MORE THAN A METAPHOR OF MALFUNCTION:

CONCEPTUALISATIONS AND USES OF SILENCE IN THE WORLDS OF EVERYDAY LIFE AND TEACHING

More Than a Metaphor of Malfunction:

Conceptualisations and Uses of Silence in the Worlds of Everyday Life and Teaching

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A thesis submitted in partial fulfilment of the requirements for the degree of

Doctor of Philosophy

Department of Educational Research

University of Lancaster

March, 2008

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Acknowledgements

I would like to thank all the research participants who contributed to this study.

I am also grateful to the many friends, colleagues and students with whom I have discussed ideas on this thesis during the past few years. I would like to give special thanks to my supervisor, Carolyn Jackson, for her excellent support and encouragement, and also to Malcolm Tight, my second supervisor, whose helpful comments brought me down to earth on a number of occasions. Ann- Marie Bathmaker, Ann Harris and Pam Marshall commented on earlier drafts of my work and I am grateful for their constructive and useful feedback.

The University of Huddersfield, where I work, has supported my doctoral studies and I appreciate the opportunity this has given me. Thanks also to Kathryn Truong who transcribed the interview tapes, Rosie da Costa who helped with the charts, and to Tina Cartwright for her invaluable assistance with the proofs.

This work has interrupted other aspects of my life for a number of years and the support of family and friends has been invaluable. My children, Luke and Jessie, and my friends, in particular Chrissie Stansfield, Jacky Kilvington and Ken Grace, have demonstrated great patience with my obsession and offered all kinds of help and enjoyable interludes along the way.

This thesis is dedicated, most especially, to my parents Roy and Doff Ollin, in gratitude for everything they have done for me throughout my life.

More Than a Metaphor of Malfunction: Conceptualisations and Uses of Silence in the Worlds of Everyday Life and Teaching

Abstract

The word 'silence' is used in many different contexts and has been discussed from the perspective of various disciplines. This thesis compares how this complex concept is understood and embodied in the social practices of everyday life and teaching. The worlds of everyday life and the classroom are constituted by socio-cultural rules and discourses. These shape the ways participants view themselves and their relations with the other components of those worlds.

In the current performative educational context, teachers must be 'seen' to teach and learners must be 'seen' to learn. As a consequence, talk and overt performance are assigned more value and significance than the less recoverable 'silent' activities associated with teaching and learning. This thesis explores those 'silent' pedagogies and what they tell us about the ways that teachers and learners position themselves within the cultural world of the classroom.

Firstly, the thesis explores how individuals manage their relationship with the sensory environment and how certain types of sounds constitute an individual's sense of 'silence'. Then, it considers the way that individuals use 'silence' as a metaphor for a variety of different relational states in the worlds of everyday life. Using Vygotsky's work on the mediating function of language, the thesis discusses how silence can act as a mediating sign or tool. It then explores teachers' accounts of using many different types of 'silence' in the formal learning environment.

In contrast with the negative view of silence in the current educational context, teachers' descriptions of silence present a positive framing of its role in teaching and learning. From the data, a range of teaching and learning behaviours associated with silence are identified. Suggestions are presented on how knowledge of different silences can reframe notions of 'good teaching' and how these might inform observations of classroom practice.

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A thesis submitted in partial fulfilment of the requirements for the degree of Doctor of Philosophy, Department of Educational Research, University of Lancaster, March, 2008.

Chapter One: Introduction

> Silence is like salt, you won't value it until it's not there, it's only in its absence that its value becomes meaningful.
>
> (Participant in research study)

My interest in silence

In the last few years the concept of silence has fascinated me. This fascination originated from two separate incidents. The first happened in the company of someone who speaks very little, when I realised how relaxing it was to stay silent for long periods of time. This felt a pleasurable contrast to my work as a teacher and teacher educator, where so much talking takes place. The second incident occurred within the same few months. This time it was the two minutes silence in memory of the victims of the bombing at the World Trade Centre on September 11th, 2001. While not wishing to undermine the seriousness of a tragic loss of life, this silence felt imposed by the political leaders of the USA and of the UK - a hegemonic and repressive silence, instead of a silence of respect - and I felt it marginalised as 'less important', non-Western tragedies such as the genocide in Rwanda.

The different silences represented by these two incidents made me aware - friends and family might say 'obsessed'- of the various ways in which the word 'silence' is used. Examples of these different uses occur on a daily basis in a range of different cultural artefacts: a television nature programme on the 'silent wastes of the Antartic'; a newspaper column describing the 'overwhelming silence of the international community in the face of the humanitarian crisis in Dafur'; the front page of the Independent newspaper a few days following the Asian Tsunami, blank except for the

word 'Silence' emblazoned across its cover; the violent 'silencing' by the Burmese government of political protest. Examples appear when I travel abroad - the word 'silencio' painted in large script over the arched entrance to a convent and the same word 'silencio' written on a street sign with the picture of car horn crossed out; in literature, Hamlet's last words 'The rest is silence'; Keats' use of 'silence and slow time' in his poem on a Grecian urn; in film, a recent film about a monastery 'Into the Great Silence'; the whole extensive genre of 'silent' films. In advertising, British Telecom's slogan 'It's good to talk'; the film advert where actor Patrick Swayze makes a pitch for a film to Orange mobile phone executives, who want him to change its title from 'The Silent Hunter' to 'The Chatty Hunter' instead. An interview with Claudio Abbado, the conductor, where the true secret of being a musician is the ability to listen 'to silence' rather than play; silence in court, the right to remain silent, silence is golden - examples are everywhere, once one begins to look.

As a teacher educator, I also became aware that silence is generally presented negatively in current educational discourse - except as an indication of good classroom discipline -and became interested in the meanings ascribed to silence in that context.

The argument developed in this thesis

The word 'silence' is used in various ways and has a range of meanings in different contexts. When analysed, the concepts underpinning the word have important social-cultural significance and certain types of silence have key functions in different socio-cultural worlds. In this thesis, I will undertake to 'make the familiar strange' by using the concept of silence as a prism through which teachers' everyday and professional

lives are viewed. I will argue that these lives are shaped within culturally-constructed environments favouring the articulated, the easily observable and recoverable aspects of human behaviour. The worlds in which people are located have no independent reality, but are figured, shaped through cultural practices and individual perceptions (Holland et al, 1998). By considering different types and uses of silence, the 'taken-for-granted' cultural practices and discourses used to define and describe these different figured worlds can be open to re-examination. A consideration of silences also provides the opportunity to reframe these worlds in different ways.

Academic writings on silence in teaching have tended to focus on one type of silence i.e. the silence of not speaking. However, silence is 'a communicative resource whose manifestations go well beyond the mere absence of speech' (Jaworski, 1997, p.382). This study includes both everyday lives and teaching life to encompass the diverse meanings people ascribe to silences in different cultural contexts. It is how people *themselves* define silence in their personal and professional lives, which is of interest here. These definitions may vary between individuals. Different types of silence provide a set of cultural resources from which some are selected and others excluded in different figured worlds. People belong to different social worlds and only by considering the ways that silence figures in different contexts, can we explore how the concept is interpreted and transformed from the world of everyday life to the world of teaching.

This thesis will compare associations of silence in the world of everyday life with those in the formal learning environment. It will argue that in everyday life silence has a range of positive and negative associations, but in the classroom silence is generally

viewed narrowly - as an absence of talk - and negatively - as an indicator of passivity and absence of 'active learning' - except when it functions as an indication of discipline and control.

Educational context

Government policies and the views of certain educationalists dominate the way that teaching is culturally construed by placing value on certain behaviours at the expense of others. Notions of 'good teaching' are based on the need to provide measurable and recoverable evidence to meet government policy targets. The values underpinning this evidence-based approach have permeated the education system at all levels. Recent government reforms have emphasised the fundamental role of observation of teaching practice and the importance of action plans for improving teaching practice (DfES, 2007). Observations of teachers in the classroom, carried out by inspectors from the Office for Standards in Education, Children's Services and Skills (Ofsted) are an important part of an educational institution's grading. As institutions need to achieve high inspection grades, staff are taught to 'observe' from an Ofsted perspective. Programmes of initial teacher training (ITT) have to prepare teachers for 'successful' observed practice, and, finally, text books accessed by teachers need to be perceived as 'relevant' in order to sell. In this context, teachers and those conducting observations of teachers, are led to place value on models of teaching which provide the clearest 'evidence'. I will argue that talking provides evidence that can be observed and measured and it is this quality which means that 'good teaching' is often equated with 'good talking'.

This thesis will call into question the value and underlying purposes of talk within Western formal learning settings - socially constructed environments where there is little challenge to the primacy of talk in underpinning the teaching and learning process (MacKinnon, 1999; Delamont, 1983; Stubbs, 1975).

Original contribution to knowledge

It will contribute to original knowledge in three main ways. Firstly it will consider silence in the lives of 'ordinary' people, using their *own* definitions as a starting point, rather than imposing a particular definition. Hence the ways in which this complex concept is embodied in the social practices and understandings of everyday life, as well as in teaching, will be interpreted within the individual's own frame of reference. Using the metaphors generated from research participants' own descriptions will provide a means of comparing how silence is conceived and used across different cultural contexts.

Secondly, it will add to the small amount of research on silence and teaching, by reframing teaching in terms of 'silences' rather than overt classroom activity. By doing so, it will provide an opportunity to re-consider the skills that teachers actually use. The term 'silent pedagogy' will be used to represent those subtle and complex aspects of the teaching and learning process which have been marginalised or ignored because of difficulties in observing or evidencing them. From the data, a list of suggestions will be generated about how knowledge of different silences could reframe notions of 'good teaching' and inform an alternative approach to observations of classroom practice.

Thirdly, the thesis will suggest an integrating interpretation of the word 'silence' in the classroom context. With reference to Vygotsky's (1978) work on the mediating function of language, the thesis will argue that silence, as well as speech, can act as a mediating sign or a tool. It will expand on Vygotsky's work by arguing that silence can function simultaneously as an 'internalising' sign *and* an 'externalising' tool in the boundary space within which relationships are negotiated. Of importance here is the notion of silence as a relational space in which the individual creates meanings about the world.

Research aims and questions

The overarching question which drives this research is as follows:

How do people use conceptualisations of silence in the figured worlds of everyday life and teaching?

The aims of this study are as follows:

1. To explore different conceptualisations of silence
2. To investigate the meanings and uses ascribed to different types of silence in everyday life
3. To consider the ways in which silences are understood and used within the formal learning environment
4. To use the concept of silence to provide an alternative framing of what constitutes good teaching and how this might be observed

The general research questions are as follows:

1. How do individual teachers conceptualise 'silence' in their everyday life (i.e. life outside work)?
2. What associations and values are linked to the different conceptualisations?
3. How are these exemplified in 'everyday' life experience?
4. How are these exemplified in teaching?
5. What are the similarities and differences between silences in the social worlds of everyday life and teaching?
6. What kinds of insights into the teaching process can a discourse of silence provide?

Approach to thesis

In this thesis I treat individual conceptualisations of silence as representing the dynamic interplay between individuals and the social worlds which they inhabit. The term 'everyday life' relates to those domestic and social relationships and activities, outside of work, in which people engage on a daily basis. These are played out within the context of life in the United Kingdom (UK) in the twenty first century - a 'Western' consumerist society, affluent in relation to most other parts of the world, technologically advanced and characterised by a fast pace of life, with an emphasis on material goods. The hegemony of English as the 'global' language (De Swaan, 2001) also privileges this society among many others on the world stage. In Western society, speed and competition are valued over slowness and co-operation: 'moving from a world where the big eat the small, to one in which the fast eat the slow' (Honoré, 2004, p.3). This has resulted in increased pressures on the individual and less time to spend with family and friends. Writers have suggested how cultures and societies are being 'squeezed together and driven at speed towards increased mutual interaction .... the compression of the world' (Cohen and Kennedy, 2000, p.24), resulting in a radical shift in our understandings of space and time. This 'compression' may also prioritise certain modes of communication, moving from the use of the written word to an 'oral culture', favouring the 'collective' over the 'private' and the 'concrete' over the 'abstract' (De Kerckhove, 1997).

Although the participants in this study are teachers, they are also individuals whose everyday lives take place in this 'fast' society where global communications are necessary to support economic growth (Friedman, 2000). Their personal lives are, in many ways, distinct and separate from their professional lives as teachers and

represent one of the multiple 'local rationalities and identities' (Elliott, 1996, p.7), moving between different physical, intellectual and emotional environments. The worlds of 'everyday life' and the 'classroom' are constituted by socio/cultural rules, expectations and language shaping the individual identities and stories of those who participate. In these worlds, individuals use certain 'tools of identity' (1998, p.42) derived from particular notions of themselves, from genres of discourse which shape the way they talk about themselves. However they are also 'targets' of diagnosis, in which others judge them according to objectified descriptions and criteria specific to particular contexts. In everyday life, these judgements create their own pressures and reconfigurations of identity. However, in the 'interlocking of the public and private spheres' (Davies, 2001, p.135), understandings and practices are wrapped up in their own senses of self, but also in the socio-cultural contexts in which these identities are formed.

The many types of silence

Silence has strong symbolic connotations, used in preference to speech when a particular situation transcends the capacity for verbal expression. It also appears to be of significance to many individuals in their everyday lives and can be used metaphorically or figuratively to express a number of other states. Silence also has strong pragmatic functions within different socio-cultural contexts, although these may not be recognised or acknowledged by those who use it.

The prevailing and superficial interpretation of silence, related primarily to speech or sound is reflected in the first two entries in the Oxford dictionary:

> Silence: 1. absence of sound; 2. abstinence from speech or noise.
> (Thompson, 1995, p.1292)

This study involves uncovering the different meanings associated with silence, recognising that there is not one silence, but many different types, and is based on the premise that individuals have different conceptual understandings of silence linked to their own histories, socio-cultural environments and psychological leanings.

The fuzziness of silence

Silence is a fuzzy and indeterminate concept (Jaworski, 1993). This can be a strength, in that it can mean a lot of things to a lot of people - but also a drawback, in that it evades linguistic capture. A striking feature of the existing literature is the multi-disciplinarity of writings on the subject (Kurzon, 1997; Jaworski, 1993, 1997). These include writings on silence in communication, the visual arts, music, environmental science - noise and sound, performing arts, spiritual, philosophical and ontological inquiries, cultural studies and studies of power and control. The wide range of contexts and perspectives which infuse these writings, makes 'silence' a potentially rich but confusing area for study, where authors move between rigid pragmatic analyses to broader cultural perspectives, without necessarily establishing coherence between the two.

The eclectic nature of the subject is also indicated in the discourse used, which encompasses descriptive, analytical, metaphorical and, occasionally, quasi-evangelical modalities. Jaworski (1993) indicates the richness and complexity of the various orientations on silence - psycholinguistic, paralinguistic, ethnographic, semiotic, pragmatic, educational, literary and philosophical. Many writings on silence tend to be

more descriptions than critiques. However there are notable exceptions, such as Tannen and Saville-Troike (1985) and Jaworski (1993, 1997). There have been attempts to create theoretical frameworks for the analysis of silence (Saville-Troike,1985; Bruneau,1973). Bruneau's framework, whilst possessing limitations, does provide a useful starting point, identifying and categorising three major types of silence - psycho-linguistic, interactional and socio-cultural - and in particular, his notion of 'slow' and 'fast-time' silence has some interesting resonances for discussions on teaching and learning.

In scientific terms there is no such thing as absolute silence. The musician, John Cage, encapsulated this in the famous quotation:

> There is no such thing as absolute silence, something is always happening to make a sound.
>
> (Cage, 1961, p.191)

Although an immediate association with silence might be one which relates the concept to an absence or a lack of something (Scollon, 1985), in both Western and Eastern cultures intentional silence is generally held to have meaning, although the meaning will be interpreted differently according to belief, culture or context (Bruneau, 1973).

In Western society, the particular meaning and importance attached to silence can be seen in the use of silence as the ritual expression of mass grief and loss, manifested, for example, in the two minutes silence in remembrance of the world war dead. In these situations, words are perceived as inadequate. In Eastern religions, silence has

an equally strong symbolic status, being perceived as the ultimate expression of unity with the universe (Dauenhauer, 1980). In view of its symbolic communicative importance in both cultures, it is interesting why silence does not feature more in academic writings on human communication and culture. One reason for this may be the 'slipperiness' of the concept (Schwartz, 1996), in that it resists definition.

Silence and sound

As silence is not an absolute - some sound is always present - it is the nature of those sounds and the individual or cultural group's perception of those sounds that may contribute to the sense of silence. As sound exists relationally to other sounds, the interpretation of the significance of those other sounds depends on expectation and context. This thesis will also consider the types of sounds that are associated with experiences of silence and also the different types of auditory stimuli which may detract from silence. The interpretation of silence relies strongly on the meanings and associations that are attached to it. As these may be different from person to person, so the sounds associated with certain types of silence may differ. These silences may not be articulated or understood in the same way as speech (Jaworski, 1993, Jaworski, 1997, Kurzon, 1997) and may even be represented in modes other than speech or sound, for example, visually or spatially.

Terminology

This thesis is relevant to education internationally, as there are certain trends and characteristics of Western education permeating systems in different parts of the world. These include strong links between education and the economy, an emphasis on skills' development and a bias towards explicit and accountable education

practices. However, there are inevitable differences due to specific cultural and political contexts. Hence it should be assumed that any discussion of 'education' or the 'formal learning environment' will be related to the current educational system in the United Kingdom and that there will be explicit reference to other systems if at any stage they form part of the discussion.

I will use certain terms to encompass a range of different learning environments and situations. I use the word 'teacher' as a generic term for someone involved in teaching, although that person also may be called a 'lecturer' in Further Education (FE) or Higher Education (HE), a 'tutor' in Adult Education (AE) or Community Education (CE) and a 'trainer' in work-based learning. Similarly, I will sometimes use the word 'classroom' as a generic term for any formal learning environment, although in different contexts this may be a lecture theatre, a training room or a workshop setting. The term 'lesson' will be used to indicate a short time-constrained period of formal learning, as part of a larger programme of study.

I will also differentiate within terms that are usually used generically. Hence, for example, the word 'verbalisation' is frequently used to refer to talking, but I will distinguish between 'verbalisation' i.e. putting something into words, which may be writing or typing into a computer, and 'vocalisation' which relates specifically to talking out loud (Saville-Troike, 1985). In the context of this thesis, a conflation of 'verbalisation' and 'vocalisation' into merely 'verbalisation' would be unhelpful and would hinder analysis.

Finally I will distinguish between 'participants', who participated in the face to face interviews, and 'respondents' who responded to the questionnaires.

Overview of chapters

This chapter has introduced the personal, social and theoretical context for the thesis. Chapter Two will set out the conceptual framework for the thesis and will also mention other theories which have informed my research. Chapter Three will consider the general literature related to silence, indicating the range of resources on the concept which could be accessed by different cultural worlds. Chapter Four will focus on teaching and learning, discussing the value placed on talk and the generally negative value assigned to silence. It will also refer to the limited research and writing on silence in the classroom. Chapter Five will discuss the research methodology adopted for this thesis and will be followed by three data chapters. Chapters Six will consider general notions of silence in everyday life, and then focus particularly on silence, sound and noise. Chapter Seven will consider silence used as a metaphor for various types of relationship between the individual and the world. Chapter Eight will concentrate on silence in teaching and learning.

Chapters Six, Seven and Eight will both present and discuss the data. As the conceptual framework of this thesis concerns the relationship of the individual to the socio-cultural world, the data need to be contextualised in the real-life histories of the participants. To separate presentation and discussion into different chapters would mean either de-contextualisation or repetition. Hence I will analyse the data and refer, where relevant, to the literature and the underlying concepts as they arise. At the end of each chapter, I will summarise the key points that have emerged. Chapter Nine will

provide an overview of the key themes and ideas arising from the data. Chapter Ten will provide the conclusion to this thesis and offer suggestions which might inform future practice or research. The appendices will include artefacts which illustrate aspects of the research process.

Chapter Two: Conceptual frameworks underpinning the thesis

The study of silence encompasses different theoretical disciplines and, in this research study, has involved engagement with different bodies of theory. The major conceptual framework I use is that of 'figured worlds' (Holland et al, 1998), derived from socio-cultural theory and drawing on ideas from Bourdieu (2002, 1993, 1977), Vygotsky (1986, 1978) and Bakhtin (1981). In this thesis, Vygotsky's work on 'signs' and 'tools' in semiotic mediation will be of special importance, in illuminating how silence performs different functions in people's lives. After presenting a general overview of these theories, I will orientate them towards social practices in the worlds of everyday life and formal learning, within which the research participants form their own understandings and identities.

Other theories will also inform this thesis. Bruneau's three categories of communicative silence (1973) and, particularly his ideas on silence and time, act as an initial prompt for discussion. In addition, theories relating to metaphor, space and time, boundaries, sound and noise, are also of relevance and will be covered briefly in this chapter.

What does 'conceptualisation' imply?

The notion of 'conceptualisation' requires clarification in the context of this research. The term could be treated as a fixed or evolving definition from an individual standpoint, where the 'individual' is represented as an independent psychological entity (Gross, 2001; Pinker, 1997). A useful starting point in this case would have

been the influential work by Goffman (1990, 1986) on the way that individuals frame experience and the transitions between the private and public 'face'. However, Goffman's approach is predicated on a notion of identity which is relatively static and under the control of the individual who 'possesses' it. In Goffman's work, the ways in which individuals conceptualise experience takes as a starting point a cohesive identity, somehow separate from the external world, where transitions between different contexts mark the deliberate adoption of different persona and roles. This reflects a 'lived' experience of the world, in that people do talk of themselves as having personalities, as acting 'differently' in certain situations and of being 'robbed' of their identity in others.

However, this view of the world, based on the psychological notion of the individual as a separate entity, does not address the ways in which participation in the social world affects the ways that people think and feel, nor the ways in which identity is to some extent unstable and contingent on context. Holland et al (1998) discuss 'Western representations of the self' which 'bespeak a person who is autonomous, bounded and trans-contextual' where:

> ..people's representations of themselves in the stream of everyday life reveal a multitude of selves that are neither bounded, stable, perduring, nor impermeable. (1998, p.29)

Taking this viewpoint, the notion of 'conceptualisation' takes on a more complex character, indicating that individual's conceptions may shift according to context and may involve apparent inconsistencies of definition and practice.

Socio-cultural theory and the shaping of identities

The complex relationships between the individual and the socio-historical environment have been explored in a number of different ways (Holland et al, 1998; Wenger, 1998; Lave and Wenger, 1991; Blumer, 1969). These include the nature/nurture debate, which considers whether the roots of behaviour are determined through genetic or social influences, Marxist theory which locates individual behaviour within the larger economic and historical forces of capitalism and the works of Bourdieu (2002, 1993, 1977) whose notion of 'habitus' illuminates the difficulty of divorcing an individual's identity from the socio-historical-cultural sediments that form their sense of self. These also shape their dispositions to act and experience in particular ways in different environments.

Both Bourdieu and Foucault (1977) emphasise the reproduction of social structures where unequal power relations are embedded in both the cultural practices and the discourses used to define and describe everyday life. These present a 'common sense' view of the world, not open to challenge, because its nature as a cultural construct is not recognised or understood. Bourdieu's concept of 'habitus' relates to human agency which is grounded in a 'field' of complex relations. The subjective and objective are co-joined - the social world not only shapes consciousness, but is itself, at least in part, shaped by the individual conceptions and representations of that social world (Bourdieu, 1993). Within this world social space is 'reified' (2002, p.126) as 'a way of holding at a distance and excluding any kind of undesirable intrusion' (p.127) and discourse acts as a barrier against alternative perspectives which might challenge the culturally-silenced aspects of social practice:

> The dominant are drawn towards silence, discretion and secrecy, and their orthodox discourse....is never more than the explicit affirmation of self-evident principles which go without saying and would go better unsaid.
>
> (Bourdieu, 1993, p.83)

In socio-cultural theory, individual thoughts and emotions are constantly mediated by the cultural resources available. These mediations are not neutral but located within the power relations inherent in society which allow or deny access to certain of these resources (Woodward, 1997). In addition they shape the meanings and perspectives within which the individual makes sense of the world and their place within it. The shaping of identity is inextricably bound up with these different mediating devices, which provide 'collective identities' (Jenkins, 2004). These stem from the sharing of a 'symbolic repertoire', within which and against which individuals construct their personal senses of self. However, as Jenkins points out, these symbols are more than imaginary, they take on a reality because of the concrete practices that arise from a belief in them. Hence the practices give life to symbolic repertoires, although the communities that enact them are not *'real'* in themselves, but are imagined:

> Nor can a community ever be imaginary (even though it can never be anything but imagined).
>
> (Jenkins, 2004, p.116)

The meanings, associations and identities constructed through membership of different social worlds are formed through interaction between individual histories and the socio-cultural-historical environments which are formed by them and which form them. (Holland et al, 1998; Wenger, 1998; Lave and Wenger, 1991; Bourdieu, 1977; Blumer, 1969). Some of the most influential theories in this body of work consider this complex interplay between as taking place over an extended period of time. For example Lave and Wenger's (1991) work on 'communities of practice' describe

workplaces as sites where people participate in a common enterprise involving long term engagement in a set of situated social practices. Bourdieu's notion of 'habitus' represents this process as slow-moving change from generation to generation (Holland et al, 1998).

What these theories fail to encompass satisfactorily is the way in which the individual and the social environment are in constant interplay, involving small scale adjustments and improvisations which are derived from constant relational positionings and repositionings that occur in practice. However, Lipsky 's (1980) work on 'street-level bureaucracy', and De Certeau's (1984) work on the tactics used by individuals to 'poach' their own time within the workplace and individualise aspects of their everyday lives, indicate the ways in which people navigate to create spaces of agency within different social worlds. These 'constructive subversions' also take place in the world of teaching (Ollin, 2005).

Figured worlds

The notion of 'figured worlds', derived from anthropology and drawing heavily on socio-cultural theory, involves a more rapid timescale of interaction than the majority of socio-cultural theories. It also draws on the notion that communities are not 'real' but 'imagined (Jenkins, 2004). Figured worlds represent the fluid and dynamic interplay between the self and the social that takes place at the micro-level on a continuous basis, drawing on the 'processes or traditions of apprehension' (Holland et al, 1998, p.41) - by which individuals make sense of and respond to the world. These worlds have the following characteristics:

> 1. They are historical phenomena – we are recruited or we enter into them, but they are developed as a result of the participants
> 2. They are social encounters (like activities) in which participants' positions matter and are localised in particular times and places. Rank and status preclude access to some figured worlds.
> 3. They are socially organised and reproduced - they divide and relate participants. They depend on interaction and inter-subjectivity for continuation.
> 4. They occur as 'landscapes of action' which have a 'human voice and tone'.
>
> (Holland et al, 1998, p.41)

And importantly, they are cultural worlds, 'populated by familiar social types and even identifiable persons'. (p.41)

Figured worlds acknowledge the day to day significance of human agency within larger structural forces which constrain the way the world is experienced and interpreted. To 'improvise' within these social contexts, individuals draw on their own experiences and the cultural resources available to them:

> One's history in person is the sediment from past experience upon which one improvises, using the cultural resources available, in response to the subject positions afforded one in the present.
>
> (Holland et al, 1998, p.18)

The term 'figure' involves a range of meanings associated with mental representation. To 'figure' something is to 'imagine' or 'picture mentally'; a 'figure' is 'a person as contemplated mentally' (Thompson, 1995, p.502); 'figurative' means metaphorical rather than literal representation. These definitions imply a view of the world which does not contain an objective reality, but is formed through the imaginings of participants. This world is not fixed, but is filled with possibilities for action, reaction and 'improvisation':

> By modelling possibilities, imaginary worlds can inspire new actions; or paradoxically, their alternative pleasures can encourage escape and a withdrawal from action
>
> (Holland et al, 1998, p.49)

This notion of figured worlds - 'figurative, narrativized or dramatised worlds' - draws on Vygotsky's ideas on play, where this capacity for imagining configures the different worlds in which people participate.

Mediation through tools and signs

Vygotsky's work (1978) considers the role of collectively developed signs and symbols as mediating devices. These are the media which form mental and emotional faculties in childhood. Tangible objects are collectively assigned meanings as artefacts or tools affecting the ways that children think, feel and behave. Vygotsky describes how a child will use a particular tool as a 'pivot' - a mediating or symbolic device that the child uses not just to organize a particular response but to 'pivot or shift' into the frame of a different world (Holland et al, 1998). As the child develops, the tangible tool - the toy such as the log which represents the horse's back - may be replaced by socially-derived conceptual tools which perform the same pivotal function. Vygotsky distinguishes between tools and signs - such as language, writing and number systems - in that the tool's function is *externally* oriented, whereas the sign's function is *internally* oriented:

> The tool's function is to serve as the conductor of human influence on the object of activity; it is *externally* oriented; it must lead to changes in objects. It is a means by which human external activity is aimed at mastering, and triumphing over nature. The sign, on the other hand, changes nothing in the object of a psychological operation. It is a means of internal activity aimed at mastering oneself; the sign is *internally* oriented.
>
> (Vygotsky, 1978, p.7)

Whereas physical tools have an effect on the physiology of the individual, signs and symbols act as intellectual and behavioural tools, altering 'the behavioural architecture of the users' (Holland et al, p.35). These mediating devices are not original but are appropriated as a result of social interaction.

At first mediating devices might be tangible, such as a particular word, phrase or a piece of music. However with repeated use the tangible may become internalised completely - through conscious inner speech and unconscious thought - or through the display of certain skills, emotions or the enactment of certain motives (Vygotsky, 1978). Vygotsky sees this symbolic mediation as enabling human beings to exercise some control over their environment.

Holland et al's description of the use of cultural artefacts as 'psychological tools' (1998, p.60) contains some ambiguity, suggesting the potential for tools to be *externalised* in that they influence the framing and constituent parts of particular figured worlds, and *internalised* (hence transforming into signs). This important ambiguity will be explored in this thesis.

Mediating devices include the discourses pertaining to particular figured worlds, where participants learn what is valued and how to reproduce what is valued. In these worlds, speakers become aware of how different language, genres and styles are assigned different values. They change behaviour in order to accommodate assessments based on their capacity to reproduce those with high value:

> The assessment reveals itself in the way speech is marked, leading the speaker to strained, self-consciousness "correct speech" or to effortless, unselfconscious speech; to comfort or discomfort; to voice or to silence.
> (Bourdieu, 1977, p.128)

It is interesting to note how Bourdieu equates assessment to 'speech' - overt activity - and uses silence as a counterpoint to the positive 'voice', thereby assigning it a negative cultural value. In the context of this thesis, does the quotation demonstrate an unwitting cultural bias towards vocalisation?

The unwitting internalisation of certain social practices and values leads to an exclusion of alternatives. This echoes Wittgenstein's enculturation view of language:

> ...in which the novice internalizes the normative standards of the linguistic community....Wittgenstein emphasizes that the training process, if successful, makes the learner *blind* to *alternatives*'.
> (Medina, 2005 p.101)

The internalisation of cultural values and the use of different cultural artefacts provide a means for individuals to 'position' themselves in different figured worlds (Holland et al, 1998). These are not static positions, but contain possibilities for change or development. Hence semiotic mediation helps understand how dispositions are developed over time, but also 'a means by which these dispositions can be countered and sometimes overcome' (1998, p.137). Of importance to this thesis is how silence could be a mediating device between the individual and the social world which allows for these possibilities. Examining how certain - limited and often negative - views of silence have been internalised, offers a means for teachers to counter these values within their own professional worlds.

Inner speech

Vygotsky

In their discussion on mediation, Holland et al draw on Vygotsky's work on inner speech:

> The forms of speaking and interacting inhabit us to make 'inner speech' and 'inner action'. They are the mediating devices of our thinking, feeling and willing' (1998, p.235)

However, they engage in little critical appraisal of this work. In his influential book 'Thought and Language' (1986), Vygotsky argues that 'speech is an expression of that process of becoming aware' (p.30). In younger children, thinking is externally articulated into vocalisation, whereas in older children it becomes internalised into 'inner speech'. This inner speech is signified externally as a 'pause'. In Vygotsky's terms 'all silent thinking is nothing but egocentric speech' (p.31), which is not just applicable to children but to adult thinking as well.

In this use of the term 'speech' Vygotsky links processes of thinking to speaking, (vocalisation) rather than verbalisation. He links the use of this speech to the development of thinking:

> ..inner speech develops through a slow accumulation of functional and structural changes, …it branches off from the child's external speech simultaneously with the differentiation of the social and the egocentric functions of speech, and finally … the speech structures mastered by the child become the basic structures of thinking.
>
> (Vygotsky, 1986, p.94)

In this quotation, Vygotsky summarises three essential aspects of his theory. Firstly that inner speech fulfils egocentric functions, while external speech fulfils social functions. Secondly, inner speech develops as a result of maturation, and thirdly, that

the structures of speech become the structures of thinking. It is the last point which carries the most inconsistencies in his work. Briefly, in order to justify this position, Vygotsky eliminates the kinds of thinking that do not fit his theory. He dismisses 'lyrical speech' - presumably inner or external - prompted by emotion, as not being 'real' thought:

> Though it has all the earmarks of speech, it can scarcely be classified with intellectual activity in the proper sense of the term. (p.89)

He distinguishes between 'verbal thought' and 'natural thought':

> Verbal thought is not an innate, natural form of behaviour, but is determined by a historical-cultural process and has specific properties and laws that cannot be found in the natural processes of thought and speech. (p.94)

Hence verbal thought is only one category of thought, the category of thought that can be consciously produced in speech. It is difficult to understand what he means by the other '*natural* processes of thought and speech', as the notion of speech is an inherently social concept and one which underpins his argument. He distinguishes between this 'verbal' thought and less or non-articulated thought, which he terms the 'practical intellect', where thought can function without any word usage or detectable speech movements:

> Non-verbal thought and non-intellectual speech do not participate in the fusion [*i.e. of thought and speech*] and are affected only indirectly by the processes of verbal thought. (p.89)

Hence there are many kinds of thinking, some of these occurring without verbalisation. However, this indicates a specific notion of thinking:

> Thought is not merely expressed in words, it comes into existence through them.
>
> (Vygotsky, 1978, p.218)

It seems here that Vygotsky is describing a very specific kind of thinking - rational and near to external articulation. But even verbalised thinking becomes 'non-verbal' as it increases in complexity. He describes the progressive abstraction of thought, where 'there is signification independent of naming', implying that thoughts no longer have specific words attached to them. Hence, although he describes inner speech as an internalised continuation of external egocentric speech, he suggests it changes its form:

> It is still vocalised, audible speech i.e. external in its mode of expression, but at the same time it is inner speech in its function and structure. (p.228)

Egocentric speech becomes decreasingly vocalised and because of its structural peculiarities becomes increasingly meaningless to anyone else. Vygotsky calls this 'the birth of a new speech form', developing 'abstraction from sound'. This new speech form contains much more that speech:

> In inner speech one word stands for a number of thoughts and feelings, and sometimes substitutes for a long profound discourse. (p.248)

At this point, where the thoughts far outweigh the language to express them, the question arises, can one legitimately continue to link thought and language or is it that 'thought' has its own language (Pinker, 1997)?

It is worth highlighting some alternative views here. Research in cognitive neuropsychology suggests that some patients lack inner speech, but can still write perfectly adequately. This implies that language does not generate thought, but

thought generates language (Eysenck and Keane, 1990, p.364). Claxton goes further, arguing that 'highlighting the ways of knowing that are associated with consciousness, control and articulation' have enabled scientific advance, but what he calls the 'undermind' has been ignored (1998, p.223). Here Claxton explicitly relates thought and the need for public articulation of thought to a particular kind of epistemology. Thought may also be constituted visually rather than verbally. Sachs (1989) refers to the visual language of the deaf; Einstein believed that intellect was not necessarily language-based, as his own creative thought consisted of abstract images rather than words (Mercer, 1995). In particular, recent research in neuro-science indicates the weakness of the link between verbalisation and thought. For example, exact calculation is language dependent, while approximation relies on nonverbal visuo-spatial brain networks (Blakemore and Frith, 2000, p.39) and the brain can operate at a subconscious level, working 'behind your back' (Blakemore and Frith 2005, p.7). All of these views suggest potential flaws in the notion of 'inner speech'.

Returning to Vygotsky in the context of this thesis, if 'all silent thinking is nothing but egocentric speech', then what other aspects of thinking are silenced by this view?

Bakhtin

Holland et al draw on both Vygotsky and Bakhtin in discussions on 'inner speech'. Vygotsky describes inner speech as internalised egocentric speech, a site of semiotic mediation between the self and the social world. In contrast, Bakhtin (1981) is more aware of contested practices in different speech forms, which he views as located in power and struggle. Here, inner speech is viewed as dialogic, containing multiple 'voices', where voices are:

> situated vocal-images within inner speech, and thus possible ideological standpoints for responding to the problems that confront practitioners.
> (Holland et al, 1998, p.180)

Hence verbalised inner speech is internalised engagement with the voices and positions of others within the social world.

The figured world of education

So how might the concept of figured worlds be applied to education? In their work Holland et al give a number of examples of different figured worlds, such as the world of Nepalese Adolescence (Skinner et al, 2001), the world of Mental Health (1998) and the world of Alcoholics Anonymous (1998). However, there are few instances where the concept of figured worlds has been used in the context of education, and these have tended to be American (e.g. Uttiera et al, 2007, Fecho et al, 2005). In the next sections I will orient this concept to education in general, and then, more specifically, to the education setting in the UK.

In the world of education there is a particular interpretation of what it means to be a teacher or learner, what typical teachers or learners are like and what kind of activities occur when people teach or learn in a *formal* learning environment. These culturally-derived understandings about teaching and learning in a formal learning environment differ from those related to more general notions of learning in other figured worlds.

When teachers and students enter the world of the formal learning environment, the way they understand themselves incorporates the cultural knowledge underpinning the organisation of that figured world. There are various symbolic devices that help to mediate this transformation, which include the narratives, character types and

activities which serve this figuration. With 'alcoholics', labels are attached to individuals not on the basis of the amount of alcohol drunk, but on the basis of a failure to meet normalised social obligations. Perceptions of deviance which form these obligations are not related to the acts of drinking themselves but are as 'a consequence of breaking the rules and sanctions created by a group that is in a position of power, and that finds the behaviour 'unsettling'. (Holland et al, 1998, p.67). This is equally the case in the world of education, where other labels may be applied such as the 'good teacher', the 'smart' learner (Hatt, 2007), the awkward student, or indeed, the 'silent' student. A recent novel encapsulates the difficulties experienced at school by the young John Franklin - a great sailor and explorer in later life. The boy's 'slowness', an indication of deep thinking in his everyday life, was perceived as stupidity by his teacher, who wanted quick responses to his questions. Shifting from his everyday identity to the classroom identity expected by the teacher proved a problem for a boy who took learning seriously:

> Turning into somebody else at school, that was hard.
> (Nadolny, 2003, p.23)

Labels such as 'slow' are drawn from the discourses prevalent in that culture (McDermott, 1999) and those who accept those labelled identities are affected in the way they act within the world and how they understand themselves. Holland et al give the example of the figured world of academia:

> ...... a world called academia, where books were so significant that people would sit for hours on end, away from friends and family writing them. (1998, p.49)

This is a recognisable world to me, as an *individual*, sitting here on my computer, in voluntary isolation from those dear to me, surrounded by mountains of books written

by academics. It is also a *culturally modelled* world, stereotyped from a generalised view of an aspect of academic life which has been distilled from others' past experiences of that life. However, it is also a *constructed* world - socially constructed through discourse - in which certain people figure as actors and represent the types which occur within this world and participate in the activities through which it is constituted. Building on Holland et al's categories of the world of academia, I have italicised my examples of the cultural constructions of this world:

- 'taken for granted generic figures' (Holland et al, 1998, p.59) *such as teachers, students, administrators;*
- 'generic acts' *such as teaching lessons, giving lectures, giving tutorials, setting assessments;*
- 'the stories that pertain to these' *such as stories of academics trying to juggle teaching with research;*
- 'the discourses' *such as 'brilliance', 'originality', which is the discourse by which academics come to evaluate themselves, understand themselves and position themselves within this world.*

All these constructions can be applied, not only to academia, but to the world of education as a whole.

The current educational context

The promotion of free market economies dominated by large multi-national corporations has placed an emphasis on competition, performance and results. In the UK, as in the majority of Western cultures, this ideology has permeated approaches to

formal education. The importance of skills' development to support and enhance economic growth has been a cornerstone of UK government policy, echoing similar approaches around the world. Within this context, education has been under pressure to be linked closely with the economy, both in pedagogy and in management, and now displays certain characteristics appropriated from market place culture. Various writers have indicated that the result has been a technicist and instrumental approach to education, with a bias towards performativity and accountability (Ball, 2004; Shain and Gleeson, 1999; Whitty, 1997).

There are expectations within this world that teaching and learning need to be 'seen to be done' and overt *evidence* of performance and achievement needs to be provided by those involved. Holland et al suggest, 'the expectations are embedded in the *means of gathering information*' (1998 p.198) (my italics). In the case of education, the means of gathering information is through *evidence-based* assessment and inspection, including classroom observations of teachers.

Hence the generic figures - teachers and learners, for example - will be culturally figured in particular ways with expected ways of acting and behaving. Generic acts such as teaching and assessing, will be skewed towards a particular set of cultural understandings about what these acts involve. The stories that are told will include those of teachers trying to maintain their own values and beliefs about teaching, whilst having to subscribe to policy-derived dominant stories about 'successful teachers' (DfES, 2007; Ofsted, 2007). The dominant discourses will describe and evaluate teaching, teachers and learners in particular ways and so teachers' identities will be

formed from discourses about what it means to be a 'effective teacher', just as learner identities will be shaped by notions of what it means to be a 'good student'.

However, these dominant discourses and practices are not simply the 'context' in which teaching and learning occur, but become internalised by the individual:

> ....the forms of speaking and interacting inhabit us to make 'inner speech' and 'inner action'. They are the mediating devices of our thinking, feeling and willing.
>
> (Holland et al, 1998, p.235)

Here the cultural resources on teaching and learning that potentially *could* be available - for example drawing on alternative framings derived from experiences of different cultures, are silenced by the dominant framings and discourses of social practices within that context. These may involve overt demonstrations of power in the classroom or they may occur through the practices of 'invisible pedagogy', which control without seeming to control (Bernstein, 1997). In this context, teachers and learners may be 'blinded to alternatives'.

However, they may also find, in Bakhtin's terms a 'space for authorship':

> Although we use 'others' words and acts, others' speaking, others' voices' yet authorship can orchestrate these, to create a position, our own voice, from which we work.
>
> (Holland et al, 1998, p.211)

From the literature on teaching, there are examples where 'spaces for authorship' have been argued or demonstrated 'through the small scale practices of the individuals or groups (Avis and Bathmaker, 2004; Day et al, 2000; Smyth and Shacklock, 1998)

providing a means of imagining *possibilities* for change' (Holland et al, 1998, p.255), in spite of large scale policy developments.

Hence the theory of figured worlds allows for an analysis of the inter relationship between the individual, the cultural and the socially constructed. In particular, the role of human agency in how the individual positions themselves - 'relational' or 'positional identities':

> They have to do with how one identifies one's position in relation to others, mediated by the ways in which one feels comfortable or constrained, for example, to speak to another, to command another, to enter the space of another...
>
> (Holland et al, 1998, p.127)

In the figured world of the formal learning environment, teachers and learners are involved in a continuous process of relational positioning - deferring, affiliating, distancing - whilst experiencing feelings of comfort or constraint which are culturally derived. They are also measured and measure themselves against stories of 'success' and 'failure', acts of 'effective teaching, 'productive thinking' (Baumfield, 2006; Moseley et al, 2005) or 'active learning' and 'figures' such as the 'exemplary teacher', the 'active participant', the 'good learner'. Institutional contexts, judged by results and assessed through inspection, reinforce particular types of discourse. These understandings are formed in a culturally-constructed context with imposed constraints of space and time in which the personal and the collective meet:

> the joining of personal times is extended to a collective temporality. Class-room times are constituted by a world of shared patterns of interaction and communication, collective knowledge and common expectations.
>
> (Adam,1995, p.67)

Figured worlds and everyday life

Holland et al display a certain ambiguity about the application of 'figured worlds' to 'everyday life. Although they acknowledge that everyday behaviour has 'an ideology', a cultural world' (1998, p.141), they make a distinction between 'mundane activities' and 'the more dramatic, remarked activities' singled out in figured worlds. It is hard to see why they relegate the everyday to the 'mundane', when the worlds of everyday life, according to their definitions elsewhere, are as figured as any other world they represent.

For example the world of Alcoholics Anonymous (AA) is peopled with 'figures'. Members are coached to define their lives according to a culturally-derived format. However, worlds in 'everyday life' such as the world of 'domesticity' are also peopled with figures, who are culturally-shaped and tell 'stories' about their lives according to the cultural resources, cultural 'scripts' and behaviours available to them:

> A person's home is a space in which he or she dwells, carries out everyday activities of caring for self and others, plays, celebrates, plans and grieves.
> (Young, 2004, p.169)

In this space, 'wife' or mother' is not a neutral descriptive term, but represents a culturally configured person who evaluates herself, and is evaluated according to certain cultural norms. Whether it is a figured world of AA or a figured world of everyday life, the participants within those worlds internalise a range of cultural practices (Moran, 2007) which help frame their sense of themselves.

If identity is 'one way of naming the dense interconnections between the intimate and public venues of social practice' (Holland et al, 1998, p.270), then this thesis will

argue that the practices within one world will not remain hermetic, but will provide additional cultural resources which are utilised in forming individual understandings in other figured worlds. In this it acknowledges the complex set of relations between the public and private spheres (Rossler, 2004, p.5).

Holland et al appear to recognise this to some extent, without considering the implications of this notion:

> In our everyday lives we encounter and enter into many specialized practices, and these practices exist in various degrees of interrelation. (1998, p.238)

Husserl suggests that our everyday 'sense' of the world forms our background world picture, which depicts the world as we know it in everyday life - the lifeworld' (Woodruff Smith, 2004, p.150). In this thesis the practices and understandings of silence derived from the figured worlds of everyday life will provide a 'background world picture', illustrating a range of additional cultural resources on which individuals might draw to aid their understandings of silence in the classroom. These may complement or contradict those provided through the dominant voices of government, inspectorate and particular socio-historic traditions shaping classroom practice. As such they will provide a wider frame of reference and potential alternative framings of silence in the figured world of the classroom.

Figured worlds and ontology

Holland et al do not directly discuss the notion of ontology, which is concerned with the basic categories and relationships of 'Being' and 'Existence'. Depending on which perception of reality is adopted, these provide the fundamental framings of how life is viewed and enacted. According to Husserl, there are three 'regions' of Being - Nature,

Spirit or Culture and Consciousness (Woodruff Smith, 2004, p.150). Whereas socio-cultural theory concerns itself primarily with the relationship between culture and consciousness, 'figured worlds' can also be used to consider the ontological relationship between 'Nature', 'Spirit' and 'Being' (Clammer et al, 2004).

He uses the beliefs and practices of the Ojibwa tribe to provide an alternative ontological framing to what he describes as the 'Western' notion of the natural world 'out there' and the world of ideas or mental representations. In this world view the two worlds are mediated by experience, which provides the raw sensory data from which ideas are constructed. However, for the Ojibwa, there is no such distinction. Experience for the Ojibwa consists not of *mental* representation, but in *sensory* participation in the natural world:

> ....an intimate sensitivity to other ways of being, to the particular movements, habits and temperaments that reveal each being for what it is.
> (Ingold, 2004, p.39)

In the Ojibwa model, the self is relational, constituting itself in a continuous process of engagement with the environment:

> Feeling, remembering, intending and speaking are all aspects of that engagement, and through it the self continually comes into being. (p.46)

However, language does not mediate experience, it is an affirmation of existence, a way in which the self manifests its presence in the world:

> ....speech is not a mode of transmitting information or mental content; it is a way of *being alive* (sic). (p.47)

Perception and listening also take on different resonances within this ontology. The distinction between the 'spectator' and the 'watcher' is important here. The 'spectator' who perceives an apparently fixed representation of reality, remains outside the experience and looks without being integrally involved. In contrast, the 'watcher' is open to shifting sensory experience, registers it and is integrally involved in what is being watched:

> ...he *watches what is going on*. Where the world of the spectator is fixed, that of the watcher is all movement. (2004, p.49)

This is of importance in considering silence in the classroom. If the teacher is a 'spectator', then they observe the learners from a culturally-fixed position – they are trained to look for certain behaviours or attributes, which are assigned value within that figured world. They have learned to 'observe', through being observed and inspected themselves. However, if the teacher is a 'watcher', they are constantly open to shifts in behaviours, understandings and even identities. The teacher may also be a 'listener' acutely aware of every auditory clue. In his description of the Ojibwa, Ingold suggests that both watching and listening are interlinked as a 'form of dynamic sensory resonance' (2004, p.49).

Theories of silence

A limited number of writers have attempted to theorise the study of silence - within a broad communicative paradigm. Bruneau (1973), Saville Troike (1985) and, in particular, the influential work of Jaworski (1997, 1993) have informed my thinking in beginning this research and later chapters will refer to their ideas in more detail. Bruneau's (1973) initial theoretical framework for silence has 'psycho-linguistic', 'interactional' and 'socio-cultural' dimensions. These categories create an artificial

divide between the individual and the social, which my main conceptual framework - that of 'figured worlds' is at pains to dissolve. However they provide a useful starting point which helps magnify different dimensions of silence in a communicative context and provide a way of shaping discussion of the literature in Chapter Three. His concepts of fast time - 'mechanistic clock time' - and 'slow time silence' are of particular relevance to this thesis and this section will provide a brief overview of those ideas.

Psycho-linguistic silence and time

'Psycho-linguistic' silence indicates the link between the psychology of the individual and the language used to communicate. Bruneau builds on the ideas of Picard, who links silence and time:

> Time is accompanied by silence, determined by silence... Time is expanded by silence.
>
> (Picard, 1952, p.124)

Bruneau proposes two forms of imposed psycholinguistic silence - 'fast time' and 'slow time'. Fast time silences are rarely more than two seconds and are related to syntactical and grammatical hesitations. In contrast slow time silences are imposed mental silences linked to the semantic and metaphoric processes involved in decoding speech, involving:

> ..organizational, categorical and spatial movement through levels of experience and levels of memory.(Bruneau, 1973, p.26)

Fast time is the 'mechanistic, artificial time' governing people's lives, constraining them to work according to external factors; slow time follows the pace of the individual's ability and inclination to process ideas and emotions. He terms this

'psycho-linguistic slow time silence'. It is important to keep in mind that values about time are culturally-laden (Adam, 1995) and the classroom is a culturally-constructed time-frame:

> Grains of sand filtering through an hour glass...the resulting loss of time was called a Latin lesson.
>
> (Nadolny, 2003)

Of relevance to this thesis, is the relationship between time and silence in the classroom.

Bruneau suggests that a capacity to self-impose slow time silence relates to 'attentive silence', i.e. the kind of silence required of children when an adult wishes them to concentrate:

> The proper instruction of children may well be ....a matter of helping them control their own mental silences while the helpers control their own. (1973, p.22)

The relationship between slow time and memory, and the indication that mental silence needs to be achieved through some kind of conscious control are ideas which will inform discussion in later chapters.

Interactional silence

Bruneau defines interactional silence as:

> ...pausal interruptions in dialogue, conversation, discussion, debate etc. They can be related to affective, interpersonal relationships between people as well as to the exchange of information and/or problem solving. (1973, p.28)

He suggests that slow time silence may occur in group, as well as individual situations, to 'share cognitions' and solve problems. The silence here can be seen as symbolic, indicating mutual engagement and support, in which each person uses their own slow time to come to decisions or conclusions, which, later, they will communicate to other members in the group. However, they are under no pressure to articulate quickly, free from what Bruneau terms the 'burden' of speech (1973, p.28). In his references to classroom practice, 'an over-structured, whispering-producing teacher' may only demonstrate a 'silencing' of thought:

> Most teachers seem much more adept at silencing or silent conditioning of students than practicing utilization of their own silences as positive instructional and /or learning tasks.(1973, p.32)

This perspective is key to this research study, as it hints at three important ideas - that silence can be conceptualised in a number of different ways in the classroom, that teachers' voices can silence thought and that teachers could learn how to use these various silences.

Silence and space for thought

The relationship between spatial context, spatial proximity and the use of slow time silence has an effect on the amount of silence that occurs. In Bruneau's discussion on silence in therapy, the therapist has to balance giving patients enough 'slow time' to work things out for themselves, against inducing a level of anxiety which would decrease the capacity to think constructively. The need for balance is borne out by more recent research into silence in therapy (Ladany et al, 2004; Hill et al, 2003) and suggests that the use of silence requires a high level of skill in the professional context. However, Bruneau suggests that patient silence in the therapeutic context

may also indicate 'limited intellectual capacities, low comprehension, or constitutional or neurotic flatness' (1973, p.36). These negative interpretations may also reflect how the silent learner is judged in the classroom - as discussed in Chapter Four of this thesis.

The notion of slow time has been adopted by different communities, many of these in the creative arts and computing rather than in academic writings. A recent compilation of contemporary writers, equates slow time with an escape from the incessant demands of what is termed 'real time'. In this instance, slow time has positive associations with the opportunity to read and think (Powers, 2004). Speed and slowness have been considered by more recent writers (Honoré, 2004; Claxton, 1998). However, it has been suggested that 'the issue of *slowness* has ... failed to gain the attention it deserves' (May and Thrift, 2001, p.19).

Socio-cultural silences

Bruneau's third category relates to socio-cultural uses of silence, where silence is assigned different value according to specific cultural contexts. He discusses how silence may be used by those in power as a means of suppression and protest by those being oppressed. He also suggests it may be used creatively by those in authority to develop autonomy and independent thinking among subordinates:

> The silence of creative authority can set up a creative force of silence which can allow dependent but potentially creative persons a chance to work hard to overcome that force. (1973, p.40)

This provides a contrast to situations where over- use of verbal language might pre-empt independent thought and impede the capacity for individual 'slow time'. He suggests that:

> Planned ambiguity ....can be a powerful tool to be used in conjunction with the management of silences by those in teaching or guidance positions. (1973, p.40)

The association of silence with ambiguity and positive risk is an important one and is echoed by the work of Claxton, where 'slowness' involves an ability to tolerate uncertainty and ambiguity and to 'let a mental process that can neither be observed or directed take its course' (1998, p.75). Of relevance to this thesis is that this complex process cannot be observed - or assessed.

More positively, silence in response to unfamiliarity may also occur in response to a creative idea which causes a movement away from established practice or perception - the 'non-obvious relationships between areas of knowledge.....shadowy, intricate or ill-defined' described by Claxton (1998, p.56).

Whereas Claxton sees this as being outside of the surveillance of the teacher, Bruneau sees it as managed by the teacher. Implicit in both is the suggestion that silence may be used to promote independence and autonomy in learners. However, Bruneau also warns that too much independence can result in isolation and vulnerability in young people, leading to silences that are 'too deep'.

Silence and metaphor

The significance of metaphor in constructing our understandings of the world has been well established (Berman and Brown, 2000; Gibbs, 1994; Lakoff, 1993). In the context of this thesis, the use of silence as a metaphor will be of relevance. Jaworksi has discussed the use of silence as a metaphor, how silences could be divided into 'states, activities and formulaic (lexicalised) categories' (Jaworski, 1993, p.167). In a later work, he extends his discussion, considering the wider implications of silence as a metaphor for communication:

> A unifying concept for tackling diverse communicative phenomena: linguistic, discoursal, literary, social, cultural, spiritual and meta-communicative. (1997, p.3)

Beginning with the notion of a 'conduit' metaphor, where language is used as a 'conveyor' of thoughts and feelings, Jaworski categorises silence variously as a 'container', an 'activity' or as a 'substance'. In this discussion, he concentrates more on discussing silence as a linguistic form, identifying metaphors *about* silence. However, Jaworski also provides a useful signal on how the concept of silence is used as a metaphor for other concepts, for example silence used as a metaphor for death (Jaworski, 1997).

In this thesis, I will build on the idea that silence acts as a metaphor for other states or activities, using Lakoff's notion of the conceptual metaphor - where one domain of experience is understood in terms of another domain of experience (Lakoff, 1993). The idea that people use one concept to equate to another concept, including the use of silence as an ontological metaphor to generate meaning about what is being experienced in that setting is of relevance to this thesis (Lakoff and Johnson, 1980).

Here ontology is concerned with the categories and relationships of being and existence. Of particular relevance is Scollon's (1985) conceptualisation of silence as a metaphor for malfunction. In his discussion of silence in American society, the human 'machine' is perceived as working effectively as long as it is making a noise; when it stops - is silent - this indicates it has ceased to function.

It must be noted that Bruneau rejects a metaphorical association between silence and another concept - solitude:

> Silence is not the same as solitude. Silence is to speech as solitude is to society and social relations. Solitude promotes longer mutual silence, but it is not silence. Solitude is simply a refrain from social relations and a preservation of privacy.
>
> (Bruneau, 1973, p. 18).

In the context of this thesis, it will be interesting to discover whether this is borne out by participants' ideas.

Boundary objects, boundary spaces

In his work on 'The Production of Space', Lefebvre describes boundaries as demarking:

> ...spaces to which access is prohibited either relatively (neighbours and friends) or absolutely (neighbours and enemies). (1991, p.193)

Inherent in his description is the negotiation of that personal and public space. The potentially close association between the three concepts - silence, time and space - is of relevance later in this thesis. Within these boundary spaces, relationships are in a constant state of flux and negotiation.

As silence is a plastic concept, and this thesis concerns how it is conceptualised and used in both everyday life and the formal learning environment, the concept of boundary is of relevance. This could encompass conceptual transitions as well as the transitions of an artefact or set of procedures which move between different environments (Bowker and Star, 1999; Star and Greisemer, 1989). The ways in which different communities interpret and use the artefacts or procedures throws light on the nature of the communities themselves. The consideration of personal and professional views of silence and the boundaries between worlds that these views may illuminate ideas of the nature of silence, and also on the socio-cultural practices of the teaching community. Here transitions across boundary spaces may be of relevance, representing the 'interesting pedagogic space' of the 'in-between area of boundary practice', where 'elements from both sides are always present' (Edwards, 2005, p.5). These elements may encompass the identities enacted in different worlds, with boundaries as relational spaces. Here the concept of personal space, usually considered in terms of incursion into physical space, may encompass mental boundaries where intrusion is experienced as invasion of privacy (Lee, 1976, p.39).

Sound and noise

In this research, I will also consider the relationship between silence and sound and there are certain theories of relevance here. Schafer's work on what he terms 'soundscapes' is a seminal and comprehensive attempt to consider our experience of the world in terms of the acoustic environment (Schafer, 1994, 1977). The research on which his book 'The Tuning of the World' (1994) was based involved both the natural and post-industrial soundscapes. This work has acted as the foundation study for the acoustic ecology movement, dealing with the impact of sound and noise on the quality

of life. In his work Schafer also considers the importance of silence, by which he means the balance of sound that will best enable concentration and focus, and will allow for appreciation and a sense of connection with the world at large. He argues for a greater awareness of sound and a greater intolerance of noise:

> Ultimately this book is about the sounds that matter. In order to reveal them, it may be necessary to rage against those that don't. (1994, p.12)

Schafer's research leads to an argument on the grand scale about the importance of 'sounds that matter'. On a more pragmatic level, the work of Dockrell and Shield (2006) on the effect of different types of noise on learning within the primary classroom suggests a complex inter-relationship on the effects of different types of noise on a range of classroom activities. Of interest to this study was the negative effect of *vocal* interference on tasks involving working memory such as reading and spelling and the interference caused by children's background 'babble' and intermittent environmental noise on information processing tasks. However research in other contexts suggests that it is the *number* of voices involved in background 'babble' that is of significance, with the paradox that the more voices (in this case over six), the less disruptive the effect to concentration in that the voices become background sound (Banbury and Berry, 2005). What was significant in the findings of both studies was the need to build in quiet spaces in order that tasks may be carried out effectively. This reminds us that there may be a positive relationship between the auditory environment and learning - we may learn through sounds as well as in spite of them. The cognitive aspects of audition provide us with information about the world and 'auditory information participates in a fundamental way in the development of knowledge' (McAdams and Bigand, 1993, p.2).

There have been various cultural studies on the socio-cultural practices in which people use personal devices to control their relationships with sound and noise. Of interest here is work on 'Walkmans' (Bull, 2004; Du Gay et al, 1997) which counteract the notion that this technology is alienating or distracting. Translated into current technology, this would be applied to 'iPods'. The studies suggest that these devices are used for 'escape' to create some personal space in crowded environments, but also as a means of 'aesthetic control' (Bauman,1993) in imposing the individual's own music on the auditory environment:

> ...an active, creative practice which enhances rather than diminishes their relationship to the external environment.
>
> (Du Gay et al 1997, p.93)

They also suggest that 'Walkmans' can provide a political space from overt manifestations of power and repression, where, for example, in China, private music provides the opportunities for a political distancing from the official public music of the Chinese state - the hegemonic 'noise' as defined by Attali (1985).

Summary

This chapter has identified the main conceptual framework which underpins this thesis - that of figured worlds. Unlike other socio-cultural theories, figured worlds takes into account the smaller-scale ongoing positionings of individuals within social worlds. Other theories which have informed this thesis were also identified - theories of silence, metaphor, boundaries, sound and noise.

Chapter Three: Multiple perspectives on silence

This chapter is intended to provide an overview of the existing writings on silence. Within the conceptual framework of this thesis, the ideas presented in these writings are potential 'cultural resources' (Holland et al, 1998, p.45) which participants might access in their own efforts to conceptualise silence. They derive from a range of disciplines and demonstrate a variety of perspectives on the subject. They also serve to highlight some of the major issues related to a study of silence.

Silence within a communicative paradigm

A number of writers, including Bruneau (1973), Saville-Troike (1985) and Jaworski (1997; 1993) have considered silence within a communicative paradigm. Saville-Troike (1985) includes silence in her integrating framework of communication, categorising communicative silences into different types. Of significance to this thesis, is the notion that silence is not just related to speech or sound, but can involve a number of different modalities. Also of relevance is her separation of 'verbalisation' and 'vocalisation' - distinct terms often subsumed into 'verbalisation'.

If silence is viewed as a communicative form in some way comparable to speech, then what is the relationship between silence and speech? And which is the 'normal' mode of communication? If the normal mode of communication is speech, then silence, defined as the lack of speech, can be seen as an abnormality - a deviation from the norm, a 'metaphor of malfunction' (Scollon, 1985). If both have equal validity as modes of communication, then can silence as well as speech be viewed as the norm?

Chapter Four will suggest that in the world of education, silence is generally viewed as deviant. However writers from other disciplines, such as socio-linguistics, have suggested otherwise. Using Bruneau's three categories - psycho-linguistic, interactional and socio-cultural - the following sections will consider how some writers have approached the subject.

Psycho-linguistic silence

Psycho-linguistic silence involves considering the relationship between silence and speech. Many writers see speech and silence as inextricably linked, but vary in their views on how this relationship is balanced:

> We should be sensitive to the thread of silence from which the tissue of speech is woven.
>
> (Merleau-Ponty, 1973, pp.45-46)

Merleau-Ponty suggests an inextricable link between speech and silence - without silence speech would be meaningless. His metaphor of the thread implies that the 'weave' of communication would be incomplete without both. In his description, speech is 'grounded' in silence and emerges from silence. In contrast, Bruneau presents psycho-linguistic silence as a *discontinuity* imposed on speech, which suggests that silence is located, but also isolated, within a 'normal' communicative environment of speech. Kurzon (1997) suggests a polarisation of speech and silence as opposites. Acknowledging the complexity of this relationship, Jaworski initially describes silence in a continuum with speech (Jaworksi, 1993) and, in a later work, as a separate, but contiguous scale (Jaworski, 1997).

Categories of psycho-linguistic silence

Saville-Troike (1985) distinguishes between two different types of communicative silence - propositional or non-propositional. If the silence is 'saying something' it can be seen as propositional, in effect a speech act without the speech. She summarises propositional silence in this way:

> Silence may be used to question, promise, deny, warn, threaten, insult, request, or command, as well as to carry out various kinds of ritual interaction. (1985, p.6)

However, non-propositional silence can be viewed as prosodic, forming part of the speech rhythm of an individual speaker and reflecting the psychological dimensions of the individual's attempt to communicate in words. A number of writers use the term 'silence' to indicate a paralinguistic interruption, including sounds devoid of lexical meaning, but still containing some communicative meaning (Jaworski, 1993). Here the notion of silence moves away from 'no sound uttered' to 'no lexical sound uttered'. In this example, silence can contain sound, but not articulated vocalisation.

Hesitations and pauses

Non-propositional silences are usually described in terms of 'hesitation' or 'pause'. Some writers use the terms interchangeably and others make a distinction between the two. Bruneau (1973) uses the notion of 'hesitation' as the overarching concept, with different types of pauses occurring as subsets. In contrast, Scollon (1985) suggests that a relatively short silence can be characterised as a linguistic pause but, depending on the length of pause, it may be termed a hesitation - a *momentary* pause briefly interrupting a flow of words.

The length of pause may also reflect the language styles culturally appropriate to particular social worlds. Although there is general agreement that the significance of a pause is linked to its length, different research gives different measures of the actual length that implies significance (Walker, 1985). Variations in 'significant' pause or hesitation length suggest that different individuals approach conversation in different ways. This may be linked to such variables as a characteristic personal style of discourse or external task requirements (Scollon, 1985). However the cultural context may also impact on how they are interpreted. For example, Scollon (1985) proposes two potential interpretations, with pauses viewed as coping mechanisms or, alternatively, as a form of disfluency. Here the latter, in particular, presents a strongly negative conceptualisation of silence.

Viewing silence as a social construct highlights how interpretations of silence are context-laden. Kurzon (1997) discriminates between 'intentional' and 'unintentional' silence, and suggests that unintentional silence is primarily related to an inability to cope in social situations. The individual may feel inhibited, may be too shy or embarrassed to admit they do not know the answer or may be stressed by a particular situation. In intentional silence, the individual chooses to remain silent for reasons of their own, for example, taking an anti- authoritarian position in defiance of an authoritarian presence; in 'unintentional' silence, the situation causes them to withdraw.

A problem with notions of intentionality and unintentionality, is that the silence of shyness and the silence of defiance may have similar outward characteristics. An observer could interpret the behaviour as intentional when it is unintentional within a

particular context. Similarly, 'shyness' is not an absolute quality; someone may be 'shy' sometimes, and not at other times. The different intentions behind what the overt behaviour presents as the *same* 'silence' will be interpreted by others as having the *same meaning* across time or across contexts. It is not difficult to imagine how an unintentional silence could become an intentional silence in the space of an hour, depending on the behaviour of other people in that context. Or how an individual might be described as shy, because of silent behaviour in one context. That individual may be assigned a fixed identity as a 'shy' person, whereas their silence may have different meanings, representing different identities in the various worlds in which they participate. For example, in the context of this thesis, the 'silent' learner - termed 'shy' in the classroom - may be extremely talkative at home. Hence it is the *relationship* between different components of the context that will affect the individual's behaviour.

Positive notions of psycho-linguistic silence

Some writers suggest positive reasons for hesitations or pauses (Chafe, 1985), for example where silence is contributing to precise articulation of thought. A distinction between a pause that indicates uncertainty and a pause which represents a deliberate and conscious act of discursive control is further explored by Jaworski (1993) who compares the difference between what are termed 'silent' and non-silent pauses. In his analysis, non-silent pauses can be seen as hesitations, whereas silent pauses can be viewed as the deliberate emphasis of ideas or arguments and also as a positive means of signalling space for response. Here the silences are both used for dramatic and semantic effect by the speaker and also as a means of extending the 'thinking' time of the listener. The relationship between silence and thinking time, echoing Bruneau's

(1973) 'slow time' - for the person controlling discursive silence or for the person on the receiving end of a communication - is an important one and will be discussed in later chapters.

Interactional silence

Bruneau defines interactional silence as pausal interruptions in communication involving others, such as conversations or debates. The distinction between psycholinguistic and interactional silence is problematic because much vocal and verbal communication occurs in interaction with others. Hence it may be difficult to distinguish between the individual/psycho-linguistic and the social/interactional. For example would a verbal communication, such as writing a letter or an email, be considered an individual or a social silence? The individual is thinking about the person with whom they are communicating and hence there are other 'voices' - those of the social world - even if that person is physically alone.

Silence within interaction has an element of 'riskiness' (Dauenhauer, 1980) which affects the way in which the interaction is experienced and viewed. This perceived risk stems from an absence of *explicit* spoken explanations for specific acts or activities which forces participants to interpret others' actions on the basis of non-vocalised evidence. Here the function of vocalisation is that of providing evidence (whether accurate or not) and reassurance for the 'interpreter' that they have interpreted the others' intentions and actions 'correctly'. However, some research has indicated that complex decisions and judgements take place at a pre-articulate level of thought and only simple decisions can be articulated fully (Dijksterhuis, 2006; Gladwell, 2005).

Hearing and listening

Silence may be interpreted as hearing or listening to someone else talking. Dauenhauer suggests that the activity of hearing or 'listening', with its connotations of concentrated attention, forms part of a common effort to achieve understanding and that the spoken word is interlinked with the pre-articulated thoughts of the participants.

> Their thoughts are not, of course, their stable property, a finished product to which they allude by means of speech. Rather the thought of each makes possible and is made possible by dialogue and by the perceptual domain with which dialogue is continuous. (1980, pp.117)

Here Dauenhauer suggests the dialogic component of inner speech (Bahktin, 1981) related to cognition as well as overt and vocalised dialogue where the thoughts of the individual are in a constant process of formation. The fairly crisp and precise notion of silence functioning as a boundary marker 'between speech units' (Philips, 1985, p.208) fails to encompass the complexity of what occurs within that silence. Jaworski, recognizing the fuzziness of the boundaries between silence and speech, suggests that silence itself acts as a boundary, which is defined in the following way:

> A boundary separates two zones of social space-time which are normal, time-bound, clear cut, central, secular, but the spatial and temporal markers which actually serve as boundaries are themselves abnormal, timeless, ambiguous, at the edge, sacred
>
> (Leach, 1976, p.35, cited, Jaworski, 1993, p.124)

Here Jaworski suggests that silence acts as the ambiguous marker of time and space occurring within and between interactions. This has echoes of Star and Greisemer's (1989) work on boundary objects, where concepts as well as artifacts mark the interface between one individual or group and another and where these boundary concepts provide an opportunity for different meanings to be explored and negotiated.

An important aspect of this is the recognition of the different spaces - physical, psychological and social - where these meanings may emerge. Although Jaworski only mentions the idea of boundaries quite briefly, this notion of silence as a boundary is an interesting one which will be revisited in later chapters, particularly when considering individual processes of positioning and re-positioning in different figured worlds.

Silence as a metaphor of malfunction

Rather than being perceived as enriching human interaction, the fuzziness and riskiness associated with silence in the social world means that it is often perceived as awkward and threatening in some way. On an interpersonal level, silence within a communicative context can be framed as deviant, with speech being conceived as the 'norm'. Scollon (1985) makes explicit and important reference to the metaphorical function *of* silence i.e. as being used to represent another separate concept. He argues that research on pausing in conversational interaction has been built on the metaphor of the machine and that studies of communication have tended to look on silence as a metaphor for the breakdown of this machine. In this case, the absence of vocalisation correlates to an absence of communication.

In writings on interactional silence, lengthy silences between couples in a relationship may be interpreted as meaning that they have nothing to say - equating with a breakdown in communication and a lack of compatibility. Kurzon's analysis of the icy interactions between Elizabeth Bennett and Mr. Darcy in Austen's 'Pride and Prejudice' provide an illustration of how silence occurs in this way (Kurzon, 1997). In

the marriage-making ballroom of 'polite' early nineteenth century society, social conventions and expected behaviours frame the way that silence is interpreted.

If vocalisation is the expected social behaviour within a particular context and there is the intention to communicate, then silence in this context must be interpreted as significant. Sifianou's work on politeness emphasises the importance of these conventional expectations. For example, where there is little social distance, it is often more appropriate to maintain silence than initiate talk (Sifianou, 1997). Although silence can communicate both polite and impolite messages, silence is neither intrinsically polite nor impolite, but is assigned negative or positive value according to the social and cultural context.

Interaction structured through silence

Previous examples in this section have positioned silence in a binary relationship to talk, where the talk structures the interaction. In contrast, Philips (1985) introduces the idea of interaction structured through silence. In Philips' analysis, the focus is on visual rather than auditory cues and the close monitoring of physical behaviour becomes the way in which individuals interact. Hence it is 'access to the *non-verbal* context' rather than the *vocalised* context i.e. what has been said before, that characterises this kind of silent interaction. This has echoes of Ingold's (2004) work on the world of the Ojibwe, where 'watching' becomes a highly sensitised sensory process.

However, Philips suggests that the ambiguity of silence makes it difficult for researchers to gather and analyse research data:

> Academic researchers who make a living in talking may, along with other white-collar workers in industrialized societies, also overemphasize the importance of interaction structured through talk... (1985, p.211)

Philips' comment on the figured world of academic research suggest a pragmatic acknowledgement of the performative functions of talk, which enable measurement and analysis - and hence academic research and writing - to take place. Hence the positive value assigned to talk and the negative value assigned to silence may imply a vested interest in results. This is of relevance to discussions on teaching and learning in later chapters.

Interactional silence and power

Economic and social factors might also lead to a privilege of talk over silence (Philips, 1985). A recent book (Cameron, 2007) has suggested the link between talk and status, where higher status speakers talk more than lower status ones in formal and public contexts. Here there is also a link between talk and gender, as men tend to occupy more high status public positions. It follows, then, that 'talk' will be a *signifier* of status in those contexts and silence an indication of lack of power. This may also be true in everyday life. For example, research on men and women giving street directions indicated that the male self-selects as the informant when being asked directions and the female remains silent (Dendrinos and Ribiera Pedro, 1997). However, in the role of supplicant i.e. the person who asks for directions, it is the woman who speaks - occupying the subordinate interactional role of information seeker and the man remains silent.

Silence as a form of discourse, in certain circumstances, may also signify status. Watts (1997) suggests that power is exercised in any verbal interaction and that silence

assumes significance at points of what he terms 'imbalance' in this interaction. Using Goffman's idea of 'self image' (Goffman, 1990), he argues that social status is defined in relation to the extent in which an individual's self image corresponds to the perceptions of other group members. On an institutional level, participants need to be in accord as to their relative status - in Holland et al's terms their 'relational identities in particular figured worlds (1998, p.127). However if there are no institutional clues, then the balance of power is affected through what is termed 'discourse status' where, for example, different responses to an order/request may change the balance of power among the participants. Here 'communicative dialogue is itself a symbolic structure' (Ellsworth, 1997, p.83). Of relevance to this research study is Watt's notion that a strategic use of silence may 'strengthen the status position from which power may be exercised' (1997, p.94) and that this may relate to the individual's values and personality.

These studies suggest that talk and silence have different status in different circumstances, and that the negotiation and understanding of that status represents a complex process of deconstructing specific communicative situations. These deconstructions do not only occur as a communicative process between the individuals involved, but are interpreted according to the socio-cultural rules which abide in specific circumstances. These will be discussed in more detail in the following section.

Socio-cultural dimensions of silence

In Bruneau's analysis, the major distinction between interactional and socio-cultural silences appears to be in the relative scale of the silences discussed and the number of

people that are involved. In the socio-cultural context, these are perceived as large scale:

> Socio-cultural silences are those related to the characteristic manner in which entire social and cultural orders refrain from speech and manipulate both psycholinguistic and interactive silence.
>
> (Bruneau, 1973, p.36)

Here silence is presented as a restraint from the cultural norm of speech.

Bruneau itemises a number of 'places of silence'. These include churches, courtrooms schools, libraries, hospitals, funereal homes, battle sites, insane asylums (sic) and prisons. He suggests that some places, and the cultural icons associated with them, help to maintain cultural norms and beliefs, and perpetuate socio-political ideologies and practices. He also suggests that silence can be a major form of rhetorical control such as in playing the national anthem and in ceremonies of respect to the dead.

Cultural norms of silence and speech

A Western cultural orientation towards talk has been highlighted by various writers coming from different cultural viewpoints - for example, the Native American, (Valentine, 1995; Philips, 1985, 1983; Basso, 1975), the Finn (Sajavaara and Lehtonen, 1997; Lehtonen and Sajavaara, 1985) and the Chinese, (Yang and Stacey, 2003). In a globalised world, where cultural identities may have significant fluidity (Eade and Allen, 1999), this is a simplistic polarisation of West and East. However, Holland et al do identify this distinction in their references to 'Western representations of the self' (1998, p.29). Using the East-West binary, cultures described as 'Eastern' contain particular religious traditions - Hinduism, Buddhism and Taoism - which, traditionally, place a high value on silence rather than talk (Dauenhauer, 1980).

Philips (1985) explores cultural bias in her discussion of interaction structured through silence rather than structured through talk in her work with the Warm Springs Indians, where much interaction occurs silently through focus on mutual physical activity, such as building or riding, rather than through vocal communication. Other writers also describe the positive value assigned by Native Americans, where it may be experienced as a time to 'make sense' of experience:

> ....It is not a time of frantic groping for thoughts and words to express thoughts.... Silence is the continuity which integrates ideas and words
>
> (Witt, cited Osborn, 1973, p.16)

Different interpretations of silence occur depending on the specific rules and norm of that culture. The conversation of Athabaskan Indians contains long switching pauses between speakers, but these pauses have been given negative attributions by those not familiar with that cultural norm (Scollon, 1985). Scollon argues that in Western society, where speed of response is valued, a slower pace of conversational exchange is perceived as negative.

In the Western context, silence signifies ignorance, anxiety or embarrassment. Scollon's metaphor of a machine, mentioned in an earlier section - if it is working, it is running; if it stops it is malfunctioning - reduces silence to a malfunction. In contrast, for the Athabaskans, silence or 'quiet' i.e. the refraining from vocalisation, represents a range of positive values:

> ...knowledge, control, cooperation, attention to others and a socially productive attitude.
>
> (Scollon, 1985, p.27)

Whereas Western culture equates participation with vocalisation, in Athabaskan culture, silent individuals are also seen as participants. Scollon suggests the power of cultural re-figuration in that, by changing the metaphor, we can change the meaning attributed:

> Changing the metaphor changes the meaning of silence (1985, p.28)

Silence is also valued in other cultures. Hirschkind suggests that where Western democracies privilege persuasive speech, Islamic culture privileges the listener (Hirschkind, 2004). Silence is an appropriate act of greeting in the Amish community (Li, 2001) and Finnish culture provides many instances of positive silence. Sajavaara and Lehtonen (1997), revisiting their earlier work on the stereotype of 'The Silent Finn' (1985), consider the reasons for this stereotype and the implications that arise in interaction and inter-cultural communication. Apart from lengthier silences, often with positive associations, typical Finnish behaviour includes 'passive information gathering' i.e. observing without saying anything. However, in their use of the word 'passive', the writers appear to adopt the same position they wish to counteract, by equating observation with passivity and talk with active communication. A notion of *active* observation would seem to make more sense in this context. Basso's influential early work on the Apache also suggests that silence involves information gathering and decision-making:

> Keeping silent among Western Apaches is a response to uncertainty and unpredictability in social relations.
>
> (Basso, 1975, p.83)

Here the silence involves a process of deciding how they will react to a new person or situation, rather than as an indication of reticence or fear. In other words, they take

time in silence to observe and to decide whether and how to interact. Both Western Apaches and Finns share a strong cultural respect for other people's privacy, and Sajavaara and Lehtonen (1997) suggest that silence can be seen as a means of allowing another person space. However, not all associations with silence in Finnish culture are positive, and silence in intercultural encounters may also be used to prevent loss of face. In this case, talk would be seen as increasing exposure and vulnerability.

Sajavaara and Lehtonen (1997) argue that concepts of silence are culturally bound. In cultures where silences are normally filled by talk, silence can be perceived to have a negative affective impact. However these interpretations may not be valid in societies where silence is equated with relaxation and enjoyment of another's company without the need to talk. In this situation 'silence is harmonious' (1997, p.274). Although this enjoyable and companionable silence can also be found in more 'talk-oriented' cultures, the difference may be in the range and scope of social situations where it may have this potential interpretation.

Of relevance to this research study is their exploration of notions of 'conceptual imperialism' in which silence is, at the best, merely tolerated. They suggest that the prevailing Western cultural stance presents talk as the 'default' mode of communication and that vocal activity is considered to be a prerequisite to social success. The term 'cultural imperialism' implies a large-scale culturally organized discourse where the notion of 'success' is predicated on the individual's ability with the spoken word. It is this discourse which frames the way that people evaluate themselves and others in different figured worlds.

Also of relevance are their comments on the ways that 'people make use of their own conceptual categories to organise their observations of the behaviour of others' (1997, p.277). Although this acknowledges the effect of personal histories and experience on the ways that individuals 'observe' aspects of the world, it fails to encompass how individuals also internalise the cultural discourse of 'others' (Holland et al, 1998). Sajavaara and Lehtonen suggest that a 'tolerance of silence' should be replaced by a 'tolerance of talk'. How this might alter the cultural constructions underpinning the figured worlds of everyday life and teaching will inform and be developed in later chapters of this research study.

Power and silencing

In socio-cultural terms, the notion of silence and silencing is used metaphorically to indicate that the voices of certain individuals, groups or communities are not allowed a 'voice' which can be 'heard' within mainstream society. Here Bakhtin's notion of 'voice' 'the social identification and valuation of cultural resources and artifacts' (Holland, 1998, p.235) is important, in that prevailing discourses - and the ways in which they shape the world - work to extend control by subordinating other languages, other discourses which might seek 'to avoid, negotiate, or subvert that control' (Vice, 1997, p.19). Kurzon (1997) calls this the 'transitivizing' of silence, where silence becomes an active verb containing an 'object' which is to be 'silenced'.

Olsen's seminal work 'Silences' (1965) played a significant part in introducing this metaphor into the vocabulary of marginalisation and has since been adopted by writers on disability, race and gender (Corker, 2004; Schultz, 2003; Morgan and Coombes, 2001, Coates, 1986). Some silencing occurs indirectly, not from overt repression, but

from an exclusion of alternative views. For example, Hafif (1997) talks about silence and gender in the Arts, where the absence of women painters leaves a silent gap in the pantheon of publicly recognised creative expression. She suggests that this silence extends to the spectator. The women who view paintings on display at national galleries may remain unaware that they are being excluded from representation in this area of cultural significance.

Music is another cultural arena where silent exclusion may occur; however it may also provide a form of expression for politically-silenced groups (Edgar, 1997). This may be in terms of stabilisation and integration within a particular cultural group and in the location of that group's identity within society as a whole. Music may also provide a voice for the oppressed group in situations where speech could be repressed:

> Voice is thus given to that which has previously been silenced.
> (Edgar, 1997, p.317)

Holland et al's anthropological research into the songs sung by the Tij women in Nepal exemplifies how music can provide a political 'voice'. These songs were used by women, at least temporarily, to subvert the control of the prevailing male-dominated culture, by voicing the possibilities of a new imagined world 'a figured world that rearranged gender relations' (Holland et al, 1998, p.254).

In the context of this thesis, the negative use of the term 'silence' (indicating socio-cultural-political repression, where individuals or groups are excluded from full participation) and the positive use of the term 'voice' (indicating a notion of being taken into account, being listened to, playing a part) could, itself, be seen as a culturally determined means of expressing social participation (Hargreaves, 1997).

This discourse defines participation through 'voice' i.e. oral expression, and non-participation, through exclusion, as 'silence'.

Aesthetics and silence

Silence is frequently interpreted in a fairly restricted communicative sense - in its relation to speech. This section broadens the communicative scope of the concept and provides a brief overview of the multi-modal associations of silence.

Silence and music

Silence in music links a notion of sound as a medium of communication (speaking) with sound as aesthetic expression (music), and there are a number of parallels between the two forms. Edgar (1997) explores the possible relationships between silence and sound, considering how silence functions and is understood within the context of music.

He discusses three broad categories of musical silence - temporal (focusing attention on what will happen next), spatial (something left out that was expected to be there) and gestural (forming part of the rhythm of the music). These three types of musical silence have their parallels in the communicative relationship between silence and speech. But the silence is not absolute, but relational:

> ....music can be seen as the result of the paring away (or silencing) of all but a few possible sounds, so that that sounds that remain have their meaning due to the silences that have been created about them.
>
> (Edgar, 1997, p.314)

In the figured world of musical performance, people listening to a particular type of music will have culturally informed expectations of the registers available and

equally, will have expectations of certain registers to be silent. The confounding of these expectations may cause the listener to constitute what they are hearing as 'not music'. Hence listening itself is a form of cultural practice:

> Active listening is not simply psychological space....it conjures up historical, cultural or social situations in which listening surfaces as a new device for creating new symbols and word senses.
>
> (Carter, 2004, p.45)

Cage's famous work '4:33' uses the natural sounds emerging as a result of the pianist's silence to mediate the audience's experience. He challenges the presuppositions and values of the dominant culture as to what constitutes music and what constitutes silence, providing an 'imagined possibility' (Holland et al, 1998) that 'music' could be configured in a different way. In his analysis, Edgar argues that a marginalisation of silence indicates a 'restrictive cultural conservatism'(1997, p.315), where audiences experience music through the filter of 'culturally specific presuppositions' (1997, p.317).

In this section, it can be seen that previous ideas in the chapter, on the relationship between silence and speech, silence and power, translate into a different cultural medium, that of music. However, so far, there remains the conventional relationship between silence and sound. The next section translates conceptions of silence into altogether different modalities, in particular the visual arts.

Visual silence

Hafif (1997) locates visual silence within a purely artistic, non-verbal frame of reference. Silence in painting refers to the silence of the artist as they paint and also to the 'silence' of the colours they use - for example, contrasting a 'loud' red painting

with a 'silent' white one. Silence in painting is the opposite of 'clutter' and certain plain paintings, such as Barnett Newman's white painting, can have a strong psychological effect in the emotions that are engendered as a result. Hafif suggests that feelings of frustration, weariness and petulance - mediated by the use of 'noisy' colours - can be replaced by feelings of 'well-being, generosity, expression and openness', mediated by the 'silence' of white (1997, p.349). Here the Vygotskian notions of 'tool' and 'sign', of high importance to this thesis, can be applied. Silence acts as a 'tool' used by the artist to convey a particular psychological effect, but also acts as a 'sign' by which their psychological experience and their relationship with the painting is internalised by the audience.

In their writings on art, both Sontag (1966) and Kwiatkowska (1997) invoke complex, and relations between the individual and the socio-cultural world. For example, Sontag's influential work 'The Aesthetics of Silence', represents silence as a means for the artist to sever contact with demands of the world which threaten to distort their work. She also uses silence to represent a level of ambiguity and difficulty within the work itself, which initially, at least, may cause negative reactions in the audience who struggle to understand and, like Edgar's (1997) concert audience, resent the unfamiliar.

Kwiatkowska (1997) also equates visual silence with cultural expectations which frame what is and is not 'seen'- not seeing what we *expect* to see or to happen. As a result of being filtered through our cultural preconceptions, something that confounds

these expectations will not 'exist' - it will be 'silenced'. Of relevance to later chapters is the question of what is culturally *seen* to exist in the formal learning environment.

Kwiatkowska also includes smell, taste and touch in her discussion on silence. In the latter case, she suggests that the absence of positive tactile contact between parent and child can be constituted as a silence.

This section has introduced multi-sensory and multi-perceptual conceptions of silence which broaden the scope of the subject - shifting silence from its relation to words and sounds, to other senses and to physical space. It also expands on the ideas from previous sections, relating perceptions of silence to its relationship with social and cultural worlds.

Silence and the spiritual world

Silence is also conceptualized in its relationship with the spiritual world. In art, Hafif (1997) emphasises the spiritual dimensions:

> ...for in the spiritual is found a quiet, a respect, a concentration which allows for centredness rather than dispersion. Painting can provide an opportunity to be alone, to shut out the chatter of the world, to go inside and rest - but with an open restfulness which allows the energy of the world to flow through peacefully and restoratively. (1997, p.348)

Her description relates to an experience of 'wholeness', a sense of belonging to the world. Here the world 'flows through' the individual, not as a source of strain or conflict, but as something of which they are an integral part and which nourishes them. This is reminiscent of Ingold's (2004) description of the Ojibwe's relationship

with nature and also of various writings on the role of silence in organised religion. It provides another example of how the concept of silence translates across different disciplines and different cultural worlds. Bauman's (1983) work on silence in the Quaker religion is one illustration of this, where he considers the same issue discussed at the beginning of the chapter - the relationship between speech and silence:

> Silence is both antecedent to speaking in worship and the end of speaking in worship; silence precedes speaking, is the ground of speaking, and is the consequence of speaking.
>
> (Bauman, 1983, p.126)

Bauman's statement also contains the notion that silence expresses emotions or thoughts which are too profound or extreme for words.

Another example of conceptual translation is in Hoyland's (1948) discussion of the relationship between silence, sound and noise in religious worship. In the notion that silence is never absolute but sound is always present, he predates both Cage (1973, 1961) - from the cultural world of music, and Schafer (1994, 1977) - from the cultural world of sound and acoustics:

> Silent prayer is never truly silent, it is full of noises remembered.
>
> (Hoyland, 1948, p.3)

Hoyland also suggests that the mind becomes overcrowded with thoughts and feelings producing cognitive and affective 'noise' interfering with concentration. It is only when this interior dialogue ceases that the mind can experience full spiritual silence. The notion of silencing the 'inner chatter' has been used by Hafif in her discussion on art and echoes religious expressions on processes of communion with God. However, it could also be of relevance to teaching and learning when considering the need for

high levels of focus and concentration on learning. The work of Szuchewycz (1997) on Charismatic religion provides another example of how ideas of silence in one context may be useful cultural resources for considering teaching and learning.

In the figured world of religion, silence indicates a set of collective cultural understandings on its signification of 'reverence, awe and respect' (Szuchewycz, 1997, p.239). In Charismatic group meetings, silence may have a preparatory function, in which individuals decide whether to speak, and, if so, what to say. The same may occur in a classroom. In Charismatic meetings, when a silence seems 'too long' or 'dead', usually the leader intervenes to end it. The role of the religious leader in this circumstance and a teacher in a classroom in comparable circumstance would have similarities. The difference is that the Charismatic religion values individuals who possess a special sensitivity and skill in the interpretation of silence. In contrast - a teacher's sensitivity to different types of silence, a concept narrowly interpreted within the educational context - is not a culturally - valued teaching skill.

Ontological significance of silence

The ontological significance of silence has its roots in fundamental philosophical processes in which the human being attempts to uncover their relationship with the world. It is the process of uncovering people's relationship with 'Being' that forms the basis of philosophy and which forms the final perspective on silence covered in this chapter. Picard suggests that silence provides the context for existence:

> Man does not put silence to the test, silence puts man to the test.
>
> (Picard, 1952, p.1)

Here silence is greater than the mere human, it represents everything that is not human, and that it is through confronting silence that human beings discover who they are. The individual is in constant interaction with all aspects of the world:

> I am not simply subjected to the world. Rather the world is a kind of dialogue with me.
>
> (Dauenhauer, 1980, p.118)

In this dialogue, silence is 'based in the tensions and interplay between human beings and the world' (1980, p.174). The relational nature of silence is an important notion which later chapters of the thesis will explore. However, Dauenhauer's has ambitious and all-embracing claims for his work where he seeks to get to the ontological 'essence' of silence, which he claims:

> ...can account for man, the world, and the connection between them. (1980, p.175)

Interestingly, although Jaworski (1993) takes a socio-pragmatic approach and explicitly rejects 'essentialism', whereas Dauenhauer takes an ontological and essentialist stance, both authors reach some common conclusions. Silence cannot be tied down - it is essentially an elusive concept; it is inherently ambiguous and non-determinate; it is not in an oppositional, but a complementary relationship with discourse; it is meaningful and active rather than 'absent' and passive.

Summary

This chapter has considered a range of different perspectives on silence and illustrates the richness and multi-modal nature of the subject. It identified how silence changed its meaning according to the context in which it occurred and also how cultural norms could shape how silence was viewed - whether positively or negatively - within

different social worlds. Bearing in mind the variety of perspectives possible, the next chapter focuses on how silence is viewed in the figured world of teaching and learning.

Chapter Four: Talk and silence in the figured world of education

In the previous chapter different aspects of silence were identified - communicative, aesthetic and ontological - and these suggested that judgements on the value of different silences were culture-laden. This chapter will focus on the ways that silences are interpreted within the figured world of education. My argument will be that this world is culturally biased towards the overt and measurable use of talk and that, following from this, the ways that different types of silence are viewed and understood are also subject to this cultural bias.

In the 'cultural world' of education, there is a particular interpretation of what it means to be a learner, what typical learners are like and what kind of activities occur when people learn in a formal learning environment. Certain artefacts, such as schemes of work and lesson plans, with defined learning outcomes, observable shifts in activity and identified forms of assessment, form the ways in which processes of learning are conceived and lessons are delivered. These cultural understandings about learning differ from those in other figured worlds. By engaging in or avoiding certain behaviours, both teachers and learners position themselves in relation to that world:

> Thinking, speaking, gesturing, cultural exchange are forms of social as well as cultural work. When we do these things we not only send messages (to ourselves and others) but also place 'ourselves' in social fields, in degrees of relation to - affiliation with, opposition to, and distance from - identifiable others.
>
> (Holland et al, 1998, p.271)

Teachers and learners who 'interact' and students who 'participate' display *valued* characteristics within the figured world of formal education, but it is important to remember that 'thinking, speaking' and 'gesturing' are culturally interpreted social practices and, as a consequence, notions of interaction and participation will also be subject to particular cultural framings.

Bias towards talk in the formal learning environment

Formal learning settings are sites of mutually negotiated meanings to which all participants bring preconceived expectations of what will occur and, as such are culturally located. Here the teacher is in a formal position of power and makes decisions to initiate or intervene in classroom situations (Crossley, 2005; Delpit, 1997). This function relates to teachers in schools (Delamont, 1983) and in post-compulsory contexts, such as higher education (Light and Cox, 2001; Chalmers and Fuller, 2000; Prosser and Trigwell, 1999; Horgan, 1999), further education (Curzon, 2004; Lea et al, 2003; Davies and Tedder, 2003) or adult education (Rogers, 2002; Tight, 1996; Jarvis, 1995; Salisbury and Murcott, 1992). Delamont suggests the teacher attempts to impose their own meaning on the situation in order to achieve control. This control may be disciplinary or it may be epistemological, in that it is the teacher's interpretation of knowledge that is presented to the students.

Traditionally, the teacher imposes a meaning and structure on the learning environment by dominating the talk within this setting, selecting topics, providing explications and asking the majority of the questions (Stubbs, 1975). Here 'the teacher is in the class to instruct' (Brophy and Good, 1974, p.346), and to control communication (Hall and Hall, 1988). Delamont argues that this perception of the role

of the teacher is so integral to our notions of teaching, that teaching is correlated with talking. She challenges the reader:

> If you doubt this, try to imagine a silent teacher.
>
> (Delamont, 1983, p.115)

In the conventions of this figured world, the teacher talks and the learner talks when required. In developing her argument, Delamont criticises Flander's influential research on classroom interaction which places an over-riding emphasis on talk (Flanders, 1970). She highlights the Western cultural bias towards talk, suggesting that Flanders:

> ...merely shares with other people in Western Society that teaching and talking are synonymous.
>
> (Delamont, 1983, p.119)

Here Delamont suggests an internalisation of the values placed on talk, so that the relationship between teaching, learning and talking becomes 'common sense' and taken-for-granted by those participants, including researchers, within the figured world of education. This may be the case whether it is the teacher or the learners who talk. She also argues that researchers in education fail to challenge this preconception, but instead 'they build their systems around it' (1983, p.119). Hence researchers themselves construct classroom enquiry round 'talk' - a measurable and recordable activity. (MacKinnon, 1999).

Research has indicated that the majority of the talking in formal learning settings is done by the teacher. Rowe's research on the balance of teacher and learner talk in the classroom identified that, in a classroom when someone is talking, two thirds of that talking is done by the teacher (Rowe, 1974). Although Rowe's work and other related

studies suggest that longer pause times by the teacher encourage students to talk more (Hall and Hall, 1988), the balance between teacher and learner talk appears to have remained fairly constant in more recent studies. For example, Tsui (1995) suggests that student talk accounts for an average of less than 30% of the talk in teacher-fronted classrooms. A significant implication here may be that in less traditionally configured classrooms the proportion of teacher talk to learner talk changes to incorporate more talk from the learners. However, it is still the teacher who has the culturally awarded right to lead and manage the talking environment (Cazden, 2001, Jaworski and Sachdev,1998). Teachers may take on a metacommunicative role, commenting on the perceived strengths and weaknesses of different types of talking activities which are taking place. Green and Weade (1985) locate teacher's power in classroom discourse where they convey 'meta-messages' about who can talk, when, where, what about, to whom and in what ways. In this sense, teachers are teaching learners 'how to talk' in the classroom.

The majority of more recent writings on education maintain and extend the notion of the primacy of talk within the formal learning setting (Mercer, 1995; Edwards and Mercer, 1987). The advertisement for a book on promoting talk in the classroom (Sage, 2000) stated 'Get talking for successful learning!' Other writers have contrasted 'passive listening' with 'active' learning - characterised by 'verbalising, by talking, by discussing and arguing' (Cohen et al, 1996, p.245).

Of significance to this research study is the frequent association of listening with passivity and lack of student involvement and the association of learning, and thinking with the public *articulation* of thought. This represents an epistemology where

knowledge is mutually constructed, and where talk rather than any other medium aids this construction (Mercer, 1995). It is also through the activity of talking that classroom relations are described and defined:

> ...Teachers do not always maintain the stance and *voice* of authority, and there are often more student-student *exchanges*, even when the teacher leads the *discussion.*
>
> (Cazden, 2001, p.109)

My italicising here highlights the way in which implicit assumptions about talking frame analyses of classroom practice even when talk is not explicitly mentioned. In observations of classroom practice, the proformas used by the observer also incorporate an implicit bias towards talk, with value placed on clear communication of aims and objectives, clarity of presentation, question and answer techniques (Fry et al, 1999).

Group work and the social functions of talk

In contemporary education practice, didactic approaches to teaching are often replaced by more learner-centred methods such as group work. In texts for training teachers in the post-sixteen sector (Petty, 2004, Huddlestone and Unwin, 1997), 'group work' - with the implicit assumption that this involves students talking to one another - is advocated in almost evangelistic terms:

> Think of an activity you really enjoy, and I will wager it either *requires* other people or would be made more enjoyable by involving them.
>
> (Petty, 2004, p.18)

This is echoed by texts for HE teachers, where 'Group learning has never been so important as it is now' (Race, 2000, p.viii). In spite of this, there has been some

backlash against the overuse of group work and discussion, used 'uncritically' in educational settings (Elwyn et al, 2001).

In the discussion above, the enthusiastic views on group work and talking are predicated on a number of assumptions i.e. that learning is essentially a social experience, that group learning is an enjoyable experience and that people learn better in groups. But 'communicative dialogue' in the classroom positions learners in culturally-defined ways, drawing them into a particular structure of relations. Ellsworth (1997) deconstructs this notion in her question 'So who does the dialogue think I am?' which has the answer that it assumes she is 'a solitary subject who wants to be a social subject' (1997, p.83). Hence, she argues that communicative dialogue sets to transcend individual privacy.

In writings on the benefits of group work in education, the notion of 'social' has come to be used by many educators in the simplistic sense of being with other people i.e. being 'sociable'. The conflation of 'social' with 'sociable' leads to a misunderstanding of the more sustainable and complex perspective that all learning is inherently social i.e. that all individuals are socially and culturally bound and their dispositions result from a complex interplay of personal lived experienced and the socio-cultural and historical context in which they exist. The perspective that group learning is enjoyable and the *best* way of learning seems an over-generalisation in the light of the many writings and research on differences between learners, such as Gardner's work on multiple intelligences (Gardner, 1993).

Strong advocates of group work appear to adopt three major positions. Firstly, there are those who believe in education as a means of developing communal values and community where group activity is seen as a means of developing shared strategies for learning and for overcoming problems (Huddlestone and Unwin, 1997; Minton, 1991*)*. Talking within the classroom can also act as a 'training ground' for democracy, where people learn the skills to interact sympathetically and respectfully with one another. (Brookfield and Preskill, 1999). However, these can be undermined by those who talk too much (Shuttleworth, 1990). Secondly, there are those who advocate the effectiveness of learning from others as opposed to learning individually, drawing on Vygotsky's ideas of social learning and the relationship of thought and language (Mercer and Wegerif, 2004; Mercer, 1995; Bandura, 1977; Bruner, 1966). These argue that talking helps to clarify and refine ideas and understandings. However, only Bandura advocates the importance of learning through observing others, as well as the importance of talk.

The link between talking and thinking, which Vygotsky (1986) suggests occurs in childhood development, is favoured by educationalists who marginalise his notions on the 'inner speech' which develops with maturity. There may be implications here about the way that thinking itself is delineated, in that talking and listening to talk are viewed as 'linear' processes, in contrast to reading which is 'non-linear (Erickson, 2004). If learning, thinking and talking are inextricably and often unquestioningly connected, ignoring other equally valid modes of learning and the ways in which vocalisation becomes inner verbalisation, then capacities for thinking in different ways may also be constrained.

Finally, there are those who view education as a means of operating within a specific political and economic frame whereby education and the perceived needs of the economy are inextricably linked (Ball, 2004; Apple, 1993). These systemic constraints determine 'the parameters of what is negotiable and meaningful' (Apple, 1993, p.140) and drive particular postulations and interpretations of social behaviour and classroom activity. Whereas some writers will connect group work to the development of skills for democratic participation (Bligh, 2000; Brookfield and Peskill, 1999,). Race (2000) links the benefits of group work with employability, providing useful employment skills and good evidence for a curriculum vitae. In this example, talk operates within technicist parameters and is geared to specific economic goals. Cameron (2000) in her book 'Good to Talk?' presents a persuasive argument for the ways in which the teaching of 'communication skills' is co-opted to serve particular narrow interpretations of empowerment and skill. Operating within these constraints, education fails to encompass a whole range of different types of talk that are genuinely empowering or creative.

Teachers' own 'communication skills' are also framed in particular ways. One of the most commonly cited texts for teacher training in the post-compulsory sector, (Rees and Walker, 2007), frames the teaching competences related to 'effective communicative skills' in a way that seems to imply that talking or not talking can be equally valuable. However, when considering the exemplars within the chapter, the bias towards teacher talk becomes more evident with an emphasis on 'techniques of good talking'. It is significant that, where there is an example of the teacher listening to the students, this is in relation to students' questions and explanations related to the topic initiated by the teacher.

Silence in the formal learning setting

For learners and teachers in different educational contexts, talking and learning are closely interlinked and the ability to talk well - an observable and measurable activity - is highly valued. Jaworski and Sachdev (1998) explored the content of teachers' references for students applying to university. They found that volubility, articulateness and general eagerness to talk were considered to be desirable characteristics, whereas a lack of talking or apparent reluctance to talk, even when academic performance was good, was perceived negatively. Within the formal learning setting, learner silence is often problematised and in need of teacher intervention. Silence is mainly seen as positive when it signifies students' compliance with the rules of discipline which determine the parameters of acceptable behaviour within that context. Here the teacher's power is represented by their right to silence their pupils and pupils have no automatic right to silence.

This view seems to occur across both compulsory and post-compulsory education sectors. For example, work on silence and emotional displays in the school classroom presents teachers' silence as a mechanism for control and pupils' silence mainly as avoidance of work or sulking (Gilmore, 1985). A study on classroom interaction in higher education seeks to *explain* the reasons why certain students are not talking, with the implication that their apparent non-participation represents an undesirable situation (Fassinger, 1995).

The discourse of teaching places emphasis on participation, activity and interaction. However these are culturally loaded terms, in the way that participation is framed and characterised through the use of talk. Li (2001) identifies this bias, suggesting that

when participation in the group is a criterion for evaluation of student performance, the talking student is favoured. In this context, silent, even if active, listening is equated with non-participation. This suggests a view of activity as overt and observable behaviour, where 'active' learning involves 'doing' something - talking, moving around, carrying out in a practical task. However, as Li suggests, this causes a problem when considering covert behaviours such as listening and, indeed, thinking, in the classroom context, where the observer is likely to construe these as passive rather than active behaviours.

The problems associated with notions of participation and activity also occur when we consider the term 'interaction'. Research studies of classroom interaction tend to provide records of the talking that takes place between people, where the notion of 'getting the students to interact with one another' usually implies vocalisation. However, MacKinnon identifies the cultural framing that this view of silence implies and suggests why talk may have such high value placed upon it for empirical research observations in formal learning environments. She argues that talking provides *evidence* - recoverable and assessable data - which is relatively easy for the researcher to analyse and interpret (MacKinnon, 1999). This argument has equal validity when applied to inspections of teaching; teacher-talk, and learner-talk provide *evidence* of classroom activity. Conversely, less overt, but important pedagogical processes, including learners' thoughts and feelings, are difficult to observe (Tsui, 1998).

It is useful here to remember that there are other perspectives on social interaction which include the interaction of the learner with different aspects of the context and the environment. Here the silent listener 'where listening surfaces as a new device for

creating new symbols and word senses' (Carter, 2004, p.45) plays a part in the interaction. The notion of figured worlds illustrates the constant process of relational positioning in different forms that takes place on an ongoing basis between participants within a social world. Listening here allows the person time to create their own understanding, rather than articulating partially formed understandings which may cause premature and unhelpful relational positionings. However, in contrast to listening for understanding - in what might be considered genuine, but silent, interaction - the teacher may engage in 'pretend listening' (Robinson, 1994, p.142) which only seeks to hear the 'right' answer.

Within the educational context, a broader notion of interaction is suggested by Cropley (2003) in his discussion of creativity in learning, whereby the environment includes the resources available, both human and material. Hence interaction can be with a written text or involve an act of writing, drawing or painting. Interaction is also a term commonly used in relation to computers, where the learner interacts with an electronic environment, not only verbally, but through kinaesthetics and images as well (Preece, 1994).

Rogers (2002), in his writing on adult learning, identifies a number of methods which involve interaction with resources rather than direct human contact. He gives examples of interaction in a music appreciation class, which involves students in writing their own programme notes, or record sleeve notes or reviews of particular recordings. Here the interaction is with the material, resulting in verbalisation. He implies that this is a deeper form of interaction than the more general educational bias towards vocalisation, described - rather disparagingly - in terms of:

> ...discussion - so ubiquitous in adult learning programmes.
> (Rogers, 2002, p.223)

Rogers criticises the indiscriminate use of face-to-face vocalised interaction, instead of the range of interactions available to teacher and learner. As these examples suggest, by encompassing notions of non-vocalised, rather than vocalised interaction, we can consider silence in the classroom in a different and more positive way.

Teachers' unease with silence

The unease with silence may be as much to do with the teacher as the learner. In her book devoted to a consideration of the 'quiet child', Collins devotes a significant amount of time to express the unease she experiences through having a child in class who does not talk (Collins, 1996). Here, her personal discomfort appears to have internalised a broader set of cultural discourses and practices within which teaching is framed and which view silence as 'unsettling' behaviour. Silence in situations where speech may be expected is frequently associated with timidity, embarrassment, fear and neurosis (Saville-Troike, 1985) and through this framing becomes a pathology which needs to be cured by remedial action on the part of the teacher. Hence in the formal environment, if vocalisation is established as the norm, silence is interpreted negatively. Atherton (2005) calls the silence of 'not-talking' a 'conspiracy of silence', which students use to indicate, boredom, loss of motivation or dependency. Hirschy and Wilson (2002) again subscribe to what appears to be the socio-cultural norm, by equating participation with talk. Once again the exemplars of student silence are negative:

> Students may be frustrated with domineering peers, fear appearing stupid, have low confidence levels, be shy, arrive unprepared, experience uncomfortable feelings about the topic, be sleep deprived, not understand the material in the manner it was presented, perceive that the professor does not really want discussion, or feel anxiety about being singled out as a model member of the group.
>
> (Hirschy and Wilson, 2002, p.93-94)

Gender differences can also affect vocal interaction. In Fassinger's study (1995) she concludes that the emotional climate affects the level of female student participation. Drudy and Chathain (2002) refer to a number of research studies which support this view and report that in their study that teachers appeared to create different classroom climates for girls and boys. In their study, the student teachers involved reported negatively on girls' silences, using descriptions like 'shy', 'reserved', quieter', 'not willing to become involved', 'inhibited' and 'less confident'.

However, there may be more complex and less negative interpretations possible. Boler (2001) suggests three possible reasons why students are silent in class - they may be shy, they may be resistant to the dominant discourse within that setting or they may be involved in a reflective and engaged silence. The latter kind of silence may express a number of different silent activities - listening and trying to understand what is being said or thinking and making connections to existing knowledge are two examples of these. Students' silences may be interpreted by the teacher using a variety of means - through observation of the body language of the individual, their writing and talking to them one to one, although the body language from different cultures may indicate different messages to the teacher.

Writings on silence and pedagogy

In comparison to studies on talk and pedagogy, relatively few writings on silence and pedagogy are based on first hand research. A significant exception to this has been the research of Jaworski and Sachdev (1998) working from the premise that in most cases, talk will be the 'unmarked' (dominant) underlying linguistic form for teachers, whereas silence will be the unmarked form for pupils. From their study, involving pupils from rural, inner city and suburban secondary schools, silence was viewed negatively, associated with conflict or breakdown in communication. But it was also given positive value, especially by rural and inner city students. The writers suggested two possible reasons for this. Firstly, for rural pupils, silence was familiar to them, being compatible with the 'tranquil' rural environment, whereas for inner city pupils, it provided a welcome respite from the environmental noise of the inner city. Secondly, that the working class composition of both rural and inner city schools, meant that pupil silence could be used 'as a means of controlling the teacher' (p.285) to redress the unequal power balance between teacher and students. In rural schools, teachers tended to use silence for facilitative reasons, whereas in inner city schools they tended to use silence more for control. When teachers did use silence as a facilitating device, it could enable students to 'gain access, organise and absorb new material' (p.286).

In their research study, silence was considered as a linguistic form equated to the absence of talk, although the writers did suggest that this could include absence of 'relevant' talk. In the light of Jaworski's important work (1993, 1997) on multi-disciplinary and multi-modal aspects of silence, it would have been interesting to find

out if pupils all interpreted silence in this way. Of particular significance was the writers' mention of the relationship between silence and learning, rather than teaching.

In addition, a small-scale piece of research is also of interest. MacKinnon (1999) conducted a study of a group of first year undergraduates in order to discover how individual students assess their own silences and the silences of peers. Her conclusions highlighted that silence is used in Western cultures as a means of defining social space and that within a classroom environment, silence is equated with an absence of student talk. Students did not just keep silent so as not to appear foolish; they also kept silent so as not to appear too clever in front of their peers. Silence was sometimes equated with lack of confidence, but not always. There was a clear distinction between silence in lectures - teacher talks, students silent and tutorials, where students were expected to talk.

Much of the writing on silence and teaching is either philosophical or based on personal musings rather than being based on research. The work of Zembylas and Michaelides (2004), is fairly representative of this genre of educational philosophy. They explore different silences in pedagogy and the value of silence in educational practice and consider some important questions about silence and teaching, including its ambiguity.

They argue that educators rarely think of using silence creatively and point out that talk is commonly seen as the predominate mode, with silence as marginal or deficient. The authors also consider silence outside the communicative paradigm and attempt to consider the more abstruse type of silence - how silence creates a meaningful space as

a 'way of being' in relation to others. The link between silence and consciousness is also mentioned by Caranfa (2004):

> ...students become more conscious of themselves in relation to the world of silence with which their lives become unified. (2004, p.227)

Both Zembylas et al and Caranfa adopt a philosophical approach to the subject and hint at the more abstract and ontological aspect of silence. At the other end of the spectrum, there are writings based purely on personal experience in teaching.

In his weblog about teaching, Louis Schmier, Professor at Valdosta State University in America, provides an example of this type. He describes how he has grown to appreciate silence, from having feared and hated it in class:

> I was controlled by it. It was my most dreaded enemy. I couldn't tolerate it. I once worked hard to avoid it at almost all cost......Sound fed a deep-seated unrecognized need to be seen, to be needed, to feel important. (1995, p.1 of 5)

The 'sound' he refers to here is, of course, the sound of the human voice. For Schmier his need to talk as a teacher was a manifestation of ego, as opposed to a mechanism for helping learning - by teachers refraining from talk and allowing silence, students may learn more.

There have been few pedagogical approaches derived from a consideration of silence. Probably the most famous is 'The Silent Way' (Gattegno, 1976) - a method of language teaching where the teacher is mostly silent and uses pointing rods and charts as the main teaching tools. Here silence is used to prompt students to speak and also to create space for them to increase their awareness of themselves as learners. Similarly it gives the teacher space to observe and become aware of how they are acting and

feeling - giving a capacity for 'reflection-in action' (Schön, 1983). Patten (1997) also gives an interesting account of attempting to develop a curriculum *about* silence in a programme for first year students entering an American University. As with Gattegno's approach, self-awareness formed a key part of the learning, where students:

> ....became students of themselves and how they understood the world.
> (Patten, 1997, p.370)

In Patten's account, the programme was received enthusiastically, with students engaging in the ideas presented at both intellectual and emotional levels. However, this quote also implies a relationship between this kind of learning and the formation of identity.

Different cultural views on silence in teaching and learning

Zembylas and Michaeledes (2004) refer to the Western cultural bias which favours talk over silence and suggest that, in the formal learning environment, students internalise the ideological bias which dichotomises speech and silence:

> Their bifurcation in the modern West is an expression of culturally specific social, ethical and political views about the place of silence. (2004, p.201)

In writing about perceptions of other cultures, it is important to admit the danger of over-generalisation about particular cultural characteristics. If we use 'figured worlds' as a conceptual model, any cultural environment will contain aspects of affiliation, distancing and improvisations on the part of the individual actors involved. However, by using research about different cultural understandings of silence in teaching and

learning, this does provide a means of 'making the familiar strange' and highlighting certain cultural assumptions prevailing in the current educational context.

For example, Tharp and Yamauchi (1994) consider interaction in Native American classrooms and in classrooms where Native Americans are mixed with other Americans. Their research supports some of the general points made in Chapter Three about the preference for longer 'wait time' after a question, in native American culture. It also supports the suggestions made by Jaworski and Sachdev (1998) on how students who feel disempowered - through class or culture - may use silence as a protest. In this case withdrawal from talk signifies a protest against different cultural values - the 'foreign *participation* culture' being imposed within the classroom.

An important aspect of Tharp and Yamauchi's argument is their distinction between the teacher's role in 'Western' and in Athabaskan culture. In Western culture, they suggest the teacher is like a 'switchboard operator' - 'switching on and connecting' different voices (and pulling the 'plug' when necessary). However, Athabaskan teachers spend more time listening and less time talking. Hence they are likened to 'jazz band conductors' who only provide direction and support where necessary, and feel no obligation to 'perform'. The writers present the possibility of a different approach to silence in the classroom. For example, they argue that in contrast to European-American children where speech is the culturally privileged medium, Native American children may learn better by silently observing - a way of learning much more natural to them in their everyday lives. They also suggest a cultural bias towards thinking, in that schools have a tendency to favour verbal rather than visual

symbolic thinking. They suggest that Native American children tend to think more visually and holistically, rather than verbally and linearly.

Silence and thinking

While educational discourse awards considerable theoretical attention to critical reflection and creativity, the working reality of everyday life seldom affords the spaces for silence that are needed. Dawson (2003) suggests that the 'deep silence' fostered by meditation is a necessary requirement for deep thought and self knowledge. She links these processes to the enhancement of intellectual and creative activity. She is careful to avoid linking the meditative act to any 'mystical' calm, but instead characterises it as a means of feeling more 'expanded' where:

> ...the thought and attention required for careful reading and writing might have a bit more space to grow. (2003, p.35)

In this context, she discusses Heidegger's notion of thought which is enigmatic, elusive and mysterious, requiring time, patience, space and silence to develop beyond the linear and simplistic. Dawson links this to the notion of creativity, which she argues needs quiet time and a sense of space in order to flourish and be afforded complete attention. She suggests that the busy, pressurised environments of educational institutions are counter-productive in their capacity to engender deep and complex thinking and creativity.

Silence, silencing and power in the classroom

Schultz (2003) discusses silence within a discourse of power and control of classroom space, where students are not encouraged or allowed to voice their own thoughts and

ideas. She presents these processes of listening in two main ways - listening for silence and listening for acts of silencing:

> Listening for silence includes listening for missing conversations and overlooked perspectives, and also listening for the moments when students are actively silenced by individuals and institutions.
>
> (Schultz, 2003, p.109)

This listening is not purely aural, but also visual in that teachers need to be actively and minutely aware of what is happening in the classroom. In Schulz's analysis, this awareness is focussed on issues of dominance, where 'silencing signifies a terror of words, a fear of talk' (Fine, 1994, p.32). However of relevance to this thesis is the notion of teacher as 'listener' rather than 'performer'.

Schulz and Fine both discuss silencing within a frame of white middle class 'voice' and Black and Latino 'silences', which represent disaffection and high drop out rates from the educational system. These echo Freire's notion of the 'culture of silence' related to oppressed groups (Freire and Macedo, 1995). Schultz discusses silencing at the institutional level, silencing by peers and silencing by teachers, and her research indicates this may take place in both formal and informal spaces within the institution. She argues that is not always the quiet students who are silenced; it may be the articulate, but critical, members of a group. On a structural level, this may mean that those who challenge may be excluded from leadership positions, by the group themselves, or by the institution which requires a more socially acceptable and integrated type of performance.

Barnes (1992) describes different ways that teachers silence student talk - by not responding to what the student says, by not responding if they consider the vocabulary

to be at fault or the grammar to be at fault i.e. responding to the form not the content. However students may also silence teachers through lack of response. Philips (1983) describes how Native Americans will use silence to undermine, in their refusal to ratify the utterances of the teacher. This is covered in detail by Gilmore (1985) in his work on silence and sulking in the classroom. Cazden also mentions the ways in which students can silence the teacher, through carrying on their own secret conversations, reading or working on other material than that prescribed by the teacher at that time (Cazden, 2001).

Silence, writing and reading

So far in this chapter, silence in the formal learning setting has been considered as non-vocalisation. However, the notion of what I will call 'silent verbalisation' is one of relevance to this study. By this I mean the ways that reading and writing may be seen as forms of pedagogic silence.

Belanoff (2001) considers how silence relates to reflection, meditation, contemplation, metacognition and thoughtfulness. As a mediaeval scholar and teacher, she considers how silence has been described in major texts read in that period, in particular the musings of Augustine and Aquinas, both of whom view silence as 'a setting for acts of literacy' (2001, p.405). It is useful here to remember the historical development of 'silent reading'; prior to St Augustine, all reading would have been reading aloud (Manguel, 1996) and hence 'silent reading' is in itself a cultural construct.

Belanoff discusses how the 'naming' of the world allows us to fix an image in our mind, so as to consider it in detail. This has been described by Ivan Illich as 'allowing

the letters to speak to my mind, rather than activating my mouth' (Cayley, 1992, p.232). Although Belanoff suggests that reflection has more secular connotations than meditation, both require a fixing of attention and a time to study closely or ponder. Of relevance to this thesis is that although silent, neither are static, and both involve activity.

Belanoff suggests 'inner speech' is another way to define reflection - which occurs after a stimulus such as reading. She refers to this as 'deep time' which has obvious echoes of Bruneau's 'slow time'. This temporary withdrawal from the world allows some space for ideas to resonate in what she calls 'visual sound'. She argues that teachers should be allowing the space and time for students to reflect in this way in a society where such space is limited.

Reading and writing both require a degree of inner withdrawal. Some individuals find it easier than others to create the requisite silence and stillness in a busy social context. Brand (1991) views writing as a solitary activity, for practical, intellectual and emotional reasons. Only one person actually does it and the 'reflexive stance' that writing requires means the individual must have time and space to act. Of relevance to this thesis is her discussion of what happens to the 'audience' of that writing, who writers may 'carry' in their heads' but who need to be 'kept out' in order that the writer can focus on what s/he really wishes to express.

> We calm the outside so the inside can be heard. And that means...listening closely to what we really mean to say, no matter what.
>
> (Brand, 1991, p.11)

This time and space to 'listen' to the 'inner voice' is an important aspect of silence in pedagogy. However, Belanoff also makes the point that insufficient value is placed on *visual* absorption and even 'staring' in current educational practice. This suggests a useful and alternative set of behaviours which could be of relevance to this thesis. Like Bruneau (1973), she also suggests that uncertainty can provoke more deep and complex thought:

> Educational settings have to create some level of dis-ease, some disruption of student and teacher expectations: ways to disrupt our students' routines and cause them some discomfort, which is undoubtedly going to cause us discomfort also.
>
> (Belanoff, 2001, p.420)

Belanoff's ideas are interesting for a number of reasons. She distinguishes between recognising the rich and potentially productive value of silence and the practical implication of developing strategies to help students make best use of silence. This is especially difficult within an educational climate of standards and assessment - time constrained and pressurised. Her brief discussion on the relationship between reflective silence and identity formation, is of relevance, especially the concept of a 'liminal space' - the moment between perception and response or the instant between event and reflection. This echoes Bahktin's (1981) ideas on the liminality of language itself, in which language operates on the 'creative borderzone or boundary between human consciousness, between a self and other' (Morris, 1994, p. 5).

Silence and electronic learning

Online learning can also provide opportunities to operate in different timescales to the classroom through asynchronous communication (Blake, 2000).

However, the cultural values on talk and silence which appear to underpin much writing about on-line pedagogy are similar to those related to face-to-face teaching. For example, the difficulty of understanding 'student passivity' or 'silence', where silence and passivity are linked, is also mentioned as a problem in online pedagogy (Benfield, 2000, p.1). The online environment also lacks many of the non-verbal cues present in face-to-face situations. Silence also represents ambiguity in that the teacher in an on-line environment has difficulty interpreting the silence. As in writings on face-to-face teaching, silence is exemplified in a negative way - questions that fail to stimulate, questions which are misunderstood, students who are bored and uninterested, the material at too high a level, technical difficulties with the computer.

Benfield suggests that there are even greater expectations on the students to perform in the electronic learning environment - to actively communicate through text with the tutor. Hence the teacher needs to engage in the smallest details of the learning process, including the building of a learning community, rather than focussing on the content of what is to be taught. From this point of view, it could be argued that by eliminating the overtly vocalised aspects of this process, the teacher has the opportunity to consider in a more subtle and complex way what is really occurring in this learning environment

Summary

This chapter has provided an overview of writings on talk and silence in the educational context. It has discussed the value placed on talk in the classroom and the negative value generally assigned to silence. However, it has also provided examples

from writings which suggest that silence can have positive benefits in the formal learning environment.

Chapter Five: Research methodology

This chapter gives an overview of the research methods chosen for the study. It will locate them within a philosophical and methodological framework and identify some of the tensions which exist between the process of gathering robust and valid data, with my positioning as a reflexive explorer within the research process. The blurring of boundaries between the researcher and the researched, and the transition of informants from non-analytic to analytic is also of relevance here (Francis, 2004). Personal tensions also exist between my wish to be taken seriously as a researcher by adopting a safe role within the accepted traditions of the academic community and the lived experience of my own fascination with the subject of my research. These tensions, in their turn, reflect wider debates about the nature of research and how concepts such as validity and generalisability may be constituted within more recent research paradigms.

Philosophical framework for the study

On considering the ontological and epistemological paradigms of different research positions and, from this, my own philosophical stance within the world of research, I was driven by the question 'What kind of inquirer do I want to be?' (Schwandt, 2000, p.205).

In view of my personal fascination with this subject area, I was aware that my 'authorial subjectivity' (Fine, 1994, p.19) could bias the responses. The nature of the inquiry establishes it within the interpretevist paradigm which takes the position that

human action is inherently meaningful and the purpose of inquiry is to grasp (interpret) the meaning behind the action. (Action here is used in its broadest sense, encompassing the idea of a 'speech act' as well as e.g. physical action). Some interpretevist philosophies support the notion that the inquiring 'self' should neither affect nor be affected by the process of understanding. If the interpreter's own self 'intrudes' then it must inevitably distort or bias the interpretation, hence the research methods chosen should seek to eliminate or minimise this interference. Some branches of phenomenology would support this position, although there appears to be some hangover from a positivistic, scientific view of the world that exists 'out there' in this stance. 'Philosophical hermeneutics' (Schwandt, 2000, p.194), however, views the inquirer trying to 'understand' as an inescapable component in the act of understanding. This is a stance echoed in feminist theory, which views knowledge as inextricably linked to socio-cultural structures, where the observer can never be unbiased, but is 'positioned' in relation to that knowledge (Fivush, 2004). From this viewpoint, the role of the inquirer is to become aware of their own personal traditions, prejudices, biases and the effect these may have on reaching an understanding of others. In the case that these might negatively affect the interview process, the inquirer must be prepared to challenge and change them. Within the context of this inquiry, I have avoided any spurious claims to objectivity, but have adopted a reflexive stance within a hermeneutical epistemology, in which my own involvement in the process has been acknowledged and explored.

This inquiry has a qualitative rather than quantitative focus, being located within:

> ..this discrepant, plural, ambiguous and multiple world in which researchers work and in which they try to make meanings.
>
> (Brizuela et al, 2000, p.xii)

As such it involves trying to uncover these meanings from the complex, fuzzy and ambiguous conceptual understandings of 'silence' that individuals develop, linked to their own histories, cultural environments and psychological leanings. My overall purpose has been to generate as rich and 'thick' data (Geertz, 1973) as possible in this under-researched area which, once analysed, could provide a practical and theoretical basis for any future studies. However, in order to resist any temptation to produce an overly superficial exploration of 'silence', my intention was to avoid over-prescriptive techniques which might incline me to premature and potentially limiting data analysis. Hence the approach I adopted was designed to avoid an extreme deductive or inductive approach (Miles and Huberman, 1994) and to operate in the fashion suggested by Rudestam and Newton where:

> The investigator remains watchful of themes that are presented, but resists any temptation to structure or analyze the meaning of an observation prematurely.
> (Rudestam and Newton, 2001, p.38)

At the same time, I had to consider how best to represent the individual realities inherent in the meanings constructed and also, how to address the 'crisis of legitimation' in which the traditional means of evaluating qualitative research i.e. validity, generalisability and reliability, have been re-evaluated, re-configured, and redefined (Denzin and Lincoln, 1994).

Positioning

The major conceptual framework for my research is 'figured worlds' which represent 'social encounters (like activities) in which participants' positions matter and are localised in particular times and places' (Holland et al, 1998, p.141). My positioning within this study recognised that 'I' as an individual, with my own psychological

leanings, preferences and the sediments of my personal life history, interact on an individual level with the personal life histories and orientations of the research participants, and on a broader level with the wider socio-cultural-historical environment of which we are all part. From an individual perspective, my life history, my gender, my race and my class, as well as my genetic make-up, may predispose me to view the subject of silence and the responses of the participants in a particular way.

But the difficulty of extricating this from the complex web of social structures which bind and support me meant that any attempt to present myself as an unbiased observer would be a falsification of my research stance. Here I recognised my alliance with the positioning of feminist research. This indicates that knowledge is embedded in social interactivity and that the researcher is always observing from a particular historical, cultural and contextual standpoint. It also acknowledges that power relationships within the research process are unequal (Fivush, 2004). Hence my approach needed to provide as much space as possible for participants to generate their own ideas, whilst keeping the data generated within manageable limits for analysis. Here a process which partially involved 'co-construction' was used, in which listening and responding to the other played an important part (Fivush, 2004). A particular dilemma in terms of drawing conclusions from the research data was how to explore *individual* conceptions of silence, through an accepted process of qualitative research i.e. the research interview, within a conceptual framework which views 'meanings' as *socially* constructed.

As an experienced teacher and teacher educator, I also wanted to ensure that my views of the dominant cultural resources available to the education community were not too

personally biased. Hence I conducted a survey of forty-eight teacher educators from institutions across the country to establish the major texts they drew on to inform training in practical teaching. Although I only received eleven responses, some of these were detailed and provided useful information to ensure that my own understandings were supported by others in the field.

Developing theory

In the figured world of academia there are accepted discourses about research and these formed the cultural resources from which I drew to inform the approach I would take. As the ideas from this research have developed through interactions between myself, as researcher, research participants and a range of different cultural resources related to silence, it seemed appropriate to draw on research processes which allowed for this fluidity. The development of theory has involved an ongoing iterative process of trying to understand and make meanings from the data, and hence my approach has drawn from the ideas underpinning grounded theory which links to the type of research attempting to understand social phenomena about which little is known (Strauss and Corbin, 1994). The 'social practices' pertaining to the figured world of this research share characteristics in common with social practices in any culturally defined arena in that they involve adaptations and 'mid-course corrections' (Erickson, 2004) in response to changing situations and the acquisition of new knowledge.

My aim here was to develop substantive theory, related to the use and practice of silence in the specific contexts of everyday life and classroom settings, leading to the development of a more formal theory linked to the significance of silence across the figured worlds of everyday life and, in particular, the formal learning environment. By

examining silence in everyday life this would provide a broader set of cultural resources from which to examine the constraints of the classroom.

The ontological importance of the transferral from the limited to the general is signalled by Douglas when he discusses the:

> ontological emergence of theoretical concepts beyond singular perceptions of phenomena.
>
> (Douglas, 2004, p.65)

In other words, the formal theory has something to say about 'being' in the world, for example about social processes in general, that moves beyond the mere practical application.

Sampling

The following section will discuss the approach to sampling used within the research. Mason (2002) identifies four main sampling strategies - statistically representative; ad hoc; a close up view of (often) a single case; and lastly, the use of a relevant range of participants who are indicative, rather than being representative, of particular experiences, types or examples. In the final sampling strategy, the researcher purposively selects on the basis of this indicativity, hence the term 'purposive' or 'purposeful' sampling (Patten, 2002). As the nature of this study is related primarily to the meanings and perceptions of individuals, it would be neither possible nor appropriate to treat it as a hard-edged, objective and scientific study, with a sampling process based on a statistically representative sample.

Hence the purposive approach, oriented to the selection of participants who will provide the richest sources of data, seemed the most appropriate strategy to meet the aims of this study, with its goal of generating instances which display a wide variety of perspectives to illuminate the research question and to capture central themes which cut across variations in participants (Dane, 1990).

Qualitative researchers usually work with 'small samples of people, nested in their context and studied in depth' (Miles and Huberman, 1994, p.27) and are generally based on purposeful sampling, as random sampling would destroy the potential coherence of the studied and the site of study. Sampling was planned to be an iterative process - a means by which theory was being generated on an emerging basis, leading to the next set of choices about who would be interviewed, and operating to put 'flesh on the bones of general constructs' (Miles and Huberman, 2004, p.27). I made sampling decisions based on the need to identify, confirm or enrich the main emergent patterns and themes, but also to discover contrasting views. Within this process, I paid attention to the notion of 'maximum variation' seeking for cases where more extreme positions might be held, in order to test the viability of the core tenets, in particular seeking deliberately for negative instances or variations, where there was the possibility of disconfirmation as well as confirmation. I was mindful here of my own positioning, where my disposition to view many aspects of silence as positive and valuable, may have caused me to seek participants to support my own ontology. Hence, I deliberately interviewed people who expressed dislike of silence, as well as exploring the ideas of people who had strong positive associations with silence.

In some instances, I sought 'information-rich' cases where I had a strong suspicion that these participants would favour positive notions of silence with some intensity. The yoga teachers, the performing arts teacher who developed a module on silence and the teacher who used the 'horse whisperer' techniques with her pupils were all examples of these intense cases.

In Lincoln and Guba's (1985) discussion of sampling as an iterative process, emergent and sequential, they use the analogy of a detective trail, following clues which lead the researcher in a particular direction (Robson, 1993). Here the snowball or chain method, has some use and I make a distinction here between using the snowball approach as a strategy for making contact, and using it as a formal method of sampling. As a formal method, it has serious problems in persuading of its validity, but as a lived experience of the actual processes of interpretative research, it can be seen to have some practical use. This was of particular importance when I was seeking for teachers who used silence consciously in their teaching. Samples can usually evolve during the process of inquiry in what Miles and Huberman call 'conceptually-driven sequential sampling' (1994, p.27) where 'initial choices of informants lead you to similar and different ones' and where the researcher is led to explore different facets of the area of study, seeking out relevant informants as these are revealed or indicated through the process of data collection. The implications for myself as a researcher using this approach was to set boundaries for this research which took into account the limits of my time and resources and which set a frame to help uncover, confirm or qualify the basic constructs as they emerged.

To counteract the potential problem that the researcher ascribes too much value to those members of the population who are available, I undertook a peripheral boundary survey. Although this was not intended (nor would be able) to be seen as a representative sample of a wider population, it did provide an opportunity for my views and my interpretations to be challenged by conflicting data, to act as a 'de-centering' device (Miles and Huberman, 1994). Hence, having completed the pilot study, I also decided to use an additional wide, but shallow purposive sample of one hundred and sixty-four informants, to provide supporting or contradictory data as a backdrop to the in-depth qualitative data from the long interviews. It is important to emphasise that this was not to be used statistically, but as a heuristic to provide security for any claims to potential generalisability, by confirming, qualifying or providing warnings against over-simplification or over-complacency in my use and interpretation of the data. This function is reflected in my term - 'numero-qualitative' (n-q) sample - which reflects the larger numbers, but also the qualitative nature of the questions given (See Appendix C).

Participants in the in-depth qualitative interviews

In the initial exploratory study, the sampling process was based on access and on the range of experience of the participants. The main function of the interviews in this initial study was to provide a variety of perspectives on the concept of silence and the significant factor in choosing who to interview was to produce as rich data as possible in the short time available. To provide a range of perspectives on the concept of silence, five respondents were selected who came from different backgrounds and occupied different positions on the spectrum of teaching experience from highly experienced to novice. Two were academics at different UK universities in different

subject disciplines; one was a yoga teacher in adult education; one was an ex-FE lecturer with a background in teacher training; one was a French experimental musician and photographer, teaching part-time in Higher Education. In terms of gender sampling, there were two males and three females. All were in the thirty to fifty age-range.

Following on from the initial study of five participants, twenty teachers were interviewed, making a total of twenty-five in all (Appendix A). The sample was chosen on the basis that this would be a sufficient number to generate a range of conceptions and a variety of practices to illuminate the conceptualisation and use of silence.

All participants in the detailed qualitative interviews were teachers. There were four main reasons for this. Firstly, they all operated within a similar socio-cultural context i.e. a formal learning environment, bounded by certain rules and expectations of the purposes of education and the interactions between teacher and learners. However, they worked in different educational contexts with different types of learners. Secondly, I have many years experience in teaching and teacher education and could use my knowledge of the context and activities to inform questioning and discussion. Thirdly, I had a good level of access to this community and was fairly confident that I would be trusted, that participants would be prepared to give a considerable amount of time to participating in the research and that they would be inclined to discuss fully and honestly. Lastly, and extremely importantly, these participants were well-placed to provide the data required from my research questions. In all but two of the last interviews, where primary school teaching was involved, all participants were

teaching learners over the age of sixteen. Of particular importance was the need for theoretically-driven sampling, where the informants were selected, not on the basis of 'representativeness', but on the basis that they would help to provide some insights to inform the conceptual questions of my research. The difference of perspectives, located in different conditions and nested in different sites, with the potential to provide a multi-faceted view of the concept of silence was of significance in the choice of participants.

In choosing teachers who worked in a number of different learning contexts from educational institutions my aim was to balance heterogeneity with homogeneity - heterogeneity in that a major focus for my sampling was multi-disciplinarity; homogeneity in that the participants needed to belong to a community which, to some extent, engaged in a consistent set of culturally prescribed activities. The reason for the multi-disciplinarity was that my readings about silence were strongly multi-disciplinary in themselves and hence the importance of viewing silence from the perspective of different modalities. All participants came from different subject disciplines to get as broad a spectrum of views as possible within the confines of the research study. However, in order that there would be boundaries to and a means of comparison between the data generated, these views needed to be grounded in some kind of communality of context and experience. Hence all participants but one had been teacher educated and all participants in the second stage cohort of interviewees were trained as teachers at the same institution. This choice was based on the assumption that they had all been exposed to a consistent philosophy and approach to teacher education, including a commonality of discourse and immersion in particular notions of reflection. It was also assumed that they would have acquired some

theoretical tools to reflect on and discuss teaching and learning. One participant from HE who was not teacher-trained was included on the basis of his extensive experience in sound.

Their experience and training, to some extent, gave them the status of 'experts' in their discussion of those aspects of the research relating to teaching and learning and this enabled the relationship between the researcher/researched relationship to carry a dynamic corrective to the imbalance of power inherent in the research process.

Respondents in the numero-qualitative (n-q) survey

Forty-nine respondents in this wider sample of one hundred and sixty-four were teachers in the post-sixteen sectors, engaged on in-service teacher training courses with teaching roles in the education, health, police, prison and fire-service sectors. These were the nearest match to the general profile of participants in the in-depth interviews. For more peripheral samples, I used fifty-one informants that were being trained in early years teaching, and a group of sixty-four (mainly) younger informants who were not in teaching at all, but were undergraduate students on the second year of a psychology degree Ages ranged from eighteen to sixty one, with the greatest number of responses being from people under twenty. Thirty-nine respondents were male, one hundred and twenty-five were female.

Research process

The research involved an initial qualitative study, followed by the major study which was supplemented by a peripheral boundary study.

The initial exploratory study was designed to begin to 'map the territory' for the later more extensive study. It was also designed to test the instruments and techniques adopted and to modify these in the light of experience and a preliminary analysis of the data produced. The second stage involved a larger study where embryonic themes emerging from the initial study were extended and explored using as a starting point a relevant conceptual framework. These two stages were designed to produce 'thick' data, rich in contextual detail and complex in nature. The second stage also involved obtaining wider, but far thinner and more superficial data. These were designed to either provide support for the thicker data and to substantiate a notion of data saturation, or to point out areas of anomaly which would indicate the need for and the direction of any further in-depth interviews.

Table 1: Summary of data collection process

	Data collection	**Research instrument**	**Locations**	**Documented by:**
1.	The initial exploratory study	Semi-structured interview, followed by co-constructed discussion	Participants' workplaces or my home	Audio recording and written notes (first interview, notes only)
2.	The main study	Semi-structured interview, followed by co-constructed discussion	Participants' workplaces, my office or my home	Audio recording and written notes
3.	The numero-qualitative peripheral boundary study (conducted at same time as most of the main study)	Qualitative questionnaire	Classrooms/lecture theatres where respondents were attending courses	Completed questionnaires

Interviews

Operating within the paradigm of philosophical hermeneutics, the nature of the semi-structured interview inevitably changes to a dialogic process, in which knowledge construction is conceived as actively engaging all participants rather than being 'done' by the researcher (Mason, 2002, p.224) and displays links with constructivist approaches (Lincoln and Guba, 2000). Schwandt makes this distinction between active production and reproduction in the research process:

> Understanding is something that is produced in that dialogue, not something reproduced by an interpreter through an analysis of that which he or she seems to understand.
>
> (Schwandt, 2000, p.195)

The idea that meaning is negotiated through dialogue had implications for the way in which the semi-structured interviews were organised and conducted. With some other forms of interpretevism the methodology requires the interviewer to intrude as little as possible e.g. with minimal use of verbal or non-verbal prompts. This desire to avoid 'inquirer contamination' may also mean that the interviewer will decide to withhold the interview questions until the interview itself - otherwise the interviewee might not give a 'genuine' response or might even discuss them with someone else. However, within the hermeneutical framework, the logic would appear to be that 'contamination' is inevitable and the individual's own meanings will already be constituted through previous tradition, experience and dialogue. Hence, apart from the very first interview, which prompted me to take this subsequent approach, the questions were given beforehand to act as a focus for participants to examine in some detail their understandings of the concept of silence. If, as part of this process, the individuals chose to talk to other people, then this was construed as part of the

ongoing dialogue with others inherent in the construction of meanings in the lived experience of the everyday world (Blumer, 1969).

In the interview itself, an opportunity was introduced for the inquirer to move away from the dynamics of the traditional interviewer/interviewee roles and engage in less formally constituted dialogue with the intention of reducing the potential unequal power relationship between researcher and respondent. I was also concerned to avoid what Fine terms 'ventriloquy' - where the researcher complacently believes they are giving 'voice' to the participants, but in fact, manipulates them to say what she wishes to hear (Fine,1994). For this reason, I considered it essential that participants should not only be involved in a process of mutual knowledge construction, but also that they should have opportunities to agree or disagree with the interpretations I was making.

Interviews were divided into semi-structured (with fairly minimal vocal and non-verbal intervention) allowing the individual to formulate their own responses followed by an open, unstructured discussion on how individuals experienced the process of the interview (with a far more dialogic approach) and providing some space for the individual to comment on anything that had gone before. This system was intended to provide an additional opportunity to explore inner coherence in the individual's meaning system and also gave the participant a more active role as inquirer into their own meanings. The disadvantage was that the data arising would potentially be messier and more difficult to analyse.

The questions were designed to allow for the generation of useful background data on conceptions of silence even if the responses were negative to questions five, six and

seven. They were structured to provide as much opportunity as possible for the respondent to generate and explore as many personal meanings as possible, before selection and application to the more limited environment of the classroom.

Following the experience on the initial study, where the categorisation of sounds associated with silence and the distinction between noise and sound had emerged as important, but unexpected themes, the interview process was modified to include some additional questions.

Schedule of questions

Given prior to the interview: (in order that the participant had time to think and prepare)

1. What are the different types of silence you can think of?
2. What associations do you have with these different types of silence?
3. How do you use silence in your everyday life?
4. As a teacher, when does silence occur in your learning session?
5. Do you deliberately use silence in your teaching?
6. If yes, why?
7. If yes, how?

Given at the end of the semi-structured interview: (these were not given before because I did not wish to pre-empt participants' own ideas)

1. What noises/sounds do you associate positively with silence?
2. What noises/sounds do you find intrude on your positive notions of silence?
3. Based on what you've said before, what are the differences for you between silence in your everyday, personal life and your perception and use of silence in the classroom setting.

Process of recording interview data

Participant interviews

In order to achieve more accuracy in reporting, all but the first interview, in which the questions were trialled, were tape recorded as well as taking my own notes. There

were a number of advantages in using both tape recording and taking notes. These included a reduction in the amount of direct eye contact, making the interview feel less like an interrogation as long as the occasional friendly and interested eye contact and paralinguistic cues were able to be maintained. The process provided an opportunity to review interview data whilst the tapes were being transcribed. This meant that preliminary data analysis and theory generation could take place which could determine the next set of interviews. As a positioned researcher, the notes were also helpful in providing a record of my own interests and priorities in what was being said by the participant. A cross check with the original text could aid reflexivity by indicating how I might have intervened or placed undue emphasis on certain aspects of the interviewee's responses in order to suit my own position in relation to the research. In effect the notes acted as a way of silencing potential 'ventriloquy' in my conduct and interpretation.

Numero-qualitative (n-q) survey

I gained permission from people teaching in a number of different areas to hand out questionnaires to their students. In all but one class, I handed out questionnaires personally to survey respondents and respondents were allowed time to complete prior to collection a short while later. In the other class, the questionnaires were handed out by the teacher and returned to me later. Out of one hundred and eighty-four questionnaires distributed, one hundred and sixty-four were returned.

Based on initial analyses of the responses from the participants interviewed early in the main study, the questions were devised to provide support, contradiction or alternative perspectives on more general aspects of silence. A major consideration was

that questionnaires should be as unambiguous and clearly worded as possible, as there would be no vocal explanation of them to respondents, whilst allowing the possibility for respondents to generate their own ideas. There was some verbal explanation on the questionnaire itself to contextualise the questions (see Appendix C).

Questionnaire on silence

1. What associations do you have with silence?
2. Under what circumstances do you most experience 'positive silence'?
3. What sounds do you think of in relation to your positive associations with silence?
4. What are the sounds that would most intrude on your 'positive' silence?
5. Please add any other ideas or experiences on silence you wish to contribute.

Data analysis

In the iterative process of data analysis, I was concerned to keep as fluid an approach as possible, not wishing to 'freeze' the theory prematurely (Glaser and Strauss, 1967). One major issue was deciding when saturation had been reached. Determining the boundaries of my current research - in other words, knowing when to stop - proved to be an issue. Here I took as my guide the notion of saturation (Glaser and Strauss, 1967), which seemed to be indicated most strongly by a sense of 'I've been here before' - in other words, there was nothing really new being said or discovered.

It was expected that the initial investigation would produce complex and contradictory data. There could be a tendency to view this complexity as problematic and hence an attempt to reduce it to a coherent, but over-simplified view of a particular aspect of experience (Dippo, 1994). One challenge was how to establish a means of presenting and analysing the data in a coherent form, without losing the potential richness of what might be uncovered.

Steps in data analysis

The steps below represent an iterative process, in which these steps were revisited with each new data set generated by each set of interviews. At each stage, conceptualisations and theory generation occurred, to be tested and revisited in the light of subsequent data returns. These were also tested against the initial conceptual frameworks which were changed in the light of the data being generated.

Participant interviews:

1. Interview notes transcribed.
2. Data from interviews typed into matrix under question categories.
3. Matrix produced of categories for different types of silence.
4. Produced a comparative matrix of participants' responses.
5. Produced a broad thematic analysis, drawing out common themes emerging from data.
6. Revisited all twenty five transcripts and analysed each one thematically in detail to test the validity of the themes.
7. Wrote initial draft, which was subject to a number of revisions, in which different perspectives gained importance and others became less important.

Numero-qualitative questionnaires

1. Collected questionnaires.
2. Transferred data from questions to comparative grids.
3. Generated a separate list of additional comments written on the forms.
4. Ongoing comparison of interview data analysis and these data to check for correspondences or anomalies which might point to the need for further interviews.

Validity

The notion of validity is usually categorised into internal and external validity.

Internal validity

The internal validity of data in qualitative research is based on the notion of congruity between the researcher's intention, the methods employed to achieve this and the

trustworthiness of the interpretations assigned to the data collected. There are different ways of establishing internal validity including: confidence in the data: authenticity of the data - including fairness; ontological authenticity - making the familiar strange; educative authenticity; cogency of the data; soundness of the research design; credibility of data; auditability of data; dependability; confirmability (Cohen et al, 2000, p.108). A number of writers on research methods make the distinction between methodological and interpretetive validity (e.g. Mason, 2002) and there appears general consensus that both need to be demonstrated if the evidence produced is to have credibility.

Methodological validity

The reasons for the research methodology have been discussed in the preceding section. One addition to this discussion is the issue of triangulation, i.e. 'giving strength or support to findings/conclusions by drawing on evidence from other sources' (Wellington, 2000, p.201*).* The notion of triangulation as a method of confirming the accuracy of data is problematic within a qualitative research paradigm e.g. Mason (2002) argues that *different* methods are likely to expose *different* social or ontological phenomena or research questions (my italics). In other words, they will add to the richness and complexity of the data, rather than provide a neat confirmation. In this inquiry, I intended that the methods of semi-structured, followed by open-ended, interview would provide confirmation of internal validity, strengthened by the thinner, peripheral sampling process.

Interpretative validity

In order for any interpretation to be judged as valid, it must be based on sound data in the sense that they should be authentic and accurate. In the case of this inquiry, participants were coded to provide confidentiality and a key to the codes was established so that respondents could be traced and confirmed as genuine if required. In order to ensure accuracy, interviews were tape-recorded (except the first one which was used as an initial trial for the questions). During the open structured interview, participants were asked to confirm or clarify points in the notes which were unclear or lacked sufficient detail. There are reservations expressed by some writers on the idea of 'respondent validation' (Mason, 2002, Miles and Hubermann, 1994) in that there may be various reasons why interviewees would be unwilling to confirm the accuracy of what had been transcribed. However, within a dialogic system the inquiry process is one over which the interviewee should have some kind of control and to support claims to validity, should have the opportunity to comment on the process and content of the interview.

The notes made from the interviews were cross checked by listening to the tapes again. Interpretation was reached through a process of systematic data analysis which involved cross-checking back and forth between different data sources. Data were strongly contextualised through the nature of the questions which specifically asked for examples and situations to illustrate potentially abstract metaphorical conceptions. In addition the different sections - related to everyday life and teaching - provided an opportunity to establish patterns or inconsistencies between the two contexts. In the data analysis, data were organised cross-sectionally to provide thematic comparison and attempts were made to read the data from different perspectives.

External validity and generalisability

In qualitative research, external validity refers to the generalisability of data (Schofield 1993; Williams, 2002). Mason (2002) refers to two types of generalisation - empirical and theoretical. The generalisability of this study is related to its potential for theoretical generalisability e.g. in transferability to other contexts. For example the data could be used as a starting point to consider the conception of silence of individuals in different professional areas or as a basis for exploring conceptions of silence in different generational or cultural groups. The study also has the potential to contribute to wider bodies of knowledge e.g. pedagogy, teacher professionalism, thinking, language, perception, personal values, ecology and socio-cultural theory. Through its use of figured worlds as a conceptual framework, it also provides a detailed illustration, which could be developed by others, of how this framework could be applied to education.

Generalisability

Denzin (1983) rejects generalisability because of what he perceives as the difficulty of moving beyond the individual consciousness. He argues that this creates its own meanings and generates its own actions, even when there is some communality with the meanings of others. Generalisability is also rejected by Lincoln and Guba (2000) on the basis that ideographic knowledge is always generated within a particular time and context. Williams (2002) suggests that much interpretive research does not engage directly with issues of generalisability. He suggests that there are significant similarities between interpretative research and a large scale survey in that both ask 'why?' and both seek explanations, however speculative and tentative those may be. Williams problematises the various overlaps and 'cross-pollinations' of different

research processes which, in his view, attempt to synthesise approaches which have different priorities and incompatible ontological and epistemological bases. However, he does argue that a modified type of generalisability is possible where aspects of a situation 'can be seen to be instances of a broader recognizable set of features' (2002, p.131). Williams links questions of generalisability to those of sampling, because the sample provides the data for proposing certain characteristics which may then assume a set of inferences to be applied to a wider group. For this purpose, the sample itself must reflect the relevant characteristics of the intended wider group.

Substantive theory would be understandable to individuals working in that area (trustworthiness), be general enough to be applicable to a number of different situations and be flexible enough to apply to changing contexts and situations. In one sense, in spite of having undertaken the research, at the point of generalisability, the issue is out of the researcher's control. As Glaser and Strauss(1967) indicate, the researcher cannot prescribe exactly how the results of a study can be transferred, all they can do is provide sufficient information to enable the reader to determine whether there is applicability to other situations. However, I would suggest that this appears to be a rather passive view of the researcher's role in that this information includes not only the data and the analysis, but also, in the case of a researcher from a particular professional field, some ideas and suggestions about how the research might have a substantive contribution within that field. What is important in terms of trustworthiness is that the researcher is able to persuade their audience that what they present is worth consideration (Lincoln and Guba, 1985). In the context of this research I have already given well-attended papers at both national and international conferences and have had articles accepted for publication (e.g. Ollin, 2008, in press).

Limitations of the data

There are limitations in relation to the internal validity of the data. The data collected are of individual perceptions and understandings, as well as uncorroborated explications of their own practice. Hence, when participants describe how they 'use' silence it is their reported use of silence, rather than use determined through empirical observation. However, it is important to bear in mind that 'observing silence' is inherently problematic (MacKinnon, 1999; Philips, 1985) and would still rely mainly on interpretation.

Ethical considerations

Students were sharing some personal details as part of this inquiry and measures were taken to ensure mutual understanding of what was involved, the way that data would be used and an assurance of confidentiality for the participants. Participants were also given the opportunity to contribute during the open discussion following the more formal interview component. They were encouraged to discuss their ideas and feelings about the process as well as to check for the accuracy of the data .This open discussion was conducted as a dialogue between co-professionals in order that the balance of power inherent in a conventional relation between researcher and research could be redressed as far as possible.

Chapter Six: Conceptions of silence in everyday life

This is the first of two chapters which consider how people use conceptualisations of silence in the figured worlds of everyday life. It suggests different types of silence and shows how individuals draw conceptualisations from personal histories, as well as from more communal cultural resources. As socio-cultural theory stresses the interplay between the individual and the world, this chapter then considers how people balance their own needs in relation to the external auditory environment and the role of silence in mediating this relationship in the world of sound and noise. Finally it broadens the scope of the conceptualisations to consider how participants considered silence from sensory perspectives other than sound and suggests how silence also mediates in these contexts.

Different types of silence

In Chapter Three, different types of silence were identified through various writings on the subject. These different types were also identified in the range and scope of conceptualisations generated by participants in this research (Appendix B). Participants talked about silence in relation to sound, speech, sight, smell and touch, art, music, religion and covered many aspects of the subject identified under the 'psycho-linguistic', 'interactional' and 'socio-cultural' categories discussed in Chapter Three. In this process they supported ideas suggested in writings on silence which are not based on first-hand research. Their typologies were developed, and often different emphases given or new types generated, once they began to give examples of associations with silence in their own lives.

Participants expressed surprise at how many types they could generate and how this 'modelled possibilities' (Holland et al, 1998, p.49) for thinking about things differently:

> It's fascinating and I think that some of the stuff that I've said I'll continue to think about and might refine it ...(Joyce)

Two participants expressed a strong dislike of silence:

> I feel uncomfortable with silence, if I'm on my own or around other people...I like music on in the background ...I just do not like silence.

Tracey was one of the younger participants and saw herself as a lively and sociable person who engaged in many social events with friends, such as going to the pub, or going out dancing. In these cultural contexts, the silence of 'not talking', was seen as being 'unsociable'.

All other participants expressed a generally positive attitude towards particular types of silence, although some were more strongly positive than others. In the n-q survey, seven males and seventeen females expressed markedly strong positive responses to silence 'It's brilliant!', with three males and nine females expressing markedly negative associations with silence 'I associate silence with loneliness or my mum telling me to shut up' (n-q survey). All other respondents expressed a positive attitude to particular types of silence.

Participants displayed considerable consensus in the types of silence generated, although they categorised and prioritised differently. The following examples give

some detail of how participants approached the subject. Yolanda, a teacher trainer and teacher of yoga, a weaver and a journalist:

> Oh, I had fun with this because I thought there was inner silence, and outer silence and the sort of silence you have on holiday which isn't necessarily silent - if you're watching waves you might have sea sounds and things. There's the imposed silence where people say 'Shut up!' and there's deliberate silence where you choose not to speak. And there's the sort of silences you have in libraries which I suppose is a 'shut up' sort of silence, and the sort of silence you have in church which is a different one, sort of a Holy silence, almost an awestruck silence somehow, especially if you go in a big cathedral like York. And yesterday on the news there was an earthquake silence, all these people digging and shouting and crying and then they found a little boy and they said 'Be quiet and listen' and they tapped. So I don't know. I called it earthquake silence but silence for a particular special reason and then of course that there's the sort of silence you have on Armistice Day when you're remembering.

Charlotte, a teacher of English to Speakers of Other Languages (ESOL), had a more personal approach:

> First of all I thought about relaxation, or sleeping, or chilling out. Another type of silence would be concentration. I thought about the fact I drive to work now, to (name of town), and even though I keep tapes in the car, quite often I enjoy driving in silence… part of that is concentration, but partly, I think it's the feeling of having your own space. ... So for me, personally, silence is about having your own space and no-one else intruding … And another type of silence I thought was anger, thinking about the angry parent or having an argument with your partner, where you can't think what words to spit out next, so you just sulk… anger or sulking. Another silence, a bit like having your own space, is prayer, or contemplation, meditation…

There are obvious similarities between the categories identified by both participants, such as silence in relation to religion and silences where people choose not to speak. However, these categories are expressed differently. Yolanda draws from a range of different events and contexts, as well as from different media, which she may or may not have experienced personally. In contrast, Charlotte's emphasis is on her own personal experiences and need for silence. Although they draw on similar cultural

resources, they adopt differing positions in relation to these. One reason may have been specific individual circumstances. As Charlotte was undergoing a very stressful time at work, it may be that she emphasised a greater need for personal space than Yolanda, who has a relatively peaceful life living in the country and managing her own work time.

The difficulty of conceiving of absolute silence

Reflecting views expressed in the literature reviewed in Chapter Three, participants expressed a difficulty in conceiving of absolute silence (Cage, 1973, 1961). Jean Claude, as an experimental musician, was familiar with the works of John Cage and cited him explicitly. Peter, who admitted that his scientific background may have biased his initial approach to the concept, commented:

> The true silence is a complete absence of any noise - which I've probably never experienced.

Two of the participants, Jean-Claude and Karen were specialists in sound and from this specialist perspective emphasised the relational nature of silence and noise. Karen saw this relationship as a continuum:

> I thought about a kind of continuum with absolute silence at the other end and absolute noise at the other... and I thought actually both ends are an impossibility and you're always somewhere in between.

In contrast Jean-Claude suggested a more oppositional relationship between silence and sound, in that silence may be defined not by the *absence* of sound but the sounds themselves:

> ..once those sounds are not there, what replaces the sounds is not exactly silence, but another range of sounds, which you didn't hear before. That's why silence doesn't exist.

Some participants tried to find an equivalent to silence, drawing on their own experiences. Harry, a keen mountain climber, described being buried in an avalanche; Simon discussed his experiences of isolation torture during his period being trained in the military and Susan, a former school teacher, drew on the sensation of being in a 'white room' in a special needs school which blocked out external sensory input:

> ... real silence, probably the only times that has happened is for about thirty seconds in a white room in a special needs school where they .. block out everything with soundproofing.

Whereas Harry and Simon's examples conjure up negative experiences, Susan was more positive, describing diving underwater and how she realised her need for both vocal communication and for silence:

> Underwater I suddenly realised that I do quite like the ability to be able to talk and hear or make noises, should I want to. ..But there's also something nice about it, because it does free up space to look and think .. it's headspace really.

Because she was underwater, Susan was not in control in that she could not speak, but it also freed her from *having* to speak. As she had a choice about when to finish the dive, this silence was largely under her control, unlike the silences described by Harry and Simon. In these examples, silence not only relates to sound, but also reflects the individual's emotional relationship with the external environment. The silence is not 'objective', but is imbued with meaning.

Silence and meaning

As suggested in previous chapters, the notion that silence has meaning, places it in relation to other types of language. But what is this relationship? Participants considered the issue of which comes first - silence or sound? Harry as a sportsman and as a team player, identified the way that actions and events in sport can appear to punctuate silence:

> ... triumph ...at one end of the spectrum and complete and utter failure at the other end of the spectrum. Both of them come out of a silent moment.

Here silence is the grounding from which sound, noise and action emerge (Dauenhauer, 1980; Merleau-Ponty, 1973; Sontag, 1966). However, although there are background sounds, the silence is acknowledged and communicates a particular set of meanings for those who experience it in this communal setting.

Virginia described silence as a 'form of language' and, like Kurzon (1997) explored the notion of silence as a signifier:

> That whole process of silence as a signifier. You've got silence, which is the product, you've got silencing, which can be an action, you've got the silencer, who generates the signifier - the 'silencing', and you've got the 'silenced', So you've got a whole range of subject positions and interactions going on all around this notion of silence.

She implied that silence acts metaphorically to represent a range of emotional states or relationships. However these emotions do not have an objective existence but represent conceptual interpretations of silence which are fluid and dependent on individual perception. She warned against treating the 'language' of silence superficially:

> I think the taken for granted-ness of it that needs to be deconstructed .... it can signify feelings, it can signify panic, embarrassment, discontentment, it can signify contentment, ease, it can signify power.

These are emotions experienced by the individual in the social environment, but within the context of different cultural worlds silence also contains socio-cultural interpretations and evaluations of particular human actions - whether they are judged a success or a failure. In Harry's example, the silence expresses a judgement of sporting performance, based on a particular set of cultural values.

However silence does not just signify emotional content and cultural judgement, it may also signify different perspectives dependent on the knowledge held by different participants. Kevin's illustration of what he called the 'silence of waiting' was the scenario of a patient waiting for a doctor to explain the implications of some blood tests. The way in which the individuals involved experienced that silence would be imbued by both the patient's and the doctor's knowledge of whether the blood had tested negative or positive. In this example, the positional identities of the participants would alter according to the nature of that knowledge. In this positioning, the relational power of the doctor would increase and that of the patient would decrease, if the prognosis was poor. Kevin's scenario provides an example of how different components in the environment - the patient, the doctor, the cultural expectations and power relationships associated with their roles, the physical space of the waiting room, the knowledge related to the blood tests - exist in relation to each other. It also shows how a shift in one component could alter the positionings of individuals within that environment, although this process could take place in silence.

Multi-sensory associations with silence

The strongest sensory link with silence was in relation to sound and this will be covered in detail in the rest of the chapter. However, participants also suggested associations with other senses, supporting the multi-modal perspectives offered in Chapter Three.

Smell

Martin described how smells of flowers and food could evoke memories of silence. Firstly in his garden:

> I love the smell of flowering redcurrant after it's rained and I'm thinking if you're out and about and as you relax, those things come back to you...

Secondly as a child at his grandmother's:

> ...sat at the dining table because Sunday lunch is coming and there is that pause where it's all quiet and you know it's going to come through any moment and you get those smells, a certain smell of the gravy ... it's those quiet moments before the big event.

In Martin's description, a number of components within this world shift, altering the balance between sound and smell, talk and quiet. Here silence mediates Martin's experience of these different components, internalising the experience of comfort and security, whilst at the same time allowing for an orientation toward the pleasure to come.

Sight and sound

Lois drew on both sight and sound in her evocation of silence:

> Watching my son sleep always is a wonderful time; I go into him two, three, four times a night, just to see him sleeping and that's a lovely silent moment, just listening to his breath.

Here the balance is between the visual pleasure of seeing her beautiful son, the sound of his breath and her experience of completeness in her relationship with her child. However, within that silence, Lois, the mother, is also listening and 'watching' (Ingold, 2004) in a state of sensory awareness to any shifts in the equilibrium of this scene which might indicate that something was wrong.

A respondent from the n-q survey used the same scenario to link physical, emotional and psychological silence:

> Silence comes from within and one of my experiences of silence is the peace from watching a new baby sleep.

Joyce also drew on sound and sight, but filtered through her perspective as an artist. The components of the world of music included the 'listening silence' of an audience and art included the meanings generated by the person viewing the work. She echoed the ideas of Sontag (1966) and Hafif (1997), considering silence as giving meaning through providing contrast with the more evident parts of the work, as also being imbued with meaning itself:

> .... the composition....It's designed to have some silence in it which has a meaning in itself....My mind immediately went to a Mondrian painting which has all those squares. There are some which are filled with colour and some which are white, which would have to be the space - the non-colour.

She then began to equate silence and more general kinaesthetic space in art:

> Klee has done some mobiles.... If they're things supposed to move around, then what they are is not a silent space, but a space which is waiting to be filled - which silence can be and may not be....Silence can be something which needs filling or it might be something which is intended not to be filled.

In the last sentence, Joyce suggested two dimensions of silence - both as an absence and as a 'presence'. The absence of silence was not a lack, but an intentional space, which imbues what was visible with meaning:

> Japanese art, which has very little in it, but the little becomes more meaningful because of the space or silence round and about.

In Joyce's examples, the artist uses silence as a tool to pivot the observer towards the meaning of the work which exists in the relationship between the object and the space. The relational nature of silence and how people position themselves in relation to the sensory world of sound will be explored in the following sections.

Silence and sound as relational

Participants explored this process of positioning when they discussed their own relationship between silence and sound. This existed irrespective of whether someone could hear or not. Maureen drew on her specialist knowledge of deafness to suggest that people who hear, process the vibration of sound waves as 'auditory', whereas deaf people experience the vibration as a broader physiological experience. Hence this aspect of the external environment still impacts on the individual, although it may be processed in different ways. Individual physiology, history, preferences and sensitivities will determine how that environment is experienced.

For example, as a musician, Jean-Claude was interested in sounds for their own sake, and valued them for their musicality. He described from his own experience, the stripping away of outer layers of sound to reveal other sounds previously obscured:

> I remember lying in my bed sometimes in the evening, in an old house, and having the house singing a whole symphony to me in terms of little creaks and little sounds coming in and birds outside ...particularly at night... because at night all the activities that generate a lot of sounds are not there.

The discourse he uses is from the world of musical performance, in which he is an active participant and the interplay between himself and the environment is filtered through his perceptions of sounds as vehicles for artistic expression.

But sounds can be filtered in other ways. Virginia, as a psychologist and an academic, admitted she talked a lot and liked talking as an activity. To Virginia, all sounds were subsidiary to that of the human voice; silence was not the absence of sound, but the absence of vocal language:

> I mean silence in terms of the absence of voices, words, the absence of language because you can be in an environment where there are noises all around you. You can be walking in the woods and there'll be noises of animals, and then you'll be walking on the road and there'll be noises of cars or you'll be in a coffee house and you'll hear somebody bustling around making the coffee. But those kinds of things don't seem to me to be 'there'. In a way they're part of the silence.

Virginia's relationship with the external environment suggests a position which amplifies the significance of the human voice above other environmental sounds. In contrast, Sally commented on the perceptual and cultural bias inherent in this position:

> As I was sitting thinking about these questions, I thought well, I've got no radio or music on and there's nobody else here, but it's not silent. I can hear my computer humming, somebody doing something with a drill and birds in a tree. So I thought, my initial interpretation of silence is people not talking, but

> of course that's very kind of human ego-centric isn't it? Just because we're not making noise doesn't mean there's no noise...

In this case, both Virginia's and Sally's conceptualisations of silence reflect a cultural positioning that places the human voice above the sounds of nature, but Sally is using the insight this affords her to query that predominance. As a result of this insight, her own positioning has altered.

Distinction between sound and noise

Most participants distinguished between sound and noise as expressed where noise generally had negative connotations, mainly associated with the notion of 'intrusion'. Harry explored his perceptions of the difference, by presenting an example of how he distinguished between the two terms:

> Noise would be intrusive....if I were writing a novel I would say 'She heard a noise in the kitchen'. I would expect something pretty awful to happen, but 'a sound from the bathroom woke her up', that might not be the same thing. I would consider noise to be a far more threatening word than sound ...whereas sound has got very pleasant associations with it.

Although this view was supported by many of the participants, there was one major exception. Karen, one of the two experts in 'sound', described how she had to wear earplugs to bed as she was continually distracted by surrounding 'narratives of sound', both inside and outside the house. From her description it seemed that her acute awareness of auditory stimuli - an advantage in her job - put her at a disadvantage in her everyday life. Her use of the term 'narratives of sound' suggest a particular process of meaning-making in relation to these stimuli, which was more than just registering their existence and has some similarity with Jean-Claude's professional interest in the musical patterns created by 'night' sounds. Karen's expressed need for

personal space also appeared significant in her relationship with these auditory stimuli, where noise took on a physical and intrusive presence. It was interesting that she linked this to another sensory mode, calling herself 'tactile defensive' in that she disliked being touched and had difficulty in knowing 'where my edges are, in that I bump into things all the time'.

Sounds associated with silence

However, for the majority of participants, the term 'sound' had positive connotations:

> Sound is soft, it's more eloquent, more ambient. (Maureen)

Using the term 'sound' in this way, this section will concentrate on the sounds that participants associated with silence. It will also suggest some of the mental and emotional states which they mentioned in relation to their descriptions. The suggestions on sound made by participants were supported by responses in the n-q survey (Appendix D).

Many of the participants mentioned the sounds of nature in relation to experiencing silence:

> If you hear nature that's a good thing, you know the sounds of leaves, of the trees and things like that. If I'm out, I love that...I associate that with silence.....the calmness I suppose, it's peace. (Gareth)

The association of silence with calmness and peace was also evident in the n-q data, where many respondents made this connection which one respondent described as 'Distant winds and gentle waves'. In the sounds associated positively with silence,

there were forty one mentions of the sound of birds, thirty three of the sound of wind or breeze, thirteen of the sound of the rain and ten of the sound of the sea.

What is interesting here is why the link between natural sounds and positive silence occurs so frequently? This is not an association confined to older people, but many of the younger respondents also made this link. In one sense it could be seen as a cliché, but what is a cliché but an association that has overwhelmingly strong communal associations? Arising from this is the question which this thesis will not be able to answer - do these associations arise from a cultural or a more fundamental ontological source?

Environments where silence was experienced

Participants' experiences of the sounds of nature were usually localised in particular activities and places. A number of participants described silence at home. Lily, a Malay-Chinese artist brought up in the UK, described being in the house, but listening to the sounds of nature outside:

> Home silence, although you might not have the telly on or the radio and everybody else might be out, but it's not completely silent, it's more like listening to the actual noises… because we've got the cemetery at back here and there's lots of trees, so it more seems to be the wind or the birds or garden noises.

Here Lily demonstrates a use of the word 'noise' in a positive way, although when asked directly whether she perceived any difference, she came out with the same distinction between sound and noise as other participants.

Peter described being in the garden and the therapeutic quality of the natural sounds:

> At home I guess it's that coffee in the garden before the kids have got up. A kind of quiet which is a nice kind of quiet because there is sound. You know there is the sound of wind and birds and kind of garden sounds, which in many ways makes that quiet qualitatively quiet, therapeutic.

Peter was a father of two and described his home life as frequently frantic and full of activity, so in this description, silence is associated with notions of peace and tranquillity. Laura, a primary school teacher, also emphasised strong associations between natural sounds and peace. However, interestingly, by using the phrase 'storybook sounds of nature' - drawing on the language of the primary school environment - she also implied that these could also be a cultural construction. Other participants experienced silence when they were in the country, again with natural sounds providing a soothing background to activity such as mountain climbing, walking, running or cycling. Harry, a sports psychologist and keen sportsman associated silence with getting to the top of a mountain:

> If you have successfully completed a climb and you just sit there, there is that moment of silence, that sort of equilibrium between body and landscape and mind, where everything just goes quiet, you don't want to talk, you just want to sit there.

This description indicated an act of absorption into the surrounding soundscape (Schafer, 1994) and landscape. The use of the word 'equilibrium' is important here, indicating there is no tension in the relationship between the individual and the environment - the positioning, for this moment, does not need any adjustment.

In Harry's example, silence and stillness are linked. However other participants linked silence to outdoor physical activity. Whereas Tracey described the silence she experienced while jogging as a way of 'turning off', Susan linked experiencing the gentle sounds of nature outdoors, while cycling, to thinking:

> The outdoor space ..is very helpful, that kind of silence … just natural …. So I think when I've been cycling I've done some of my best thinking, and when I'm walking on hills I'm quite good at thinking as well.

Here Susan, as a research academic, described how the world of academic life co-exists with her world when cycling in the countryside.

In these examples, each individual has positioned themselves differently. Harry had a strong degree of affiliation with the acts conventionally associated with mountain climbing - including the narrative where 'you get to the top and take in the landscape'. Tracey described jogging as a way of *not* engaging with the demands of the external world, rather than as something positive. Finally, in the silent activity of cycling Susan's identities in two figured worlds - sport and academia - temporarily become merged.

The relationship Susan indicated between thinking and silence is an important one and will be considered in detail in Chapter Seven.

Silence and the sounds of home

Although many participants and many respondents in the n-q survey mentioned natural sounds in association with silence, there were participants who equated other kinds of home sounds positively with silence. So Martin mentioned the central heating system in his house:

> Sounds funny, but the first thing that springs to mind is the central heating system! It's one of those things that drones on in the background, but you know that the radiators will be nice and warm… it's a form of cosiness… you know, you hear it kick into life… there is that kind of background noise… it's quite usual.

In the n-q survey, respondents mentioned not only central heating, but other types of background domestic sounds - clocks ticking, 'electrical appliances humming', 'the house settling'.

What appears to be important here is the familiarity of those sounds - providing a background of security where everything seems safe and nothing worrying or frightening is imminent. These sounds mediate the individual's experience of that environment, hence the sounds of Martin's central heating possess particular meaning for him - in addition to security and familiarity; they signal warmth and comfort.

Conversely an absence of these sounds may indicate that something is wrong. Kevin, in his identity as a father, described how silence could represent a lack of a comforting human response and hence could be used as a weapon, for example it could be a way that a parent might indicate disapproval of a naughty child. In his identity as a son, Kevin gave an example from his own family history, which had strong emotional resonances for him. He described how much his mother had said she hated the silence when all her children had left home. This description implied a greater physical and emotional isolation rather than just an absence of the sounds of loved ones. Here he suggested that if certain sounds were associated with something comforting or pleasant, then the absence of those sounds could be disconcerting or even distressing. In the most extreme case, silence could be associated with the permanent cessation of sound which occurs in death - a literal example of the relationship between silence and death expressed metaphorically elsewhere (Jaworski, 1997).

In support of Kevin's example, a number of the n-q respondents also mentioned sounds internal to themselves. Fifteen associated the sound of their own heartbeats positively with silence and seven mentioned the sound of their own thoughts 'the sound of me thinking to myself'. Twenty three mentioned the sound of breathing, often in relation to the sound of their own breath, although some also mentioned this in relation to the breathing of loved ones. The choice of these internal sounds suggested a particular set of meanings relating to reassurance, familiarity, but could also indicate a confirmation of continuing to be alive.

Noise intruding on silence

In its relationship with sound, silence was most frequently associated with the natural world. In their relationship with the natural environment, silence represented a temporary state of equilibrium for most participants. Noise represented an intrusion and a disruption of this equilibrium. Penny described the 'sensory bombardment of noise' experienced in the urban environment and a number of participants referred to the intrusive characteristics of 'city' noise. Responses in the n-q survey indicated many city noises intruding on silence. Thirty-one people identified traffic noise in general, with a further sixteen mentioning cars specifically. Other machine noises which scored relatively high were telephones (twenty- five) and alarms, including car alarms (twenty). One respondent described these as 'Loud, negative, violence, aggression'.

Susan contrasted machine noise with what she considered a less intrusive sound of a hand-pushed mower:

> Old fashioned lawnmowers that were hand drawn mowers and not the modern ones that are generated by some sort of power. The old fashioned ones I could even fit into my definition of silence almost…the modern ones are quite an unpleasant noise and kind of get in the way.

In this context 'getting in the way' implied an intrusion on Susan's capacity to think without interruption. Apart from 'city noise' and machines, noise from other people also intruded. Participants identified other people's music as intrusive, and this was also mentioned by thirty five respondents. However, the highest category of intrusive noise was that of other people's voices.

Christine described noisy next door neighbours who stopped her thinking and concentrating. She perceived this noise as an aggressive intrusion into her personal space and she described feeling 'hounded' when it occurred. Forty-one respondents mentioned the human voice without specifying the circumstances; thirty-one specifically mentioned raised voices or shouting. Of the forty-one non-specific cases, six mentioned the intrusion in terms of direct communication: 'People talking, especially to me'. Participants also mentioned specific instances of someone talking directly to them, even loved ones, where they experienced the talk as intrusive noise.

Participants described the various strategies they used to minimise intrusion. This was frequently represented as a process of trying to gain control over their auditory environment. Christine described putting on a CD with classical music which would mask the noise which she found difficult to tolerate. Karen, describing her need for almost constant music, called this control putting 'a blanket of silence over sound that is already there'. Maggie discussed the ways in which people use 'iPods' and 'Walkmans' to maintain the sense of personal space, echoing the work of Du Gay et al

(1997). In each example, silence was expressed in terms of comfort with the surrounding auditory environment. Violation of this comfort through the introduction of unacceptable noise was experienced as 'physical intrusion' (Laura) and the individual's efforts were concentrated on restoring the sense of equilibrium by asserting the sounds which to them represented silence.

Different perceptions of sound and noise

Although there was considerable agreement over what was classed as positive or negative, there were occasions where participants held different views on what could be classed as 'noise' and what as 'sound'. What some participants counted as soothing, others found intrusive. This was ascribed to familiarity or lack of familiarity. Kevin described how his father, was unable to sleep in the country because he was brought up in the town and was used to the sounds associated with that environment. Here the individual's personal history caused a specific perspective to be adopted on the soundscape of this figured world. Similarly, Maggie described the effect of the countryside on a group of young people:

> The young people, I think, they've problem with silence. They live in a world of noise. When we used to take kids out to the countryside, when I started teaching, they were actually scared of the quiet, because they were used to noisy families, noisy traffic, noisy city.

Maggie not only suggested that the lack of familiarity meant that the silence became intrusive, but also that the equilibrium provided for her, and others, as a result of their relationship with the natural world, was becoming less possible:

> People now constantly have music... whilst there's nothing wrong with that music, it's almost if you turn that off or get rid of it, they don't know how to fill this space...

This not only suggests that music is being used to block out an experience of silence, but that the cultural capacity to experience pleasure in silence is being diminished.

In contrast to other participants, Karen's perspective on the 'natural' spaces of the countryside was negative and based on personal experience of being brought up in the countryside. Karen disliked the sounds of the country, which she experienced as intrusive 'noise' not sound. She termed this the 'complicated hubbub' of the countryside:

> In the countryside there tends to be quite a lot of noise.....machinery and animals and water and trees ...these are all things that I find fairly noisy. Because of living in the city, they're not things that I kind of pick up normally, so you kind of notice those...

The unfamiliarity of the noise is partly responsible for Karen's negative reaction, but also her associations with the countryside itself:

> I'm usually scared of countryside, and that's to do with being brought up in the countryside. I'm not so keen on animals and I genuinely think that farmers are a bit scary, they often carry guns and I feel that the countryside is about rules.

Unlike some other participants, including Penny, the yoga teacher, who associated the space of the countryside with freedom, Karen saw it as a repressive 'political space' packed with rules. The auditory stimuli, constituted by some as sounds which soothed, associated with peace, calm and tranquillity, for Karen were a reminder of this perceived oppression:

> It comes back to where you're allowed to be and where you're not allowed to be and the kind of person you are. I also think that countryside recently, is quite a political space, and there seem to be a certain group of people who live and work in the countryside who have a different set of rules to people who live and work in the city. I would say that countryside is something that people

> describe as silent or peaceful, but actually it's often one of the least silent and peaceful places, as well.

For Karen, the figured world of the countryside was filled with social practices which indicated overt control of space and were related to the countryside as an environment where people worked. The characters that inhabited this world were the 'angry farmer' and the 'territorial landowner'. Here aspects of the countryside that other participants ignored or of which they were unaware, caused Karen to position herself differently to other participants in relation to that world.

Public spaces associated with silence

Although Karen was the only participant to view the country as a culturally-constructed rather than a 'natural' space, participants did mentioned other public spaces conventionally associated with silence, where the silence occurs because of certain cultural rules and conventions. These rules determine how silence is defined, what may be characterised as 'sound' and what as 'noise':

> There are rules that govern silence and social norms that govern it. So...silences that might be generated by oneself or silences that might be imposed by another, are regulated by social rules and norms about where they can be used, where it is appropriate to use them and therefore can be violated. (Virginia)

Penny called these 'institutional silences', echoing the frameworks of both Bruneau (1973) and Saville-Troike (1985):

> Institutional silence, like in prisons, in a solitary confinement context, Or in schools, maybe not schools nowadays, but schools, where you used to have to go and stand in the corner in silence, so it can be used as a punishment.

Penny associated these kind of institutional silences with power and repression, where some people have the capacity to control and others are denied access to that control:

> I was … just tending to think of the negative side of it, as a form of taking away freedom, a form of torture even, and taking power away from people, using silence to do that. .. You know, really nasty regimes where you're silenced basically, it's not safe to speak your mind.

Penny also mentioned churches and religious meeting houses where there was 'religious silence':

> Religious silence - I mean probably every religion will use silence even if it's in the form of silent prayer. I was initially brought up as a Catholic and then my parents changed to be Quakers and so silence is a big part of that form of worship.

In the examples given in the previous sections, the concepts of silence, sound and noise serve both metaphorical and literal functions. For Karen, countryside noise acted metaphorically as a reminder of the limitations to her freedom. For Penny, the concept of religious silence acted metaphorically, as a sign of communion with something greater than the individual. However, within Penny's examples of institutional silences, silence was also associated metaphorically with repression. The concept was used literally, to some extent, in that within particular institutional spaces, specific auditory stimuli would be characterised as unacceptable 'noise'. For example, the sounds of shouting in a school corridor would be considered unacceptable noise, disturbing the level of silence within that social space. However, as notions of silence and noise within these institutional spaces would have been culturally determined and would have a signification which implied adherence to the rules within that space, unacceptable noise would also act as a metaphor for rejection or challenge of those institutional rules. Hence silence being 'broken' would imply rules being 'broken'.

Silence spaces filled with noise

Other participants described direct and literal reactions to noise within certain spaces, such as libraries and museums. Participants suggested that these previously silent spaces were now filled with what they characterised as 'noise'. Maggie, working in FE, discussed libraries in colleges filled with the noise of computers and of people talking. Susan described the new science museum in Birmingham which uses new technology designed to be 'interactive' and which she found overwhelming, aggressive and 'claustrophobic':

> They come at you with everything. It's not things to look at anymore, it's push button things, so you can press and you can hear people talking and then you can make machines do things and, you can grow lettuces and you can see how technology does X, Y and Z, and technology makes a lot of noise whenever it does X, Y and Z, so you hear all the noises of it. And it literally is noise, coming at you in every different section of the museum, different types of noise, so if you're standing in one section you can actually hear bits from the other place as well. And it's fairly loud too, aimed to appeal, I presume, at younger people. And it's just all too much!

Susan's example presented the tension between the use of auditory stimuli to engage and motivate, and the different ways that individuals might actually respond and give meaning to those stimuli. In the science museum, there is indication of designers following current thinking on learning which promotes certain types of active engagement, fast pace and many shifts in activity. Based on these ideas, presumably the designers envisaged the environment as stimulating and exciting - filled with enjoyable sounds, rather than intrusive noise - but Susan's response indicated that their design assumptions were not borne out, at least in her case. The stimuli, rather than giving space to enjoy and learn, are here described as 'noise', encroaching on that space.

In Susan's interaction with this world, the value she placed as an academic on space and time to think things through carefully and clearly, located in particular scholastic traditions pertaining to learning, involving study and detailed engagement appeared to be at odds with the fast-moving bombardment of sensory stimuli within this contemporary learning environment. However, as an experienced teacher educator, she also acknowledged that there could be generational differences in the way students liked to learn.

Some participants suggested that different generations would have different perceptions of what constituted noise and what constituted sound, due to the level of familiarity with certain auditory stimuli. Hence members of one generation would, generally, have less tolerance for certain stimuli due to their unfamiliarity, which would be experienced as foreground noise rather than background sound. One respondent from the n-q survey also suggested this:

> Different age groups have differing ideas on silence and preferences change with age.

However, this was not fully supported by the general data from the survey, where younger respondents generated the same categories of intrusive noise as older participants.

Summary

In this chapter, participants rejected the idea of absolute silence and identified different types of silence, including the multi-sensory nature of the concept. Associations with silence were filtered through different perceptions and personal histories. Participants represented themselves in a process of continuous positioning

with the auditory environment, in which they imposed their own versions of 'silence', as a means of exerting personal control. Their 'sounds' of silence were equated to a sense of comfort and temporary equilibrium between the individual and the world. Although the word 'noise' was used to indicate an unpleasant auditory stimulus, like silence, it became a metaphor for the way the individual experienced an aspect of the world. The next chapter will expand on the notion of silence as a metaphor used to express different aspects of that relationship.

Chapter Seven: Silence as a metaphor in everyday life: personal, social and communal silence

The previous chapter discussed different views of silence, both positive and negative, and introduced the ways in which silence has the capacity to convey meaning. This supported previous studies referring to the semantic properties of silence (Jaworski 1997, 1993). Using the most literal association with silence - its relationship to sound - the chapter also discussed how people negotiated the world of sound and noise. For many, the term 'silence' represented a positioning that enabled them to exert some control of, and experience a sense of equilibrium with, the external environment. This was not only physical, but metaphorical positioning, in that the term 'silence' was used to express a sense of comfort and freedom from intrusion.

This chapter continues these themes, by expanding on the role of silence as a conceptual metaphor, where one domain of experience is understood in terms of another domain of experience (Lakoff, 1993). It will consider how the term 'silence' is used to express a range of relationships between the individual and the everyday world, exploring the associations and values linked to the different conceptualisations and how these are exemplified in everyday experience. This chapter will suggest that silence, as well as vocal or verbal language, performs a mediating function in these relationships. It will also introduce some examples of how silence can act as a 'tool' or a 'sign' - a theme that will be further developed with an explicit focus on teaching and learning in Chapter Eight.

Firstly, silence as a metaphor will be explored in personal terms, considering the ways in which individuals use silence to mediate the private and social spaces of different figured worlds, followed by the use of silence as a metaphor in social or communal contexts.

1. Personal Silence

(a) Silence as a metaphor for personal space/time

Participants used silence as a metaphor for personal space/time, in aspects of their lives perceived as personal and private. In the previous chapter, they used various strategies to exert control over environmental noise. In this chapter they express attempts to control 'metaphorical' noise, balancing social pressures - the physical and emotional demands of participation in the worlds of family and friends - against needs for personal space.

Virginia described the busy world of Western culture:

> I think particularly in Western cultures, what we're encouraged to do is be busy and have these full lives, so they're full or activities, they're full of talk, they're full of things, they're full of relationships, they're full of 'do, do, do, do, do', there is no space, there is no silence.

In this busy world, the concept of personal silence encompassed both the physical and the abstract:

> Because you can be surrounded by noise but be silent.... you can create your own silence in a noisy world - but abstract rather than physical. (Laura)

This silence provided mental and emotional space:

> Silence means a time of personal space. It does not have to last for hours - a few moments can be very therapeutic. (n-q survey)

For some participants, this also represented 'a space for authoring' (Holland et al, 1998), for reinforcing a sense of identity. Virginia expressed this as an 'internal dialogue' in which her own identity was negotiated:

> I think that people are increasingly looking more and more and more for a way to get back to that silence, ... in that dialogue you have with yourself, that you understand who you really are.....in the absence of those spaces, in the absence of that silence .... there is an inherent danger that your sense of who you are becomes fragmented and lost.

Virginia's use of the word 'danger' suggested a sense of identity under siege. Charlotte, too, represented her identity as something that had to be guarded, in order to reinforce a sense of separateness between herself and those who would seek to intrude:

> ..silence..to have that sense of being myself, in my own space, and that other people can't touch that.

Here intrusion represents an incursion into her own sense of self as well as physical and emotional space. For Charlotte, physical space and conceptual space for maintaining her sense of identity were co-related:

> Silence is more about physical space around me than an absence of sound. It's about privacy - about having some part of you, yourself, that can't be taken away by others or influenced by others, unless you let them.

However, social worlds shape the values attached to certain identities and these can influence how the individual positions herself. Maureen's use of the word 'selfishly' shows how she incorporates 'socially inscribed voices' (Holland, 1997, p.283) to influence her sense of self:

> The silence in my personal life is very selfishly about me trying to look after me.

The world of Maureen's narrative is peopled with the 'good mother', the 'caring daughter' and the 'supportive friend' which seek to position females in relation to these identities. In the previous chapter, people used silence to negotiate their relationship with sound and noise, in order to exert some control over their environment. Here personal silence provided a temporary space for Maureen to exert control by *not* engaging directly with this social world or taking into account the needs of other people.

Lois articulated how she perceived this 'private' and 'public' separation, where the 'me' - the 'other' to the rest of the world - operates within different private and public spaces:

> There's this word, 'separateness' being apart from the world and people and yet, having a feeling or a sense of completeness... Private thoughts, in a public world... we should allow ourselves private thoughts and although we are public we are still want to maintain privacy and it's [silence] about that internal world, which is' other' to anybody else, because it's an unseen world.

As an actress as well as an academic, she emphasised the performance aspect of people's engagement in the social world, suggesting that, within the public spaces where performances are enacted, an individual's identities may co-exist. However, in this public participation, a cohesive sense of identity may become 'fragmented and lost' (Virginia), through the conflicting demands and pressures for conformity to acceptable social types. This sense of fragmentation is in contrast to the sense of 'completeness' contained in Lois's idea of 'private' separation. Whilst the individual

is still aware of the 'public world', they are in a state of equilibrium which allows the sense of self to exist in balance with that world.

(b) Metaphor for escape or retreat

When the world threatens to overwhelm the individual, silence acts as a refuge and an escape, a figurative place of comfort and security:

> It's something for me which I actually seek out. … I give it to people in conversation, but for me it's something I need to actually seek, that I take refuge in.

Christine drew on two different conceptualisations of silence here - firstly, silence as a medium of communicative exchange - something which can be given and received - secondly, silence as a metaphorical place of refuge which shielded her from the demands of the social world. Laura expressed this personal silence as 'times that are free from human or man made noises':

> I'm very busy, but days I have to walk to school are lovely because that's my quarter of an hour 'away from it' time. It's a busy, noisy life where people want part of me. I suppose it's a sanctuary that silence. Because even though there's noise around you, you can create it yourself and just lock yourself into it.

Her use of the phrase 'want part of me', like other participants, suggest how the demands of the social world makes inroads into her sense of self. These words also echo Virginia's description of the fragmentation of identity - 'being torn apart' - caused by the busy-ness and pressures on the individual. In her use of the term 'lock yourself in', Laura used a strong metaphor for the creation of a personal world, where she was in control and to which no-one else had access.

Silence afforded Laura the opportunity to position herself differently in relation to the world of social obligation – at least for a time. She described domestic activities associated with that silent time of retreat - dusting her late father's picture and looking at her grandchildren and 'hugging yourself inside'. To a member of her family, these activities would position Laura as 'the good housewife' or 'the loving grandmother'. Laura's own positioning within this social world would be very similar, as this silence represented a space to value those people important to her. In contrast, one can imagine alternative narratives where acts of outward domestic conformity masked resentment and rejection of an individual's own positioning in relation to these idealised figures.

Kevin's 'personal silence', was also associated with specific activities - gardening and playing the piano. In his examples, 'mental silence' provided freedom from having to think about his current activity - playing the piano where 'I don't have to think what my fingers are doing'. Unlike Laura, his overt behaviour and his covert behaviour are not in correspondence. Hence an observer would describe him as 'playing the piano', whereas he would describe himself as 'thinking about other things while playing the piano'. The dissonance between the observer's interpretation and the individual's interpretation of behaviour will be especially important in the next chapter when we consider silence in the classroom.

Respondents in the n-q survey also mentioned silence in terms of retreat:

> Silence is a blissful time when I am not speaking or being obliged to communicate verbally with anyone.

Bruneau's (1973) description of 'the burden of speech' comes to mind here, where the need to vocally interact with the social world becomes a pressure from which some individuals wish to escape.

The use of silence to mediate between individual needs and participation in the world also involved constant readjustment. Yolanda, absorbed in her weaving and living in a small country village, found social participation harder, the longer her silent space was maintained:

> I'm weaving all week, I could sometimes go several days without speaking to somebody and I choose not to because I can't be bothered to speak. ....Because I think the more you are quiet, the more you want to be... You're in that space and you don't necessarily want to come out.

Even when loved members of the family talked or wanted her to respond, this could be experienced as an intrusion. As in the previous chapter, the notion of equilibrium is important here - too much silence, as well as too little silence, will disturb the balance. Maggie described the potential effect of this:

> ..if you do lead a quiet life you can find that, even one's partner can get on your nerves, because they come home wanting to talk to you and they want you to listen, so you better be really careful...that it doesn't become self-indulgent.

Maggie not only recognised that she had commitments to the social relationship with her partner, which needed to be constantly renegotiated, but also, by using the evaluative term 'self-indulgent', showed awareness of the wider social censorship for behaviour that was purely for the private rather than the social being. As actors within the figured worlds of intimate social relationships, this could be manifested in a sense of frustration with partners who did not understand the strength of the need for

personal silence. This suggested that one dimension of a 'successful' social relationship involved a successful negotiation of silence. This is an issue to be considered in the next chapter in relation to teachers and learners.

(c) Noise as a metaphor for intrusion into silence

Participants used the concept of noise metaphorically to imply incursion into personal silence and personal space. In this case, silence was equated with freedom, and noise with being hemmed in:

> There's definitely a feeling as though you're having things squashed in on you when there's lots and lots of noise, it's almost a sort of claustrophobia really. Even if it's noise that you like ....So part of silence is actually about feeling like nobody is putting barriers around you or putting walls around you, ... so it's giving you all the space you need somehow. (Susan)

Although noise could be generalised, as in this example, it was frequently associated with the human voice, with people talking and expecting to be listened to, or people wanting to be talked to - in other words the expectations of others for engagement in the processes of vocal interaction.

Within the figured worlds of domestic life, partner or children, their children might exert demands experienced as a noisy intrusion on personal silence. This was contrasted with the formal relationships in the work environment. For Peter, the workplace office was equated with sociability. *Talk* was the primary mediating tool used to promote his sense of belonging at work and reinforce a sense of fellowship with colleagues. In contrast, home was the space for concentrated work time where Peter planned lectures and wrote up research. Here *silence* was used as a mediating tool to provide the opportunity for personal space.

In contrast, Simon did his preparation and administration at his workplace and needed to create silent time at work to help him focus. In his office, people were in continuous vocal or verbal interaction and the 'good team worker' was perceived as someone who engaged in vocal interplay. In order to maintain his status as a good team worker, Simon improvised strategies which would make the silence acceptable within that context. He described how he pretended to work at the computer:

> I know that my colleagues would not interrupt because they think that I'm working on the computer .... which gives me a short period of silence to achieve what I want to do.

Here Simon was engaging in 'play' (Holland, 1998; De Certeau, 1980; Vygotsky, 1978) pretending to do something which took him from his current environment into the world of thoughts and plans. Silence acted as pivot or tool to orientate himself to that world. As with other participants, his 'play' legitimised private behaviour possibly perceived as 'selfish' in the social world:

> .... when people are talking to you, you concentrate on ***their*** conversations or work processes, so it's creating your ***own*** silence. (Simon's emphasis)

Simon's acknowledged status in the workplace and the strategies he developed to maintain it, were successful in the world of work, but often unsuccessful at home. His own children ignored the signals of unavailability - successful for him in the work environment. He identified two possible reasons for this - either the children had not yet learned to attach significance to those 'blocking off' signals, or they had decided to ignore them 'because if you're concentrating they're not bothered'. In the first explanation, young family members gradually acquire knowledge about silence as a form of communication. In the second, the children may be finding their own voice as a space for agency (Bakhtin, 1981) and literally speaking back to a 'voice' of

authority i.e. Simon in his formal position of power within the household. It is likely that the two explanations both have validity and the process of balancing their father's need for silence with the need to assert their own senses of identity are part of the 'growing up' process for his children. Hence 'learning' about silence is part of child development.

In these examples, silence acts as a mediating device 'altering the behavioural architecture of the users' (Holland et al, 1998, p.35) in their relationship with the 'noise' of particular worlds. Silence serves to define others as outsiders to participants' own private worlds - the imaginary worlds in which they organise their sense of their own identities. These are worlds in which talk intrudes, or where more general external noise makes incursions into the sense of personal space. These signals vary from user to user, and each user improvises strategies which will work in particular localities.

(d) Silence as a metaphor for isolation

In the previous sections, silence was perceived as voluntary and under the individual's control. However where it was involuntary, the way silence was experienced was very different - 'a feeling of abandonment and isolation' (n-q survey) - echoing Bruneau's (1973) reference to 'deep' silence.

The notion of 'locking in', used metaphorically by some participants, to indicate a space for the private world of their own thoughts and emotions, had a more literal significance for Simon and in his narrative indicated an instance where silence was frighteningly out of his control. Being 'locked in' reflected a key experience from

Simon's military background, where he was placed in solitary confinement as a means of preparing him for torture techniques if he were to be captured in combat. In the world of the prison, silence is used by those in control as a tool to create a sense of isolation from the rest of humanity. The prisoner's silence is a means by which warders maintain power - not only power over physical freedom of movement and whether the prisoner can eat or sleep, but power over the prisoner's own sense of identity. By depriving the prisoner of a sense of connection with the world, the warders gradually limit the resources available by which he can define himself. Simon described the effect of this silence:

> We expect to have visual acknowledgement, verbal communication, physical communication and when we have been deprived of those for a reason which we don't understand, we feel isolated and no-one can understand what we're going through mentally or physically, then it's almost as though you don't exist.

For Simon, seeing, hearing, talking, touching were vital means of providing validation that he existed. He described the techniques that people will use to recreate a sense of interaction with something outside of their immediate predicament:

> They would have to link or attach themselves to something whether it's in their subconscious, whether it's by reciting in their mind a book they may well have read or a passage which they can say or listening to some music, it's so they can reach out from themselves and touch something, and they are not getting it from any other source.

Simon's memories of the artefacts associated with a comforting figured world of 'normal' everyday life, were used here as 'psychological tools' (Holland, 1998, p.60) to evoke a different world from the isolated world of the prison cell and formed part of his attempt to reposition himself as a member of a social everyday world, to which he was temporarily denied access. As such they had an externalising, rather than an

internalising function. Silence in this instance was negative and represented an unacceptable separation, whereas the cultural resources he used - someone else's words from a book he remembers, or someone else's sounds, from a piece of music - invoking other human voices or human sounds - re-located him in a relationship with humanity. The human voice was more than just words or sounds conveying ideas or messages, instead it had an ontological significance for Simon. Echoing Ingold's discussion of the Ojobwa, for Simon in his prison cell, speech represented 'a way of *being alive*' (Ingold, 2004, p.47).

(e) Metaphor for peace and stillness

In these conceptualisations, silence represented a set of perceptions about the individual's relationship with the social world - a need for membership, a representation of an escape from demands or an indication of a coherent sense of self against the fragmenting pressures of the external environment. Participants experienced this coherence as 'internal' or 'inner silence'.

Yolanda used terminology drawn from yoga to describe the process and the need for creating 'inner silence' in an over-stimulating environment:

> To go inside and ....to draw your energy back and to ground yourself is incredibly important especially when you're surrounded by all this frantic stuff. ..They say in the city you see two and a half thousand images a day from adverts, you need some relief from that, you need to close your eyes and go inside.

This process describes an almost physical marshalling of internal resources, with the notion of 'grounding' oneself implying a relationship with something more solid and permanent than the kaleidoscope of stimuli present in Western urban society. Here

inner silence represents individual positioning in opposition to these relentless stimuli - finding a sense of equilibrium through the 'grounding' process, characterised by stillness and a sense of peace.

Of the one hundred and sixty-four respondents in the n-q survey, sixty nine responses associated personal silence with peace, calm, tranquillity, quiet and harmony, with twenty seven responses explicitly linking silence and relaxation. The common thread here is the lack of any dissonance between the external environment and the internal state. Hence the individual positioning is in equilibrium with the external environmental positioning of the individual and in this situation, silence acts as a 'sign' (Vygotsky, 1978) with an internalising orientation. This relational space does not involve language in the form of 'inner speech' but moves the individual beyond articulation.

Martin, as a dedicated Christian, added a spiritual dimension to notions of silence, where peace was derived through communion with something greater than himself. The trust and security in a greater power relieved him of the need to 'do' something or 'be' anyone, at least temporarily. In this silence, Martin's sense of identity was not an individualised one, not was it perceived to be the fragmented identities configured within the complex worlds of everyday life. Instead Martin's understandings of his own identity were mediated by his readings of the Bible in which his god is unequivocally represented as 'I am who I am' - the one great assertion of identity into which all lesser identities are absorbed. This silence recalls the 'Great Silence' of monastic life mentioned in Chapter One.

Many participants used silence to express their relationship with other aspects of the world perceived as 'greater' than themselves; for some this was Nature; for others, it was humankind. For Maureen, this silence involved walking on the moors, experiencing the presence of those who had walked there before her.

> When you're getting out and about, high up into the moor land, ...for many centuries before, people were going to exactly the same spot and thinking a multitude of different thoughts.

Here Maureen's silence embodies an experience of 'habitus', with an awareness of self derived from and yet located in the sediments of socio-historical time.

(f) Silence as a metaphor for thinking space/time

This metaphor is very important to this thesis, as participants describe what happens at times when an observer might conclude they were 'doing' nothing. The link between passivity and silence common in current educational discourse and identified in Chapter Four would support this view.

In the n-q survey, sixty-one responses mentioned thinking in relation to silence. Of these thirty-three responses linked thinking with concentration, thirteen linked thinking with reflection and another ten responses mentioned reflection separately. These associations suggest the 'slow time' mentioned by Bruneau (1973). In that silent space and time, different kinds of thinking would occur.

When Christine linked silence and thinking, she defined it in terms of time and space, distinguishing between the 'split second 'silence between the ticks of a clock, the space between words necessary to separate out and give shape to the meaning and the

brief periods of silence between words where neither person is talking. These are reminiscent of the 'psycholinguistic' and 'interactional' silences discussed in Chapter Three.

Just as the experience of silence could be disrupted by noise from the external environment, the mind 'chatting' or 'chattering' could disturb the sense of silence. Maureen described this thinking as 'noise':

> We all have thought processes and therefore ... we've all got noise continually because we are always thinking.

For Tracey, silence was associated with continuous 'noise':

> If I just sat in silence things are just going round and round in my head and I'm just thinking about things all the time and that's what I don't want to be doing.

Thought and inner speech

Tracey's position was that silent thinking is unproductive and circular. Virginia used the term 'inner speech' and suggested its value:

> ..as a process of helping you to sort things out, recognise anomalies, similarities, all those kinds of things. So I think if you value inner speech, you can use that inner space as a way of working things out for yourself.

In Virginia's discussion, inner speech performs a vital function in helping the individual understand themselves and their relations with the world, as 'actualised meaning' (Morris, 1994, p.4) located in specific contexts, events and social worlds.

Sometimes participants characterised inner speech as monologic - a 'stream of consciousness'. Sometimes it was dialogic - an imaginary dialogue with others,

echoing Bakhtin's notion of a creative boundary 'between a self and an other' (Morris, 1994 p.5). In the thinking taking place in inner speech, silence acted as a 'sign' mediating the individual and the components of their social environment, allowing individuals to internalise and make sense of experiences, also to explore possibilities and envision themselves in new social worlds (Skinner et al, 2001).

Non-verbalised thinking

These understandings could move beyond the conscious articulation of thought:

> Sometimes thinking manifests itself as inner speech, a dialogue with oneself and sometimes thinking doesn't, thinking is a blank, but the blank is not *not* doing anything, it's not *not* purposeful or active, it's just not verbal. (Virginia)

Here inner speech, involving internally articulated *verbal* thought, is differentiated from thinking which occurs *without* internal verbalisation. Importantly, Virginia emphasised that in-articulated thought does not imply *unproductive* thought, but suggests a level of non-verbal and subconscious complexity - the 'abstraction from sound' described by Vygotsky - unable to be encapsulated in words. The role of language in mediating thought occurring at this profound, pre-articulate level is difficult to explain and neither Vygotsky nor Bakhtin in their analyses of inner speech address this issue directly.

Participants who were artists - individuals with a strong visual bias in the way that they experienced the world - described using an internal *visual* language to think. This is reminiscent of Sachs' (1989) description of a visual inner language in the deaf, where the usual cultural link between thought and words exists to a far lesser extent. The use of the terms inner 'speech' and 'voice' are associated with verbal language.

These represent the selection of a particular set of cultural tools derived from a dominant discourse of 'words' and 'speech' which could bias their understandings of thinking and the processes of thought. These understandings are also value-laden, giving significance to thought that can be articulated and hence 'assessed'.

Escape from logical thought

Silence encompasses the opportunity for escape from logical thought. Laura described this process:

> I'm a great daydreamer so whenever I'm not having to do something, or I am engaged in activities that don't need my brain, I'll daydream within my own silence within my head.

When Laura talked about her brain being her 'own', the implication here was that she did not have to articulate or produce those thoughts in a way that was accessible to anyone else. The term 'daydreaming' is, like all language, culturally produced, and has connotations of fantasy, 'unproductive' thought, a 'reverie' and - according to the Oxford Dictionary (1995, p.343) - something to be 'indulged' in. However, Laura used 'daydreaming' in a different way, to mean a special kind of thought - the freedom to think disjointedly and multi-directionally, without immediate pressure to articulate the meanings generated. Lily, the Malay-Chinese artist, described daydreaming as - a 'dream space'- where ideas had the freedom to emerge without the constraints of logical thought.

Thinking as cultural work

Susan described thinking while cycling as a space in which she could allow her thoughts to roam, ranging over everyday life and her academic work writing journal articles:

> Those things [i.e.activities] are certainly conducive to thinking although the thinking isn't very productive because I'll spend two seconds thinking about one thing and then I'll start thinking about the shopping I need to do and then it'll go back to why that article isn't like I wanted it to be.

Of significance to this thesis, is that Susan described this type of thinking as 'unproductive', although elsewhere in the interview, she had described how it enhanced more formal thinking in conventional silent thinking spaces such as her desk at home or in her office at work:

> So those sorts of things tend to be a bit all over the place but never the less they're helpful usually because I can …come back to them when I've clarified something in my head.

In the figured world of academic life, as in formal education, definitions of what constitutes 'good' thinking, involving logical, structured ideas which can be communicated coherently and which form part of the fabric of her professional life, appeared to have influenced Susan's narrative. This 'context of meaning' (Holland et al, 1998, p.60) appeared to bias her notion of 'productive' thinking, although her own experience showed how less recoverable unarticulated or partially verbalised thought could help her develop ideas. In Susan's case, the use of silence to provide a space for thought in everyday life - 'headspace' as she described it - became confused by the extent to which her figured worlds of everyday and professional life were fused. Even in everyday life, Susan's sense of herself as an academic and an educationalist was very strong and this identity acted as a powerful mediating device for other aspects of

her lived experience. Hence in her discourse, she marginalises her own experience of complex, pre-articulated thought and assigns more value to a particular kind of thinking. In so doing, she affiliates herself with the culturally-dominant position in education, valuing recoverable rather than complex less-articulated thought.

(g) Different categories of thinking

The data suggested a number of different categories of thinking which are discussed in this section.

i) Anticipatory thinking (occurring before an action or experience)

The first type of thinking involved anticipation - planning or rehearsal; these could be large scale - planning for a day or rehearsing for a significant event, or small scale - planning what to say or do next, or rehearsing ways to articulate one's thoughts.

Planning

Planning included the rational and articulated projection of alternative scenarios and their consequences relating to the things that were expected to happen during the day. However, Martin's use of the term 'mull over' appeared to suggest a more free flowing kind of thought which encompassed an emotional as well as an intellectual preparation for what is to come:

> First thing in the morning...[I] have that silent moment ... I very quickly mull over the things that I've got to get done in the day and it doesn't mean I can get to them any quicker, it just means I worry about them earlier on, and ...having that quiet time, saying this is time out, this is not me at work, it's just time for me.

Although Martin identified this silent moment as time for himself, and distinguished between home and work identities, yet it was the 'self' projected into the figured world of work that dominated in his example. Here he suggested preparation for future action and interaction, without the need to actually do or produce anything at that time. He described this thinking space as a 'buffer' between thought and action, giving a chance to consider things through carefully:

> So, I think it is a buffer, and I think it also means when you do start work, or go out what you do, you have that preparation, you have a chance to think through things you'd have forgotten if you'd just dashed round.

In Martin's example, he is occupying different fields of activity (Holland et al, 1998) mentally 'pre-figuring' a future virtual 'field of activity' in which he will participate later that day, whilst existing currently in the field of activity constituted through his participation in his life at home.

Lois also used silent thinking time for relatively short term planning plan for the day ahead, however she also described how planning might involve longer term goals:

> Some of my silences are work-related silences, which I think is rather sad! Often, I am thinking about work ....and thinking about the future and what is going to be my next goal, in terms of qualification or research.

Like Susan, Lois was also an academic, but whereas Susan's professional and personal identities overlap in her enjoyment of thinking about academic ideas during everyday life, Lois takes a more ambivalent position to this mental incursion on her domestic life.

Rehearsal

When preparation was specific, it acted as a rehearsal time for how participants would engage with particular activities usually in the short term future. Rehearsal involved thinking about how a future interaction or event would be approached. This could be small-scale and short term, such as a quick rehearsal of a contribution to a discussion minutes before saying it. In this case, rehearsal would involve 'fast-time' silence and might be a psycho-linguistic pause before speech. However, it could be a longer term 'slow-time' rehearsal, as in participants' descriptions of their preparation for the research interview.

Martin used the rehearsal time prior to the interview to explore his own actions and behaviour, prompted by the research questions. He described the effect on him when he was considering this research:

> When I saw the questionnaire about silence, it started that ball rolling, it was very much kind of, alright then, what's all this about then? How am I doing this? Am I doing this? And you start thinking, yes, I am, but I start thinking what the impact of it was. You know, I like feeling comfortable to do it, or confident to do it... what made me confident to do it?

Martin's inner speech in this extract is an example of dialogic thinking, in which questions are asked and responses are formulated in a subject to which he already feels a positive affiliation.

Betty's gave a different example of dialogic inner speech, reflecting a repositioning towards affiliation. Betty moved from a negative view of silence, to 'modelling different possibilities' (Holland et al, 1998), until she finally decided on a more

positive position. In both Betty's and Martin's accounts, thinking and positioning were integrally related.

It is important to note that positioning was in relation to the subject matter, an *abstract* rather than a human component within this social world. Of relevance to this thesis is the idea that relational positioning to abstract concepts, taking place during silent thinking time, may be a strong component of what would be called 'learning' in a formal learning environment. However, in Betty's case, there is the possibility that her revised position represented an internal capitulation to a perceived dominant voice - in this case mine, as the researcher conducting the research.

ii) Contemporaneous Thinking (occurring at the same period of time as a specific activity or experience)

Concurrent thinking: Concentration and Focus

Many participants associated silent time with the opportunity to focus and concentrate on what they wanted or needed to think about. This type of thinking was mainly associated with rational thought which had a 'productive' focus. It could occur when someone was talking - the silence of active listening, concentrating on what was being said in a process of rapid absorption. It could also occur in carrying out a task relevant to what was being thought about, representing a combination of silent cognitive as well as overt physical activity.

Whereas anticipatory thinking had a future product, in contemporaneous thinking the production and the thinking are concurrent and represent the point of maximum conflation between cognitive input and output. Here the relationship between silence and concentration is important. This is not the concentration of meditation - a stilling

of thought - but concentration of *cognition*. Meditation takes the individual to a pre-articulate state of consciousness and, even deeper, to an absence of sense of a separate self. In contrast, cognitive concentration focuses on making meaning from current experience in order that it may be articulated at some time in the short or long term future. Sally discussed the importance of the brain being in the right kind of state to think effectively:

> A brainwave state, a kind of relaxed alertness … a particularly conducive state for …learning or thinking.

Silent concentration was especially needed for complex subjects:

> You might not have to be silent while the ideas are actually coming up, but when you're actually trying to get to the essence, I think that's really useful.

Joyce discussed how some people can multi-task better than others and the limits to the number of sounds the brain can process simultaneously. She suggested that different people have different capacities to do this, based on their backgrounds and dispositions. Thinking here is not only psychological, but 'cultural work' (Holland et al, 1998, p.271) in that prior or current experiences in particular social fields may affect individual capacity or inclination for silent concentration. This suggests that a capacity for silence may need to be learned.

Parallel thinking

Concentrated thought is characterised by exclusion and focus, parallel thoughts occurs in conjunction with overt activity. Thinking during cycling provided Susan with the opportunity for, what she termed, her 'best' thinking - the synthesis of previous ideas and new, creative ideas. Susan was concentrating, not on thinking, but on a physical

activity, using the silence to 'mull over' different ideas and thoughts in parallel with cycling. This could be because the physical activity gives the mind a chance to 'daydream' by escaping from the confines of logical thought. Or the physical activity may provide the main focus for concentration, while the thinking takes place without consciousness of thought, allowing ideas and solutions to develop 'behind the scenes'.

Joyce described this process when being stuck for a clue in a crossword:

> You'll go through lists of words, how you can arrange the letters, but if you silence your mind and totally switch off from that attempt to think in words and just ..go off into nothing, then what sometimes happens is that the thing just rises up... It sort of rises up out of what appears to be an empty mind.

In this type of parallel thinking, the individual deliberately stops trying to find the solution to something. Thoughts may be allowed to 'drift' or, like Susan's cycling, the individual may become involved in another activity which has no apparent cognitive relationship to the problem. Joyce's example suggested not only an abandonment of an attempt to think logically, but an abandonment of the use of conscious inner speech as a mediating tool for thought. In this case, there was no evident relationship between cognition and vocally or verbally externally articulated thought. In fact, Joyce's description suggested the benefits of suppressing the need to find or articulate immediate solutions. Although the formal learning environment is culturally-configured to value concentration, it is likely that Joyce's parallel thinking would be considered as a displacement activity, taking the learner away from what was considered important.

iii) Retrospective thinking (Occurring immediately or some time after an event or experience)

Silence could act as a space to think through events that have already occurred. These could be a particular stimulus or experience which had just happened, or had occurred some time in the past - recent or longer term. There seemed to be two major purposes for retrospective thinking. One was 'meaning-making', for example, understanding something that had happened or been said to them. The other was coming to terms with an experience - affective as well as cognitive processes and had much in common with the notion of 'reflection' (Schön, 1993). The two aspects of retrospective thought were not mutually exclusive, but one or the other predominated depending on the context.

Silent thought and making sense

Participants described how they made sense of stimuli, for example new ideas and concepts, by a rational process of analysing and verbally explaining. This might be done through the use of inner speech, or it might involve using externally articulated speech. Sally suggested 'I don't really know what I think until I've said it'. Vocalised language mediated Sally's inarticulate understandings into a vocalised product expressed in a language designed to be understood by others. In this process, Sally's thinking could also be shaped by the social practices occurring and by the types of discourse expected within that context.

In contrast, participants gave examples of the multi-faceted processes involved in making sense and silences allowed complexity, especially in areas which were 'shadowy, intricate or ill-defined' (Claxton,1998). Catherine described trying to make sense of a multitude of stimuli:

> .. it's processing, it's thinking about what's happened... sometimes the pace of what we do is so fast, and we always constantly talk about whatever ..pops up into your head - That's a really interesting connection with that. What about this? What about that?

In her example, the conventional expectation for speed of vocal response did not allow the brain to make complex connections:

> Silence is about gathering time, I suppose it's about just trying to draw lots of kind of diverse thoughts together.

Lily named these 'inter-spaces' and linked them to her professional knowledge about learning:

> I am definitely a reflective learner, so I sometimes think ...is it just me that needs these spaces, these inter-spaces, to integrate things, or is it everybody at certain times?

Like Catherine, she viewed these 'interspaces' as an opportunity to integrate or synthesise existing knowledge with new knowledge, before the need for articulation. Here silence, not verbalisation, acts as a mediating tool between the individual and the experience, requiring 'slow time' rather than fast time in order to allow those meanings to emerge (Bruneau, 1973).

Silent thought and coming to terms with an experience

Silent retrospective thought allows for emotional as well as intellectual positioning. Drawing on an experience when he performed poorly at a cricket match, Harry distinguished between people who need to talk when they've failed at something, people who get very physically angry 'throwing their bat against the dressing room wall' and other people who need to go away and not talk.

> What I need to do is just find a quiet, a really quiet corner and replay it in my head - come to terms with fact that I've failed, replaying it, reflecting on what I could have done differently.

The silence is about emotional adjustment to the experience, but also using that failure as a learning experience to learn how to perform differently in the future. This not only refers to the need to improve Harry's own cricketing performance, but also to an emotional repositioning in relation to the rest of the team, the spectators watching the game and his own sense of self in this world. Harry has, temporarily at least, ceased to be a 'good cricketer' or a 'reliable player' and this involves a re-evaluation of his cricketing identity. This identity is not only constituted by his own high standards, but also by the values which dominate the figured world of cricket, where he could be seen as 'letting down the team' or 'not pulling his weight'.

The 'boos' or silence of the crowd, the groans or silence of his team mates, mediate his understanding of the meaning of that experience. Harry's thinking is about re-establishing a sense of equilibrium, where the learning that has occurred enables him - retrospectively - to regain a sense of control over the experience. He cannot influence what happened, but he can influence how it might happen in the future.

(h) Thinking and intrusion

All the different types of thought mentioned above occurred during 'silence'. During those silences, participants were able to make sense of, and adopt positions in relation to ideas and knowledge, as well as people. However, as these processes were silent, they would be difficult to observe. By making the assumption that this silence indicated an *absence* of activity, an observer might be tempted to intervene.

Participants described vocal interruptions which intruded on silent thinking space and time. Maggie gave the example of her elderly uncle:

> My uncle has got Parkinson's. He takes a long time to form a sentence... his wife finishes his sentence off for him, but I know that if I wait he'll finish it himself... So that's really important to give that time...

Joyce also explored how pressure to talk or respond to questions might distort people's ideas:

> "Is that what I really think or did it just come out of my head at that time and if I spent a bit more time thinking about it....?" That's something about the process of being questioned ... When somebody asks you a question you answer it to the best of your ability at that time.

Although most participants focussed on individual meaning-making, this process could be more explicitly social in nature. Joyce introduced the idea of 'desultory silences' - long spaces between different utterances between two or more people. She described this as a comfortable, but long drawn-out process of meaning-making.

> .. let's just say we were sat just reading or doing some work and you'd said something to me about a particular subject and then you might have a conversation about it and come up with a few ideas and then you might fall silent doing something else. And then come up with another idea connected with it and say "Ooh, there's just something I've just thought of".

This represents a balance between individual thought processes and interaction within a social context. It is not time constrained by the rhythms of continuous conversation, nor by the externally imposed requirements of a 'group task' in a formal learning setting, although Joyce suggests 'there is a potentially common thought process about something'. Hence the individual and the other person or people can shift in and out of intrapersonal and interpersonal communicative interaction at their own pace and within their own time frame. Here the silence mediates both as a sign - internally

orienting the experience for the individual - and as a tool, with an external orientation to the eventual end product of the thought.

Although Bruneau's (1973) reference to silence in group problem solving suggests something of this process, the 'desultory' meaning-making has less specific initial focus than his use of the term 'problem-solving' would imply.

2. Social and communal silences

In previous sections, participants' understandings and uses of silences were connected with their own needs and sense of self. Silence acted as a relational space mediating the individual's relationship with the world - as a tool, a sign and sometimes as both. Although it was experienced privately and the meanings generated were personal to the individual, sometimes, they would be articulated publicly and sometimes they remained private. Where they remained private, they could not be observed and hence they might be interpreted as not having occurred.

In the following section, silence moves into the public sphere, where meanings are developed in direct contact with other people or with cultural artefacts which represent different aspects of their relationship with the world.

Cultural artefacts used to mediate this relationship can act as symbolic tools which signify connection and membership of the social world. For Gareth, living on his own, the sound of the radio permeated his domestic life:

> I've got the radio on, I wake up with the radio on, get ready to go out with the radio on, I come home and I want to know what's going on.

The radio not only provided company, but gave Gareth information of events in the outside world. These facts, ideas, emotions and voices are integrated through Gareth's perception, to inform his personal experience of the world. Laura's silent times were peopled with those she loved and those with whom she had to interact or support:

> Worrying time is silent time too...That you're thinking then about things, how to solve, how to help people out.

Laura was physically on her own, but thinking about other people. Like Gareth, the social world and her private world intermingle in her thoughts. But in which figured world are they currently participating?

The extent to which *thinking* about social practices, as opposed to *physically enacting* these practices, constitutes 'participation' in a figured world is problematic and seems to be a limitation in Holland et al's analysis. However it does suggest how cultural bias might engender a particular notion of participation - physically present and overtly behavioured - which may not represent the individual experience. Hence individuals may have the perception that they are participating, even if others may not perceive it in that way. In Laura's case, she was mentally and emotionally participating, even if her family were not aware of it.

But what if Laura was sitting in the same room as her family and silently thinking these thoughts? Would she be participating in this social world or not? And what if Laura was reading a group email sent by a member of her family and thinking these thoughts? Again - would this be participation or non-participation? These questions will return when we move to consider silence and the formal learning environment in the next chapter.

Different cultural worlds contain expectations of certain types of interaction which signify particular types of social relationships. In this context, participants used silence metaphorically to represent both negative and positive framings of these relationships. Of interest to this thesis, is how positions could shift imperceptibly within the silences as individuals become aware of others' positioning.

(a) Silence as a metaphor for social disfunction

Participants suggested that silence in a social setting can indicate that something is wrong. These echoed Scollon's (1985) use of silence as a metaphor for malfunction. Tracey, who disliked 'personal' silence, viewed social silence as negative, indicating that people were unhappy. She viewed talk as positive, indicating that there was nothing wrong. When she was with people, she was always talking or trying to get them to talk:

> Because I think when people are being quiet, they're not happy.

Gareth also described himself as a talkative, sociable person who found silence difficult when he was with other people:

> I find it hard to be silent, you know when I'm with others....I value silence when I'm alone, I find it quite uncomfortable myself if I'm with others.... I struggle with silence, you know I do struggle with it with others.

In a social context, he suggested that his silence would be noticed by his companions as he was usually talkative and even opinionated. Hence silent behaviour would be unfamiliar and be considered significant:

> I have a close relationship with most of my colleagues - but I was told on one of those great evenings of having a drink and being honest with each other, that I always have to be heard, I've always got an opinion. ... I do like to be involved, I like to be, not the centre, but I like to be involved if I've got an opinion.

In the world of the 'pub', peopled with types such as the 'good sport' and the 'anti-social so and so', Gareth's silence would be disorienting, in that it would confound the expectations of his companions. Positioned (in his own words) as the 'talkative, mouthy one' by his friends and accepting this identity, Gareth equated talk with participation in the group and silence with lack of participation.

Silence also had a stronger signification for Gareth, indicating a serious breakdown in communication. Talking indicated that there was some point in continuing with a relationship and also represented the will to do so; silence indicated the opposite position and was seen as potentially destructive and hurtful:

> Silence "cutting someone like a knife" sounds quite offensive doesn't it?

This aggressive metaphor indicated how, for Gareth, silence could be used as a weapon of power within a relationship where one person has decided there is no more room for communication. He also used the metaphor of 'talking to a brick wall'. The 'brick wall' here signified non-responsiveness and intransigence, where more talking would not help to clarify, but to obscure:

> More words ... will just cloud the situation, you've made the situation clear and what more is there to say?

For Gareth silence represented not only a breakdown in communication at this point, but also had a terminal function, indicating that the discussion had come to an end.

(b) Silence as a metaphor for embarrassment or discomfort

Although Gareth's descriptions indicated the strongest correlation between silence and interpersonal crisis, other participants also described how interactional silence signified difficulty or awkwardness in a particular social context, depending on different tolerances for silence.

Penny, a yoga teacher married to another yoga teacher, described how her partner needed more and faster vocal interaction than she did:

> I know I'm more of the silent partner.... my partner gets quite frustrated but ..I don't. If we're having a conversation and he's opening up quite a lot, and I'm listening .. he gets frustrated that I'm not verbally contributing enough back.

For Penny, the perceived slowness of her response represented taking time to think what her partner was saying and how she wanted to respond.

> Often I'm just thinking about what he said, I haven't found a way to sort out what to say back again. I'm still thinking about it. ...a space to think - like a digestion, I suppose!

It could be argued that, by taking time, Penny is attaching *more* significance to communication than her more talkative partner. The individual nature of these tolerances was highlighted by the fact that their choice of a common career did not necessarily correlate with a consistent tolerance of silence. Whereas within the figured world of the yoga class - their professional environment - both would tolerate a high level of silence, individual tolerances differed in the world of everyday home life.

Maggie indicated two types of embarrassed silence - embarrassment *for* somebody and embarrassment in *doing* something. Embarrassment *for* somebody occurred when

an action did not match the social expectations of that environment - the 'horizons of meaning against which incidents, acts and individuals are interpreted' (Uttiera, 2007, p.109). Social embarrassment could be experienced whether or not the protagonist also felt embarrassed. Being embarrassed could also make other people feel embarrassed - in effect embarrassment had the capacity to grow *more* embarrassment - signified by silence. As Sally expressed it:

> You can pick up if somebody else feels uncomfortable, the silence and then you can begin to feel uncomfortable… it's catching.

Silence here functions as a 'conversation' where one person's silence communicates a particular message to someone else, which is received, interpreted and responded to - also by silence. However, this responsive silence has changed its communicative content as a result of the message received. In this situation each individual builds a narrative of the event, positioning themselves in relation to the other or others and in so doing:

> What may be an uncomfortable silence for one person may not be for somebody else, so it can be the same silence, the same room and maybe the situation and two people think about it and feel very differently. (Sally)

These interpretations can shift, but can also reinforce a particular set of meanings associated with the particular world. Maggie's description of 'embarrassed silence' building on 'embarrassed silence' suggests a synergy between individual and social embarrassment which undergo a process of mutual amplification. In this process, silence is in constant mediation between each individual, the social world in which they are participating and the shifting meanings they derive from their experience in this context.

The potential fluidity of these interpretations suggest that although 'figured worlds are socially organised and performed' (Uttiera, 2007, p.109) they can, also, be reconfigured through relational shifts among the actors involved and also through the perceptions of the individuals participating.

Participants talked about the 'delicate balance' between silence in company being comfortable and being an indication that communication had broken down. It could be argued that 'communication' had not 'broken down' but instead that something was being communicated which was unwelcome or unpleasant.

During what are perceived as uncomfortable or awkward silences, vocalisation may turn into inner speech in an attempt to discover the meaning and to consider how to deal with it. Betty's description of the silence of being angry with her husband gave an example of this process:

> In an argument, that sort [of silence] you can cut with a knife and ... I'm just trying to find a way out of it and I'm sure the other person is as well and you think "How do I resolve this?...Something's gone wrong here, can I fix it? Should I fix it?"

Like Gareth, Betty used the aggressive 'cutting' metaphor for this type of silence. Here silence may act as a tool, with the externalising function of punishing the partner perceived to be at fault. It may also act as a sign, with an internalising orientation in which the individuals involved consider their position. This does not merely represent a practical consideration of how to proceed. For Betty, '*Should* I fix it?' also represents a consideration of her position in relation to the marriage itself. Silence acts an artefact for 'becoming' in which Betty begins to explore not only her current situation but future possibilities for action. In this process, her identity as a wife 'who

works to patch things up' is put in question and an alternative version of this relational identity is explored.

(c) Metaphor for comfort and security in the society of others

Participants described the pleasure of being silent with people - a 'space for comfortable silence' (Sally) - feelings of familiarity and security were important components of this experience. Sometimes comfortable silence was expressed through an evocation of a particular situation:

> That sort of companionable silence when two of you are reading the Sunday papers and all there is, you know, the rustling of the newspapers... the clinking of the coffee cup. (Maggie)

Harry also mentioned joint activity, such as doing the crossword together with a partner, as 'companionable' silence.

In the world of everyday life, the capacity to maintain this type of silence with family and friends was valued by many participants. It reinforced a particular set of meanings about the individual and their most important relationships. This was expressed within broader statements of values and beliefs about the nature of friendship:

> Probably the friends that I value the most are the friends where you can be silent to and you can actually sit together and be there or be together, without having to talk to each other or at each other all the time. (Susan)

Talking *to* each other had the suggestion of dialogue, talking *at* each other suggested dominance over a particular conversational space - talk as an expression of power. The 'good friend' was someone with whom you could be silent and where silence represented an equity of relationship which talk may not have allowed. As previously,

silence represents a sense of equilibrium in the individual's relationship with the social world.

For other participants, this silence could be complete silence, with no-one talking, but it could also be intense and concentrated listening on the part of one or more people, which signified absorbed attention and respect for what the other was saying.

Participants suggested that the ability to value and enjoy companionable silence was one that may be developed over a period of time. Harry partly attributed his positive associations with silence with the ageing process, which he equated with no longer feeling he was 'saying things to fill a space'. Here silence indicated a confidence and security in his own capacity to be silent, and an increased occurrence of silence in interpersonal relationships could indicate that a relationship had improved.

Gareth described the uneasy relationship he had with his father when he was younger, where he felt that his father, being 'a silent man', did not help communication - characterised by Gareth, in that context, as an ability to talk to each other. However the gradual improvement in the relationship with his father was signalled by an increased ability to be comfortably silent in each other's company:

> I can sit there and read a paper or watch the TV. They live quite a long way away, I'll go and see them and I'll have the chat and the cup of tea and then I'm quite happy to sit there, as they are as well, it's just feeling comfortable I suppose.

He suggested that now his father could talk to him more, he was able to experience comfortable silence with him as well. This suggests the perception of silence as being fluid and negotiable, capable of change and contingent, not just in the social, but also

in the emotional context. This development in Gareth's relationship with his father could have resulted from a change of subject positions - from young son to grown adult, from young father to elderly man - and the opportunities for improvising a new set of interactions occurring from this relational shift (Holland et al, 1998, p.18).

Social expectations, based on the particular norms of a relationship, and wider cultural expectations, particular to particular contexts or environments, could determine how a silence was experienced. Catherine - at one stage a novitiate nun - described the companionable silence where talk was not expected and where the subtleties of non-vocal communication were well-developed:

> You could be sitting at the breakfast table and you could think, 'Ooh, I feel like... some jam, but somebody could have identified that's what you wanted and you'd have it in front of you... and it was really interesting, because I think I learned a lot about non-verbal communication.

She described her time in this silent environment as liberating:

> There wasn't a pressure to go through general conventions of speaking, or that kind of 'social nicety'..... what was lovely was just having that complete liberation of being able to be quiet. Although it was imposed, it felt very different, it felt something that was cultural, and I think that there was something .. that was nestled in the culture, that made it feel completely natural and that was just... part magical.

Catherine's notion of silence being 'nestled in the culture' is important here. In the figured world of the nunnery the 'silent nun' represents the ideal type and there are no social conventions or cultural expectations to talk. Value was placed on silence, whereas vocalisation would be experienced as a 'burden of speech' (Bruneau, 1973) detracting from what was important. Interestingly, in Catherine's description, silence as a culturally-accepted communicative form, appeared as effective as talk.

(d) Silence as a metaphor for communality and community

The communal world of the nunnery is one where human vocalisation is not expected and where background sound is subdued, with the implication that this silence will enable God's voice to talk to those present. I use the word 'communal' silence as opposed to social silence here, with the implication that this type of silence promotes or enhances a sense of community and shared experience amongst those who partake in it.

In the figured worlds of religious or spiritual gatherings experiences of individual identity are subsumed into a communal identity. This in its turn collectively imagines being subsumed into something greater and more powerful than itself. Communal silence is also associated with events which are so overwhelming that all sense of human agency becomes temporarily suspended. This may occur after natural disasters - the 'earthquake silence' mentioned by Yolanda - or it may occur at times of significant national or local disasters.

Fiona described the impromptu actions of people driving in Sheffield, following the news of the Hillsborough football disaster where nearly a hundred people were killed:

> I was in the car and it was on the radio and I stopped and pulled to the side of the road and it was amazing, everyone just stopped what they were doing and did the same. So that to me is a complete silence, you can't actually hear any noise and you're feeling emotional because everybody's supporting each other and sharing in that time- in that time you think about what's happened, the disaster.

This communal silence is an indicator of something so important that words do not suffice. Fiona described it as 'deep and complete, where you stop speaking and moving and where someone else is also involved'. Here the silence indicated a

commonality in thought and feeling and people stopping their cars was an improvised signal indicating their shock. In their spontaneous silence, signalled by cessation of activity as well as speech, they were replicating informally their experience of formal public silences.

Shock and grief, which might cause the individual to 'draw into him/herself' - retract personal boundaries - became a social experience in which those boundaries were extended to make contact with, and indirectly to provide solace to, other people in a particular social space. The communality of experience, expressed through the medium of silence, represented a temporary equilibrium between the individual and the communal world.

(e) Silence as a metaphor for power and repression

Spontaneous silence after a tragedy can represent a time when boundaries between the individual and the communal consciousness are blurred. Imposed silence derived from identical circumstances can represent a formal expression of political or social power. Dominant social values, enacted through figures in positions of social power, can determine what will be occasion for public grief, and what will be marginalised.

Culturally-determined values can act to silence less powerful members of a community in different settings. Virginia, an HE lecturer in psychology, coming from a feminist background, indicated its relationship to power and control:

> For me silence is enormously wrapped up in power and interpersonal power and dialogue wrapped up in a relationship in language from which it can't be separated.

She placed considerable emphasis on this relationship and the ways that particular social groups can act to silence others:

> ..Silence me, to make me be quiet, to make me submit, to take away the space for my voice if you like, and those kinds of silences I think are manufactured by others and that's what makes me understand silence as something... in which power is embedded and through which power can be applied to you.

Here Virginia used the term 'manufactures' silence to represent how dominant individuals, bolstered by inequitable formal power, deliberately position others at the margins of their social space. She provided two anecdotes from her perspective as an academic to exemplify different ways in which silencing through power operated in her professional life.

Her first story related to a meeting where she and another female colleague felt that some key information had been distorted by a male colleague who had carried through his own agenda, in spite of the recorded facts which supported their case. In Virginia's analysis, the male colleague silenced them through his position of status. In the social reality of this figured world the dispositions of different actors were mediated by relations of power. This power was structural, in that he held a higher position than them within the institution, and gendered, in that his culturally-differentiated status as a male gave him priority over the females within that group. She explained how the silence of their reaction contained a mixture of shock and fury.

Her second story related her experience of being a relatively new member of the academic community, giving a paper at a psychology conference. She discussed the different theoretical positions on psychology, but then argued that the theoretical positioning of that conference had been determined by a small group of high status

academics who led the event and who favoured the psycho-analytic approach. In this figured world, as in her previous example, relationships and discourse were organised around positions of power and status (Uttiera, 2007).

Virginia described her frustration that the approach of the high status academics did not appear to welcome alternative positionings or alternative discourses. In Virginia's narrative, she then acted out a synthetic dialogue, representing her own and the conference leaders' positions:

> And I'll say..... "I don't agree, because psychoanalysis in and of itself is a dominant discourse, which has structured all of our lives and had a massive impact on how we understand people and ... that discourse silences other ways of understanding people".

And then she enacted the conference leaders' response:

> And they'll say "Ah well, yes of course you would say that wouldn't you because you don't understand it properly. It's because it takes fifteen years, twenty years worth of training".

She then described the impact:

> So then you're silenced, you, the power of your argument is silenced, it's made less, it's diminished, it's subverted and is in submission to the argument or the voice of another.

The dominant discourse at this conference represents the silencing of the old over the young, as well as the professionally experienced over the professionally inexperienced. Here silence was used as a tool by those in positions of power within the community. But the silencing did not just involve 'shutting up' it also involved the silencing of alternatives. In her narrative, Virginia drew on the cultural resource of her own grounding in feminist theory to discuss how she, as an academic in a potential

position of power in relation to others, might unintentionally silence the women she interviewed for her research, through the way in which she analysed the research texts. She described the multiplicity of possibilities contained within the discourse of an individual:

> An agentic person who is negotiating all the different forms of language, all the different ways of talking, all the different possibilities they might make available and using some them but not using others and why, for what purpose .... and her reasons for choosing them tell us something us something about how she understands herself as a person, her identity, her subjectivity.

(f) Silence as an ontological metaphor

For participants, the use of metaphor to represent another conceptual state, illustrating their relationship with the world, but also with 'Being' indicated an ontological as well as a communicative understanding of silence .For example, Virginia's account positions herself in relation to the figured worlds of academia, but also reflects her own consciousness of inhabiting a world where strands of power inform and influence social relationships. In this way, she moves beyond the socio-political to the ontological - her way of 'being' in the world:

> ...no ontology is simply a system of knowledge; it is equally...an account of a way of being in the world and a definition through practice (and not only through cognition) of what that world is and how it is constituted.
> (Clammer et al, 2004, p.4)

Summary

Participants used the concept of 'silence' metaphorically to indicate various relational positions between individuals and the world. Whereas in the previous chapter, individuals negotiated the auditory environment, in this chapter, they negotiated the wider socio-cultural environment. In this process, silence mediated the way that the individual experienced the world. Notions of balance and equilibrium were as

important in the wider context as in the world of sound, and individuals explored a range of positions in which perceived balance or imbalance - of privacy and intrusion, of security and threat, of power and personal control - were identified in terms of silence. Silence mediated as a tool, to exert control over the external environment, and as a sign to internalise experience.

Chapter Eight: Conceptions and reported uses of silence in teaching and learning

In previous chapters, the data concerned conceptualisations of silence in teachers' everyday lives. Silence acted as relational medium in which the individuals, as one component in the social world, positioned themselves in relation to other aspects of that world. In the last chapter, participants used the concept of 'silence' metaphorically to indicate the various relationships between individuals and the world. Silence mediated as a tool, to exert control over the external environment, and as a sign to internalise experience. This chapter continues with the notion of silence as relational, considering how teachers understand and describe its use in the classroom. Participants discussed silence in relation to talk - teacher talking/learner silent; learners talking/teacher silent; teacher and learners silent. Then related to verbalisation, sound, e-learning and, finally, from a multi-modal perspective.

Notions of silence within the formal learning environment are framed by the bias inherent in particular social practices and by the ways in which teachers perceive their role within that context - perceptions which are, themselves, both socially and personally constituted. Within these figured worlds, discourses, practices and interactions provide important tools for identity formation:

> ...particular characters and actors are recognized, significance is assigned to certain acts, and particular outcomes are valued over others.
>
> (Holland et al, 1998, p.52)

As Chapter Four indicated, silence is assigned little value by those in dominant positions in education and interpretations of silence are limited and generally negative.

In the current educational context, the most common metaphors for learner silence would be 'social disfunction' or 'embarrassment/discomfort' if chosen from the range of metaphorical meanings suggested in Chapter Seven. Similarly, the metaphor commonly assigned the highest value for teachers would be silence as an expression of power and discipline.

However, in this chapter, teachers draw on a wider range of cultural resources to discuss silence within the formal learning environment. By using the ideas generated on silence in their personal lives, teachers explore silence in teaching and learning from a broader perspective and consider alternatives to the overt behaviours generally valued in the current educational climate.

Identity and the transition from the private to the public space

In the previous data chapters, participants generally placed a high value on 'personal silence'. In the transition between their personal, everyday lives and their professional lives - from a private to a public space with specific responsibilities - the purpose and functions of silence changed:

> The silence of my personal life is very selfishly about me trying to look after me…trying to find space. In the classroom, it's a silence that I'm trying to create for the benefit not of myself, but benefit of the students so it's a different motive altogether. (Maureen)

In the classroom the teacher's role meant that all activity was geared towards different aspects of that role:

> The silence I use in the classroom is for a reason, for work, is for a job, is for control, or to get attention. ….the silence at school is always for a purpose.

Here Laura described silence in terms of a tool, with an externalising object - to change the behaviour of her learners. Inherent in that process is the power ascribed to that role of the teacher.

Power and control over silence

Chapter Four identified the teacher's responsibility for controlling communication in the classroom. Participants discussed the teacher's power over silence and for some this meant using silence as a tool for discipline. However, they also indicated a more complex set of relations, where silence had to be requested or negotiated. Whereas Fiona felt she had control over silence in her private life, in her IT classroom for adult learners, she needed to ask for it:

> In the classroom situation I would have to ask people to be silent, whereas in my everyday life I would naturally create the time - turn off the TV and unplug the phone.

The negotiation of silence occurred with younger learners as well as with adults. Harry, working with sixteen year old FE students, also distinguished between personal and professional silence, but indicated that the negotiation of silence with these learners could be a difficult process:

> ..silence in my everyday life is directed by me, so if it's just me, I can have it when I want it, but in a classroom it's a negotiated thing and it's sometimes hard to get.

In Harry's example, the positional identities of the teacher and students are in a process of formation through the negotiation of 'relations of power, deference and entitlement' (Holland et al, 1998, p.127). But these are *mutually* constituted rather than prescribed positionings, in spite of traditions in which the teacher is the formal

focus of hierarchical power (Bernstein, 1997). Although the teacher has formal control over the silence, when to talk and when to be silent, the teacher is also in a relationship with the learner, where some kind of balance needs to be reached. From her perspective as a teacher educator, Maggie suggested that the need to 'balance the silence and the talk' was an important pedagogical skill.

Although, to some extent, 'in charge' of the silence, teachers have a professional responsibility to make judgements and take decisions on what seems useful for learners at any one time:

> Being in charge of the silence doesn't always mean that that silence is going to be useful to the people who they are imposing the silence on.....the silence that a class needs is based on your own perception of what they need. (Joyce)

The teacher's perceptions of their learners' needs are mediated through a range of cultural artefacts - curricula, resource materials, text books on teaching, socio-historical traditions of teaching a particular subject. They are also affected by conceptual understandings from the teacher's personal history and professional training. The power they exercise is based on an interpretation and enactment of personal and professional values and where those position them in their relations in the classroom.

Teacher identity and perceptions of role

Teachers' sense of their professional identities, mediated by inspections, teaching observations, teacher training courses, government policies and curricula, affect their approaches to students and the values underpinning their teaching. These in turn shape

how they judge silent students and how far they perceive their role as promoting talk in the classroom.

In her own practice as a teacher in HE, Susan was shaped by a view of teaching, which valued 'getting students to talk' and figured the classroom as a space for talking:

> I see times in the classrooms or times when people get together as very precious space where people can talk to each other and communicate with each other, whereas they spend a lot of time on their own where they are not able to do that....it's a good chance to be communicating - so you're not being silent.

In this description, Susan adopted the view of 'good' teaching which prevails in much pedagogical literature and government policies. Her group were mature postgraduate students who had infrequent group sessions and so there would also be a professional justification to emphasise talk. However, she also drew on her own negative experiences of silence, to inform her connection between the teacher's role and learner talk. If a new group did not talk to each other, she perceived it as a failure on her part:

> I think probably with the adult students now it's a concern that they may be embarrassed to talk to each other ...... So if it's all very silent when they're having that opportunity to talk to each other, as I see it, then I'm feeling that I'm failing because I've failed to make them feel comfortable enough to do that.

Susan's identity as a 'good teacher' was integrally connected with talk, echoing Delamont's (1983) argument on the cultural symbiosis between teaching and talking. Her position was also shaped by her choice of metaphor about silence - that of embarrassment.

The dispositions and learning histories of other teachers also affected their attitudes to classroom silence. In Charlotte's private life, silence was associated with reflection, emotional recharging and the re-establishment of her sense of self, but, in teaching, silence was associated with giving students opportunities for cognitive processing:

> I'd visualise that silence as their own thinking space.

Charlotte brought a sense of the value placed on silence in her everyday life into her classroom practice, but re-orientated it to the social practices and values underpinning the world of teaching. Charlotte's experience of herself as a learner who valued silence - in other words her 'learning about her own learning' - provided a resource from her personal history which she could draw on in later life as a teacher. She drew on her own previous experiences at school, where she enjoyed silent thinking time:

> ...as a child and teenager at school, I felt as a girl I was quite odd, in that I enjoyed thinking things through silently...It was much more stereotypical, particularly for girls, to work in twos and threes and chat...

Charlotte portrayed her school identity as a learner as deviant, in that it did not conform to what she perceived as the gendered norms of behaviour within the school setting. Charlotte's preferred mode of learning involved a large amount of silent thinking time. However, as this deviated from 'normal' expectation, her learning was actually subverted by the cultural values of her school - an institution whose major function was, ostensibly, to promote learning.

Identity and skill in the use of silence

Susan's perception that teachers should 'get students to talk', was partly derived from negative recollections of silence as a university student. She described experiences with 'awful tutors':

> [They] used to just sit there and wait for something to happen and you could sit there for what seemed like minutes on end with nobody saying anything in complete embarrassment.

For Susan, the behaviour of the tutors had nothing to do with trying to encourage learning, so in her narrative, and from the perspective of a former teacher educator, she interpreted the silence as an indication of poor teaching:

> When I look back at it now ..., they weren't doing that deliberately, it was they didn't have the skills to do anything about it. So you all just sat there and that was horribly uncomfortable silences, there was nothing positive about that. ....it seemed like it was being imposed...they would ask a question and just wait until somebody said something.

It is possible to interpret the events in this narrative from a different viewpoint - that the tutors were trying to give 'thinking space' to the students, but within a cultural context where talk was expected. However issues of control may be relevant here.

Unlike references to the *negotiation* of silence within the classroom in an earlier section, Susan's account suggested an *imposition* of silence, in which the tutors were exercising overt signs of control over the class, without the students - as the other participants in that social world - agreeing to that positioning. Susan suggested that these tutors were poor at using silence and that a high level of professional skill was required to use silence effectively in the classroom. If the tutors had approached the use of silence in a different way, it was unclear from Susan's account whether she

would still have considered it inappropriate for eighteen year olds or whether a more adept and sensitive use of silence would have worked for her as a learner.

A significant element in Susan's narrative was her perception that the silence had been used in an inept fashion. Hence it was not just an 'inappropriate' use of silence, but the perceived 'ineptitude' that undermined students' confidence in their teachers' professional skills. The trust necessary for students to accept a shift from their own cultural expectations of classroom behaviour was absent. This suggested a process whereby students constantly interpret the teacher's actions within the context of their overall judgements about the teacher's competence and balance this against their culturally-derived expectations of classroom practice.

Within this world, teacher's improvisations occur in a negotiated space in which learners affiliate themselves with a teacher they trust, or fully or partially affiliate themselves with a set of cultural norms and distance themselves from a teacher they mistrust. Trust comes both from students' belief in the teacher's competence and from the teacher's own belief in the value of the teacher's improvisations. The confidence of the teacher plays a part here. A teacher's silence might be open to different interpretations based on how the students 'read' the teacher's belief in the value of their approach. Martin described this:

> If you're apprehensive about something, that can be picked up by the learner, so if the pause you've got is 'What am I going to do next…? I think those kind of silences are interpreted negatively by the learner, whereas…if they can see your level of concentration, or the direction you want to go with it, then I think that silence is different.

Here it is not just confidence in the teacher, but an awareness of what the teacher is trying to achieve that makes the silence acceptable to learners. In the complex set of relations occurring within the silence, teacher and learners position themselves through ongoing understandings and interpretations of acts and behaviours.

For Christine, it is the deliberate and appropriate use of silence - 'of empowerment, not panic' - that marks out a skilled teacher. If the teacher communicates they are in control of a particular teaching tool, learners may trust that the teacher has good reasons for its use, even without an explicit understanding of the teacher's choice. The teacher may communicate this confidence through silent eye contact and gesture, rather than through speech.

It is unlikely that learners will be aware of this skill, as use of silence will not be part of the dominant cultural resources about teaching they would generally access. As such they are more likely to focus on overt teacher behaviours and, like Susan's own student experience, only notice when silence is used poorly. However, from a professional standpoint, Christine considered that effective use of silence was the hallmark of an excellent teacher:

> The silence we create…that .. gives the space to think… that's what really marks out the excellent teacher… you are giving them the space to take in a lot more and they can develop their own thoughts….the more difficult or complex the information that you're trying to convey, the more important it is to give people a chance to think about it, not rush them.

The teacher in this description is acutely aware of the nature of knowledge they want their learners to acquire and is also highly sensitive to the ways in which individuals need to make sense of information and ideas in order to learn. Christine's use of

silence as a metaphor for thinking space is one which translates from everyday life to the classroom context. In the processes described, the teacher's use of silence, reinforcing a sense of their own self as 'a skilled professional' enables each learner to position themselves in relation to the knowledge mediated by this silence.

Talk as a sign of inexperience

Participants suggested that a skilled and experienced teacher would be capable of making these subtle judgements and have the confidence to let learners have the time to think for themselves, rather than be driven by a need to intervene through talking:

> You can tell if a teacher is nervous or inexperienced - they keep talking and don't make that gap.

If the teacher talks during that processing time, it is likely to hinder rather than help understanding:

> It's important for people to have time to process the language spoken to them - it might take them a while to formulate the answer and then to actually get the words to come out.

It is interesting that participants equated a teacher talking too much with inexperience. This might suggest two things. Firstly, that the new teacher transports a discomfort about silence from their everyday life into the (for them) newly figured world of the classroom. Hence, as a novice, their identity is still bound up with social practices outside this world. Secondly, that their teacher identity is formed from the dominant cultural resources, including the dominant discourse, about teaching so far available to them, such as the text books used in teacher training or the exemplars of 'good teaching' proposed by government websites. As a novice, it is likely that these two

aspects are in a state of flux, as their positionings in relation to the options available and their identity as a teacher begin to form.

Identities in different figured worlds

The teacher's identity cannot be divorced from their own personal histories and participation in other social worlds. Lois, an experienced teacher in the performing arts, described how she began to use silence with her students. For Lois, the ability to deal with and use silence in preparing to be an actor and in the acting itself was an important aspect of enculturation into the world of performing arts, and she led them gradually to develop this skill.

> At the beginning of year I talk a lot - I have been criticized for over teaching - later I go more into workshops where silence can be used.

Lois drew on her personal history as an actress in expressing the whole experience of teaching and learning in terms of 'performance':

> Teaching is performance. I perform every day. You need to be an entertainer. Make them laugh. Let them know you as a teacher. Let them know the parts you want them to know.

Lois shifted between the worlds of acting and the worlds of teaching, making connections and generating meanings which were both situated in particular contexts, but provided some sense of continuity in her sense of 'being in the world' (Clammer, 2004). Like other participants, she both recognised the constraints and rules pertaining to the different environments, but used the various discourses and practices from different figured worlds as resources for forming and re-forming her identity as a teacher. In her description, silence has a part to play in these formations.

Lois' description provides an example where different cultural resources are used by an experienced teacher to describe her practice, whilst maintaining her identity as an 'actress' in another figured world. As teachers become more experienced, their identities may form through distancing themselves from the dominant discourses on teaching and reasserting more personal aspects of their identities from different worlds.

Figured worlds, cultural expectations and learning

However, teachers are also aware of the 'official knowledge' (Apple, 1993) which it is their job to impart. They are also aware - or have internalised awareness - of the behaviours which are valued within this figured world. Here the teacher becomes imbued with 'a complex of orientations towards others, echoic of the other's expectations' (Carter, 2004, p.56), where their relations with learners contain an echo of the cultural expectations extent within this context.

Tracey illustrated the dominant cultural expectations of 'usefulness' and 'achievement' within FE, where she ascribed the requirements for demonstrable activity to wider issues related to pressures of syllabus and targets within the mechanical 'fast time' (Bruneau, 1973) of that world:

> There's such a prescriptive and full syllabus for BTEC and so little time to do it, so when we're in the classroom...we're that busy trying to say "boom, boom, boom, get this in", rather than letting students have time to reflect, think and learn, take it all in properly. Because at the end of the day, they're getting marked on what they've produced, and by sitting and thinking in silence, they're not producing anything, are they? But BTEC assignments don't show anything about the student and their actual learning.

This raises some interesting questions about the professional context in which Tracey operates and the contrast between the overt purpose of a further education college i.e. to enable students to learn, and its actual purpose - to get students to produce work which can lead towards a formal qualification. This has echoes of Holland et al's description of a world constructed of practices which exist mainly to enable that world to continue - 'a cultural world ....which is its institutional reason for being' (Holland et al, 1998, p.66). In Tracey's description, it is the production of qualifications that provides a key rationale for education's existence, rather than the learning which takes place. Hence overtly 'productive' activities rather than the complex and silent processes of 'reflecting, thinking or learning' are assigned high value by those in power with vested interests in certain kinds of achievement.

Explanations for the 'silent' learner

Chapter Four, as in the section above, suggests that the dominant discourse of teaching emphasises overt measures of learning and participation. Hence teacher and learner talk is valued (as long as this talk is perceived as relevant by the teacher or the classroom observer). In this world, effective learning is signalled by types such as the 'good talker' or the 'active participator', whereas the 'silent student' is a cause for concern.

Participants gave examples where a learner's silence would indicate a problem, drawing on the metaphors for isolation, embarrassment or social disfunction that appeared in Chapter Seven. However participants also provided alternative and more positive explanations why a learner might not talk:

> ....if they are in a small group and someone's not verbalising, they're maybe thinking, but they can appear not to be contributing and maybe they need more time to think, or maybe other people are saying the same things that they have thought of.

In Sally's description, the learner was participating, although without overt signs of participation. An observer might conclude that s/he was not 'learning' - i.e. not providing the evidence required within the timescale expected by the teacher in order to assess progress. However, although the learning was 'behaviourally silent' (Tolman and Honzik, 1930), it was still taking place.

Uses of silence in teaching

Participants were asked when silence naturally occurred in learning sessions and when they deliberately used it. This proved to be an artificial distinction. In the research interview, responses altered as aspects of silence which 'naturally occurred' became the means by which participants explored what actually happened in formal learning settings. This included how, often unconsciously, they used silence to perform certain ends and hence the interview became the means of making some tacit aspects of their professional practice more explicit.

Transitions between worlds

Previous sections discussed the relationship between personal and professional identities and attitudes to silence. Here transitions involved importing and transforming aspects of personal history into a world culturally-defined through specific values and practices. The boundary between the 'private' and the 'public' is *physically* marked by transitions into and out of the space of the classroom. However, transitions of identity and purpose do not occur neatly at the point when teacher or

learner steps through the door. Participants described how they used silence to aid these transitions.

Silence at the beginning of a teaching session

Peter described how he used silence to indicate that a class was beginning:

> It's about starting, in that at the beginning of a class I usually try and call the class to order and there's usually a brief moment of quiet before I start.

Here the silence produces a contrast from what has gone before and indicates a transition from a personal, sociable space into the formal social space of the classroom. It also represents a reformulation of identities and the use of a particular set of cultural resources which mediates the ways that these identities are understood. From the 'loving father', 'caring husband' 'loyal friend' of the figured world of everyday social life, the individual who is Peter moves to become 'the teacher'. In this space, there are different timescales and sets of social relations. These give him the power to 'call the class to order' and determine the point at which the transition from personal to public space will officially occur. The silence between the call to order and the initiation of activity by the teacher, is a space in which collective meanings on the nature of 'order' in the classroom are re-affirmed (whether or not they are adhered to). This space also signifies an acknowledgement of the respective formal identities of the participants expected in this figured world.

Whereas Peter used silence after the vocalised 'call to order', Harry described using silence without vocalisation at the beginning of a session:

> If you let a group of students into a room ... then you might stand by whatever it is you are doing, OHP, whiteboard or anything like that, and you might be poised without saying it but looking, "I am now ready to begin, let's have you".

Harry's personal history as a sportsman includes a notion of silence as a focussed preparation for a burst of activity. Similarly, he uses his own silence to signal preparation for teaching and learning. In contrast, Gareth used silence at the beginning of a session as a time to listen carefully to what his students are chatting about when they are settling down:

> I might use silence just in a very small way of not talking, when I first come in and I'm listening to what they're talking about. And I'm shuffling papers and moving things and getting ready, but sometimes I actually like to hear just what the theme of the day is, because there's always something with young students. I was amazed when I first came what they were chatting about. .....I just like to know where they're at.

Gareth's activity of shuffling papers was a form of 'play' to pivot him into the world of his learners. He used this information to gear the session to his students' current preoccupations, so that he could make the new ideas and information as relevant as possible. In this way he was acting as a 'watcher' and 'listener' (Ingold, 2004) during the silence, using the skills of an experienced teacher to learn about his students. Unlike Harry, who is *preparing* to teach, Gareth is *already* engaged in a practice of teaching - he is orienting himself to an awareness of his students as learners. However, he is acknowledging that in the transition into the classroom, they will still be engaging with events from other figured worlds which may seep into their engagement with this one. His knowledge of their current preoccupations will help in creating some sense of coherence between everyday life and the classroom.

Rather than 'becoming the teacher' through signalling his control of the time and space, he becomes the teacher through 'watching'. His students do not realise he is being deliberately silent, nor are they aware of his 'watching'. Bernstein (1997), building on Foucault's (1977) notion of surveillance as an expression of social control, would interpret Gareth's actions as the surveillance of teacher over student - part of the practice of 'invisible pedagogy', representing the unseen networks of power in the classroom. However, in Gareth's terms, it is a means of sensitising himself to the other participants in this figured world, so that he can learn how to help them.

In contrast, Simon's students are well aware of his control of the silence during transition:

> Sometimes if I have a large audience ... especially when they come in and they're quite noisy to start off with, I would ask them just to close their eyes first, which isolates them and ...then I would ask them to open their eyes. I just keep that silence for about twenty or thirty seconds and it has a controlling, calming effect on the learner.

Here Simon publicly allows time for learners to leave behind their own preoccupations and engagement in social relationships, isolate themselves momentarily from people they may have been chatting to, so that when they open their eyes, they enter into a different set of relationships appropriate to this particular learning environment:

> By closing their eyes it isolates them, they can't see the response from their colleagues and then not speaking as well isolates them even more.

Simon's use of the word 'isolate' reminds us of his descriptions of being isolated in solitary confinement in a military cell, where isolation meant being divorced from

humanity. However in the teaching context, although silence remains a metaphor for isolation, this momentary isolation is intended to allowed his students a short time of calm - a time 'not to be' before having to engage and interact. Hence, for Simon, a metaphor for something negative from his personal history - a mediating sign which caused him distress - is transformed into a mediating tool which can help his students. The silence of isolation is transformed into a metaphor for peace and stillness.

The silent transition space can sometimes be an awkward experience for students. In this context, the teacher's role is to 'read' the silence and intervene if needed:

> ..as they're arriving and they don't actually know each other, at the very beginning, because people are feeling a bit awkward and they don't know who these other characters are, then, so that's more of an awkward silence and people are dying for you, as tutor, to do something to break the silence... people are giving each other sideways looks, trying to weigh each other up. (Susan)

Susan's description illustrated a process of relational 'positioning-in-action', where the new students are surreptitiously trying to locate themselves in relation to others in the room and, in this process, beginning to ascribe identities to co-participants - 'the confident speaker', 'the- know-it-all', ' the intellectual loner'. The circumscribed and conventionalised activities (Skinner et al, 2001) particular to this world form the basis of expectations - the context of meaning - about what will happen and whose position and responsibility it is to make the situation work.

Silence at the end of a teaching session

Silence was also used for transition at the end of a session. Susan described how she used silence to provide a conclusion to what has gone before:

> I don't think of myself as a performer when I teach, but the end of a session I definitely do try and mark as the end of a session rather than drifting out. So, there'll be a kind of conclusion, ... perhaps like a conclusion to a piece of music, ... so it punctuates it and that can often be silent at the end.

The teacher here 'shapes' the experience for those participating, by using silence to indicate the class has finished:

> It's me saying "Right this is the end", and not expecting a response and so there's this bit where nothing happens and nobody says anything.

At the beginning of a session, silence acted as a focus and a signifier for students to leave their personal and private considerations and become part of a social communal activity. At the end of a session, silence acted as a boundary between the space and time devoted to formal learning and the student's own learning space and time:

> It's about boundaries... it focuses people on the fact that we're coming to an end, we're drawing to the end of the session (Martin)

In these transitions, both teacher and students were moving from the world of the formal learning environment to other worlds in their everyday lives.

Transitions within a learning session

Participants not only described silent transitions as entry and exit parameters for the lesson, but silence used as a transitional space between activities - a tool to indicate a shift in activity. Martin described the types of noises within an e-learning classroom and in particular 'active clickers' - easily distracted, kinaesthetic learners who had a constant need to 'click and point' at their computers. With these learners, Martin used silence in terms of a change of location away from the computers, and a change in activity. He viewed this as having a calming function:

> It's not silence about being a lack of noise, it could be a silence about a lack of activity, a change of activity, so silence might be .... coming away from the people, coming away from the groups, so it's that changing gear.

Maggie suggested that silence was to orient learners to a specific focus, by using it as 'punctuation' - creating a change in rhythm and emphasis:

> I think it's useful to use silence to make an impact.... You can use it to get attention, you can use it to change the pace of something, you can use it to get people to focus.

This description of silence as 'punctuation' is reminiscent of the literature on silence and performance (Jaworski, 1997) and the prosodic uses of silence in speech (Saville-Trioke, 1985) and music (Edgar, 1997). However, it is not neutral, but used to create a narrative of learning in which certain discourse is encouraged and other discouraged, and where certain types of knowledge are emphasised at the expense of others. This 'punctuation' could be used by the teacher to control how knowledge itself is positioned in the lesson.

Silence could also be used for emotional transitions within the lesson. Karen gave the example of a session on peer mentoring, where the student group were asked to bring in objects which were meaningful to them and one woman brought in something belonging to a grandchild who had died:

> We had to leave her for a few minutes and the group had to cope with the silence for a few minutes, and then she could talk about it.

Drawing on the metaphors from the previous chapter, this was a personal silence, in that the person needed time and space to emotionally prepare to talk - to make the personal, public. It was a thinking space, where she could rehearse what she wanted to

say. But it was also a communal silence, in that the rest of the group were participating in a communal acknowledgement of a significant and tragic event.

Silence and the Learners' Thinking Space

Participants discussed how they used silence to allow learners time and space to think. Drawing on silence as a metaphor for thinking, they described different types of thinking that took place. Most participants mentioned using silence after asking questions, but there were a variety of different reasons or contexts for this. Participants emphasised the importance of silence in giving time for cognitive processing - learners' 'thinking space'. However, surprisingly few categories of the 'silent thinking' identified in Chapter Seven were used in the classroom. The most frequently mentioned were involved the characteristics of *contemporaneous* thinking - concentrated focus on immediate cognitive processing - and anticipatory, *rehearsal* thinking - rehearsing for something they were going to say next or preparation for an assessable product, such as a student presentation.

Participants also described other reasons for silence after questions, concerned with broader aims of learner development:

> When the students are making a presentation and they ask if anyone has got any questions, there's usually a huge silence ... I tend not to jump in and ask the first question, I tend to let it hang and see if anyone's going to ask the first question.

Here Peter is deliberately trying to orchestrate a sound environment dominated by the student 'voice' as 'presenter' and by the student 'voice' as 'questioner'. This silence is a sign of 'invisible pedagogy' (Bernstein, 1997) where the teacher remains in covert, rather than overt control. The balance between teacher and student voice is being

opened for negotiation by Peter and students may accept this re-positioning - and ask a question - or reject it, and give the teacher the responsibility for speaking. Their choice may depend on the extent to which the learners' enculturation process towards the world of *Peter's* classroom, has marginalised conventional cultural expectations of the dominance of the teacher's voice. In contrast to the metaphor of personal space 'being for me' as in everyday life, here Peter's purpose is to develop greater independence and autonomy in his learners, through giving *them* personal space for themselves.

Simon, who carries out mandatory fire training for Health Service personnel, used silence deliberately to confound the expectations of his audience, who expect him to be the 'purveyor of information'. He explained why he remained silent when someone asked him a question:

> When I don't respond it is not .... accepted normal behaviour. It focuses their attention on me, the fact that I haven't answered. ......So it's giving the learners time to think what has been asked and I'm hoping that they will have evaluated the question and have come up with their own response to it, so hopefully they will pre-empt what my answer's going to be.

Here Simon was silent in the hope that another's voice, rather than his own, would provide an answer or solution. In this process, he 'plays' with the conventional identity of a teacher as the 'purveyor of knowledge' and constructs another identity for himself as the 'teacher who doesn't give the answer'. As a result the relational identities of other participants must be reconfigured, changing students from 'imbibers' to 'producers' of knowledge'. Simon is able to do this because his professional subject expertise (also acknowledged by his students) allows him the confidence to improvise upon the conventional expectations of this environment. In

this sense he is 'authoring his own' environment and 'making it available' to other participants (Holland et al, 1998, p.53).

This 'authoring' is based on a set of personal understandings of the conventions of the environment, coupled with a set of ideas, drawn from certain cultural resources on what creates effective learning. These are integrated into an orchestration of classroom dynamics which reconfigures overt expressions of power and the teacher's 'voice'.

Many of these silent mechanisms play an important role in transferring responsibility from the teacher to the learner and could be seen as part of the process for making the learners more autonomous. Hence the learner's thinking space is not only about cognitive processing, but about how they position themselves in the learning process.

Silence as the teacher's thinking space

Silence, as an absence of talk, provided an opportunity for the teacher to consider what was happening at a particular point and whether the silence was meeting their intended purpose. It also gave a space for the teacher to review and adjust what they or the learners were doing. Sally indicated the purposeful nature of the use of silence in the formal learning environment, but also the constant process of judgment and reflection that occurs for the teacher during those periods of silence:

> This is what I want the students to do with it, and in the silence I'm thinking". Is what's happening is what I hope's happening?" and, "What might I do differently?"

Many participants discussed the subtle and continuous processes of interpretation and forming judgements throughout a formal learning session - the processes of

observation, judgements and decision making undertaken by teachers when silence occurred. That silence could be where no-one was talking, or it could be when students were participating in an activity where the teacher was not involved:

> An ability to tune into things when you're not talking, you know like the fact you can hear other sounds, you really start to notice things and then you start to notice things about other people's behaviour, facial expressions or position in the room. (Sally)

Here Sally described a complex and finely-tuned sensitivity to what was happening in the classroom, where the teacher acts a 'watcher' (Ingold, 2004) and a 'listener' (Carter, 2004) to inform the next stage in activity. Charlotte used those terms explicitly:

> As a tutor...I felt that I was sort of making my ears listen really carefully....so if you gave people a task, you'd be watching and listening for whether they got on with it straight away, or whether they were confused and unsure about what to do next.

This information was also being used by the teacher to decide whether any intervention was necessary and was also based on a sensitivity to the relationship between silence and time:

> I'm looking at the clock thinking, right well, they're writing sentences, so that's why they're quiet, so how many more minutes do they need?

The longer the silence, the more focussed the teacher's attention on reading the clues in the classroom to determine whether students understood the task and the language, or were confused and unable to understand what is required.

In Sally and Charlotte's examples, the capacity of the teacher 'to act purposively and reflectively' using their knowledge of the 'complex interrelationships' of this figured world (Holland et al, 1998) is not demonstrated by overt acts of intervention, but by the enactment of *abstention* i.e. of restraint from intervention. Their positioning in that context may vary from being 'the teacher who is seen to be teaching' to 'the teacher who senses that learning is taking place'.

Virginia described her thoughts when trying to interpret student silence - in her example, the silence after a question:

> The way I read that silence is for some it's a signifier of "I don't care, can't be bothered, wasn't listening"..... For some "What did you ask? What did she want? What did she say?" For some it's "I'm so embarrassed to talk in front of all these people I would never answer the question even if I knew the answer". For some it's a "Please don't look at me, please don't look. I don't want to have to say it" .... then for others it's about "Oh, I think I know this but I'm not sure I'm right. I don't want to make a fool of myself" by getting it wrong, and then you've got others who are waiting to be invited.

She then described what she would do:

> I look around and see what they're doing, see what their non-verbals say, and sometimes their non verbals say "We don't get it but we don't want to tell you". And sometimes their non-verbals would say "Oh I can't think now" - they don't really understand but nobody wants to say it - and then sometimes you'll get the .... "Oh yeah, we know ....it's ok, we've got it".

This 'imagining' exemplifies the way that a teacher may use a silence to become aware of her own and her learners' understandings about the situation, to decide on whether action is necessary, and, if so, what kind of action. Of importance in Virginia's example is that the silence may not indicate *lack* of comprehension, but comprehension and impatience to move on. Important also is that the silence allows the understandings of the learner (about the subject) and of the teacher (about the

learner) to emerge. Silence allows these understandings to occur within the same liminal space (Belanoff, 2001).

This silence - the pause after a question - is used by Virginia as a mediating tool with an externalising function to provide a short amount of 'slow time' for learners to engage with what has been asked. However, for learners, silence in this case becomes a 'sign' in that it mediates the learners' internalisation and organisation of this experience. During this process, it also becomes a 'sign' for the teacher, who internalises her understandings of how learners are processing that experience through her 'inner speech' which offers alternative framings of her perceptions of that silence. Finally, silence again becomes a 'tool' in which both teacher and students prepare to externalise their thoughts through pre-articulated rehearsal of their thinking. The balance between silence as a mediating tool and a mediating sign is related to the length of time the silence lasts for each individual participant. Hence the person who talks - publicly articulates - is no longer using silence as a sign; the person who listens still can.

Internalised understandings may relate to cognition or to the emotional content of the silence. Where the teacher perceived the silence to be uncomfortable, participants saw the teacher's role as being the one to break the silence - to provide a voice which would then encourage other people to speak. For Charlotte, this would be preceded by an inner dialogue which explored the reasons for the silence:

> In the classroom, if there's silence, I feel that my brain's ticking over...why has everything gone quiet? Is that OK? Do I need to do something to stop people being silent?

With a new student, Virginia described how she would act if she read their silence as one of fear or embarrassment:

> What they actually need is coaxing and bringing on and helping them to move out of that silent space and they're not used to being able to give voice to ... ask things of you.

Here the teacher's intervention is to enable to student to feel comfortable to speak. However, depending on the teaching context, this would be approached in different ways. Virginia made a distinction between silence in a tutorial and silence in a lecture:

> So that kind of silence in a project student's very different and it requires a different kind of tack. I would fill the space, not with information [as in a lecture] but with encouragement, with ice breaking, with attempting to get them to talk about anything...... so that they feel more comfortable with talking into the gap.

Virginia was describing two silences of 'not talking', one in a project tutorial and one in a lecture, but she read and responded to these silences differently. Her perceptions of the purpose of those two learning situations affected her interpretation of the silence and the type of intervention which may be required. In each case, by being sensitive to shifts in the learners' positioning in relation to different components in that world - herself as the teacher, other learners, the knowledge presented - she repositioned herself to create an appropriate balance between those components.

Silence, listening, attention and respect

In the silences where one person was talking, whether teacher or learner, then other people were involved in the activity of listening. Peter described how listening helped in the rehearsal of one's own ideas during the discussion process 'when both people

are talking and listening'. He described how listening to another person talk also helped in modifying one's own ideas:

> If you're actually *listening* to the other person...you've got to be able to take on board what they're saying, check it with your understanding and you would then reject or accept or modify. If you are accepting what they're saying, you'd modify your model of what the information means.

Peter's description demonstrates the way that the listener may reposition themselves in relation to the subject matter. If this active listening does not take place, then Peter suggested students would only hear ideas and views which supported their own. Although this might maintain a sense of equilibrium in this environment, it also precludes the possibility for change. Sally described herself as having strong ideas and a tendency to dominate group situations. Hence talking in group work merely reinforced publicly her existing private thoughts. For Sally, silence, as in refraining from talking was the best way to learn from others:

> If I sit back and I deliberately don't speak and I wait until other people speak, what I've found is that I often end up having a different view than what I had originally, so I've learned more by not speaking.

Here Sally equates learning with the repositioning afforded her through active listening.

The personal tutorial, outside the formal classroom environment, provided a legitimised opportunity for the teacher to shift from a conventional 'talking 'identity through listening carefully:

> They might be upset about something and me sitting here quietly, while they actually talk things through, it's like they use you as a sponge to absorb to all the things that are in them, so… using silence to illustrate the fact that you're listening to the individual. (Martin)

The teacher's lack of interruption was a signifier not only of respect, but an acknowledgement that the individual's concerns were being taken seriously. The cultural conventions, that normally apply in the formal classroom, where the teacher is seen to lead and is expected to lead, alter in the different physical and emotional space of the personal tutorial. Within this environment, the teacher and student may reposition themselves, with the teacher as a 'listener' and the student as the 'talker' who is allowed to dominate this particular space.

Constructive repositioning, which enables both participants to feel that the needs of the situation and of themselves as individuals have been met, requires that both have a mutual understanding of the meanings of talk and silence in this context. They also have to accept the mutual repositioning required. If this does not take place, then the teacher will continue to dominate vocally, giving little opportunity for the learner to develop their own ideas. However, a skilled teacher may use the tutorial as an opportunity to help the learner develop a 'voice'. In the 'landscape of action' of the culturally-configured world of education, this may prove 'contentious work' (Uttiera, 2007, p.109), resisted by the learner who prefers to retain the power of silence, whether or not is to their ultimate social advantage. Within this silence, the learner may struggle to retain the equilibrium equated with familiarity and comfort, whereas the teacher may seek to create some measure of discomfort and disequilibrium in order to effect change.

Comfortable silence in the formal learning environment

In Chapter Seven, silence was a metaphor for comfort and security with others. In the classroom context, participants identified situations where an absence of talk meant a 'comfortable' silence and where talking could lead to emotional discomfort.

Charlotte gave the example of icebreakers, where the exposure that occurs through having to talk in a public forum may be uncomfortable for many people. Many texts on practical teaching emphasise the role of the 'icebreaker' in settling in new student groups and creating a feeling of belonging and connection with other students (e.g. Petty, 2004). The term itself, where the 'ice' suggesting a non-human and hostile environment is 'broken', by some kind of vocalised activity which creates a sense of human support reinforces this view.

However some participants suggested that although this need for public vocalisation works with some students, it has the opposite effect with others, making them withdraw. In this case talk as a mediating tool creates a silence which is that of discomfort or retreat. In Charlotte's example, an icebreaker such as students talking about themselves to the group gives a 'voice' to each learner in the classroom and hence might model particular cultural conventions about desirable forms of participation. However, the imposed requirement to *publicly* position themselves in relation to the rest of the class may be inappropriate for students who prefer to take time to work out their positioning - to other students, to the teacher, to the whole environment - within this world.

Sound, noise and intrusion on silence in the formal learning environment

The world of the formal learning environment contains other components apart from teacher and learners. In Chapter Six, silence was discussed in relation to sound, and this section describes how teachers and learners position themselves in relation to the auditory environment of the classroom.

Karen described the 'narrative of noises' - the rustling of paper, invigilators walking up and down - from her strongest association with education - the examination. For Karen, these were auditory signs of the control and surveillance characteristic of spaces in the formal learning environment. However, Martin would try and make learners aware of the auditory characteristics of different spaces and how they might be used:

> I try and make use of those quiet elements and I usually advise people on working in the learning resource centre, the library, it's a nice quiet environment, where they can do that undertaking of that reviewing of their skills.

Sometimes learners would be aware of these spaces for themselves and actively seek them out. Fiona, in her IT workshop for adult learners, described a particular student's actions:

> I've got one student who's not silent in class, but if he's doing some sort of task, he asks if he can go into the office, which is completely out of the classroom....he prefers to do it out of the classroom and go into a silent room because he's trying to concentrate and there's a lot of noise.

She indicated the kind of auditory stimuli he would characterise as 'noise:

> Everyday classroom noise, people asking questions, printers and computers going. He wants to do the task under conditions where the door's shut, nobody interrupts him and it's quiet.

In the process of seeking out a 'silent' space, this student positioned himself in relation to the 'noise' of the other learners and to the level of control that Fiona as a teacher has over his actions. This was possible in the world of adult education, where it could be viewed as a sign of increasing student independence, with the student taking responsibility for controlling an aspect of his own learning. In the more formal learning environment of a college or school classroom, walking out in order to find a silent space, most likely, would be seen as a sign of disobedience.

Culturally and historically, particular institutional spaces are associated with the opportunities for this silent concentration. However, participants suggested that these spaces, traditionally associated with silence, were now filled with noise. The change of discourse from the word 'library' associated with the non-vocal activities of reading and possibly writing, to 'learning centre', where all activities associated with learning - vocal and technological - may be located, marks the historical development of a particular kind of communal space within the figured world of education.

Maggie described how a set of expectations about silent communal learning spaces, derived from prior conventions about spaces to study, could be confounded by the historically changing nature of these spaces, which now may be 'full of computers or giggling students':

> Quite often, the places that you expect to be silent, like learning centres, are not silent... You often find the silences these days in other places, like a corridor, where somebody's gone because a place they thought was going to be silent is full of computers or giggling students.

In Maggie's description, silence is experienced relationally as a result of an accommodation between the individual and the environment in which they seek space

to learn without disruption. In her example, the corridor has become the silent space for learning:

> So silence is not the same as quiet… you go somewhere quiet where you could be silent - is it people that are silent?

In addition to physical spaces for silence, auditory spaces may be created as well. As there is no such thing as 'absolute' silence, the sounds that might help students to concentrate become important. Just as in everyday life, there will be different configurations of what may be 'sounds' and 'noise' , then what may be 'sounds' to particular students, which provide a comforting background, may be experienced as intrusive 'noise' by a teacher. Fiona described her reactions to this in her IT workshop for adult learners:

> People who are silent are concentrating and what I do find strange is students who bring CD's and listen to music while they learn. I have asked them why, I thought they'd just got earphones on to stop the noise around; they said the sound helps them concentrate.

She emphasised that both these students carried out their work successfully. Fiona's comments indicate that some students need to have the auditory environment under their control - their own kind of silence - which blocked out noises which intruded on their concentration. In this they exert both 'aesthetic control' and make a 'creative' space for themselves (Du Gay et al, 1997).

Martin, also teaching IT, but for some of the time, using more formal classroom structures than Fiona's workshop, became interested in the notion of sounds in the classroom during the course of the interview:

> It's what I need to consider more, you know, looking at the auditory element, in terms of sounds that I might be using in the classroom.

Silence and sounds to aid transitions

Martin mentioned the use of music to aid concentration, but then focused on the notion of silence as a mediating device to mark transitions. Previously in this chapter silence mediated the transition from a personal, private world, to the public world of the classroom and also as a tool marking the transition from one activity to another. In this context, Martin identified a range of sounds within that silence which could indicate a change of activity or change of gear. His examples drew from the natural soundscape of an IT classroom, such as equipment 'powering down':

> That sound.... me powering down the computer that I've been using to demonstrate something, might imply that we are going to go on to a discussion session ... It might be that sound of the data projector powering down, means that we're moving to a practical activity...

His examples also drew on more generic classroom sounds:

> It might even be the sound of a flipchart being flipped over, you know, getting ready for some discussion that's going to take place. Even the sound of Blu-tak, you know, Blu-tak-ing things on the walls, it's all that kind of sound, whiteboard markers coming out, people being involved in a certain type of activity.

Martin's description of the use of these sounds as an orientation device to a new section of the learning session recalls Vygotsky's notion of 'pivots' as mediating devices which enable 'a pivot or shift into the frame of a different world' (Holland et al, 1998, p.50). Here the sounds described could act as pivots, used deliberately by the teacher to shift students into a new frame of activity. From a different theoretical perspective, this process could be similar to Ausubel's idea of the 'advance organiser'

(Curzon, 2004, p.99), giving learners a chance to anticipate and prepare for what will come next:

> I know from kind of some of the practical activities I've done, people get used to a pattern ... my formal sessions for the diploma programme fall into a very structured pattern and what I found is that people quite quickly get into the groove of that kind of pattern, that sequence, they know what's coming next, in essence, they feel confident with it.

Here, the use of sounds almost acts like a musical score - giving a structure and rhythm to the learning session.

Auditory cues might also function subliminally to reduce potential anxiety about what will come next. Martin referred back to his responses about positive sounds in everyday life:

> It's made me revisit the whole learning environment...it's coming back to the silence of the central heating system, a nice relaxing sound, I know if it's in the background that everything's alright, everything's working, everything's ok, and I find it's that feeing of warmth that's still going to come.

Martin's everyday life, where certain sounds created a sense of security and well-being has impacted not only on his 'understandings' of the world of the classroom, but also the 'possibilities' (Holland et al, 1998) inherent in drawing on a particular set of cultural resources - those to do with sound - to reconfigure this world by filling it with comforting background sounds. Here he echoes Jaworksi's (1997) metaphor of silence as 'container', to indicate how, he as a teacher, can use these sounds as a tool to help learners:

> Silence isn't just a void, it's what can I fill it with that will be helpful to the individual.

Intrusive noise

All participants, assigned high importance to the relationship between silence and thinking. As mentioned previously, contemporaneous thinking - concentration - was given high importance. 'Machine noise' and human noise could intrude on personal silence, in the formal learning environment as well as in everyday life. Christine described how someone's voice could intrude on her capacity to think:

> You can use silence to concentrate on something which you believe is important and you can become increasingly frustrated if you are interrupted and your thought processes are broken up.

In Christine's description, the individual has made a personal choice to focus on something, which is consciously prioritised above other possible thoughts. In this case, the individual has positioned herself as a 'thinker' in relative isolation from others who are 'not thinking' - about the same thing or with the same degree of concentration. Hence, in this interruption, it is not only the integrity of the thought process which is compromised, but the positional identity of that individual. This echoes Bakhtin's notion of 'the inner activity and inner life' of the individual (Holland et al, 1998, p.8), which in this example is disrupted by the intrusion of another's voice.

In the classroom this voice may be that of another student, but it is more likely to be that of the teacher, engaged in all the vocalised activities - initiating speech, imparting knowledge, directing activity, controlling behaviour - socially and culturally legitimised by his or her position in this figured world.

From her viewpoint as a professionally qualified teacher, Christine could see how this disruption could subvert the overt key aim of any formal learning environment (i.e. to

help people to learn) in a number of ways - by not addressing the different ways that people learn, by overloading the learners with too much vocal information, by directing and possibly limiting learners' own creative processes, and by interrupting the student's own potentially valuable thinking time and space, where they might be trying to make sense of complex information. It could also disrupt the individual's possibilities of developing their own identity as a learner.

In effect, the teacher's voice could 'silence' the learner, not only in their thinking and learning, but in their agency to make choices about where to position themselves in the learning process. Here silencing transfixes the learner's position into one of cognitive subordination to the teacher's priorities and timescales which are themselves culturally-constructed.

The individual's personal dispositions could be subsumed into their professional understandings of what is good for their students. However they might also affect how quickly a teacher might want to intervene. Gareth described how his own personal discomfort with silence led him to interrupt and pre-empt students' answers:

> I ask questions and prompt, part of me is uncomfortable with silence, so if, I'm asking something and nothing's coming back, ... I will probably come out with the answer that I was trying to extract from them.

Here Gareth linked his personal discomfort with silence (as in not talking) - already identified in his discussion on his everyday life - with his discomfort in the classroom. His personal dispositions towards talking are reflected in his classroom practice, but are in conflict with his professional willingness to adopt certain pedagogical practices - in this case a practice which he acknowledged would be beneficial to the students in

allowing them more space to arrive at their own answers. His discomfort made him assume that the students would feel discomfort as well. Hence what Gareth might frame as a constructive '*intervention*' in an 'over-long' silence (to him), might be experienced as an '*intrusion*', by the student trying to concentrate.

His shifting stances - between personal dispositions and professional obligations - represent the 'mass of contradictions, containing many different understandings...' (Holland et al, 1998, p.8) in Gareth's attempts to develop some congruity between his identities in the different figured worlds in which he participates.

Verbalised silence in teaching

Much of the discussion so far has covered the relationship between silence and talk. Many texts on teaching use the term 'verbalise' to indicate both spoken and written forms of communication. In the context of this thesis this is an unhelpful distinction. Participants' conceptualisations of silence in the formal learning environment frequently ranged beyond the relationship with sound or speech (vocalisation) and included various forms of verbalised silence such as reading, writing and e-learning using computers.

Reading

Participants mentioned how silent reading would allow the reader to engage thoughtfully with a text - an interaction with the ideas or stories presented, and occasionally and obliquely with the writer's own story. However the opportunities for silent reading in the formal learning environment were limited. Whereas Laura -

teaching primary school pupils was able to build in periods of silent reading - participants from other educational sectors had more difficulty.

Within the world of the primary school classroom, conventionalised activity involves teaching the 'skills' of reading and hence silent reading practice is seen as a legitimate activity. In more adult settings, the 'skill' is usually assumed (rightly or wrongly) to have been developed and hence the purpose of extended silent reading is no longer clear. In these cultural contexts (unless they have a specific function in relation to adult literacy), the teacher's silence, while students sit reading, might be interpreted as an abnegation of the pedagogic duties of talking, explaining, directing and intervening expected by conventional narratives of teaching.

The students' silence, even when engaged with the written texts, might be interpreted by those with more power over the cultural figuration of the classroom - inspectors carrying out classroom observations; government ministers and policy writers, and funding agencies - as passive rather than active learning, in that the students are not being seen to 'act' or perform. Hence a class where students sit and read for most of the lesson would be likely to be 'marked down' as not having enough variety or activity.

This ability to concentrate silently is not innate and may be part of some students' cultural capital, but not others. Gareth, dealing with sixteen year olds on vocational courses, whom he described as sometimes 'all over the place', talked about how he needed to promote the ability to focus by introducing activities which provide the opportunity for concentration. He considered that reading was very important here:

> Sometimes it's a tool if you like, that I use so that they can, so that they can look at something they wouldn't normally be in contact with and naturally silence ensues for a matter of time.

He suggested that reading any text was an unfamiliar event especially for some of his students who are 'rocker speed on a keyboard', but do not want to look in a book. However, he suggested that if he could get them to read something for a time, however short, it provided a space for slowing down and for reducing high levels of social talk.

Here silence, enacted through silent reading, acts as a mediating tool enabling students to enter a particular cultural world of which some of them, at least, have little or no experience. The world of everyday life in the twenty first century - fast paced, filled with talk, technological sounds and noise - is contrasted with a world of slowness, stillness and concentration. By introducing students to this world - the figured world of silent reading - Gareth hopes to extend the cultural resources that are available to them in their everyday lives.

Writing

Writing involves the process of articulating thoughts into words without vocalisation, and, in many instances this process of silent verbalisation enables a longer timescale for thought processes than vocalisation allows. The distinction between *vocalisation* and *verbalisation* is very important in this context.

A number of participants mentioned writing as a type of silent activity. Charlotte, as a teacher of ESOL and also a volunteer co-ordinator, mentioned writing as a silent skill which she believed was in decline in favour of vocalised language. She suggested that

complaints from employers about literacy not only included the problem of employees not being able to write well, but also the problem of not being able to check and correct their work - a slow and thoughtful process, linking reading to writing.

Charlotte suggested that the extra skills used when writing were important skills in their own right, relating to an individual taking responsibility for their own work. In her example, the process of writing could also be viewed as a process of identity formation, in which the individual moves from being the 'immature student' to the 'responsible, autonomous student' in the world of the classroom. The slow process of writing allows for this in a way that the 'immediate' medium of vocalisation does not. Writing also gives a permanent record of thinking at a certain point in time, which can be read again and revised again.

This potential for a protracted engagement with the individual's own text, the slow evolution of ideas, the reworking, the drawing on different resources to inform or change thinking, is not possible within the timescales of the formal learning environment, although it is expected to take place outside - in the form of written assignments and homework. Charlotte suggested that some students needed to learn this skill in class - a skill which is not about the formation of written letters, but the formation of complex thoughts - as, in their everyday lives, they may not be encouraged in the skills of writing, nor, by inference, in the skills of *thinking* silently and slowly.

In everyday life, Charlotte suggested that many students may use 'texting' as their main form of verbalisation, but this medium had more in common with vocalisation

than verbalisation in its immediacy and apparent lack of care. The truncated form of language used in texting and the rapidity of response often associated with the process, reflected more the rhythms of a face to face conversation, than the considered and thoughtful activity of writing.

Interestingly, there were times when dominant performative practices, designed for measurement and assessment, actually provided a space for these slower activities to occur. Participants gave examples where external assessment requirements gave an opportunity for writing that otherwise would not have occurred. In Fiona's IT workshop for adult learners, most of the time was spent working on computers. However, there was a space at the end of each session where learners handwrote a learning log. Fiona discussed this use of writing, which allowed a slowing down and an opportunity for learners to consider their learning more carefully:

> At the end of each lesson everyone fills in a diary sheet of what they've been doing. It's not really silence, but that sort of partly covers it, because everybody's not moving around and because everybody's writing down the review, so it's quieter at that point.

Here the 'silence' was used relationally to indicate a contrast with the previously noisy and busy computer room with five printers going at once and 'computers humming'. Fiona's description of the use of log books, as required by the accrediting body, was an interesting example of how performative requirements could actually provide some thinking space for 'busy' students. Betty also described the use of log books in her work training trades unions officials, who she prompted to talk for almost all of the session.

> The only time they get to reflect is when they're filling in their workbooks and they only do that because they're required for accreditation, otherwise they wouldn't have that ten minutes at the end of the morning and the end of the afternoon to fill in what they learned.

As in the previous example, the need for accreditation provided some 'slow time' (Bruneau, 1973) for thinking, through writing, which would not be available otherwise. Betty acknowledged that she would not have instigated this herself. She considered that a key purpose of her teaching was to encourage her trades union students to gain confidence in talking, as this was a vital component in their job roles. Hence, in Betty's class, this time for writing and thinking was not presented to learners as a process to help their learning, but as a task which had to be done to obtain their qualification.

Betty's perception of the vital importance of talk in her teaching, coupled with her admitted love of talking in everyday as well as professional life might have caused her to eliminate any slow time for thinking from her classroom practice. Hence it was interesting here that the written assessment requirements, determined by an external awarding body, not only provided the means of giving the students a silence space for retrospective thinking, but also acted as a means of mediating Betty's personal disposition towards vocalisation.

Electronic learning (e-learning)

Verbalisation also occurred through the use of computers and e-learning. One participant had a particular interest in distance e-learning. As this is the only teaching mode in which formal learning can take place at different times and in different spaces, Martin's ideas will be discussed in some detail. The section will also cover

some aspects of silence and teaching which have appeared in other sections, but this time in an e-learning context. Here the figured worlds of the virtual e-learning community and the social practices of the traditional classroom overlap. One issue, which reflects a problem with the notion of figured worlds in general, is the nature of the imagined world within a *virtual* environment, where different figured worlds, such as the world of everyday life and the world of the formal classroom co-exist in the same space.

Martin discussed how computers enabled different environments for learning - the classroom, the library, the learners' own homes and suggested the importance of learners finding their preferred spaces for this:

> Their own hideaways, their own focused area.

Martin's use of the term 'hideaway' echoes the notion of silence as a metaphor for escape or retreat, identified in Chapter Seven. Martin described how e-learning could be used as a bridge between the past, present and future, enabling learners to think about what they have learned, where they were now in relation to that learning, what they needed to do, or what they would like to achieve in the future - immediate, medium or long term.

Here silence acts as a metaphor for thinking space and time and Martin's description of the different cognitive functions echoes the three major categories of thinking - retrospective, concurrent and anticipatory - a greater range of thinking than the types identified for the face-to-face classroom. He used the example of on-line assessment

tools to illustrate how silent non-vocalised self assessment freed learners from the pressures of institutionally-imposed time:

> It gives them the chance to review in their own time, but that silence...is an acknowledgement of...where they are. It's a clear indication of understanding, and ability to actually engage.

Here both computer and the silence act as mediating artefacts - material, in the case of the computer, conceptual in the case of the silence the on-line process provides, creating freedom from temporal and spatial constraints:

> They can find their own space, their own silence, their own quiet time.

It can also liberate students from particular cultural conventions in the formal learning environment, including what Martin perceived as the enforced vocalisation of traditional classrooms:

> I remember things like the maths class, where the teacher wasn't going to move on until you'd said something, so ... that nightmare scenario's gone.

Martin suggested that e-learning provided the learner with choices about the level of interaction they needed or wanted with the tutor and with other students. The silence he described in terms of time and space was not only about the learning process. It was also about students deciding how they wished to position themselves in relation to other participants in that world. In this context, Martin indicated that this was within the learner's own control how much they wanted to interact, how much they wanted to share what they were learning:

> They could, if they're happy with that, share it with a broader audience.

This relative freedom to position themselves in the virtual learning environment is in contrast with face to face contact in the formal classroom, where cultural conventions dictate that the level of vocal and spatial interaction is under the teacher's direct control.

In distance e-learning, the nature of the relationship between the tutor and the learner is both more removed, in that they are physically separate, but also more intimate, in that the communications between them can provide the impression of purely individualised conversation:

> They also know that during that period, you're there to support them; not physically, but a quick response to their own questions, and what's nice is, you might be corresponding with twenty four people, but to that individual, it's a one-to-one discussion.

Although silence can act as a metaphor for personal space, it can also shift into a figuration of isolation and disfunction, where the learner withdraws from contact and struggles to keep up with the work. Martin described how the silence allowed by e-learning still required close 'observation' by the teacher, with the same level of awareness as in a face to face situation. However, this would be textual awareness, through the significations of written electronic contributions, rather than the visual and vocal clues within a classroom environment. If a learner was not textually participating, then Martin would check to establish whether they were progressing satisfactorily or whether they were, what he called 'silent running'. However, he would do this through a face-to-face tutorial:

> I say "You've not gone into silent running with me, have you?" I say that silent running is a bit like the submarines, the communication stops, people don't really verbalise anything and you vanish off the face of the earth, I say, so, I kind of try to look out for those signs of the silent runner.

A 'silent runner' could have wider implications than temporary lack of overt participation and might indicate someone in danger of dropping out of the course. Martin believed it was important not to jump to conclusions and hence the discussion he initiated with the learner was intended to establish how the silence should be interpreted:

> I find that gives me a chance to try to gauge that silent running, whether it is contentment, whether it is engagement, whether it is just fear and about to sprint.

Here Martin implied that there were a number of potential interpretations of silence in learners:

> It might be that people need time to build on what you've said in the session, so there are some individuals where I've had that discussion and they've said, "It's fine...I don't really think of the elements until after the course session has ended and then by the time we come round next week, I've actually resolved anything that I thought was a problem", so that silence... can mean that they're quite content with where they are with things.

He also stressed that the lack of overt participation in class face to face sessions was not necessarily an indicator of poor performance on the part of the student:

> I've had some learners, this year, who have been very silent in the class..., but when you look at the materials they've produced, they've engaged with the materials in such a way that other learners haven't.

Some students were unable to unwilling to vocalise in class, whereas they were happy to verbalise in an electronic format:

> Via email, those individuals were very fluid, very insightful, very clear about what they hope to achieve.

He described how he helped and supported them via email, but also suggested that they acquired many kinds of skills which developed independence from the tutor through maintaining this physical and intellectual space. In Martin's description, learner silence is legitimated, through recognising the ways in which different learners may position themselves in relation to formal learning.

For Martin, the opportunity to take time outside the classroom could be of significant benefit to some learners:

> There are some learners who will quite actively engage with you in a discussion, but there are some learners who will prefer to go away and actually construct their question and reflect on what they've done, because they feel very self-conscious, so having that quiet opportunity is important.

This space provides an alternative timescale to classroom time for students to develop more thoughtful and carefully constructed questions. In the virtual world, learners can exert control. In the classroom, time is culturally-imposed and usually shaped through the rhythm of the most vocal students or by the speed at which the teacher requires responses. Martin suggested that 'lurking' i.e. remaining at the periphery of electronic communications without actually participating, may be related to time and speed of response:

> Sometimes, lurkers, it isn't that they've got nothing to say, it's just that they can't type quick enough to get there and that's why sometimes, email which is not immediate, it's much more helpful to them, because it doesn't matter if it's something that somebody else has said, because it all comes in at different times.

Here Martin implied that it was the synchronicity of response that can be the issue for these silent lurkers, whether face to face or through email. Asynchronous electronic communications could provide the time to develop responses, but for the learner could

also present an illusion of original contribution, which could motivate participation through this more remote medium.

Martin suggested that electronic communications had the capacity to have a qualitative effect on contributions. He described email tutorials, which he considered not just to have a different purpose to talking in face to face tutorials, but a different quality of engagement. (Here he use the term 'verbally', but implied 'vocally').

> They didn't want to engage verbally......but one of the things I find is that the questions that I get asked are much more insightful than just somebody stopping me in the corridor and saying, "What about this?" because they've not thought it through.

On exploring the difference in more detail, he made the distinction between face to face discussions and e-learning at a distance.

Martin described face to face discussions as events which were often tutor-initiated and concerned more with reassurance, both for the learner and for the tutor, than with intellectual challenge. He contrasted these with the more overtly cognitive aspects of e-learning, where he suggested most students would at least try to address the challenging task he had emailed and in some cases would have developed it beyond his expectations.

Learner identities

The silence that the e-learning environment allows these students and the ways in which both learners and tutors improvise their roles within this virtual world, have echoes of the 'social play' in the 'margins of regulated space and time' suggested by the work of Holland et al (1998, p.273). In this world, individuals develop 'new

competencies in newly imagined communities' as a result of repositionings between teacher and learner, learner and other learners. In these processes, participants constitute new identities for themselves, derived from a change in how the world of formal learning is perceived and experienced. However, the identities formed within that new 'virtual' figured world may be different to individual identities within the face-to-face formal learning environments. Of importance here is how silence can mediate this shift in identity.

This can also happen in a face-to-face environment. Tracey, teaching tourism in an FE college, explored the different levels of maturity of her own students and suggested that the ability to deal with silence varied according to their age. She distinguished between her younger 'certificate' students and the older 'diploma' students, suggesting that the younger students preferred to talk when they are doing an activity and might ask to for music in the background. In contrast, diploma students often prefer to carry out activities in silence. She suggested that the younger students may not only feel insecure with silence, but primarily viewed attendance at college as having a social purpose. This was in contrast to the diploma students who associated college with study and the need to learn. Here, perceptions of the purpose of the educational experience adds another perspective on learners' attitude to silence. As a student matured, the purpose of education changed and so the affiliation to silence might become stronger. In Tracey's account, talk is associated with sociability and silence with learning. Like Gareth, she overcomes her own dislike of silence to acknowledge its value in a professional context.

Silence and talk in the formal learning environment

In Chapter Four, I discussed the literature on the significance of talk and teaching, including how teachers dominate talk in the formal learning environment. Teachers' use of talk involves both initiating and intervening behaviours and these dominate much of classroom discourse and books on practical teaching, where talk is highly valued. These views were echoed by Karen who said that classrooms were:

> ...opportunities for the complex discourses of people talking or listening to other people talking. They can do the internal dialogue another time.

The teacher who appeared to use the least silences was not the participant who expressed the strongest *personal* dislike, but the teacher with the strongest *professional* interest in talking. Hence Betty, the teacher of trades union officials - where the educational purpose was seen as creating confidence in talking and negotiating - concentrated least on silent activity.

Many participants associated certain types of silence with deeper types of learning, whereas talk had a range of functions for talk unconnected with learning in the classroom. Whereas silence may signify that students felt confident about what they are doing, talking could signify a need for comfort and security. Laura gave the example of learners talking when they were supposed to be getting on with some work:

> I think it's when it starts to be difficult and they start to be insecure that they will question and will chat with each other.

However, working silently suggested security and confidence in their ability to do the task:

> It's them concentrating, and they're locked into what they're doing, and it's within their capabilities.

In these circumstances, talking could be viewed as a need for reassurance, as well as a means of gaining help or clarifying the task or ideas related to the task with each other.

Another function of talk was related to motivation. Betty discussed how lengthy periods of silence could make a learning session lose momentum and equated talking with enhancing and maintaining interest and motivation:

> I don't want them to lose their 'oomph'. You know, if you've got them excited and they're up and going...I don't want to see that drop below a certain level where they've switched off; it's a fine line.

Sally suggested that vocalisation would have different significance depending on the nature of the subject being taught. For example, when she trained people in personal development, the pressure to talk may relate, not only to social expectations, but to expectations of reciprocity. In this case, a student having 'private thoughts' could be seen by some members of the group as unfair and selfish, phrased by Sally as "You haven't spoken so you're denying me the chance to learn from you".

In this situation, there is also reciprocity of risk and exposure. People may feel they have made themselves vulnerable through talking, and resent the fact that a silent person has not exposed themselves in the same way. In this context, talk had the function of signifying membership of and commitment to a particular social group. Sally distinguished this from learning which she viewed as taking place in a private space, with personal control about what to articulate in a public forum:

> There's something about silence being learning just for me, because then you choose what you're going to share. Group learning is for the public, to share with other people.

However, on a personal level, she also viewed talking as a public confirmation of her views, saying that she finally knew what she thought when she heard herself saying it. Hence, for Sally, it appeared that the public arena provided the final stage in a process of (previously silent) intellectual and emotional formation.

Where the learner was more advanced or where the learner did not perceive social engagement as relevant to their learning, an emphasis on talk with fellow students could be perceived as time-wasting. One of the respondents in the survey expressed their frustration:

> I can get quite annoyed with group work, ... I can usually formulate ideas silently, in my head, and then just get on with the task ... So I am often frustrated in seminar and group work sessions, as feel the progress in tasks is slower than I feel comfortable with.

Multi-modal uses of silence in teaching

So far this chapter has considered silence in relation to words and sound. However, silence was also discussed in other modalities. Martin described how he had begun to think about the possibilities for silence in teaching and learning:

> It's made me think about the small things... Silence might be audio or visual senses, it might be smells, it might be some kind of space... you start looking at the smallest thing and the impact it has.

While considering the 'small things' which make up teaching and learning, Martin also indicated the multi-modal nature of silence. As previous chapters have implied,

silence can be considered spatially, kinaesthetically and visually, as well as audially and verbally.

As an alternative to the exposure of the 'talking' ice-breaker, Charlotte suggested that a number of 'silent' activities including making something, drawing something or writing something, either in groups or individually, could create as sense of connection with the class, without overt social performance. For some students, this type of activity would begin the process of a gentler 'melting' of the ice, rather than a brutal 'breaking' of the frozen shell. It could also help intellectually by enabling participants to take a fresh perspective on the situation and on the social relations within it.

Kevin suggested that silent kinaesthetic activity which involved sculpting in clay or the use of drawing could provide a way of learners opening up about their feelings and perceptions of a particular situation or idea, without the need to talk:

> Drawing your problems, drawing your ideas rather than talking about it.

In this example, there may be no verbalised 'inner speech', but a process of 'thinking' in a visual or kinaesthetic way, in which the individual positions themselves through the act of making, rather than through speech.

Silence, space and movement

A number of participants drew on the metaphors of silence and personal space, as in giving students the space to think and develop their own ideas. However, silence was also conceptually linked with movement in and out of mental and emotional space.

Spatial silence was considered important by a number of participants who discussed the need to give space for students to think or feel, by removing the immediacy of the teacher's presence. Kevin, teaching in higher education, asked this question:

> Is absenting oneself a form of silence? I remember working on a project with a group of students who didn't want to do something, so instead of forcing myself on them, I absented myself, I left them on their own for quite a while and they just got on with it.

Kevin's creativity as a teacher allowed him to play with the conventions of face to face teaching, which dictate that the teacher must remain an overt presence in the classroom. By changing his position as a teacher in relation to these students, from the person who initiated activity to a teacher who removed himself from the learning space, he created a space for learners to reposition themselves in relation to the task to be undertaken. In this case, he was not 'silencing the students' through the exercise of his formal power, but using spatial silence as a means of enabling them to perform the activity. However, because his students trusted him, Kevin's repositioning was accepted as being in their interests.

Martin also discussed repositioning of participants in the formal learning environment, suggesting that a fresh perspective might be provided by physically moving, without talking, from one space to another or from one activity to another. This shift in perspective could also occur through being given the space *not* to think about something for a while:

> It's strange because it's a sort of silence away from the topic and away from any general conversation.

Laura, the primary school teacher had been trained in techniques by Monty Roberts, the 'horse whisperer', who, instead of 'breaking' horses, observes their natural communications closely and tries to replicate these in his training. A key feature of this method is in allowing space for the horse to approach the trainer, rather than the trainer intruding into the horse's natural space (Roberts, 1996). Laura had applied his non-intrusive spatial techniques in her classroom.

She described her 'silent positioning' where she had one place in the room where she stood if she wanted the students to focus on her and stop talking. She was silent whilst positioning herself and had never vocally or verbally explained to the children the significance of that positioning, yet they had understood its meaning. In Laura's example, the conceptual process of positioning, whereby she as a teacher reasserted the formal power she had within the learning environment, was mirrored by the physical process of positioning herself in a way that was meaningful for her own pupils. Using her training as a specific cultural resource, Laura had worked with her pupils to create a set of shared understandings in her class about the purpose and meanings of specific silent acts.

Visual silence

Participants also discussed how visual silence was used in teaching, including both visual images used without vocalisation and images used without verbalisation. Sally discussed how she rarely spoke during a 'Powerpoint' presentation. If she had communicated effectively on the screen, she believed that vocalisation was extraneous:

> They can see it, they don't need me to say what it is.

Other teachers mentioned using pictures without any text. The main reason given was that this made students think for themselves, rather than being told or guided by words. They also mentioned classroom activities carried out in silence to maximise the impact on participants. Sometimes these would be followed by vocal discussion, but occasionally the teacher would make a decision to leave the activity to 'speak for itself'. This was especially the case in activities which dealt with attitude change or the affective domain. The silence here allowed space for retrospective thinking; it also allowed time for the learners to reposition themselves in relation to each other. Betty described an activity (one of Betty's only silent activities) with her trades union officials, which prompted students to range themselves silently in order of perceived social status and privilege in a variety of different contexts. This resulted in the white males in the group 'winning' for almost all of the time. The silence that followed was 'pregnant with meaning' as participants considered the implications of this, both for themselves as people and for their trades union roles.

Laura, teaching in primary school, described a deliberate silent activity which helped concentration through visualisation:

> We've got thinking squares so, and we've taken all the bright things away from the front of the classroom so that they look up at the little blue square. So when they're thinking we'd expect them to be quiet. ....If we're asking them to recall something, ... if they want to, we'll say, "Look up and look into the thinking squares and think" and it makes them internalise and try and recall the information.

Here, not only the absence of vocalisation helps concentration, but the 'silence' of the colour and the absence of visual cluster surrounding it. The teacher's use of silence is

as a mediating 'tool' on an external object, but for the learners the same silence acts as a mediating sign leading to internalisation.

Meta-silence

One aspect of silence, which was not mentioned explicitly by most participants, but was implicit in some comments, is what I will call '*meta-silence*' where the teacher deliberately taught or discussed silence and the processes of silence. Within the interviews undertaken, only the two teachers of yoga, the primary school teacher and the specialist in teaching sound had been concerned with 'meta-silence'. For example, Karen deliberately taught her students about silence when they were producing sound installations:

> I'll say to them, you don't have to pack it all in, it can have moments of silence. It's similar to a painting - in an abstract painting you need areas where less is happening and areas where more is happening and I think about it in the same kind of way.

Subject areas, teaching and use of silence

It is beyond the scope of this study to attempt to establish detailed links between different subject disciplines and the use of silence in teaching, as there are a complex set of intersecting factors which impact on each participant's views on silence. Personal history, preferences and dispositions, the values and purposes which underpin their area of teaching, the type of learner with whom they work and the learning environment within which they operate all have a bearing on their understandings and approach. However, there were certain features in the use of silence which appeared to be more predominant in particular types of teaching and I give some examples below of how particular silences were used.

The two teachers working in the field of performing arts tended to use silence as a means of building awareness and sensitivity through observation of themselves, others and the surrounding environment. Here it was seen primarily as a tool to provide them with information they could use in their own performances. The teacher in occupational therapy, training students in working with people with dementia, also used awareness techniques, but in this case to teach her students how to use silence as a tool for communication. The yoga teachers also used many of the same techniques, but these had the purpose of enabling learners to move beyond that awareness towards a deep focus and concentration. Of the two teachers working in information technology one worked more face to face and one used more e-learning at a distance. Of relevance here was the ways in which new technology could provide silent time and space for learners to work and, importantly, think, at their own pace and to decide when and if to interact with others rather than with their computer. The two teachers of art used silence to provide creative space for their learners and also, in group situations, to engender a sense of focus and communal engagement.

Although all participants used silence after questions, the HE lecturers in science, psychology and education, whose main purpose was the academic engagement of their students, placed high importance on the use of silence for cognitive processing of complex ideas. These lecturers also used silence as a purposeful strategy to develop increasing autonomy in their students through making the students take responsibility for answering rather than being told the answer by the teacher.

The teacher in the voluntary sector, training volunteer counsellors in drug and alcohol abuse, also used long silences after questions, but these were used as open-ended

silences to allow participants to express feelings and ideas, rather than the more closed silences awaiting an acceptable answer as suggested by the HE lecturers. The two teachers who worked with learners in the sixteen to nineteen age range expressed the greatest difficulty in using silence with their learners, using silent reading or silent watching video as a means of focus and concentration. The teacher of ESOL suggested that language teaching has a culture of recognising the importance of silence, more than most other subject disciplines and mentioned how it was 'drummed' into her in her training that she should not talk constantly and leave space for answers or for people to understand what was happening or to make notes.

> My training was not to fill the space with more words which would add to the confusion. (Charlotte)

These illustrations of the approaches of different disciplines, suggest that their subject worlds had, to some extent, different cultural perspectives on silence related to different social practices within those contexts.

Summary

In this chapter, participants drew on a variety of cultural resources to explore different uses of silence in the classroom. Their dispositions and personal histories affected their attitudes to silence and talk, but even participants with negative personal associations with silence adopted a pragmatic approach to its use in the classroom. Metaphors from everyday life were transferred or transformed in the transition from the personal to the public space. In this transition, silence became a means of helping learners, rather than being used for themselves. Teachers used silence as a tool to orient themselves towards their students, but also as a sign to internalise their understandings.

Chapter Nine: Themes arising from the data

In the data chapters, participants generated ideas related to the research aims and questions. Both discussion of silence in everyday life and in the classroom showed that individuals conceived of silence in a range of different ways, and that those conceptions had both positive and negative associations. Different silences could have different meanings according to context and perceived intention. The data indicated points of comparison between how various metaphors for silence in everyday life translate into the world of the formal learning environment. They also indicated where some are transformed or marginalised.

This chapter will refer to ideas from the earlier chapters, and comment on how the data have confirmed these or offered new insights. It will discuss the major themes arising from the data, firstly discussing silence in everyday life and then in teaching. With a particular focus on the final research questions and research aim, it will consider the insights into the teaching process offered through a discourse of silence. It also will also suggest how these might provide an alternative framing of 'good teaching' to educational discourse in the current policy context.

First I will summarise my interpretation of the 'story' told by the data. In this I will introduce the notion of 'silent pedagogy'. I will then present ideas and suggestions on how knowledge of different types of silence could inform practice, including what might form an alternative focus for classroom observations which seek to identify

'good teaching'. Finally, I will evaluate the conceptual framework of figured worlds in the light of this research.

The 'story'

The main theme running through the data is the relationship between the individual and the world, which includes other people, as well as the sensory, physical, epistemological and cultural environment.

The term 'silence' is used metaphorically to conceptualise the positional relationships between the component parts or activities of a particular world. From a human perspective, the term is used to express the space in which individuals negotiate and accommodate the worlds in which they participate. This is a continuous process in which the individual aspires to reach a state of equilibrium in their relationship with that world. This equilibrium represents the measure of affiliation or distance experienced by the individual to different components in the world. By analysing how the word 'silence' is used in a specific situation, particular insights can be gained into how those relationships are perceived and enacted within different socio-cultural contexts.

In Chapter Six, participants described their relationship with the sensory environment, focusing on sound and noise. Here they imposed their own notions of silence as a means of personal control over the noise that threatened to intrude. Although sound and noise were treated fairly literally, they also became metaphors for personal space and intrusion. The metaphorical associations with silence were further developed in Chapter Seven. In this chapter, the concept of silence was used to indicate a range of

relational positions between the individual and the world. Balance and equilibrium were as important in the wider context as in the world of sound, and individuals explored various positions in which perceived balance or imbalance - of privacy and intrusion, of security and risk, of power and personal control - were identified in terms of silence. Silence mediated as a tool, to exert control over the external environment, and as a sign to internalise experience. Although silence mediated relations between the human components of particular worlds, it also mediated in the individual's relationship with the world at large. As such it acted as an 'ontological' metaphor, indicating a more profound set of relationships with 'being' and the world.

Chapter Eight drew on ideas generated from everyday life as presented in Chapters Six and Seven, within the context of the argument presented in Chapter Four. Chapter Four discussed how commentators on classroom practice focus on overt aspects of teaching or learning - the observable skills of the teacher, the perceived needs of the learner, the evidence that the learner is 'learning' - expressed as separate but interlinked processes. In this context, silence equates to 'riskiness' (Dauenhauer, 1980) in that it does not provide answers or explanations. In contrast, Chapter Eight discussed how considering different silences allows a focus on important aspects of teaching and learning, including the ongoing *relationship* between *all* the components - teacher, learners, knowledge, sensory, physical and cultural environment.

When silence acts as an internalising 'sign', it is a relational space where individuals explore and reach understandings about these different components. They position themselves in order to achieve or maintain what they experience as a state of equilibrium within this world.

Using the metaphor of silence as a container (Jaworski, 1997), when silence acts as a 'sign' in the classroom, it is 'filled' with the following:

- Inner speech containing the 'voices' of the individual teacher or learner, other learners. It also contains voices from personal, social and cultural worlds outside the classroom. Sometimes these 'voices' may be constituted as 'knowledge' in that they represent the culturally-internalised voices of others;
- Pre-articulated or un-articulated thoughts representing a range of different ways of thinking;
- The individual's sense of self and their identity within the classroom. That identity will be in a state of flux as a result of transition between different figured worlds;
- The sensory and physical environment - the sounds, smells, sights, spaces of that world;
- Ongoing relational shifts in positioning by participants.

When silence is used as a tool - with an externalising object - this represents an agentic practice in which the teacher or learner seeks to exert active control all or some aspects of that world.

When used by the teacher it may act to preserve traditional relations of power, through silencing others' right to control. However the 'good' teacher uses it as part of the process of pedagogy. This involves drawing on a range of cultural resources about silence, derived from different worlds including their own everyday lives. These allow them to use silence as a multi-modal tool which relates to all aspects of the sensory and physical environment. They use it to 'watch' and listen', becoming highly

sensitised to shifts in positionings within this world. They use it as a thinking space with an externalising orientation, which makes decisions about whether to initiate, intervene or abstain from intervention. In doing so, they use silence as a way of determining the best ways to help the learner to learn. This might involve disturbing the learner's sense of equilibrium in order to shift the learner's relational positioning. It might relate to a cognitive process - a shift in relation to new knowledge - or to developing their identity as a learner, making transitions in and out of the classroom space, as well as transitions within that space.

The combination of silence as a relational sign and a relational tool is represented by the notion of 'silent pedagogy'. It is silent because it takes place in various forms of silence and different silences are used to support the process of learning and 'becoming' a learner. It is also silent because it is not part of the expectations of what will be seen, hence may not be acknowledged as existing (Kwiatkowska, 1997). In effect, it is 'silenced' by more dominant forms of educational discourse.

The learner will be unaware of a teacher's skills in using silence, as they have a culturally-formed view of the teacher's role, placing emphasis on observable performance. Hence it is unlikely learners will even recognise the use of silence as a 'skill'. They will only recognise when it is used badly. A classroom observer, such as an Ofsted inspector, constrained by a similar set of cultural resources will also place value on overt, assessable teaching and learning behaviours. Within the dominant cultural frame, these represent 'good teaching' and provide the recoverable data for formal inspection reports. The inspector needs to produce these to justify their role and continuing employment.

In this context, a teacher's skills in using silence and the subtle and complex set of relationships 'contained' in different silences, may be viewed by an observer as an 'absence' of activity. Similarly a learner's silence would be viewed as 'passive' and, in a group, as 'non-participant'. However, skills in understanding 'silent pedagogy' are essential if an educational environment is to have a genuine focus on learning, rather than performance.

Types of silence and cultural resources

The data provided research evidence to support the views expressed in much of the literature on silence. A few participants may have accessed some of the literature directly - Jean Claude's knowledge of Cage's work (1961) comes to mind here. However, most participants may have indirectly accessed the views expressed through the literature. This is because the views had informed the shadowy and complex understandings underpinning the various uses of the word 'silence' in different kinds of cultural discourse. Hence these may have become some of the culturally 'internalised' resources from which participants drew in their discussions on silence.

Their typologies on silence in everyday life supported the range of perspectives identified in Chapter Three (Appendix B). They covered silence within communicative, aesthetic and ontological paradigms, displaying examples of interdisciplinarity of the subject (Jaworski, 1997). Participants considered silence in broader terms than in its relationship to sound or speech, taking the multi-modal perspective reflected in some of the literature (Saville-Troike, 1985). Bruneau's three categories were covered, although with limited mention of hesitation and pauses from a psycho-linguistic perspective. Instead, these were discussed more widely in relation

to silence in social situations, emphasising the difficulty of separating the individual from the social in this context. Of particular importance was the way that silence was used metaphorically to represent other personal states or kinds of social relations. The data from participants and respondents included many positive associations, as well as mention of the culturally-dominant negative associations. Here silence was both acknowledged as a 'metaphor of malfunction' (Scollon, 1985) and as a concept with important personal and cultural significance.

Cultural resources from different figured worlds were used to inform understandings of silence in the world of the classroom. These covered most of the range previously identified, with the exclusion of ontological notions of silence. Here text books, policies, idealised figures, dominant discourses of education, teacher training courses and discussions with teaching colleagues were all used as cultural resources from the world of education. These provided opportunities to access alternative practices and viewpoints to dominant discourses of education. However, in this world, although most of the range was covered overall, different participants focussed on specific aspects and excluded other aspects. This suggests two possibilities: firstly of deliberate selection from the cultural resources previously identified in the interview; secondly of unconscious de-selection, as certain aspects of silence did not match their understandings of the formal learning environment. The subjects taught may have played a part in the selection process, but personal histories and experience of participating in other figured worlds are also likely to have had some influence.

Participation in different figured worlds

The multiple 'sites of identity' (Holland et al, 1998) occasioned by participation in different worlds, provided a range of personal resources used to position themselves in the world of teaching. For example, Susan mentioned participation in the figured worlds of academia, sporting activity, domesticity and friendship. The values and practices from each of those worlds placed Susan in different degrees of affiliation or distance with the dominant discourses of teaching. Her notion of 'productive thinking' and the importance she placed on talking showed close affiliation with cultural norms. However, drawing from everyday life, she valued companionable silence which represented the 'best' kind of friendship, emphasised her own need for personal thinking space and expressed her hatred of the 'claustrophobic' noise of the museum learning centre. In these positions, she showed a distancing from cultural norms and an affiliation with values mediated through personal experience.

Agency - or in Holland et al's terms, the ability to 'improvise' - was demonstrated by the conscious selection of certain cultural resources. In Simon's case he chose to use positive associations of silence as thinking space in preference to negative personal associations of silence as isolation in the world of military training. Here, 'changing the metaphor, changes the meaning' (Scollon, 1985, p.28). Although teacher and learners shared the same 'symbolic repertoire' (Jenkins, 2004) about teaching and learning, Simon 'improvised' a change in the teacher/learner relationship, where both parties shifted to less culturally-normalised identities.

Discourse from one world was used to frame practice in another. Hence Lois drew on her participation in the figured world of acting to express her approach and

understanding of teaching in terms of 'performance' and the teacher as an 'entertainer'. In her description, she used a discourse where she possessed a 'real identity' which was only partially revealed in the transition from the private to the public face (Goffman, 1990). Her students 'knew' her in her teacher identity. However, her conception of the teacher - which corresponded to some aspects of her perceived 'real' self - was also culturally constructed and socially practiced in that the 'teacher as performer' was also a recognised figure in the world of teaching. Hence for Lois her 'performance' of teaching is both a space for 'personal authorship' but also filled with 'social efficacy' in that it reflected an acceptable position in the dominant discourse of that figured world (Holland et al, 1998, p.272). In this case there is a balance between her identities in the two worlds.

If participation in a number of figured worlds can extend the range of cultural resources available to determine positionings and to aid improvisations, the corollary is - the more limited the participation and the fewer figured worlds - the more restricted the cultural resources available for improvisation. The implication here is that this would result in less 'cultural capital' (Bourdieu, 2002) being generated to allow for improvisations in 'new' worlds.

Relevant to discussion of 'multiple identities' is the identity of the learner in the virtual learning environment. Sitting with the computer at her dining table at home, surrounded by all the paraphernalia of domestic life, the worlds of the classroom and everyday life are conflated, although some of the components of those worlds are changed. The teacher exists as a disembodied text; the sounds, sights and smells of home are substituted for the sensory and physical environment of the classroom.

However, the learner and the 'knowledge' to be learned are still present, mediated through the silence of the computer. An interesting question here is what happens to the cultural conventions which normally pertain to the formal learning environment? Although outside the scope of this research to attempt an answer to this, the data from one participant suggest that the virtual student may have more possibilities for improvising their identity as a learner and maintaining more control of verbalisation as well as silence. This may be a rewarding area of study and would merit more consideration in future research.

Personal and professional identities

In participants' descriptions of everyday life, silence was a powerful metaphor for personal space or time. In this personal silence individuals took time to consider their own preoccupations rather than those of others and also to reinforce a sense of identity in the face of multiple demands. These demands could lead to a sense of fragmentation, being 'torn apart' in the need to fulfil different roles in relation to other people. Within everyday life, the need for privacy was seen as legitimate, even if they were aware that this could be in conflict with certain cultural expectations of behaviour. For example, there could be a conflict between being a 'good mother' or 'good wife' - with implications of care for others - and the need for personal silence.

However, transitions from the personal space of everyday life to the public space of the classroom shifted a perception of silence as 'being for me' to something that would be used for others. Here the idealised figure of the 'good teacher' and the practices associated with 'good teaching' created another frame for identity. Within this frame the individual judged themselves against another set of values, constructed

through the discourses related to education and pedagogy. Here they acted as their own 'observers', having learned what to observe from an internalised cultural discourse, derived from being observed by 'others' in positions of formal power. Ideas about the role of teacher, and the expectations of teaching provided a frame within which to judge their own behaviours and those of their learners. Perceptions that classrooms were for talking, and the teacher's role geared to getting students to talk, provided illustrations of the effect of these cultural expectations.

By moving from the everyday to the professional space, different metaphors for silence were transformed into resources to be used by the teacher for the benefit of learners. The metaphor for escape and retreat, which in everyday life represented their own need to withdraw from pressures, became a source of information which sensitised them to what particular student behaviour might signify. Martin's notion of 'silent running' - indicating a student in danger of dropping out - is such an example. Similarly, the metaphor for embarrassment and discomfort, which related to their own experiences in everyday life, became a resource by which they considered whether they needed to intervene in a classroom situation. The example of 'reading' the silence of new students, and deciding whether the teacher should begin talking to help them feel comfortable, indicates the way this metaphor might be transformed.

However, the teacher's own personal histories and preferences related to silence, might also cause them to interpret these silences in particular ways. Some individuals were comfortable with many different types of silence in their everyday lives and, in their reports, these affiliations translated to classroom practice. The metaphors where silence equated to comfort and security in the presence of others, or for community

and communality, informed the kinds of activities teachers were happy to use. Hence 'silent drawing' or 'silent writing' were described as signifying a particular positive emotional state within the classroom, as well as performing a productive function.

Conversely there were examples where talk was linked to a negative emotional state. For example, students talking could indicate feelings of insecurity and the need for reassurance about particular tasks. Teachers expecting students to talk was linked to creating feelings of vulnerability and pressure, when individuals were being forced to talk, before they were ready.

A personal discomfort with silence in everyday life might translate into a need as a teacher to intervene *too* quickly if a period of silence occurred. However, there were instances where the identity of 'teacher' overcame personal preferences, and silence was re-evaluated as a useful tool to achieve a particular aim with students. This implied that teachers might adopt a more pragmatic identity in the classroom, utilising aspects of personal identities in other worlds, but drawing on other - less familiar resources - to achieve specific purposes within the cultural constraints of space and time.

Power and control

Silence as a metaphor for power and repression in everyday life did not translate automatically into hegemonic practice within the figured world of the classroom. Although some participants viewed silence as being under the teacher's control, there were also suggestions that silence needed to be negotiated with learners. The examples given were not represented as a struggle for power, where different parties

used silence to punish or express dissent. Instead the negotiation of silence was seen as an example of how teachers and learners position themselves to ensure maximum compatibility between all the parties involved. These negotiations were not conducted in a vacuum, but were placed within a context in which both teacher and learners reached understandings about their relations with each other and different aspects of the environment. These adjustments were partly due to personal dispositions towards different teaching or learning styles, differing levels of comfort or discomfort with silence, and also their understandings of 'figures' and practices which peopled their world and which formed representations of ideal behaviour.

Thinking space

An important metaphor in everyday life was silence for thinking space or time. This is of obvious significance in a classroom environment, where there is a strong link between thinking and learning. In everyday life, participants described a whole range of thinking - anticipatory, contemporaneous and retrospective. These occurred in different places, and at different times of the day. However, when these were translated into the world of the classroom, the thinking which the teacher sought to promote in their learners had a narrower focus, mainly covering cognitive processing, with some 'rehearsal' thinking. This suggested how 'thinking' itself is 'cultural work' (Holland et al, 1998) and how teachers automatically adopted the prevailing cultural model of 'productive' thought (Mosely et al, 2007; Baumfield, 2006; Mercer and Wegerif, 2004). This is primarily concerned with rational linear thought which, although internalised in 'inner speech', is near the point of external articulation i.e. at a high or medium level of internalised articulation.

The shaded areas in Table 2 indicate the types of thinking mentioned in relation to the classroom.

Table 2: Different types of silent thought

Type of thinking	**Description**	**Examples of locations/activities described**	**Characteristics**	**Inner speech- Suggested level of articulation**
Anticipatory thinking	Occurring before an action or experience			
Planning	Occurring sometime before action	Walking on moors Conservatory or garden Sitting room at home In bed Deciding where to go on holiday	Emotional or intellectual preparation - could be either: *general and relatively long term *planning for a specific activity, *or could be 'mulling over'	- Inner speech - low to high level of articulation
Rehearsal	Occurring before action	In class during discussions Preparing for presentation	Detailed preparation for behaviour/language to be used in a specific activity- mainly relatively short term; could occur during a conversation or discussion.	Inner speech - high level of articulation
General apprehension	Occurring before action	Before sporting event First day in class	Emotionally driven	Inner speech - minimal level or absence of articulation
Contemporan-eous thinking	Occurring at the same period of time as specific activity or experience			
Concurrent - (agreeing/harmonious, merging towards one point)	Occurring at the same period of time as *specific* activity and focussing towards that activity	Home working At desk at work In class listening, writing, reading In class drawing or painting ('thinking visually')	Involving concentration and focus on that *specific* activity Short term rapid processing of information	- Inner speech medium to high level of articulation, except when drawing or painting

Parallel	Occurring at the same period of time as specific activity but parallel to that activity	Walking, cycling, running, climbing mountain, driving car, dusting, doing crossword	Occurring at the same time as that specific activity, but *not related* to that activity - may be conscious or unconscious Maybe 'daydreaming' "dreamspaces"	Inner speech - low level or absence of articulation
Stilling of thought	Occurring at the same period of time as specific activity or experience but focussing inwards	Sitting in country Weaving Yoga	Involving concentration and focus leading to a meditative state Closing off from external information	Attempted extinction of inner speech 'inner chatter'
Retrospective thinking	Occurring immediately after or some time after a stimulus or experience			
Making sense of...	**Occurring immediately after** or some time after **a stimulus or experience**	**After information has been given in class** Going home and thinking about ideas from class After a poor performance at sport Dealing with a situation at work	Making sense of a previous stimulus or experience Long term slow processing of information 'mulling over'	- Inner speech medium to high level of articulation
Coming to terms with...	Generally occurring some time after a stimulus or experience	Dealing with redundancy Rethinking attitudes as a result of discussion - change in sense of self	Coming to terms with a previous stimulus or experience	- Inner speech low to medium level of articulation

In the widest sense, all these types of thinking can be said to be 'productive' in that they have some function or use for the individual concerned. There are some forms of thinking in which 'inner speech' (Vygotsky, 1986) is almost completely verbally articulated *internally* prior to external vocalisation. However, there are also many examples where thinking is minimally verbalised or non-verbalised.

One alternative to culturally-constructed ideas of productive thought was the 'escape' from logical thought through 'daydreaming'. The term 'daydreaming' is, like all language, culturally produced and - according to the Oxford Dictionary - something to be 'indulged' in. However, it can also mean a special kind of thought which gives the freedom to think disjointedly and multi-directionally, with no immediate pressure to articulate the meanings generated. One participant called these 'creative spaces', 'dream spaces'.

Thinking takes place in different timescales and in a wide variety of environments, some of which seem to lend themselves more to particular kinds of thought. In this research, descriptions of thought processes - divorced from logic and articulated rationality - appeared in descriptions of physical activity such as cycling. These activities allowed silent time where thoughts could roam, for example, ranging over everyday life and academic work However, these could produce what one participant - an academic - described as her 'best thinking'. One type of thinking may complement another type of thinking and often more than one type occurs in relation to a particular emotional or intellectual stimulus.

There are also other types of thought processes which occur with internal *visual* rather than verbal representation and do not translate into inner speech, but remain as an alternative representational inner language. These may have validity for individuals who have a strong visual bias in the way that they experience the world and suggest that the terms, inner 'speech' and 'voice', represent the selection of cultural tools derived from a dominant discourse of 'words' and 'speech' which bias understandings of thinking and the processes of thought. This leads us to question how far articulating

visual thinking into words changes the nature of the thought itself. A notion of '*inner speech*' implies that thought is open to capture and able to be articulated - in words. In effect, it 'silences' other kinds of thinking.

Apart from conceptual differences between how thinking is conceived in the classroom, as compared to everyday life, constraints of time and space also limited the opportunities for different types and periods of thought. 'Slow time' (Bruneau, 1973) was important to allow for absorption and understanding of complex ideas, but the rapid timescale required for responses or for thinking in general in the classroom was counter-productive to learning. The exception to this was virtual e-learning, where a greater variety of 'thinking' outside formal temporal and spatial constraints was possible. The teacher in the face to face situation had to balance the amount of time they could allow for this thinking silence, against the demands to complete the 'required' content. This was also true in e-learning, but different and more extended timescales were enabled by the medium.

Thinking, reading and writing

In the time-constrained space of the classroom, the importance of reading and, especially, writing, was emphasised. In particular, these activities legitimated 'slow time' for thought, by allowing a personal space free from intrusion. In the negotiation of silence between teacher and learners, learners sometimes rejected activities involving silent thought. To some extent, this was bound up with the cultural expectations of the context. In the primary classroom, an observer would see a teacher doing what was expected i.e. encouraging pupils to learn the functional skills of literacy. Learners would recognise this purpose, even if they did not like the activities.

However, these pupils may not have had previous access to the cultural resources necessary to take on the identity of 'silent learner'. But without the opportunity for silent reading, they may not have the opportunity to develop more covert skills related to thinking.

This was especially true for some sixteen year old learners in FE colleges. In this context, teachers described their role as 'developing the capacity' for silence. In the transition between the fast, noisy world of everyday life and the classroom, learners were being taught to be 'silent' learners. Interestingly, sometimes formal assessment requirements legitimated the activities of thinking and writing, through recording in learning logs. These gave the teacher 'permission' to ask for silence and learners an excuse to learn about how silence might be used. Hence a formally agreed - even if unpopular - purpose, could provide the opportunity for silent thought.

Mediation through tools and signs

Silence was used to mediate individual experiences of the social world of everyday life. Silence was also used to mediate both teacher and learner experiences within the figured world of the classroom. Vygotsky distinguishes between *tools* and *signs* in that the tool's function is externally oriented, leading to a change in objects whereas the sign's function is internally oriented, an internal activity aimed at 'mastering oneself' and changing nothing in the 'object of a psychological operation' (Vygotsky, 1978, p.7).

In Vygotsky's work 'symbolic mediation' enables the individual to have some control over their environment. In both everyday life and the classroom, participants

suggested that silence could act as a mediating tool or a sign depending on the context. However, unlike spoken language, silence could act as a tool and a sign simultaneously. In everyday life silence mediated the understandings of individuals participating in a social world through its use as a metaphor for a number of different states or conditions. As a 'personal' metaphor - for personal space/time; escape; isolation; peace ; thinking space - it acted as a mediating 'sign' which oriented the individual to an inner world away from the demands or comforts of social contact. As a 'social' metaphor - social disfunction; embarrassment; comfort and security, it could also act as a sign, pivoting participants in a social world into inner worlds where they experienced themselves as 'deviant' or 'unskilled in social behaviour'. Alternatively, they could experience themselves as secure and cared for. As a communal metaphor, it acted as a pivot into a 'deeper' inner world where they experienced being part of humanity; as an ontological metaphor, it oriented individuals into experiencing 'Being' in its most fundamental sense.

However, in both social and communal metaphors, silence could act as an externalising mediating 'tool' to exert power over others and at the same time, it could also act as a 'sign', in that the 'silencing' could pivot the individual to internalising a sense of themselves as 'powerless'. Within figured worlds, this subject position may be accepted, rejected, or internalised to such an extent that it becomes 'common sense', taken-for-granted positioning or practice.

Silence in the figured world of teaching also acted as a tool and a sign. As a tool, silence becomes one of the resources available for teachers to use. However, potential uses of different silences, and their personal abilities to use them, are constrained by

the range of cultural resources about silence that they have accessed. In particular it will be constrained by the dominant performative discourses on education and by the historically and culturally determined dispositions of the teachers and learners themselves.

Within teaching, silence as a mediating tool is used by the teacher to change the 'behavioural architecture' (Holland et al, 1998) of the learners. However, the nature of silence - with its connotation of a space to make meanings, causes some ambiguity here. Whilst the teacher may use silence as a tool to achieve particular goals with their learners, to frame their world in a particular way, it also acts as a mediating sign for the learners. In the 'same' silence, learners internalise their experience and position themselves in relation to the teacher, to others in the class, to the environment, to the cultural resources, in the form of the 'knowledge' being made available through the teaching process. Similarly, the teacher may use silence as a sign to internalise their understandings of their learners, and then as a tool, as a space to decide on future action.

These processes suggest a far more fluid notion of externalising and internalising mediation than are suggested through Vygotsky or through Holland et al's analyses. However they do suggest a way in which ongoing positionings, central to the notion of figured worlds, are enacted through different silences. What happens in those silences indicates the ambiguity between silence mediating as a tool and as a sign. In the classroom, its internalising orientation allows understandings about relations to emerge. As a tool, it has an externalising orientation leading to overt action or

conscious *abstention* from observable action. This conscious abstention is still activity, although it would not be observed as such.

Teachers' Thinking Space

In descriptions of what happened in 'thinking' silences, some participants described their inner speech in monologic terms (Vygotsky, 1986) where they were checking their own understandings, emotions, actions and intentions. More often this was described in 'dialogic 'terms (Bakhtin, 1981) considering their learners' subjectivities as well as their own. During this process, teachers were positioning themselves in relation to particular learners, or to the group as a whole.

Teachers described a subtle and continuous process of interpretation and judgement in which they acted as 'watchers' (Ingold, 2004), sensitised to many aspects of the environment and their own learners'. They registered 'particular movements, habits and temperaments' (Ingold, 2004, p.39), trying to discern whether they were understanding, whether they needed further explanation or a more radical intervention. The teacher's silent activity - their own thinking - was linked to constant re-workings of their understandings about their learners in relation to the new knowledge presented or the tasks set. In these processes, the 'watching' or 'listening' of both teacher and learners was far from 'passive' - even though to an observer they may have appeared to be doing nothing. It was active, filled with their own thoughts, emotions and adjustments of their relationship with all components of the environment.

Positioning, equilibrium and control

As a watcher, the teacher's position could be affiliative, in that they felt learners were co-operative and interested, or distancing, where they felt the group, or individuals did not need their help. An example here was the 'silence of absence' where the teacher absented themselves from the group in order to give them the space to think and work autonomously. Affiliation could also be demonstrated where teachers felt learners needed help, and hence the role of 'teacher' - as 'initiator' or 'intervener' moved them strongly in the direction of control. These positions could be as a result of personal emotional reactions, bound up with their more private identities, or they could be deliberate professional positionings which affiliated, distanced, or rejected certain behaviours.

Teachers' understandings would also include understandings of different learners' own positions in relation to different components in the world, including whether learners affiliated or distanced themselves from the formal knowledge being developed in that environment. For example, affiliation or distancing might occur through grasping or failing to grasp a complex idea or through perceptions of personal relevance or lack of relevance. Using notions of equilibrium and balance developed in the data chapters, learning and feeling comfortable in their identity in the classroom might equate to the level of correspondence between the learner's affiliation with all components of the learning environment. However, part of the teacher's role as watcher related to possibilities of safely disrupting that equilibrium - to create 'dis-ease' (Belanoff, 2001) in order that students may learn and develop. Here the teacher's skill was in judging the necessary balance between security and risk and adjusting this in their dealings with different learners.

The silent learner

In Chapter Four, it was suggested that the world of teaching as conceptualised through the dominant discourse, should involve many overt behaviours such as 'initiating' topics and 'intervening' when aspects of classroom processes are not going according to the 'lesson plan' - itself an example of a defining cultural artefact within that world. However, these artefacts also act as boundary objects (Star and Greisemer, 1989) when the teacher moves across the boundary from everyday to professional life. In this transition space, the artefacts are imbued with meanings from both worlds. In this process, the values associated with certain figured 'types' within that world were also open to reinterpretation.

For example, the 'silent learner' - indicating the student who talks little or not at all in class, is often considered deviant and in need of teacher intervention within the dominant discourse - as discussed in Chapter Four. The description of teacher as 'switchboard operator' (Tharp et al,1994) suggests their role is to ensure all students 'actively participate' (both culturally-loaded terms) through talk. Whilst acknowledging where learner silence might give cause for concern, participants also identified a number of positive associations of the 'silent learner'. In some cases these examples were drawn from their own personal histories and preferences. Hence the silent learner could be someone who wanted to take some time to think, who did not feel the need to repeat what had already gone before or who was ensuring that they listened and learned from others rather than insisting on making the sound of their own voice heard.

In this reconfiguration, the teacher became the 'jazz conductor' (Tharp et al, 1994), *abstaining* from 'initiating' or 'intervening' behaviours, unless strictly necessary. Holland et al's use of the term 'improvise' is highly appropriate in the jazz context. Improvisation in jazz suggests playing with conventions and expectations to create a new kind of relationship between the player, the listener and the world of sound. However, the improvisation is limited by the constraints of the instrument, the physical capacities of the player and the willingness of the audience to stay and 'listen'. In the same way teachers' improvisations are subject to the learners' willingness to engage. Each learner's expectations of 'normal' classroom practice, imbued with previous experiences of formal education and the 'figured' teacher, positions them in greater or lesser affiliation with improvisations on the conventionalised practices within that world.

A major component of learners' willingness to affiliate with the teacher who improvises was their perceptions of the teacher's overall professional competence and skill. Perceptions of competence may derive from the conventionalised figure of the 'good teacher', with attributes such as knowledge of their subject, respect for learners or ability to vocally communicate difficult subjects clearly. However, they may also derive from 'testing' the teacher in various situations and coming to a judgement that the teacher 'knows what they are doing' and is not trying out ideas randomly. Here, both confidence in the teacher and a broad sense of what they are trying to achieve are important. Under these circumstances, the learners perceive improvisations as part of a cohesive approach to teaching developed by the teacher. The teacher's identity in the classroom becomes constituted through their practices, and must be seen by the 'others' i.e. the learners, as relatively stable. If teacher and learners have negotiated a

stable positional relationship, then other components of the environment can be destabilised. In the context of this thesis, if the learners had confidence in the teacher's expertise, then there were more possibilities for improvisations in the uses of silence.

Participants associated inept uses of silence with teacher inexperience and suggested that inexperienced teachers tended to talk too much. This might suggest two things. Firstly, that the inexperienced teacher transports a discomfort about silence from their participation in the figured worlds of their everyday life into the (for them) newly figured world of the classroom. Hence as a novice their identity is still bound up with social practices outside this world. Secondly, that their teacher identity is formed from the dominant cultural resources, including the dominant discourse, about teaching so far available to them, such as the text books used in teacher training or the exemplars of 'good teaching' with a culturally-dominant bias towards overt and value-laden 'productive' behaviours, proposed by government websites. As a novice, it is likely that these two aspects are in a state of flux, as their positionings in relation to the options available and their identity as a teacher begin to form.

So far, this section has considered processes of transition between everyday life and the classroom. But it is not only the teacher who makes these transitions - learners do as well. This involves taking on the identity of 'learner' within the figured world of the classroom, with expected ways of acting and behaving, informed by a particular set of cultural understandings about what these acts involve. Research participants described how the teacher can use a silent time at the beginning and end of learning sessions to help those transitions to take place. For some, the teacher's silence, together with dominant non-verbal signals, acted as a 'call to order'. For some the

silence was anticipatory, focussed on what was to come - as in the minutes before a sporting activity. In these silences, the teacher was ensuring that everyone is concentrating on the final transition - the moment when the everyday turns into 'the lesson'. However, the teacher may have started engaging in some of the more subtle practices of teaching before the formal start of the lesson.

One participant described how he used his silence to watch and listen - 'shuffling papers', while his students were settling down before the lesson, In this way he orientated himself to the learners in that context at a particular moment in time - their mood that day, their current preoccupations and their relations with each other. There are a number of important points here. Firstly, there is the notion of the private person silently 'becoming' the teacher, in a different and more subtle way than the more conventional 'call to order'. Secondly, his behaviours would not be considered as teaching by his learners. Lastly, that this person is 'playing' - he is pretending to do one thing, which he uses to mask what he is actually doing. In this way, he uses silence as 'play' - a pivot to orientate him to the world of learning (and learners), rather than to the world of teaching. In this world, the shuffling of the papers will be heard, if at all, by his learners as background sound to the foreground of their own preoccupations.

Sound and noise

In the figured worlds of everyday life and the classroom, participants produced a number of ideas about sound and noise. Initially silence in everyday life was related to sound and the intrusion of noise. Between participants and respondents in the n-q survey, there was considerable consistency over the sounds associated with positive

silence - the sounds of nature, the comforting sounds of home, the gentle sounds of breathing providing confirmation of life - as well as over what constituted intrusive noise, which was usually non-natural noise, such as the noise of traffic or machines. They discussed the public spaces conventionally associated with silence, suggesting examples from education - the 'noisy' learning centre - and other more general, though related examples - the 'noisy' museum. In both these examples, it was the noises of new 'interactive' technology that were the most disruptive non-human auditory stimuli. There was also consistency in identifying the human voice as being the noise which most intruded on silence. However, within this soundscape, individual participants positioned themselves differently, with some indicating a greater affiliation to particular types of sound than others.

Within everyday life, participants described a range of improvised strategies to create their own silences to block the incursion of intrusive noises. Sometimes, like Simon, they would pretend to be working on the computer, to give themselves time to think without interruption. Sometimes, like Karen, they would create 'a blanket of silence over sound that is already there' by playing their own music. This echoes the notion of 'aesthetic control' (Bauman, 1993), which allows for the development of creative personal spaces, exemplified by people's uses of Walkmans (Bull, 2004, Du Gay et al, 2007).

Students might attempt to exercise this control through the use of their own music and in less formal learning environments, such as the IT workshop, they were able to do this. The relative informality of the adult learning environment allowed students to find their own 'silence' for study, by playing music, or by locating to another room -

an option which would not generally be possible in the constraints of the formal classroom. In the more formal context, negotiation could be problematic due to different interpretations of sound, noise and silence. For example, the student who wishes to create their own 'silence' to block out what they experience as 'noise' in order to be able to think, may be perceived by the teacher, as wanting to create 'noise' to block out culturally-valued components of the learning environment.

Importantly, it was the voices of others, especially the teacher's, which could intrude on learners' productive silences. Having the culturally legitimated position of initiating talk, teachers could silence learners' thinking time and space for creative and intellectual thought. It could also disrupt the learners' possibilities for becoming independent learners. Hence the teacher's voice silenced not only thought, but the learners' agency as to where to position themselves in the learning process. The process of 'cognitive subordination' was an illustration of where power was exercised rather than negotiated within this figured world.

Within this context, participants queried the value placed on talk in the classroom. Silence for thinking, absorption of ideas, creation of ideas and positioning oneself in relation to others, was considered to have a closer relationship to processes of learning. This supports the findings of Jaworski and Sachdev (1998). In contrast, the significant functions of talk in the classroom were social, creating a sense of membership, reciprocity and motivation. Talk had some important functions in relation to learning, in particular helping to clarify ideas and present them in a logical and rational fashion to others. Here, for example, talk functioned as preparation for

democratic participation (Broadfield and Peskill, 1999) and for communication in working life (Cameron, 2000).

The classroom as soundscape

An interesting aspect of discussion was the ways in which the notion that silence involves sound, led certain participants to reframe the classroom in terms of a 'soundscape' (Schafer, 1994). The sound of students working quietly and contently was one positive soundscape echoing the metaphors of comfort and security and communality. A negative soundscape was that of the examination room, where papers rustled and the sound of the invigilator's step marked the inevitable progression of time, echoing the metaphor of power and repression. One participant, Martin, was especially interested in the notion of a soundscape which could be used purposively by the teacher to indicate different stages of the lesson, where certain sounds could act as 'pivots' to the next stage of activity. This was an example where a participant drew on different resources on sound and noise, derived from participation in different figured worlds, used the research interview as a reframing device which caused him to connect those resources to the figured world of teaching, and from this process presented an improvisation on conventionalised practice within that context.

Improvisations on practice using silence rather than talk

In participants' descriptions of their uses of silence in the classroom, a number of 'concrete' practices were identified. These are summarised in Table 3. They incorporate examples of 'psycho-linguistic' and 'interactional' silence, but also multi-modal perspectives, echoing the broader range of literature in Chapter Three.

Table 3: Types of silence in the formal learning environment

Mode of Silence	**Examples**
Verbal and vocal	Pauses in speech - Short/long
Verbal and non- Vocal	Writing, electronic learning
Non- verbal	Negative body language: Indicating strong disapproval / minor disapproval Positive body language: Indicating strong approval/minor approval
Visual/ non-vocal	Pictures used without talking
Visual/non-verbal	Pictures used without text
Spatial/non-verbal	Proxemics - people/furniture
Spatial/non-vocal	Use of physical movement Kinaesthetic activity
Spatial/transitional	Transitional spaces between physical environments Transitional spaces for identity shifts
Spatial/emotional	Positive withdrawing behaviours Positive absenting behaviours Negative withdrawing behaviours Negative absenting behaviours
Spatial/cognitive	Change of activity Space 'not to think' for a while
Temporal/ cognitive	Slow time for thinking, absorbing, integrating Time for teacher to 'watch' and 'listen'
Temporal/affective	Slow time for feeling, settling in
Interactional	Comfortable working in company of others Awkward in company of others
Environmental	Institutional areas allowing for silence. Quiet spaces in classroom. Quiet times. Reduction of intrusive noises. Inclusion of particular sounds which represent 'silence'
Meta-silence	Communication about silence

Silent pedagogy

These different aspects of what I will call 'silent pedagogy' represent three subtle and complex aspects of the formal learning environment. Firstly, there are pedagogical skills which are less observable and recordable than the overt vocalised behaviours mentioned previously. Here the teacher will use silence as a tool to achieve certain purposes in the classroom. These tools may be covert, in particular the conscious decisions to abstain from overt activity - *not* to initiate or intervene in particular classroom situations. Secondly, there are the ways in which teachers and/or learners silently interact or participate which are not manifested in talk or overt face to face engagement with others. These may be construed as passivity by observers in that they fail to conform to underlying preconceptions about the nature of participation and interaction. Thirdly, they represent the relations between teacher, learners and other aspects of the learning environment through which pedagogical processes are enacted, informed and constrained. Here silence may act as an internalising sign for teachers and learners enabling them to reach understandings about their relations with these different components. However, these pedagogies are also 'silent' because they are marginalised - 'silenced' - by more dominant discourses of teaching.

Observing silent pedagogy

The three dimensions of silent pedagogy are difficult to observe if the observation is framed through overt performance. So what else could we observe? What might an observation of silent pedagogy look like? These are some examples of questions that might shape the observation:

- What length of pauses does the teacher use after speaking (e.g. after questions, during a discussion)?
- How often does the teacher use writing or reading activities or electronic media to absorb learners without the need for talk?
- What instances are there of non-verbal communication used productively so as not to interrupt learners' thinking?
- How often does the teacher let the images 'speak for themselves' without providing accompanying talk or text?
- How frequently does the teacher intrude on each learner's personal space by behaviour such as walking around, bending over desk etc?
- How frequently does the teacher appear to interrupt potential thinking time through speaking?
- How effectively does the teacher use changes in position or changes in physical activity to give learners an opportunity to absorb what has gone before?
- How much silent 'slow time' is allowed for thinking, absorbing, integrating, creating?
- What proportion of the session do the learners spend working silently and comfortably in the company of others?
- Are there any apparently 'awkward' silences? How does the teacher appear to interpret these? How are they handled?
- How does the teacher use times when they are silent, but learners are working independently?
- Are there times when the teacher could have intervened, but didn't?
- How does the teacher obtain information about the learners without talking to them?
- How does the teacher find out if the learners are understanding and learning without talking to them?
- How does the teacher appear to view the learner who does not talk?
- Are there silent spaces in the classroom where learners can go to concentrate?
- Does the teacher communicate about silence to the learners?

There are no easily observed answers to some of these questions. However, they do form the basis of a dialogue between the observer and the observed, in which subtle processes and understandings about 'good' teaching and learning are explored. In this chapter, I have used the notion of the teacher as 'watcher' to indicate the way in which good teachers sensitise themselves to all components of the learning environment, to reach understandings and make complex judgements about what overt or covert activity needs to occur. This is a relational process, in which the teacher both *watches* and *forms part* of what is watched. A spectator is different - they watch without being

involved or taking responsibility for what is being observed. Traditionally, the formal classroom observer acts as a spectator, using notions of 'good teaching' based on overt performance as a frame for judgement. However, the use of a different set of cultural resources, based on silent pedagogies, offers the possibility of a shift in the observer's positioning. By engaging with the teacher's understandings of the world of the formal learning environment, the observer could become a 'watcher' rather than a spectator. In this shift, the nature of the relationship also has the potential for change, from judge and judged, to co-participants and 'meaning-makers' in a particular figured world.

Figured worlds

As the main conceptual framework in this thesis, I found the notion of figured worlds to have a number of strengths. It enabled discussion of both cultural and personal dimensions in the relationship between the individual and different worlds. Most importantly, it allowed for analysis of silences as relational spaces in which individuals positioned themselves to various components of a world. As figured worlds could be used at the micro-level, they could be used for analysis of silence occurring in short timescales, such as an interaction between two people, but also in the longer timescales in which identities are formed. I also found the ideas related to cultural resources very useful and have extended their use in this thesis to show how choice of cultural resources informs the detail of practice, as well as identity. Holland et al's reference to Vygotsky's work on the mediating function of signs and tools, caused me to revisit the original works. These enabled me to explore the notion of silence as a 'language' and how the metaphors for silence represented its functions as sign, tool and sometimes both.

However, I did experience some limitations in the conceptual framework. In Chapter Two, I discussed how Holland et al appeared to consider certain worlds as figured and some as not figured, with the 'mundane' being excluded from their theory. Having looked at their examples of figured worlds and having considered the data from this research study, it is difficult to see why the notion is not generally applicable. Examples in the research data of different figured worlds in everyday life included: the world of domesticity; the world of marriage; the world of parenthood; the world of childhood; the world of socialising; the world of the countryside; the world of sporting activity; the world of musical performance; the world of dramatic performance; the world of painting; the world of religious practice; the world of spiritual practice. However, although some of these are 'mundane' in that they are 'commonplace' or 'ordinary' and some of these are more 'dramatic', they all share the identified characteristics of 'figured worlds'. They are historical phenomena developed as a result of the participants; they all involve social encounters in which participants' positions matter; they are all socially organised and reproduced; they all occur as 'landscapes of action' which have a 'human voice and tone' and they are populated by familiar social types and even identifiable persons. Writings on the cultural practices of everyday life (Moran, 2007; De Certeau, 1980) would support this view.

Another limitation within their work is the minimal acknowledgement of the ways in which different figured worlds overlap and affect each other. The data in this thesis, suggest the impact of an individual's participation in *different* figured worlds (both past and present) on their participation in one *particular* world, and to ignore this seems a significant omission. The ways in which figured worlds overlap mean that the discourses and figures pertaining to one world can seep into understandings of another

world. Individuals will draw on other worlds to provide some cultural resources with which to understand their position in a *particular* figured world. This has been adopted as a premise in this thesis, and hence the ways that participants conceived of and used silence in the figured worlds of their everyday lives provided cultural resources which informed their understandings of silence in teaching and learning. However, in the case of the virtual environment, the question arises - which figured world - with its discourse, values, cultural resources and historical development- is providing the context for the learner? Is it the world of everyday life, or the world of the formal learning environment?

Summary

This chapter considered the major themes derived from the data and summarised the 'story' told by the thesis. Here it was suggested that the term 'silence' is used metaphorically to conceptualise the positional relationships between the component parts or activities of a particular world. Silence acted as a sign or tool to mediate those relationships. Many different types of silence were identified, derived from a range of cultural resources, including personal experiences, internalised discourses and engagement with different media, including academic and popular texts. Silence as a metaphor in everyday life became translated into a metaphor which underpinned different aspects of classroom practice. These not only included teaching and learning, but teacher and learner identities, and other aspects of the classroom environment - sensory, physical and epistemological. The notion of silent pedagogy was developed, representing those aspects of the teaching and learning relationship, silenced by the educational discourse derived from government policy. From the data, different types of thinking were identified, highlighting the limited range used in the classroom. A list

was generated of the multi-modal uses of silence in the classroom. Suggestions on an alternative type of teaching observation, based on considering 'silent pedagogy' was proposed. Finally, the use of 'figured worlds' as a conceptual framework was discussed, highlighting the strengths, but also some limitations.

Chapter Ten: Conclusions

The aims of this research were to explore different conceptualisations and uses of silence in the figured worlds of everyday life and the formal learning environment. By using ideas generated through the data, the aim was then to consider insights into the teaching process provided by a discourse of silence. In particular, the thesis aimed to consider how these insights might offer an alternative framing of 'good' teaching to that provided by current dominant educational discourse and, following from this, to suggest how teaching framed through silence might affect observations of classroom practice.

This chapter will draw together aspects of this research and reach some conclusions in relation to these aims. It will then consider some implications for practice and for theory that have emerged. Finally it will identify some potential areas for future research.

Writers on silence have generally acknowledged the complexity and 'fuzziness' of the subject, allowing for many interpretations and operating in various modalities. This thesis has built on previous work on silence in a number of different ways. Firstly, it has explored how people interpret the concept of silence in their everyday lives. Hence it has not imposed definitions of silence, but allowed personal definitions to emerge. This was an important process, because by embodying silence in everyday practices, it became clear that people defined the concept in terms of their relationship with various aspects of the world. As silence is, by its nature, covert and ambiguous,

this led to an exploration of the mediating function of silence in enabling relationships to be understood and positions taken in relation to different components of a particular world. Considering silence from a Vygotskian perspective, enabled us to explore how silence functions as an internalising 'sign' - allowing time and space for these positionings to occur - and as a 'tool' - providing a means of exerting control over these relationships. Whereas communicative approaches to silence focus on human relations, this thesis developed the idea of figured worlds to include the sensory, physical, spiritual and environmental, as well as cultural artefacts, such as particular discourses and epistemologies. This meant that an individual's positioning as represented by their conceptualisations and uses of silence, included their relationship with *all* components, not only the human.

The thesis also considered how one concept is translated and transformed across two different cultural worlds. The unifying element in this transfer is the individual's own understandings and experiences, which integrate a variety of cultural resources in order to determine actions and adopt positions in those worlds. Internalisation of dominant discourse may frame these understandings, but by offering an opportunity for reframing, fresh understandings about their own practice can be generated.

Using a relational notion of silence, participants reframed their own practices in teaching by considering silences rather than overt classroom activity. Here the notion of 'silent pedagogy' was developed to represent pedagogical skills which are less recoverable and recordable than measurable and observable behaviours. The importance of constructive *abstention*, a conscious decision *not* to initiate or intervene in particular classroom situations was a particular feature of those skills. Learners'

own abstentions from overt activity could also be construed as positive rather than negative, representing engagement with learning - reaching understandings, positioning themselves in relation to different components in the classroom. Here silent participation, interaction and the intense internalised activity of making sense of the world, can be seen as a counterpoint to the dominant culturally-determined characteristics of the learner who is 'seen' to learn by talking or by overt activity. The teacher's skill here is in 'watching' and 'listening' sensitised to the different meanings that these silences might represent. In this context, the teacher is both participant and a sensitive observer of *others'* positionings, taking steps to restore, or at certain times, deliberately disrupt the learners equilibrium in relation to this world. 'Silent pedagogy', therefore, represents the ongoing and fluid relations between teacher, learners and other aspects of the learning environment through which pedagogical processes are enacted, informed and constrained. However, this pedagogy is also 'silent' because it is marginalised - 'silenced' - by more dominant discourses of teaching.

Implications for Theory and Practice

Most educational theory focuses on processes of teaching, processes of learning or the socio-cultural context in which these occur. However, the notion of 'silent pedagogy' allows for discussion of the ongoing relations between *all* components in this world. Using the perspective of silence rather than overt activity such as talk, a review of some of the traditional theories of learning underpinning much classroom practice could be undertaken. This could engender a useful distinction between those actions and activities in the classroom which are genuinely to promote learning and those which are used, sometimes unquestioningly, to promote another, perhaps political,

agenda. For example, Tolman and Holzik's (1930) notion of latent learning and '*behavioural silence*' is useful in reminding us that vocalisation and learning are not inextricably connected. Vocalisation may have a performative (and assessable) or socialising function in the formal learning environment, rather than being inextricably linked to learning what is being taught. In this context, it could be argued that 'social' learning theory' has been confused with 'sociable' learning theory', where talking to others - within the parameters of classroom convention - is culturally preferable to silent learning. A re-evaluation of the complex set of inter-relationships implied by the term 'social' might be helpful here, together with an analysis of the functions and purposes of talk in relation to learning. Vygotsky's ideas on 'inner speech' could usefully be revisited, to consider what this can tell teachers about slow-time thinking - the internalised and often messy cognitive processes that reflect learner's real thinking - and about the relationship between internal and external verbalisation and vocalisation. In addition, it would be interesting to consider silence in broader environmental terms, as a space in which learners reach understandings about their positioning in relation to *all* components of the classroom environment.

The notion of silent pedagogy also allows teachers and teacher educators to consider 'good teaching' - in terms of pedagogical skills which are usually ignored. Teacher education programmes could include learning about '*abstaining*' teacher behaviours, as well as initiating and intervening teacher behaviours. They could include how silences can be used productively for sensitive 'watching' and 'listening', including all components of the learning environment. Teachers could be encouraged to re-evaluate the 'silent learner', by being aware of potential cultural prejudices, and consider whether learners are actually thinking and learning, rather than worrying because they

are not talking. Those observing classroom practice could use these more subtle and complex understandings as a basis for a different type of 'observation', as well as a different relationship between observer and observed. In this relationship, the classroom 'observer' would watch, listen and engage with the pedagogy, becoming a participant rather than a spectator.

The study has revealed a need to re-examine notions of 'interaction' and 'participation' and to question the underlying assumptions in current educational discourse that vocal interaction with peers equates to participation and that silence equals non-participation. Productive communal silence or attentive individual silence could be seen as alternatives here. A clearer distinction between verbalisation and vocalisation would be helpful in this context, with activities involving verbalisation, such as writing or computer work, being viewed as providing a silent time for learners to interact with material rather than with people.

The distinction between 'noise' and 'sound' made by participants suggested that 'noise' contains a notion of intrusion. This raises the issue of what constitutes *intrusion* in a formal learning environment. What do learners characterise as *noise* and what do they characterise as *sound*? In particular, when does the teacher's vocalised intrusion act as a 'noise' which disrupts the learner's concentration? A consideration of the classroom as a *silent space overlaid by vocalisation* could change a teacher's sensitivity to how talk and silence are used and perhaps give some pause for thought before intruding on a learner's or a learning group's silence. The development of communicative repertoires which include awareness of the range and uses of silence

and which encourage the development of a language of meta-silence are of relevance here.

Given the significance of silence as a metaphor for many important aspects of people's lives, we need to consider how teachers may use multiple types of silence more deliberately as an integral part of their communicative repertoires. Silence is so much more than 'not talking' and, as Chapter Nine (Table 2) suggests, can provide a genuine stimulus for reconsidering classroom practice. Future analysis could include extending the range of thinking behaviours currently valued in the classroom. Notions of silence could also be used to question the cultural basis of the predominance and value ascribed to talk within the formal learning environment and to provide an alternative frame for 'good teaching'. Here an awareness of positive types of silence, those of concentration, creative thought or communal endeavour, together with a recognition of personal preferences towards silence or vocalisation might mitigate the often negative associations of silence in pedagogy.

Suggestions for Future Research

Future research could examine how the use of silence as a prism for classroom observations might affect or change the way 'good' teaching is conceived and discussed. Silence as both teacher's and learner's thinking space would be a useful focus here, with research taking into account current developments in neuroscience. Research on good teaching could consider in detail the different components of the learning environment. For example, whether the age and cultural resources available to learners affected their capacity for silence, or changed the way that they conceived of silence. Silence as a form of cultural capital, to which some people are denied

access, would be an interesting aspect of this research. The subject knowledge and cultures of particular subject disciplines - only briefly touched on in this thesis - could also be a useful component to study. Research on the classroom as a 'soundscape' would provide some detailed understandings of individual learners' relationship with the auditory environment and how these might be used constructively to aid learning. Another and potentially rewarding component to research would be the characteristics of the formal learning environment itself. The question of the overlap between different figured worlds is of particular interest here. Research into the effect of different figured worlds overlapping in the virtual learning environment, where the individual exists simultaneously in both, would be a rewarding area for future enquiry. In particular, it would be interesting to explore how silent pedagogy operates in this different temporal-spatial environment and the impact on learner identities, thinking and performance.

Finally

It has been a difficult few years, juggling a full-time job, relationships with family and friends, whilst engaged in research for this thesis. In spite of the amount of work involved in this endeavour, I have been sustained by the richness of the subject which has taken me into many personally-rewarding areas of enquiry. An aspect of the research underestimated prior to the exploratory study has been the enthusiasm and interest expressed by participant teachers.

The research began with a fascination with one word and how it is understood and used. In the journey to uncover its meanings, it has generated many insights into how people perceive their relationship with the world, and how silence acts as an

'ontological metaphor' in people's lives. The Oxford Dictionary definition identified in Chapter One - where being 'silent' equates to 'not speaking; not uttering or making or accompanied by any sound; written but not pronounced' - seems singularly inadequate to describe these complexities. I will finish with the comment by Laura, one of the participants, expressing her feelings about the subject. Laura's conclusion echoes my own experiences in this research:

> I'd never thought of silence and just how big a topic it is for something that some people might say 'It's nothing that exists'. My husband said 'Well there's only silence which is no noise' - but there isn't........

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Appendix A: List of participants (pseudonyms used)

Name	Teaching Subject	Context	G	Age	Date of interview	Teacher training
Exploratory study 2003						
1. Kevin	Performance Art	HE	M	45-50		Teacher trained (post 16)
2. Penny	Yoga	AE	F	30-35	5.5.03	UK Yoga teacher trained
3. Susan	Education/academic	HE	F	40-45	8.5.03	Teacher trained (schools)
4. Maggie	Teacher training	FE	F	50-55	21.5.05	Institution A trained (post 16)
5. Jean-Claude	Photography/experimental music	HE	M	30-35	25.5.03	Not teacher -trained
Interviews 2005						
6. Tracey	Leisure and management	FE	F	25-30	21.6.05	Institution A trained (post 16)
7. Maureen	Deaf signing	FE	F	30-35	21.6.05	Institution A trained (post 16)
8. Fiona	IT	Adult & Community/.LSC	F	30-35	5.7.05	Institution A trained (post 16)
9. Christine	Law	Voluntary sector	F	40-45	6.7.05	Institution A trained (post 16)
10. Harry	Sport and leisure	FE	M	50-55	12.7.05	Institution A trained (post 16)
11. Catherine	Basic Skills/Occupational therapy	HE	F	30-35	12.7.05	Institution A trained (post 16)
12. Betty	Trades union studies	AE	F	50-55	18.7.05	Institution A trained (post 16)
13. Sally	Drug and alcohol counselling	Voluntary sector	F	25-30	19.7.05	Institution A trained (post 16)
14. Karen	Sound/media/Disc jockey	FE/HE	F	25-30	19.7.05	Institution A trained (post 16)
15. Charlotte	ESOL	Voluntary	F	30-35	20.7.05	Institution A trained (post 16)
16. Lily	Art	Community	F	30-35	20.7.05	Institution A trained (post 16)
17. Virginia	Psychology	HE	F	25-30	21.7.05	Institution A trained (post 16)
18. Peter	Environmental science/management	HE	M	40-45	21.7.05?	Institution A trained (post 16)

Appendix A: List of participants (pseudonyms used)

Other interviewees						
19. Lois	Performance art /developed silence module	HE	F	25-30	27.7.05	Teacher trained (post 16)
20. Martin	IT/Elearning	AE/Access to HE	M	30-35	28.7.05	Teacher trained (post 16)
21. Simon	Fire safety – ex military	NHS	M	35-40	3.10.05	Institution A trained (post 16)
22. Gareth	Tourism	FE	M	25-30	6.10.05	Institution A trained (post 16)
23. Joyce	Art/Playwork	AE/HE	F	55-60	7.10.05	Teacher trained (schools)
24. Laura	Horse whisperer	Primary/middle school	F	35-40	10.10.05	Teacher trained (schools)
25. Yolanda	Teacher trainer in yoga for primary schools	FE/Independent trainer	F	60-65	11.10.05	UK yoga teacher trained

Appendix B: Sample of participants' initial typologies of silence

Susan
Being on your own
Not having to talk or communicate with anyone
Being in garden
White room soundproofed,blocked out (special needs school)
Diving
Library/museum
Space
Communicating:
Angry silence
Silence where someone doesn't seem to be listening - lack of response
Comfortable companionable silence
Uncomfortable silence when you are waiting for someone to say something
Imposed silence
Sport - biking, running, swimming
Driving
Walking on hills
Silence in a piece of music
Silence of blank mind
Where people don't want to talk to you
Don't want to give an answer as it would admit some kind of failure (eg. Not doing lesson plan)

Betty
Silence when other people are working
Comfortable silence when you're all working together
Silence after an argument
Anxious
Personal comfortable silence
Comforting silence
Silence fear of incrimination
Heavy silence
Bored, resentful silence
Reflective silence
Heavy silence

Catherine
Active
Deliberate
Imposed from outside
Conscious
Passive
Space between sound
Concentration
Thinking

Charlotte
Relaxation
Sleeping
Concentration
Focus
Anger
Sulking
Prayer, meditation
Music - jazz
World drumming
Impact
Space

Christine
In terms of Time -
Spilt second silence - space between ticks of a clock
Space between words necessary to separate
Silence between word to think, when neither you nor another person is speaking
Morse code - Semaphore - music
Temporary or brief periods - but longer than split second
Longer term silences -
Deliberate
Wanted
Comfortable
Uncomfortable
Total silence - deep space
meditation
legal silence - right to remain silent
medieval - 'standing mute of mouth' - refusal to testify
Engaged silence
Disengaged silence
Silence to empower
Enforced silence

Gareth
Embarrassed silence
Uncomfortable silence
Threatening silence
The silence of anger
Silence of conflict
Comfortable silence

Appendix B: Sample of participants' initial typologies of silence

Penny
Not talking
Spaces that are more silent - natural world, night
Institutional e.g. prisons
Schools
Punishment
Religious - silent prayer
Meditation
Angry silence

Fiona
Forced
Personal
Relaxed, in natural circumstances
Two minutes silence (forced, but on public, not on personal level
Deep, complete stop speaking and moving, where someone else is involved not just yours
Silence - concentration

Laura
Personal space
Stopped noise
Times free from human or man-made noises
Inner silence
Deafness
Pauses
Listening silence
Thinking silence

Sally
Silence in music
Uncomfortable silence
Scary silence
Comfortable silence
Minutes silence
Anticipatory silence
Silence of outer space
Thinking silence
Emotionally loaded silences

Martin
Silent study
Thinking
Silent prayer
Silence of relaxation
Silence of anticipation

Jean-Claude
Silence as a state
Conceptual silence
Relative silence - different perspectives on silence and amount of noise
Lack of stimulus
Lack/absence of information
A connotation
Silence related to language
Silence related to sound
Aesthetic silence related to harmony
Comfortable silence in the presence of others
Expectant silence
Uncomfortable silence

Joyce
Natural
Unnatural
No talk
Spaces between talking
No sound
Internal silence
Threatening silence
Commanding silence
Comfortable silence
Uncomfortable silence
Visual silence

Maggie
Fear
Waiting for something to happen
Embarrassment
Meditation
End of piece of music
Silence within music
When you think
Companionable silence
No human voice
Concentration
Schools

Lois
Watching silence
Dreaming silence
Personal space

Appendix B: Sample of participants' initial typologies of silence

Peter
Complete absence of any external noise
Reflective silence
Escapist silence
'Silence before action'
Anticipatory silence

Lily
Inner silence
Silence within your home space
Public silence
Silence as space to integrate and think
Silence as concentration

Tracey
Minute's silence
Guilty silence
Lonely silence
Reflective silence
Meditation
Silent prayer
Night silence

Simon
Total silence
Communication silence
Focus
Isolation
Silence of concentration
Silence of respect

Virginia
Internal silence
External silence
Silence as a gap
Silence as a tool
Silence as a signifier
Silence as defence
Silence as a socio-cultural space

Yolanda
Inner silence
Outer silence/environmental silence
Silence with sounds around
Imposed silence
Awestruck silence
Deliberate silence
Earthquake silence
Remembering silence
Depressed silence

Harry
Personal normal peaceful silence
Companionable silence
Awkward silence
Numbing silence
Hostile silence
Sporting silences
Silence of hushed expectation
Brooding silence
Landscape silence
Dead, cotton wool silence

Kevin
Personal silence
Listening
Walking quietly doing nothing
Sitting quietly doing nothing
Mental silence - do some gardening
Playing piano - don't need to think about what fingers are doing and if I've got a work problem sitting at my desk is not likely to help
Doing something completely different
Creative silence - waiting for things to happen
Sleep is a form of physical silence - sometimes dreaming can be very noisy - very active dreams can be literally 'creating noise'
Comforting silence
Relaxing silence/non-relaxