needed to be quoted on Monday. Before I have chance to put my covering note on and send it through the customer calls me for the quote. I explain the delay and give the prices over the phone then confirming on email. This is disappointing because the E1 had managed to get the quotes to me before 8am on Monday morning so we've missed out on a good chance to show excellent customer service. It would have been nice if the office staff had been able to co-ordinate a quote while I was off ill.

¶364:

¶365: A little later the MD calls me, acknowledges my message and says he's got a new prospect for me to chase. It's S_ F__ which is next door to our new office. He's got as far as getting a name but in conversation with another trade printer has found that they supply this firm and they don't want us to tread on their feet. The MD says that

there'll be less of a problem if I tread on their feet. I've tried to approach this prospect before with no luck so I look up my file. I've got the same name the MD has but a different address along with the graphic designers they were buying print through at the time of my last call. The MD seems a bit peeved that I'm on the ball but says the contact now works next door to us and that if the other printer is supplying direct then maybe we can. I say that I haven't been back in touch because of the 'brush off' I had before so it's probably a good time to try again. The MD has left a letter of introduction on my desk at the office for me to sign and send as a starting point. I say that I'll get on with it as soon as I'm back in the office.

¶366:

¶367: In the middle of the day I call the office to see if there's anything I need to be aware of and check that the CAM is OK with the orders I sent to her earlier. The CAM says she's on lunch and can I call back. I say OK and it's just to check through the new order. The CAM tells me that:

¶368:

¶369: "I haven't even looked at it yet" – CAM

¶370:

¶371: I also ask to speak to the CAE but she is apparently on lunch as well. I say I'll call back or she can call me, which she does about 45 minutes later. I miss the call and the E1 answers my return. We have a chat about an enquiry I've sent him earlier that day while the CAE is on the phone. When he tries to put me through the CAE takes another call. The E1 is able to help with my original query though and so I leave the call at that.

¶372:

¶373: I spend a bit of time thinking about the above response. I'd be the first to make sure I take my lunch but the offhand manner and tone, particularly since I've been ticking over while ill is irritating.

¶374:

¶375:

¶376: Memo – thoughts while typing: leaving quoting while I'm away sick seems to suggest that the firm is not team orientated or has communication issues.

¶377:

¶378: The MD's approach to the prospect highlights the colloquial nature of his approach to business. There's no concern for nature of the prospect or any strategic approach to identifying prospects systematically as a good fit for our offer. Could this be why we end up with customers we dislike so much?

¶379:

¶380: There are some interesting phase space possibilities when the CAM manger tells me she hasn't even looked at an order yet. E.g. give me an hour I'll get the file out we can talk then.

¶381:

¶382: Wednesday - 16 January 2008

¶383:

¶384: My day – Working from home, Customer visits, Office, Customer visit

¶385:

¶386: I call T_ C___ to get an outwork cost for emergency F_ M___ data sheet copies.

¶387:

¶388: I then call F_ M___ to say that I'm going to try and get a digital option to put them on and for use with their directors. Unfortunately the supplied data sheets have been seen by their directors and we will have to find a new solution.

¶389:

¶390: The customer says she has talked to her colleague who created the artwork and the colleague says that she had mentioned the low-res' logo issue to the CAE and the CAE had said don't worry it will look OK when it's printed. Now the customer is suggesting a 50/50 split on the price while still being positive in the sense of wanting to make things easier for the future. I am also chased for a time when their stand will be picked up because our van hasn't been sent yet.

¶391:

¶392: I receive an email enquiry from C_ F___. There are some samples to be sent but I offer to pick them up later this morning.

¶393:

¶394: Calling at P_ B_ C___ I pick up the samples mentioned at the end of last week. There is definitely a 'repeating image' visible. I say that I will get them checked out and then call the customer with feedback as he is out at the moment. Later at the office the MD laughs at the sample and says it's the worst repeating he's seen but it's a job the firm that nearly took us over printed for us while we were moving premises. The MD suggests that we say that our new press has eliminated this problem for the future.

¶395:

¶396: On the way to the office I call at C_ F___ and pick up the samples. The customer says they've always used a different printer for this job but can't now contact them. She thought of me because her Operations Director had recommended us for other things in the past. This relates to a period about 2.5 years ago before all the takeovers etc.

¶397:

¶398: While at the office I ask the CAE about the F_ M___ artwork situation and she is helpful, finding samples and getting the CS involved, checking for solutions. There is no record of conversations about the proof so it's a 'he said/she said' situation. The CAE says that they can't expect things to be right if they use Corel draw rather than an industry standard artwork package. This is fair enough in the sense that it will need

special attention but I make the point that we need to look after the artwork for them charging where needed.

¶399:

¶400: I receive an email from C_ F___ saying that the sticker proof sent last week is not correct and that fonts have changed. I forward this to the CAM asking for an investigation. I also ask her verbally about the D___ Merryhill order as I am concerned that the art working might delay fitting the job this month. The CAM says that she still hasn't looked at the job. I later chase the proof query but the CAM has seen my email but not read it.

¶401:

¶402: I say that I'll brief the art worker in advance because the artwork needs could be difficult to describe. The art worker is not very receptive saying that he can't do any work without a job bag. I empathise but suggest we just do the artwork 'chat' now because I might not be in the office when the CAM gets to the job. The art worker comments:

¶403:

¶404: "Oh, but there's still time for fag breaks though"

¶405:

¶406: I say that I get by just doing the next thing that's in front of me.

¶407:

¶408: We have a brief chat about the artwork and the art worker makes some notes and copies some of the emails.

¶409:

¶410: I arrange with the PM for a pick up of the F_ M___ stand this afternoon. The PM didn't know we were due to make a pick up but sorts it out very quickly because we have a van only 30 miles away from the customer.

¶411:

¶412: "There, how's that suit yer" – PM

¶413:

¶414: Well great speedily about a week late is my reaction but he doesn't know the background. I call the customer to say that we are on the way and book an appointment for tomorrow to visit her about the data sheets

¶415:

¶416: Before leaving the office I sign the letter the MD has provided for me in connection with approaching S_ F___ next door. I thank the MD for his input.

¶417:

¶418: Finally I take the customers sample back to E___ and discuss the brochure issue. The customer has decided that they don't want to trade with us anymore if all we will offer is 10% off the original price of their brochure. They are not interested in the extra order/quantity option. He says that the door would be open again if, on hearing the news, the MD wants to reconsider but otherwise it isn't a problem for them to move on. I concede that I would rather have done more to make sure the relationship continues and promise to try one last approach to the MD 'when the time is right'. The most important thing for me personally at this stage is to maintain a good personal relationship with the customer which may bear fruit in the future.

¶419:

¶420: Memo – Thoughts while typing: The production manager times the picking up the F_ M___ stand from when he hears about it not from a company or team perspective.

¶421:

¶422: The slow response to the data sheet problem has meant that it has escalated into a discussion about the price that may have been avoided.

¶423:

¶424: The MD's approach to P_ B_ C___ again looks to avoid the current issue focusing on a trouble free future.

¶425:

¶426: Thursday -17 January 2008

¶427:

¶428: My Day – Working from home, customer visit.

¶429:

¶430: I spend the morning making sales calls and generate some litho enquiries from a customer (P_H_D) which has only used us to date for large format digital work. The customer emails details of two jobs, one with a delivery date for 21 January. I forward the details to both estimators.

¶431:

¶432: After sending the email I remember that when we were quiet before Christmas the MD had asked me to mention any new work to him so he could calculate a 'foot in the door price'. I call the MD and mention the enquiry in case he wants to adjust the prices. The MD says he'll have a look at the details.

¶433:

¶434: In the meantime I have received an email form the E1 who has responded to the enquiry with a query about some of the detail which I check with the customer and email back. He has also put a note on the email about the item with a delivery date of 21 January which says we would have to print and finish the job tomorrow if we were to

deliver on time with an exclamation mark. I add to my email that it will still be worth quoting if only for comparisons.

¶435:

¶436: The prices for this job are emailed to me in the middle of the day and I send them on to the customer with a note to call me if they wish to proceed with the deadline item.

¶437:

¶438: I also receive a call from T_ C___ about an urgent enquiry for hanging cards. We talk about how photographic our digital option would be and I promise to provide a printed sample if it would help him with his customer. I note to the estimators that INCA print is assumed when forwarding the enquiry. When the quotation is sent to me the E1 has acknowledged the note by helpfully giving an INCA and a litho version. The litho version is cheaper so I am able to quote the customer by stating we can supply a 'cracking' photographic image. The customer calls later to check some detail and says we should receive an order tomorrow.

¶439:

¶440: In the afternoon I visit F_ M___ to discuss the data sheet issue. The customer has found another problem with one of the four items. She shows me an email she has sent to the CAE asking for a line of text to be removed and shows me the proof that she has signed off which has the line of text removed. However the line has reappeared on the actual supplied items. As a result of this the customer says she wants more of a compensatory solution from us. She does also say that they have spotted another error which is their fault so she doesn't expect a full refund. Most customers would not have brought this up or offered culpability I feel.

¶441:

¶442: Despite the customer acknowledging that the CAE was helpful in talking the her through making changes to the bleed, due to the low-res' images which the customer restates she flagged to the CAE and this new problem she says they won't be using any of the data sheets. I say that I need to return the entire product to my office for our system to recognise that, so the customer rejects the whole job.

¶443:

¶444: The customer restates that she wants to work with us because she thinks that I will help them to overcome their lack of artwork expertise and she trusts me to do that. The customer says that she wanted her colleagues to say "Wow, have you done that" and even though people have said the overall look is good she's "gutted about the problems".

¶445:

¶446: Memo – Thoughts while typing: The estimator's addition of comment about delivery times is outside of his remit. This could be viewed two ways. Positive in that he is offering me more information or negative in that the company's memeplex is inducing him to transfer memes of causation and risk avoidance to me.

¶447:

¶448: I remember the CAE being derisory about F_ M___'s artwork ability while she was helping to change the bleed. Could these suppressed memes hidden by a forked tongue approach to customer service be leaving an empathy gap which is leading to the printed errors?

¶449:

¶450:

¶451:

¶452:

¶453: Friday 18 January 2008

¶454:

¶455: My Day – Office, working from home.

¶456:

¶457: I arrive at the office to return the F_ M___ data sheets. I tell the MD that I have had to bring the job back because the customer has now rejected it because of a couple of issues.

¶458:

¶459: The MD says "What's happened because I'm getting a bit tired of this." – MD

¶460:

¶461: I explain that we have included a low-res logo and not printed a text change that had been requested and approved. I explain that it's the customer's word against the CAE's word where the logo is concerned but there is paperwork to confirm we haven't carried out the customer's instructions properly.

¶462:

¶463: The MD asks the CAE for the proof and checks to see if it is signed by the customer.

¶464:

¶465: "Well we haven't got a signed proof so it's a reprint" – MD

¶466:

¶467: I explain that the customer still takes some blame for the artwork being difficult and that there are some more data sheets to quote for which we can use to do a combined print run so the MD says we'll go 50/50 on the previous price.

¶468:

¶469: He shouts over to the CAE:

¶470:

¶471: "We need to make sure we get proofs signed in future" – MD

¶472:

¶473: I send an email to the CAE confirming the action we need to take and asking if the lack of detail in the photos on the data sheets is due to anything other than them being low-res.

¶474:

¶475: I speak to the E1 about an outwork price I have been waiting for. He says that he will chase it up but he's only just remembered to send an enquiry after forgetting about it.

¶476:

¶477: Later I receive an email from the CAE she says she doesn't know what I mean about the F_ M___ photos, they are unclear because the files are low-res.

¶478:

¶479: Memo – Thoughts while typing: The MD is clearly affected by the returns. I'm not sure whether it anger, frustration, irritation or embarrassment or to whom or what it is directed at, maybe the customer the CAE, the production people or me.

¶480:

¶481: The E1 and the CAE don't seem bothered that they have made mistakes.

¶482:

¶483:

¶484:

Appendix 3 – Data Transcript, Diary 2[81]

Name: Observation Diary 2

¶1: Participant Observation Diary – Part 2
¶2:
¶3: Monday 28 January 2008
¶4:
¶5: Managing Director - Monday 28 January 2008
¶6:
¶7: I mention to the MD that E___ are closing their account because of the recent brochure problems.
¶8:
¶9: The MD is working on a guillotine in the works at the time. He is upset that we have been having problems generally mentioning that that was why he reacted with an irritable tone the previous Friday when I mentioned the F_ M___ problems.
¶10:
¶11: The MD explains that he feels these kinds of problems are new to the firm in recent times. He thinks it's something that's changed since he took over my previous employer. He says he doesn't want to lose business.
¶12:
¶13: In addition to the problems I have encountered the MD has had several issues which have affected his customers in a similar way. He has a general feeling that quality has been slipping[1] and thinks that it has got worse or more pronounced since we completed our latest move into new premises. This coincides with him starting to take more of a proactive selling role which means he is away from the office approximately three days a week.
¶14:
¶15: The MD reminisces about the period before he took over my previous firm and remembers it as a more straightforward organisation. There were less people working for him and this meant the whole team was more in touch with orders and customers. These days things like proofing have become sloppy[2] and he's not sure why. He makes the point however that now we have two people working specifically in a customer service role (the CAM and CAE) and he never had that resource before. He thinks that having this resource should mean we can generate a good level of customer care.[3]
¶16:
¶17: I say that that's interesting to me because I am surprised that we seem to change our approach to proofing depending on customer demands whereas when I've asked about proofing on behalf of customers the CAM and CAE are happy to tell me something needs signing or we need to wait for a hi-res proof before proceeding. The MD says that he is surprised that proofing problems have occurred because he thinks everyone knows the issues around proofing and what should be made clear to customers. He thinks that maybe we aren't making a big enough effort to "educate customers" about the printing process.[4]
¶18:
¶19: When I suggest that I could start an informal dialogue with some of our colleagues to engage ideas and attitudes the MD says he would rather organise a meeting[5] with

[81] I have used my NVivo copy of the diary 2 data for this appendix because it includes the NVivo generated paragraph numbers used in the text of my thesis. The highlighted passages with endnote numbers relate to the annotations which I made during the analysis process. I have not included the actual annotations in this appendix because they are often speculative, notes to myself or represent directions in my analysis which turned out to be fruitless. At no time do I refer to an annotation in presenting my thesis.

himself, the CS, the CAM, the CAE and me present to discuss the issues some time later in the week. After this the MD thinks it may be productive[6] for him to visit E___ with me to see if we can salvage the situation with the customer[7].

¶20:

¶21:

¶22: The Art worker who generated the proof for the problematic E___ job - Monday 28 January 2008

¶23:

¶24: The art worker who generated the proof for the ill fated E__ brochure job has not been included in the MD's plan for a meeting so later in the day when I'm in the pre-press room I ask the art worker concerned about his feelings about how that proof and job were handled.

¶25:

¶26: The art worker begins by saying that he processed the artwork for this job and as such he feels that it is his responsibility and therefore it is his fault that the error we printed didn't get noticed.

¶27:

¶28: He says that even though the artwork was sent in pdf format[8] this doesn't mean that errors won't necessarily occur when he manipulates the files so that we can make printing plates which are used to actually print each colour of the job.

¶29:

¶30: He says that people[9] see the image of a file shown on a computer screen and it looks as it should do but they don't realise that there are unseen elements in the image which aren't displayed on the screen. When he processes the job some of these invisible instructions or elements which are part of the image can become visible and that's what happened on this occasion. He says that he thinks it's our responsibility for picking this up and therefore making the job right is our problem. Providing a proof as he'd suggested wouldn't have eliminated the error but it would have given the opportunity for the customer to pick it up. The art worker doesn't consider this as a ploy for passing responsibility more a chance to make use of "a second pair of eyes".

¶31:

¶32: He elaborates about the processes he uses by saying that there are two different approaches or methods for processing a piece of artwork and the choice of which to use is based on his subjective opinion about which is most appropriate to any one job. All three art workers switch between each of the two methods regularly. When he first received this artwork he used one approach and the artwork was processed as it should be. For some reason (not stated) he used the second method when revised artwork was received and this introduced what should have been invisible artwork elements in to the actual printed job. I suggest that this may be something that led the customer to depend somewhat on the original proof even though it had been superseded and the art worker agrees this could be the case. He says that every new piece of artwork needs to be proofed from scratch.

¶33:

¶34: The art worker says that he used to be the production manager at the firm before the takeover and used to deal directly with customers[10]. During this time he says he was strict about not proceeding with producing a job without a signed proof.[11]

¶35:

¶36: He makes the point that customers don't understand that if any kind of proof is produced before he has 'ripped' the file (splitting the image in to four colours) then there is scope for changes to occur during the 'rip'. He says all proofing should be created post rip.[12]

¶37:

¶38: I suggest that amongst customers pdfs are thought of as print ready and secure. The art worker says this is a misunderstanding and it has never been the case that a pdf ensures trouble free printing in this respect.

¶39:

¶40: I suggest that the word 'proofing' may mean something different to customers than it does to us and the art worker says that the definition of a proof is a representation of artwork after it has been prepared for printing. "That's what a proof is"
¶41:
¶42: He goes on to say that this is why "the industry is in the state it's in today". Suppliers have got sloppy in proofing and the meaning of a proof has become diluted. There are now several levels of proofing because of this which aren't understood by people who buy print. He thinks the problem is that errors occur in only a small proportion of the poorly proofed jobs so customers get a false sense of security and don't realise the risks they are taking.[13] He also thinks that a printer who tries to buck this trend, thereby introducing longer production times and costly proofing starts to lose competitiveness to other printers who take risks with proofing to cut costs and to speed up lead times.[14] This puts pressure on all printers to behave the same way so the behaviour spreads throughout the industry[15].
¶43:
¶44: When I ask the art worker about his feelings concerning the way the job is passed to him and any pressures that he feels he says that it's not his concern. He used to take an interest in this but now it's his job to take an instruction from the CAM or CAE and carry it out. He gives his opinion but doesn't have the authority or time to get more involved. He doesn't want to comment on how the CAM and CAE do their jobs.[16]
¶45:
¶46: He makes the point that if we proof before the 'rip' as we have done here we are taking on the responsibility to check the post rip artwork against the proof because the proof has in effect promised a certain result but proofing this way loads more responsibility on to his ability to check and spot things while at the same time more opportunities for problems have been introduced. He uses the example of a booklet saying that ideally all booklets should be made up at the proofing stage so customers can check pagination. Proofing the pages on one sheet leaves a risk of us getting the page order wrong but this process hardly ever happens these days.[17]
¶47:
¶48: Tuesday 29 January 2008
¶49:
¶50: I arrive at the office for the sales meeting[18] arranged for mid morning. I am told by the CAM that we can't meet the D___ Merryhill store deadline. It will be a week later than requested and will therefore go into next months figures.[19] I take this opportunity to talk to the PM about the job[20] in light of the up coming meeting.
¶51:
¶52: Production Manager - Tuesday 29 January 2008
¶53:
¶54: The PM says that the job in question has been held up because we are prioritising another job for the same customer[21]. However the press used for both jobs is standing idle at the moment. The PM says that this is because some material supplied for the prioritised job has reached the press and been found to be supplied at the wrong size and we are waiting for replacements. I ask why we can't reinstate the delayed job. The PM says that he hasn't had time to process the work and work out how we are going to produce it.[22] It's apparently a material we don't do much work on and the finishing is also going to be a 'bit trial and error[23]'. The PM says that it's a double shame because the finishing machine is also stood idle at the moment[24]. The PM seems to be in a more amenable mood than usual so I ask him about his problems on this kind of job and when he gets to know about it as an order. He says he's been aware of the job since November last year because the estimators have discussed the fitting with him but he's only had the actual job details for two or three days so he's trying to work the production details out now.[25] He tells me that although he comes in at 6am and works into the evening the workers won't do that and they don't understand. This means

there's no time to plan he's always sorting out problems The MD interrupts and asks me to come up to the sales meeting.

¶55:

¶56: Sales Meeting arranged to discuss recent issues with orders - Tuesday 29 January 2008

¶57:

¶58: The MD takes the meeting handing out an agenda when everyone is seated.

¶59:

¶60: He runs through the agenda items one by one. The first issue is the relationship between sales and production. He stresses that everyone needs to work together as a team addressing the CAE and CAM directly.[26] They both nod[27] and acknowledge the point. I'm not sure about how these comments relate to what's happened specifically so after the meeting I mention to the MD that I was a bit lost on this point and he says it doesn't affect me it was directed at the way the CAM and CAE speak specifically to the CS. When I say I thought the banter was a bit sharp but I may be sensitive to that kind of thing the MD says that the attitude to the CS had crossed the line and had been abusive.

¶61:

¶62: In the meeting the MD says that we are getting pulled into offering lead times under pressure from customers which are too tight for us to meet.[28] To help sort out the problem he is instigating two production meetings each day so that scheduling can be monitored closely[29]. The CAE says that if customers ask about deliveries we can use the fact that there is a production meeting coming up to hold back the customer and keep their request at bay until we've had time to discuss it in the meeting.[30] The MD says that we have to hold back on offering delivery dates[31] until artwork has been received and then production slots are only allocated on the basis of the proofs being approved by the time we need them approved in order to keep to the production slot allocated. The CAE and CAM acknowledge their agreement to this. The MD continues by saying that if customers have a problem with that approach maybe we should threaten them with a charge for any missed slots[32]. This also gets pleasurable approval from the CAM and CAE. The MD says we need to educate customers.

¶63:

¶64: Addressing me the MD says that it might be irritating sometimes but scheduling through pre-press is going to be prioritised by the amount of time each job will spend on the press. He says that this may well hold up small jobs but they are secondary to a job that will have several hours in pre-press[33] to be completed. When I check that press time is directing priority of orders he confirms this is the case[34].

¶65:

¶66: In relation to the proofing issues we are instigating a new proofing technology[35] which will allow a pdf proof to now be created after the rip (outline pdf) meaning we will be able to proof as we had done in some of the problematic cases but now without the risks.[36] The MD stresses that this approach is only suitable for proofing content and layout of work we can't use it to proof colour matching. Colours will be run to standard ISO densities. The MD says that customers need to understand that they take responsibility for any subsequent colour problems.[37]

¶67:

¶68: I say I'm not sure why our INCA has always been proofed via pdf. The MD says that the rip on this press only happens when we run the job so it is down to the operator to make sure the job looks OK.[38] Also, the INCA produces large format work so customers wouldn't be prepared to pay for printed proofs[39].

¶69:

¶70: The MD is concerned about covering ourselves legally as far as being able to make our point in court if necessary.[40] Any customer not willing to proof in the way we suggest will be asked to sign a disclaimer thereby accepting any responsibility for

incorrect print[41]. The MD says there is also a problem with email instructions from customers because they are not signed and therefore aren't as watertight for legal purposes so we must get a written signature.[42]

¶71:

¶72: I try to suggest[43] that the approach to offering delivery dates may be a problem because if we hold back on giving delivery days as soon as we know a job is going to be ordered then we will end up giving ourselves a much shorter period to meet actual deadlines.[44] The MD, CAM and CAE react to this suggesting that we can't leave ourselves open to the whim of customers who are well known for being late with artwork.[45]

¶73:

¶74: I say that when I ask the CAE and CAM for delivery dates we seldom know when we are going to deliver. This is rebutted. They both say that is not the case and now customers will only have to wait for the next production meeting before they can have an answer.[46]

¶75:

¶76: I try again and say that if we commit to a delivery date straight away it will help us create a dialogue with customers and we can 'educate'[47] them better by helping to work towards the deadline.

¶77:

¶78: The MD gets irritated at this[48] saying he doesn't have a problem with his customers[49] and I'm the only one who seems to have a problem, so I shut up. I feel that the CAE and CAM take this as confirmation of their view[50].

¶79:

¶80: The MD moves on to the second half of the meeting which is not on the agenda saying don't look for it on there it's not on the agenda and you're not going to like it.[51]

¶81:

¶82: The MD then announces that he is stepping down as MD and phasing out his involvement in the firm over the next few months. He has been offered a position with a customer and will retain his share in the firm thereby making him available as a consultant. The MD says that he has enjoyed the last two years but needs a change, he says that there's a large personal element to his decision which he doesn't want to go into.[52] The MD then announces that the CS will be taking over as MD; he says it's a good time for him to take over, he's ready to take on the role and move things on better than he can do himself[53]. There is a pause while the CAE and CAM cry for a few minutes.[54]

¶83:

¶84: The MD then goes on to say that other people in the firm will be told over the next couple of days[55]. Other changes to take place will be the PM moving to take on a sales role for the MD's customers[56] and a new production manager to be employed.[57] This job has been offered to one of the current production staff who is considering the offer. The MD doesn't see any point in his old salary being used to employ someone from outside the firm.[58] Questions of how reporting and responsibilities for those present may be affected are not addressed[59]. The MD says he's enjoyed working with us all and feels that he is leaving the firm in a good position. He says that we made a loss of £86,000 last year but without all the moving and other ad hoc costs we would have made more than £150,000.[60] I ask if that must work out at about 6% or 7%. The MD says he doesn't know he just works in pounds. He goes on to say that things may become difficult generally in the economy saying that it will be consumer confidence if anything that drags the company down from now on.[61] Everyone agrees (I offer agreement but don't actually[62]). The MD says that we can always sell our large format machine to a company with an agreement to prioritise our work.[63]

¶85:

¶86: Customer Account Manager - Tuesday 29 January 2008

¶87:

¶88: After the meeting the CAM says to the E1 that she has received an email from a customer complaining that we have given a delivery date beyond what she said she needed when the enquiry was placed. The CAM says she can't remember being told about a delivery date unless she's missed the email.

¶89:

¶90: I take the opportunity to say to the CAM that does she see what I mean about deliveries. She says not. So I say that if the delivery request was logged and committed to at the earliest point possible[64] we would have been able to keep a dialogue with the customer about the lead time and what we need from them in order to achieve it. The E1 interrupts laughing and asks rhetorically "How can we give it a delivery time when there isn't an estimate yet"

¶91:

¶92: The CAM says that she can't see the approach working. She says that "some customers are just arses".[65]

¶93:

¶94: Company Secretary - Tuesday 29 January 2008

¶95:

¶96: I take the opportunity in the works to ask how the CS feels. The CS says that he is surprised about the MD's decision. He thought that he was motivated after all the issues with takeovers and moving had now been cleared up. He says he's not sure what's actually prompted the decision and he doesn't know what going on personally with the MD[66] to make him leave.

¶97:

¶98: "I don't know what problems he's got personally to make him do this[67]." - CS.

¶99:

¶100: The CS says that the MD says his new role will give him the opportunity to do more and recognise his potential but the CS can't understand how having his own company can't possibly offer all the things he's looking for. However, he says that he's had conversations with his wife about why he puts so much into the firm when they could both work for Tesco and probably earn as much and have no hassles or long hours[68]. The CS secretary says he's uncertain about taking over as MD and he wishes that the MD wasn't leaving. He says that at the very least he would prefer him to be around so he can shadow him. I say that he can call on me if need be and doesn't need to think of me as just a sales person and I would like to talk more about deliveries. The CS says that he understands that it must be hard for me to be told my jobs are second to other work. I say that I can see the reasons for prioritising but there may be things we can do to help get work through the firm. The CS says that we shall have to see how things work out as things change. I ask about the PM moving to sales and the CS says he doesn't think he's very happy about it. I ask why he isn't staying on as PM and the CS evades answering. I ask if I will be reporting to the CS when he is MD and again the CS says we'll work things though over the coming weeks.[69]

¶101:

¶102: Production Director -Tuesday 29 January 2008

¶103:

¶104: As I am leaving to visit customers in the afternoon the PD arrives to work a late shift and approaches me in the car park. He seems very concerned about the MD's decision.[70]

¶105:

¶106: The PD says that he thinks the MD has lost confidence since being forced into taking over my previous firm. He says that the MD thinks his decision to make the takeover was wrong[71] and the people that he inherited as a result of trying to keep them in work have actually brought with them bad attitudes from the previous firm. The PD says that the MD thinks he also made a lot of bad decisions about the potential

takeover that dragged on for most of last year. The PD thinks the MD feels that he wasted a lot of time and should have known better.[72]

¶107:

¶108: The PD asks about the meeting earlier he wants to know who was there and what was said. I tell him about the reaction of the CAM and CAE and he gives me a rye look.[73]

¶109:

¶110: I suggest that the MD may just be too nice and the PD agrees vigorously. He thinks that the all the directors have been too week[74] in addressing the issues brought by some of the acquired staff and the behaviour has spread to the established staff[75]. The PD uses an example of working procedures he's worked out for the new press which the operators are just ignoring. They also wanted to go back to not allowing radios in the works which crept in after the takeover as a cultural element form the acquired firm but they are still being used.[76] The PD says that someone comes in and reacts to a song that's on[77] and the production staff waste ten minutes talking about it. The new press has set up times of just 5 minutes so this is wasting two set up times each time it happens. I say that I would have reacted if some of the things said to the MD and CS had been said to me in their situation especially in the light of the poor service I feel I get form the CAE and CAM. I recount some recent issues and the fact that we're missing the D___ delivery. The PD gets a phone call I think from the CS while we're talking and he raises the issues immediately. After the call he says we can't be upsetting customers, we can't afford to lose them.[78] I say that he can bounce ideas off me whenever he needs to and that I've said to the CS that he can do the same. The PD asks me to keep this conversation off the record and goes into the firm[79].

¶111:

¶112: Customer C___ F___ - Tuesday 29 January 2008

¶113:

¶114: I have been asked to visit the Operations Director of this customer. He wants to brief me on some of the jobs[80] we have supplied. The customer goes through a list of things he hasn't been happy with concerning our products and service. He points out issues with our art working capability, digital print quality and window graphic fitting but then goes on to talk about the opportunities for print supply which exist at his firm.. He tells me that the bulk of their work goes through his colleague's department and we're not getting a chance at it at the moment because he doesn't feel confident enough to recommend us as a supplier. He reiterates that they are expanding at a quick rate with sixty new stores planned for this year.[81]

¶115:

¶116: I suggest that we have presses now that could offer him a good alternative supply but if I'm honest it's the approach to him as customer which we need to improve.[82] He agrees with this "I think you're right about that" so I promise to discuss his point of view with my colleagues and get some feedback[83]. The customer says he knows that a several hundred run of a full colour dump bin is coming up and he'll see if he can get his colleague to ask us to quote.

¶117:

¶118: Thursday 31 January 2008

¶119:

¶120: The Managing Director - Thursday 31 January 200

¶121:

¶122: I mention to the MD that I have arranged a meeting next Thursday with the buyers at E___. I mention that the customer has stressed that he only wants to meet if we are going to offer something new[84] there's no point in just coming to try and explain our previous point of view. The MD looks irritated and says that we're going down to talk to them about communication issues[85].

¶123:

¶124: A little later the MD is talking to a customer on the phone. When he finishes the call he says to the office in general
¶125:
¶126: "If she had a dick I'd call her a wanker" – MD
¶127:
¶128: The CS, E1, E2 and I are in the office at the time. The comment gets a small laugh from people. The MD goes on to mimic the customer.
¶129:
¶130: "Oh haven't you got my order. Oh it should have been placed. Can you help me out" – MD.[86]
¶131:
¶132: The CAM - Thursday 31 January 200
¶133:
¶134: I ask the CAM about delivery dates for some orders for which I haven't been able to pass a delivery date back to the customers yet.
¶135:
¶136: The CAM doesn't have a delivery date f[87]or any of the queries. I mention that she had said she can always give a delivery date. At this she replies that I had been talking about something else at the time and another way of working. I say no I had said when I ask for a delivery you and the CAE can't give a date. The CAM makes a few throw away comments which are difficult to hear and goes back to her computer so I don't pursue the issue.[88]
¶137:
¶138: The Company Secretary - Thursday 31 January 2008
¶139:
¶140: Later while talking to the CS he offers more insight to his relationship with the other directors he says that he always had a difficult position feeling that he is in the middle of the MD and PD who don't really get on. He feels that the fact he is a half brother[89] to the MD and PD has put him outside of that relationship somewhat. The CS thinks that the MD likes everything to work as he thinks it should. If things don't he tends to get upset and dig his heels in on those issues as points of principal.
¶141:
¶142: The CS alludes to other 'personal issues' which may have led to the MD's decision to step down but doesn't know exactly what's been happening in the MD's personal life. The CS goes on to say that he's got marital problems which he's been addressing over the last 3 years. He's been to marriage guidance[90] and there has been the involvement of a psychiatrist. He says that he's devoted to working through it.
¶143:
¶144: I mention to the CS that I had been asked to visit C_ F___ and that the customer seems to want to use us more as a supplier. I say that we've been a low level supplier for a while and we miss out on a lot of work because there's always niggling[91] issues with the orders we supply. I use the example of the CAM missing emailed approval of artwork for a job last week which held up delivery to show how service is affected. The CS says that he wants to be able to improve service and sales so it's useful to know that the opportunity with this customer exists but he stops short of offering any particular advice or attitude toward service improvement. He says that it's something we'll have to address[93].[92]
¶145:
¶146: I say that I have a number of jobs which are going to miss customer delivery date expectations and also miss our January sales moving in to February. I ask if there's anything near to completion which I can deliver today. I have already expedited an outwork job which I'm delivering a little later. The CS says that there's nothing else we can get finished today but says he understands we need to get work out.[94]
¶147:
¶148: A sign[95] next to the paper towels has appeared in the men's toilets. It reads:
¶149:

¶150: "When the floor is full please use the bin provided[96]"

¶151:

¶152: Thank you

¶153: The MD"

¶154:

¶155: Friday 1 February 2008

¶156:

¶157: Production Director - Friday 1 February 2008

¶158:

¶159: The PD engages me in conversation in the works[97]. He has been reflecting on the MD's decision to step down and thinks that the decision has been in fact a long time coming. He says that the MD has tried to arrange several takeovers during the last six years.

¶160:

¶161: The PD says that he felt misled about the MD's decision to share premises with my previous employer before his firm took them over. The PD says that the move had been 'sold' to him by the MD as a way to cut the costs of the firm but after they had moved into the sublet premises and subsequently taken over the other firm when it got into financial difficulties the MD had told him that he had always seen them being taken over by the main tenant after about a year.[98]

¶162:

¶163: The PD recounts other similar instances.[99] Their accountant had tried to set up a merger with another print firm he was accountant for. The accountant had started to bring the two companies together but the other company reacted unfavourably resulting in them finding a new accountant.

¶164:

¶165: "The accountant got fired" – PD

¶166:

¶167: The PD also reveals that the MD had also approached other firms. There have been Y___ print and B___ during the last year.[100]

¶168:

¶169: The PD says that the MD had said after our move into the current premises that there's no chance of him finding a buyer for the firm now because we've devoted so much debt to the new litho press. The PD thinks that this has been the final straw in pushing the MD to step down.[101]

¶170:

¶171: The PD feels that he isn't kept in the loop when decisions are made[102]. He thinks that the MD thinks as MD it is his prerogative to make decisions and when the MD gets stuck with an idea he doesn't change his mind[103]. As an example the PD says that the MD gets angry with the CAM and CAE but doesn't change his approach and then ends up defending them[104].

¶172:

¶173: The PD says that he understands my situation. He says that he tells the CS that he changes delivery dates when called by customers but I don't get the same attention[105].

¶174:

¶175:

¶176: Company Secretary - Friday 1 February 2008

¶177:

¶178: I ask the CS for input[106] on the F_ M___ artwork[107]. There are some changes to make which we can do or ask the customer to supply new artwork for[108] but which may not be to our normally expected standard[109]. The CS says that because fonts have been changed[110] its better that we don't try and copy it[111], rather the customer should send a new file.[112] The CAE is listening in because she handles this order[113] and says

new artwork may cause issues because the customer uses a non standard graphics package[114] but the CS says he wants a new file.[115] I say that I've explained to the customer that they fall between two usual extremes, either asking us to do their artwork or supplying it completed to industry standards so we may have to do additional work[116]. The CAE and CS think that the customer should not use the package they have. I explain[117] that I've suggested the industry standard packages but they are too costly and my contact is not confident enough to learn a new package. The customer gets work from other print suppliers without too many issues[118]. I also say that the customer wants more artwork included in their reprint price. It's not something they flagged up initially but it is something of the same nature to that which we have already acknowledged fault. The CS says that he doesn't think we should be doing any extra work for free[119]. I say I will itemise the costs we've waived so far and say to the customer that this extra cost would have been incurred anyway if it had been recognised before the original print run[120].

¶179:

¶180: Production Manager - Friday 1 February 2008

¶181:

¶182: The PM asks me about the D___ Merryhill store fitting job. He wants to know what out of hours fitting time is available. I say that I've talked about the evening after 8pm with the customer so far but I'll check if a morning slot is available. I ask the PM what day he wants to fit.[121] He replies:

¶183:

¶184: "We've got next Tuesday penciled in[122] at the moment" – PM.

¶185:

¶186: I say that if I'm ringing to check fitting times at this stage I'm going to be asked what day we're coming because we are a week later than the customer wanted. So the PM says:

¶187:

¶188: "Well better say its Tuesday then[123]." – PM.

¶189:

¶190: Thursday 7 February 2008

¶191:

¶192: Managing Director -Thursday 7 February 2008

¶193:

¶194: I meet with the MD at a BNI (breakfast networking club) meeting in Leeds at 6.15am. It's a 'visitor' day so the MD who is the member has invited me and another of his acquaintances as visitors[124].

¶195:

¶196: The MD has asked me to be there early because he wants to make sure we can get seats at the main table. With 36 people due to attend he is worried that it will be busy but thinks it should be a good day for making contacts. When we arrive we are the first there and the door is still locked[125]. I wish I had had more time in bed rather than getting up at 4.15am.[126]

¶197:

¶198: The MD finds the organiser who shows us to the meeting room[127] and we reserves a couple of seats with our files. The MD busies himself with opening windows saying that the room gets hot and then looks for the coffee and breakfast[128].

¶199:

¶200: As other people arrive I spend about an hour talking to various people about what they do and about the BNI. Some have prepared, what seems to me, as almost a hard sell, others chat more informally about the BNI[129]. The recurring attitude among visitors is that they haven't been impressed with previous experiences of other BNIs which have seemed 'trades people' orientated and simply designed towards self serving organisers.[130]

¶201:
¶202: "I went to one run by a landlord and all the regulars were his plumbers and electricians[131]" – BNI visitor.
¶203:
¶204: I suggest that the landlord was probably getting a good rate for his work needs by generating new business for his trade contacts and the visitor agrees[132].
¶205:
¶206: During this time the MD interrupts one of my conversations to say he's spoken to someone who buys printed banners; he gives me his card and suggests I speak to him. The MD says he knows its banners (not one of our firm's strong points) but he's told the contact that banners are ideal for us[133]. The MD also thinks that the two people are 'knob heads' but it's worth a go[134]. I make my way to them and set up a commitment for a meeting with them at their office[135].
¶207:
¶208: After informal networking[136] everyone sits around the table. There are more people than usual but the MD is disappointed that it's not the 36 he expected he says there is only about 24 people[137].
¶209:
¶210: All the members have a minute to say what kind of business referrals they are looking for this week. The MD has prepared a script which asks questions about colour matching across different printed items people may buy. The MD says that if you compare different pieces of print and what should be the same colour across pieces is different then you have a colour match problem[138]. The MD's proposal is to offer any referred people a colour matching audit[139]. This will involve him visiting them and looking at the different printed items with a view to supplying them all (matched for colour) from our firm.[140]
¶211:
¶212: After the members have presented all the visitors have a similar opportunity. The MD has asked me to talk about our large format digital press and point of sale[141]. I give a rundown of what type of products we can offer and suggest that digital print means cheaper prices for small print runs.
¶213:
¶214: Afterwards I remark to the MD that I found it strange just telling a bunch of people what we do without trying to match it to what I know anybody actually wants[142]. The MD says that it's all about just getting the idea of what we do in people's minds so they think of us when someone they know says that they need some print[143].
¶215:
¶216: After all the presentations the MD gets a couple of referrals from the other members and passes a couple on[144]. He tells me that he isn't very convinced about the worth of BNI but you have to give it a go for a little while to see if it works. The MD tells me that it was his bank manager who suggested he tried this particular BNI saying that he (bank manager) is a member and it's a productive event. The MD also says that the bank manager had hinted at passing on his own clients as prospects[145] for us but we haven't had any yet. However we have got £1000 of business so far and the year's membership costs £500 so it's made sense to do it[146].
¶217:
¶218: The MD asks his other visitor for his opinion of the event and the visitor is very disparaging. He says that it's been worth another try but it's just the same as previous BNI meetings he's been to and he doesn't expect any benefit[147]. He says he needs to contact specific people at larger organisations than those operating at this level.
¶219:

¶220: The MD says that we've made contact[148] with the banner buying people but both the MD and the other visitor think[149] the contacts look like they're probably overstating what they do.
¶221:
¶222: I suggest to the MD that the whole set up seems to be self serving for the organisers[150]. The MD says that it is.
¶223:
¶224: "The people on the top table don't pay any membership fees" – MD.
¶225:
¶226: The MD also thinks that the statistics the organisers give[151] of an average of £26,000 worth of business achieved by members[152] isn't met by most people around the table this morning[153].
¶227:
¶228: On returning to the office there has been a problem with the same customer that the MD had abused previously.
¶229:
¶230: The customer (a print broker, middleman) has visited our firm this morning to complain about some print jobs and she has argued with the CS in the middle of our works[154]. The MD is speaking to various people in the office. I hear him say that whatever's happened she shouldn't be dressing down the CS in the works in full view of the production staff[155]. When I ask the MD about what's happened he tells me that the customer had placed two orders[156] with very tight deadlines which he had agreed to. The artwork had subsequently been late so we had run the jobs quickly to maintain the deadlines[157]. This had meant sending the jobs quickly to an outsource finisher. There was only one firm that could do the jobs at that short notice. The MD had come in to pack one of the jobs taking out some spoiled prints but the customer had found some of the spoiled prints with her delivery.
¶231:
¶232: "Ok so they shouldn't have been there" - MD
¶233:
¶234: The customer had also complained about the other job 'offsetting'. The MD says that this job had had a large area of solid black print which hadn't dried before the job was trimmed leading to print being passed from one sheet to another, marking it. All this is due to the rush to deliver the jobs[158]. The MD says that he is particularly angry because the customer now says there's time to redo the job because she had built in extra time on her deadline and the print wasn't actually needed yet by her customer[159]. The MD says that the reaction of the customer has been compounded by the way that our guys in the works have seen her there and said things like. Oh don't worry H___ its only work.
¶235:
¶236: After returning to the office I ask the MD for time to talk about the E___ brochure and mock-up problems before we visit the customer in the afternoon. I am concerned to give the MD more information because I don't want the awkward situation of him being caught out by the history of the problem while speaking to the customer[160]. The MD says he'll talk about it after he's done some estimates[161] for one of his customers he wants to have a meeting with me and the CAM to discuss what happened. The MD says that he thinks there is a need for some conflict[162] over the issue. I say I would rather avoid conflict but the MD says that it's the way he wants it. Later I remind him we need to talk about E___ because I need to leave to see another customer. The MD says he'll have a quick look at the emails I've printed off but there's no time to meet with the CAM.
¶237:
¶238: "It's all we've got time for now. We can dredge through the details later" – MD
¶239:

¶240: I show the MD the email sent by E___ asking for a carton. The MD says that it's not got all the details we need.
¶241:
¶242: "Where would the lid go[163]" – MD
¶243:
¶244: I say that if we had asked that question[164] we would have been able to charge more for sorting the job for the customer. I say that I think the CAM didn't read the email. However, the MD says that we've solved this one because it's been resupplied. He doesn't want to go over it all again.
¶245:
¶246: I then raise the brochure issue saying that I don't know what the customer and the CAM discussed on the day the job was approved. I say that it seemed that we started to push the customer for approval of the proof to keep to our production time rather than the customer pushing us to maintain a delivery before Christmas. The MD seems irritated saying that as he remembers it we were pushing to keep to the deadline I had agreed[165] to of one week which had become difficult because it was the last week before the Christmas shut down[166].
¶247:
¶248: I say that I wanted to try and put what may well be the customer's side before we are with them but the MD says it's all in the past and he doesn't want to revisit it. He says that he's going to see the customer to talk about communication issues and ways to move forward in the future not rake over the past[167].
¶249:
¶250: The MD and I arrive at E___ at three PM. The MD says that they could do with some signage outside because the unit is anonymous. I remind the MD that they are in temporary accommodation and point out that the huge building being built next door is their new head office and warehouse.
¶251:
¶252: Inside I introduce the MD to the customer who takes us to his own MD's empty office to discuss the problems we've had. There's a moments silence then the MD starts the conversation by saying:
¶253:
¶254: "I suppose you want to hit me round the back of the neck with a brick[168]" – MD
¶255:
¶256: The customer looks a bit taken aback and starts to talk but the MD talks over him:
¶257:
¶258: "I've just come here to put things right for the future I don't want to go back over what's happened in the past" – MD
¶259:
¶260: The customer agrees that that is what he wants as well.
¶261:
¶262: The MD says that he wants to continue as a supplier and says that if we can move on then he will discount the next order by £500. The customer says that that is the kind of figure they had been thinking about as a discount on the problematic brochure.
¶263:
¶264: "Not to go over the past[169] but we had wanted £700 off the previous job" – Customer.
¶265:
¶266: The customer goes on to say that in order to tie things up with his MD can we make the discount £600. The MD agrees immediately and the problem is sorted. I am sat there wondering why it's taken 5 weeks to get to this and why is the MD's attitude so fundamentally different from earlier in the day.
¶267:

¶268: The MD explains to the customer about how he had to take over my previous firm and that a different attitude had existed at the two firms. The MD says he had to get rid of 2 sales people last year (presumably the previous MD and his business acquaintance) Since he has been using his time personally selling more over the last 6 weeks the MD has noticed attitudes among the acquired staff reverting to a poor attitude. I think that I've never seen much difference in the attitudes of the CAM and CAE. The customer says he has a good relationship with me and the MD restates that the issues are with the office staff. He says he has "put a rocket up the arse" of the CAM and CAE and told them what standards are expected[170].
¶269:
¶270: I ask the MD how our new proofing system might help for the future.
¶271:
¶272: The MD tells the customer about the 'outline pdf' system and says that he's just put in new colour matching paper proofing equipment. (I didn't know about this.)
¶273:
¶274: "It's the best £18,000 pounds I've ever spent[171]. The customer looks impressed and I confirm that the previous brochure problem couldn't happen now with the new pdf system.
¶275:
¶276: The customer says he better get back to work but there will be a number of jobs coming up for us to offer on and he'll send the enquiries to me and the CAM via email.
¶277:
¶278: "There's been a big gap in my supplier spreadsheet." – Customer
¶279:
¶280: The MD says that he wants to develop the relationship and asks some questions about the size of the new building and what kind of racking they are going to have.
¶281:
¶282: In the car park I thank the MD for helping sort the problems with E___ and the MD tells me that he doesn't know what the problem is with the CAM. He tells me that he saw a job on press recently which had a very strange paper compared to what that customer usually has. When the MD queried the job the CAM told him that she thought it was right and the MD says he had to ask her.
¶283:
¶284: "Do you think it's right or do you know?" – MD
¶285:
¶286: The MD says it turned out that the job was being produced incorrectly and it was an obvious mistake. The MD says that he was shocked because the order was from a major customer who spends more that £300,000 a year with us. The MD says that the CAM is paid 30% more than the CAE and that this is a hangover from the previous firm which he doesn't agree with.[172]
¶287:
¶288: I say that I spend a lot of my time expediting rather than chasing new work because it's hard to talk to and work with the CAM and the CAE. The MD says he does the same that's why he is heading back to the office to finish the quotes he was doing earlier. He says he should be giving them to the estimators but doesn't think they will understand the nuances of the jobs.[173]
¶289:
¶290: The MD says that we've had our sales whinge and he's going to head back to Leeds.[174]
¶291:
¶292: Wednesday 20 February 2008
¶293:
¶294: Managing Director - Wednesday 20 February 2008
¶295:
¶296: The MD says that he is getting in to his new job while there on Mondays and Tuesdays. He says that the firm he's working for is very backward.
¶297:

¶298: "They write everything out three times. I need to get them sorted with a computer."
¶299:
¶300: The MD shows me something that they produce to show carpet samples. He says that he wants to move them away from a vac formed holder but they're very set in their ways[175]. I say that I've worked in the tool steel industry before selling vac form tooling grade steel and ask if the firm is full of men in long brown coats[176]. The MD says that the coats are blue.
¶301:
¶302: The MD also comments on the staff saying that they're very old fashioned[177] and they work very rigidly[178]. He thinks that it is odd that there are three supervisors for only thirteen staff. The MD says that two supervisors will be leaving soon but doesn't say under what circumstances.
¶303:
¶304: I ask the MD if there are any samples from our large format machine because I've contacted some new prospective customers who want to see samples. The MD says he doesn't think there are any samples and comments that it's too hard to keep samples that size.[179]
¶305:
¶306: Thursday 21 February 2008
¶307:
¶308: Managing Director - Thursday 21 February 2008
¶309:
¶310: While telling the MD about some more new contacts I've made he makes a point of telling me, very loudly so the estimators can hear, that I have to remind the estimators to put the right rates in for small runs because they forget[180]. It turns out that although we've sold our smaller press during the last premises move we are still including the costing for that machine when running jobs on our larger machine[181]. The MD says that he has decided this so that we can continue to be competitive[182] on the work the smaller press produced. I have had two jobs recently that I've had to place out with a supplier that has a smaller press, in order to be competitive.
¶311:
¶312: Production Director - Thursday 21 February 2008
¶313:
¶314: I ask the PD about how he now feels about the MD leaving. The PD says that he still doesn't understand why the MD is leaving. He says that he thinks the MD has seen his job opportunity as a chink of light and has used it as a 'bolt hole' to get away from our firm. The PD says that the people the MD is working for are backward compared to us. He says that as a customer of ours he has experience of the other firm's MD refusing to send out samples for a customer request that came at the end of the day because he doesn't think he should have to rush around for a customer. The PD thinks we would try and get samples out in a similar situation. He says that our MD's new boss says that customers will just have to wait for tomorrow and the PD says maybe we should behave that way because the other firm is successful. However he says that the other firm is intransigent throughout. The PD says that the employees take their breaks right on time even down to the toilet breaks and on Fridays they finish at midday. The PD thinks this is very strange when we have to work such long hours to get the orders delivered.[183]
¶315:
¶316: The PD goes on to say that he still thinks that the failed takeover and the way our MD was treated by the MD of the prospective takeover firm has a lot to do with our MD wanting to leave. The PD says that there are still opportunities to deal with the other MD on a trade basis but our MD won't return his calls. The PD is worried that we're burning bridges.
¶317:

¶318: "But that's D___ for you" – PD talking about our departing MD
¶319:
¶320: Customer Account Executive - Thursday 21 February 2008
¶321:
¶322: A third party agency calls me to say that artwork they are supplying for a D___ job will be a day late. I say I'll check about the impact. The E1 tells me that we were going to start printing tonight but there's plenty of time to do the job. I say that I'll call the third party back and ask for the first artwork to be sent as soon as it is ready commenting that we're put under enough pressure in similar circumstances[184]. The CAE hearing this shouts across to me saying:
¶323:
¶324: "Wow, you're on the same side as us for once[185]" – CAE.
¶325:
¶326: Monday 25 February 2008
¶327:
¶328: Production Director - Monday 25 February 2008
¶329:
¶330: The PD says that the old MD came into the firm at the weekend. He says that he spent some time tidying the magazines in the reception area. The PD says that he had been working on our litho press later that day and realised, as he was singing along to himself, that the MD had been stood in the factory entrance watching him work. The PD says he asked the MD how long he'd been there and the MD had told him that he'd been there a long time. The PD thinks that the MD had wanted to watch him working. He thinks the MD has come in just to look at the firm. The PD goes on to say that he thinks it might be hitting home that the MD has made a decision he regrets or that if he doesn't regret it now he will do in the future. The PD says that later on he saw the MD working on the machine himself.[186]
¶331:
¶332: "He was crawling over the press working[187] on it" – PD talking about the ex-MD.
¶333:
¶334: Customer Account Executive - Monday 25 February 2008
¶335:
¶336: The CAE approaches me in the corridor saying that it's handy that she's bumped into me. It seems to me that the 'bumping into[188]' has been engineered. She asks me about a quote we've recently done for a new contact I had made a couple of weeks previously. She says she was really surprised to see that we'd quoted this particular company because she knows the prospect's MD and has mentioned that she works for a printer several times but they never sent any enquiries[189]. The CAE asks me how I've got the enquiry and I say that the firm has opened up a new store in Sheffield which I'd visited and subsequently called the head office and spoken to a marketing person recommended to me by the receptionist. I say that there are just four stores branded in the way of the one I saw so I used our digital short run capacity for POS as an approach[190]. I say that we've just quoted a leaflet so far which we won't get the work for[191] but when posters are needed we may see some orders. The CAE says she's known the family owners of this firm for a long time giving me quite bit of family history which I find hard to follow. The CAE says she could have been rich by now with this connection but I don't pursue that issue. She says again that she was surprised that we'd had an enquiry which they hadn't sent to her[192]. I say that I don't really contact people that I know I tend to just pick apparently suitable prospects to contact. The CAE says she'll talk to the MD later this week[193]. I say it may be a bit political because my contact had said to me that the MD gets involved in print buying but made a point of saying that I need to work through him in the first instance[194]. I hold back a bit on this though because the CAE may be able to help and I don't feel it's my place to tell her whether or not to call people she knows[195].
¶337:

¶338: A little later while I'm making coffees for people I get the chance to ask the CAE about her comments last week concerning me working on the same side as everybody else in our firm. I say that I took her comment as nothing but good natured[196] but she seems uncertain and says she can't remember saying anything like that[197]. I say again a couple of times that I had taken the comments in good humour and she says that she does remember saying something like that. I ask her if she ever does feel that I'm not on the same side as everybody else.
¶339:
¶340: The CAE says that she thinks that I don't understand the work that goes in the office and the factory, especially when asking for things to be done or for information. I ask her how she thinks things could be made better. The CAE says that she thinks there's is confusion over who does what and that things get done twice. I ask her for examples and she says things like both me and her asking for the same information from production or both of us saying the same things to customers. I think that I can place times when internally we ask the same things but examples of duplications to customers don't spring readily to my mind.[198] I say that if I get more involved in what happens internally that may be worse. The CAE says that she has just contradicted herself by saying the two things. I think this is unfortunate because it makes her go quiet and stop talking. I say there must be a way of making the situation better but the CAE remains quiet. After a moment she asks me about the MD leaving. I hold back a lot of what I think saying that the last year's failed takeover must have been tiring for him and that it's a sad situation after he worked to keep everyone in a job. The CAE agrees and says she thinks that it's sad as well[199].
¶341:
¶342: When we are both back in the office the CAE asks me about the people I've been contacting as new prospects recently. I say that we've had the enquiry she knows about and one from an agency in Sheffield. Given the chance to put my perspective I then say that most of the people I've contacted recently have given me the brush off, as usual. The CAE laughs a little but doesn't say anything.
¶343:
¶344: A little later the CAE shows me her feedback report which she fills in with customer responses to our quotations and asks for information on the ones she hasn't had a reply for yet. She tells me that the CAM has a similar sheet. I didn't know this and have never seen the sheets although some of my customer will be on the lists.[200] Unfortunately I can't add any information because all the quotes are still being considered. I point out the one which had been sent to the new agency contact and ask if the CAE will send me a copy of the spreadsheet if I need a reminder to pass on feedback while away from the office and she says she will.[201]
¶345:
¶346: Later in the day I hear the CAE say some derogatory remarks about a customer and the E1 and CAM pick her up on it but in the third person. "You're not supposed to bad mouth customers."[202]
¶347:
¶348: This evening I have bought some monkey nuts for sharing in the office. I've not done this in ages because I felt that I've had the will to contribute knocked out of me.
¶349:
¶350: Thursday 28 February 2008
¶351:
¶352: Managing Director - Thursday 28 February 2008
¶353:
¶354: When I arrive at the office the CAE is using my desk for cutting up some prints[203]. She says she's just finishing so I wait to set up my lap top. When she finishers the sheet she starts another[204] so I ask her to move to another spare table[205] which is just behind her. She makes a small protest then moves. I have left the bag of

nuts in my car to test how I feel when returning to the office and decide not to bring them in because I have taken the CAE as purposefully ignorant.[206]

¶355:

¶356: The old MD is in the office today and has heard the exchange so I decide to get his opinion on my recent conversations with the CAE. The MD offers a private conversation straightaway in the board room[207].

¶357:

¶358: I tell the MD about my conversations with the CAE concerning new customers and comments about teamwork and ask the MD for his point of view.

¶359:

¶360: The MD starts by saying:

¶361:

¶362: "I know what it is. Its women and their hormones[208]" – MD

¶363:

¶364: The MD says that he thinks the way the CAE and CAM respond to people both internally and with customers varies because they are women. He thinks that a man will either be good or bad with people but a woman will vary how she relates to people. The MD thinks that this variability impacts on the level of service we offer to customers. Service varies with the variable moods of the CAE and CAM[209].

¶365:

¶366: The MD tells me that the need for customer service was brought home to him recently when he and his family stayed in a Premier Inn while away at the weekend. The MD says that the two women[210] they dealt with at the hotel in the evening and in the morning were so nice that he would look to use the company again in the future[211]. He feels that their level of service was the defining factor. He says that his wife independently commented about the service to the same effect[212].

¶367:

¶368: The MD restates that he felt our service dropped when he left the office more to start selling in the New Year. I explain the previous 'anti-sales' feeling that sales considered they endured at the firm the MD took over and that maybe its 'sales' as a function or idea that causes the poor reaction. The MD agrees but doesn't add much to this. He says that he's got sick of "ramming the point home[213]". He says that he suggests more productive ways of doing things and "everyone agrees it's a good idea and starts to work differently then there's a weekend and everyone has forgotten" and reverted back to how things were before.

¶369:

¶370: I suggest that the way I am treated for example being asked to wait for my desk or when the CAM or CAE is 'doing a spreadsheet' makes me act in a way that self fulfils the opinion of the CAE and CAM about sales[214]. The MD agrees[215] but again doesn't add much to the point. He is dismissive of the reaction[216] because he says he gets the same treatment by being asked to wait for things like spreadsheet work and doesn't challenge it.[217]

¶371:

¶372: The MD says he also gets the same anti sales treatment[218] even from his close staff. He says that the CS thinks that sales people should be chained to their desks and work on the phone. The MD thinks that the CS doesn't understand that some people don't contact you or send orders unless you visit them. He uses the example of on of our paper suppliers who called in to ask why their sales to us range from £3,000 to £30,000 month by month and they decided that the busy months are when she had visited us.[219] He says that the CS is very good but has been ringing him when he's been out of the office questioning where he is and what he's doing.[220]

¶373:

¶374: "Why are you in the Lake district D___? and I say to him R___ we've got a major customer up here that's why" – MD talking about his conversations with the CS

¶375:

¶376: I say that it's unfortunate that my experience in the office makes me want to work from home or the car to avoid hassle on occasions when I could come in to the office by choice rather than needing to be there. This, I suggest, adds to the perception that I am out of touch with the internal working of the firm[221].

¶377:

¶378: The MD agrees "They just think you're at home watching the TV[222]" – MD

¶379:

¶380: I say that I'm thinking of the idea that I am out of touch with their real world but agree that that's probably what they're thinking.

¶381:

¶382: The MD gives another instance of his view about the differences between woman and men. He says that he is doing a charity event to raise money and has already raised £2000 pounds. The next event is a mystery journey where you have to make your way back to a rendezvous point after being dropped off from a bus with blacked out windows. The MD thinks this is a great idea and a lot of fun. He says that it's got competitive because he is doing it with a male friend and his wife is doing it with her female friend. The MD has told his wife that the men will be able to complete the task quicker than the woman but his wife disagrees because they will be able to use their 'feminine ways' to get lifts and things. The MD says that he replied by saying "yes but men have got the ability to organise and plan".[223]

¶383:

¶384: I ask the MD about how his new work place compares to ours.

¶385:

¶386: The MD says that there are a lot of things to do at the new firm but he is making progress. He's is convincing people that computers will help their processes but has had to make them realise for instance that emails can be used for internal communications as well as external communication with customers and suppliers[224].

¶387:

¶388: The MD says that his new boss was also very surprised that he was working while eating his lunch and had tried a couple of times to make him realise that he can take a lunch break[225]. The MD says that he replied:

¶389:

¶390: "It's OK. I've got a drink in one hand and a sandwich in the other and I'm working on my computer" – MD.

¶391:

¶392: I found myself wondering what he was using to type with and nearly laughed but actually conspired with the MD by saying that it must be odd to take a lunch break in this day and age.

¶393:

¶394: The MD says that again it's the women that he's having trouble with this time adding that the over 50's seem to be a problem as well[226]. He says that there's one particular group of older women[227] who work on a finishing table and as soon as they see him their arms are folded lifting their breasts trying to look stern[228]. The MD says that they move so slowly through the whole day but he knows they can move faster because "when it comes to home time they're like a bunch of sprinters". The MD says that at least the men move at the same slow pace throughout the day and at home time as well.

¶395:

¶396: The MD goes on to say that when one of these women introduced him to a male supervisor she did so with the words "This is David. He'll be wielding the big stick around here from now on" and the supervisor had replied "Oh? Well we'll see about that"

¶397:

¶398: The MD reflects on how he thinks reality is misunderstood by this group of women. He says that he asked one woman if she wanted to do a first aid course

because the health and safety situation seemed not up to scratch and he'd got the impression she would be willing to take the role on. Later one of the older women had said to him that he'd upset the rest of the women because he'd only talked to one 'smart' woman on the shop floor and not even introduced himself to them. The MD said that he told her that she as a supervisor had not introduced him to any of the staff and that he'd only asked the other woman to be a first aider and she had said yes. The MD says he added that he won't be working in an ivory tower if it comes to it he'll put a coat on and be working on the shop floor as well. He says this left the woman dumbfounded.[229]

¶399:

¶400: The MD doesn't understand why this group of women all seem to share the same attitude. He says that they are all on a relatively low wage but all work around a table. If one of them tried harder it would be really obvious and a good chance to aim for maybe another £1.50 per hour.[230]

¶401:

¶402: The MD says that his new firms practices of rigidly sticking to the rules irritates him but one thing that is better than our firm is that when he does approach people about something they stop, listen and return some engagement and enthusiasm.

¶403:

¶404: Tuesday 4 March 2008

¶405:

¶406: CAM - Tuesday 4 March 2008

¶407:

¶408: I call the CAM because I am being chased by C_ F___ for a sample print they have asked for. The CAM says that the sample is ready and on my desk. I perceive the CAM to be particularly 'stand offish' when I arrive. I thank the CAM for the sample but ask if I hadn't have chased it would it have sat on my desk or been sent out. I can hear in my tone that I'm showing irritation. I am irritated and want to show it. The CAM looks defensive and says that she would have done something with it[231].

¶409:

¶410: Art worker - Tuesday 4 March 2008

¶411:

¶412: One of the art workers has printed the sample for the C_ F__ job and has changed the trimming because trimming in the colour on this job would cause the ink to crack and it would be obvious on this small item. I say that I'm sure it will be OK but maybe making the coloured border thicker would offset the chipping if the customer needs it to be that way. The art worker refutes this flatly saying that a chip is a chip it looks the same no matter what.[232]

¶413:

¶414: Production Manager - Tuesday 4 March 2008

¶415:

¶416: The PM overhears the above conversation and explains to me how the cracking happens. I already know this because the PM (as well as others) has explained it several times before.[233]

¶417:

¶418: Estimator 1 - Tuesday 4 March 2008

¶419:

¶420: The E1 has sent me a reply to an enquiry for a banner which needs a metal frame. The quote doesn't include the metal frame. I ask about options for quoting the frame and the E1 doesn't want to get involved in quoting the item. He says:

¶421:

¶422: "This is not for us, we're a printer[234]."

¶423:

¶424: The banners are outwork for us and I ask who he's used because a previous outwork supplier had contacted this customer directly in the past and we have lost work. The E1 says that he's used the same supplier because it seems that the

customer won't be obvious on the artwork for this item. I say that they've probably had the enquiry directly but the E1 doesn't want to put the enquiry to anyone else. I can feel myself getting pulled into the same thinking and even say that if the other firm is going to win some jobs then this might be one they should do[235]. However, I resolve to find another outwork option myself and subsequently send the enquiry to another supplier.

¶425:

¶426: Estimator 2 - Tuesday 4 March 2008

¶427:

¶428: I have sent a small enquiry for some stationery to the E2. The E2 comments on it saying that it's an insignificant job. He says that it's too small for our press[236] and that he'll have to get a price from a supplier. I suggest that he sends it to a trade contact I have been talking to in the hope of generating reciprocal business[237] but the E2 says that he'll send it to a place around the corner that he knows to be cheap. When I ask him about generating reciprocal business he says:

¶429:

¶430: "Nah!" – E2

¶431:

¶432: I decide not to pursue this one[238].

¶433:

¶434: New Production Manager - Tuesday 4 March 2008

¶435: One of the press workers has been promoted to Production Manager in the wake of the MD deciding to leave and is taking over the CS's production role.

¶436:

¶437: I ask him how things are going and he says that he is waiting to take over properly after the MD has left fully and everyone is in their new roles. He says that he thinks he can make the production facility more organised.

¶438:

¶439: "It's my job to keep the presses busy" - NPM

¶440:

¶441: He says that he is going to try and keep two operatives on the litho press all the time because with one operator time is lost checking the print run and feeding the machine[239]. The extra person will be taken off finishing, fitting in the finishing work around the press operation[240]. A new employee will be considered if needed.

¶442:

¶443: I ask about the status of the PD who works on the press the NPM will be managing. We laugh about the idea of the PD reporting to him but the NPM says that in reality the PD will be working for him and will need to take direction from him. I say that despite any 'us and them' feeling he may pick up I'm there to help and the NPM says he understands although he doesn't comment on any cultural issues and seems to me to be insecure about offering an opinion[241].

¶444:

¶445: Company Secretary - Tuesday 4 March 2008

¶446:

¶447: I mention that the CAM has missed some delivery instructions on an order from D___ and as a result I will lose bonus. I ask whether crediting the error or adjusting another price will make a difference to me.

¶448:

¶449: The CS doesn't address the issue of my bonus but says that he would prefer the job itself were credited because adjusting other quotes may lead to price inconsistencies the customer may not remember the reason for. I.e. he may want to repeat a reduced price in the future forgetting that it had been 'artificiality' low[242].

¶450:

¶451: I suggest that my relationship with the CAE and CAM is affected by their preconceptions of 'sales'[243] and that my reaction to them when I sense their attitude only fulfills their opinion. I use the C_ F__ example from earlier today. (I'm trying to introduce a system archetype idea.)

¶452:
¶453: The CS's first comment is:
¶454:
¶455: "It's because they're women"[244] – CS (laughing)
¶456:
¶457: The CS says that it's not just me that has communication problems with the CAM and CAE. He is also spoken to in a rude manner. I ask if he thinks the CAE and CAM remember that it's his company. The CS says he is not treated in that way and gives an administration example. A password has recently been put on the order entry system which stops customer credit limits being exceeded without password protected authority. The CS has kept this authority to himself because ignoring the credit limits can invalidate our debt insurance policy. He says that the CAM and CAE don't appreciate this and have challenged him about why they can't have access when he can. The CS says that he needs to keep control of this and use it sparingly. He gives an example of an override he authorised recently for a major customer he has known for years and who he trusts from personal experience.[245]
¶458:
¶459: The CS thinks there will always be a stigma attached to sales as a function because he thinks that whenever I appear in the office or contact the CAM, the CAE or production staff its always going to be either because something's not good enough, quick enough or cheap enough[246]. The CS says he's sure there are two sides to the situation[247].
¶460:
¶461: However, the CS says that once the situation[248] with the MD leaving has fully worked itself out he wants to address the way we work together again. He acknowledges that the CAE and CAM have been asked to behave differently towards sales several times by the MD who, on a number of occasions, had to ask them to work positively with the previous MD who ran the firm taken over 18 months earlier. The CS says that the MD had to point out that although the CAM and CAE felt let down by the previous MD he was still bringing in orders which we needed. I say that I am looking for ways to change the current pattern between me and the CAE and CAM[249] and ask the CS for any suggestions he may have for working differently. I say that I think customers like C_ F___ have been on the verge of spending much more with us for a long time but our internal communication and therefore service level always lets us down as things start to build. The CS says that he wants to make the effort to bring these kinds of prospects on board in the near future[250].
¶462:
¶463: "Yeah, we need to bring them in" - CS[251]
¶464:
¶465: The CS says that he also has some ideas[252] for sales and describes an idea of looking for regular work[253] from fast food outlets whose leaflets can be printed together to reduce the cost[254]. He knows this strategy because another print firm used to apply[255] it and he feels that it was very successful although that firm has withdrawn from that market now.[256]
¶466:
¶467: Production Director - Tuesday 4 March 2008
¶468:
¶469: The PD has joined me and the CS during the conversation and says that I as a sales person need to be given the same service from the CAM and the CAE that customers get when speaking to them directly. The PD says there is no difference because I am speaking on behalf of the customer and if there is a difference it's like treating some customers differently to others.
¶470:

¶471: The PD says that being in sales is like being 'piggy in the middle'. He thinks that it is reasonable that I am not fully involved in internal matters because I need to be out in front of customers. The PD thinks that customers won't order anything unless a salesman is 'in front of them'.
¶472:
¶473: The PD says that it can be irritating to have someone who isn't positive to customers he says that some years ago at a previous premises there were only a few of them in the office and the E2 used to always rush to answer incoming phone calls before anyone else. The PD says that the E2 then used to get irate when people asked about or for things saying that he was too busy to sort out silly things for people and would show his irritation in the tone of his voice. The PD says he asked him to stop answering all the incoming call but the E2 kept doing it. The PD says that he felt insecure when the E2 was irritable to someone on the phone but then didn't say what it was about. The PD wanted to know what was happening[257].
¶474:
¶475: The PD says that sales can sometimes live up to the opinion some people have of it. He gives the example of a sales person they employed some time ago who came to the job saying that he had access to a lot of business but then spent all day reading the yellow pages[258]. The PD thinks that if he knew the individuals at places already then there would be no need to read the yellow pages. He says that this sales person was also full of work when they were too busy to take more orders but never had any work when they were quiet[259]. He thinks the sales person was being manipulative and was covering up his inadequacies. The PD says that the salesman used to arrive at the office and report that he had had 'very good' meetings with new prospects[260] but then no orders or enquiries followed. The PD thinks that if the meetings were good then there would have been some further communication. The PD says that in the end he questioned in his own mind whether the meetings were even happening at all[261]. The sales person left after twelve months and the PD thinks that he had just been using their firm as a stop gap while looking for somewhere else to work.[262]
¶476:
¶477: The CS leaves the conversation and the PD then says that he isn't sure contacting the fast food outlets is a good idea because the firm that did it before used a lot of effort and numbers of people we don't have in chasing work to make sure they had the jobs to print together at the right times so the savings offered to customers could actually be realised. I say that I'd had the same concern when it was first mentioned but had then started to see the possibilities. I say that it's at least good to have the idea and the more ideas the better.[263]
¶478:
¶479: Friday 7 March 2008
¶480:
¶481: Art worker - Friday 7 March 2008
¶482:
¶483: I speak to the art worker who worked for the taken over firm I had worked for. He is doing some production work in the factory and I suggest it's good to get out of his office which he shares with the other two art workers because it seems to be a 'rarefied'[264] atmosphere in that office (hinting that they have different attitudes). The art worker says that the two colleagues (who had worked for the organisation which took over our previous employer have a different attitude to getting involved. He says they stick rigidly to working on producing plates for the litho press. He says that this different attitude manifests itself in the ways they 'just leave half way through doing a job' and that when he recently asked if he could take some holiday one of the others had abused the management saying that he wouldn't lower himself to asking for holiday he just takes it when he wants. I say that I remember an instance when the managers didn't know when he would be back in the office.[265] The art worker says that he doesn't think that kind of behaviour has anything to do with work he thinks it's just a case of

good manners.[266] He says that he thinks that if the other art worker were to be challenged about his behaviour and didn't change anything he should receive a formal warning.

¶484:

¶485: Tuesday 11 March 2008

¶486:

¶487: Company Secretary - Tuesday 11 March 2008

¶488:

¶489: I ask the CS if there is anything I can do at this stage in relation to his idea of combining print jobs for the likes of fast food outlets. The CS says that he wants to continue with the idea of putting jobs together but hasn't had time to think about it since we last talked. He says that it's an idea he didn't mean to be just for fast food outlets and is put out that the PD made it seem that way. I say that I took it as just a basic idea for alternative ways of working and that I think new ideas are good in themselves[267].

¶490:

¶491: The CS goes on to say that he doesn't want to mislead customers about our pricing and would be open when suggesting we could reduce prices this way telling them what the approach is in terms of combing jobs with other customers.

¶492:

¶493: The CS says that he needs to work through some estimates of the jobs he is thinking about[268] in order to check what the costs would be for separate print runs. He says that it won't be worth pursuing unless we can offer a good saving. The CS says that he's made some calculations though based on the running time of the press and if the runs could be filled in this way it would represent a good level of sales[269].

¶494:

¶495: I bring up the issue of the attitude towards 'sales' by saying that I agree with the CS in that we will never get away from the 'us and them' attitude to sales[270] but I wondered why other companies don't have the same issue and that particularly other printers don't have this issue. The CS suggests that there usually is an attitude to sales at all firms so I tell him that I've worked for other firms where it is not the case. The CS pauses for a little while and then says he doesn't know why we have the issue. He says he has a similar problem with getting suppliers chased for better deals. He says that we just accept what we're told and don't push for a better service or price when we could do. The CS says he's mentioned this to people in the office but it hasn't changed how people behave. The CS says we need to address things and ends the conversation.

¶496: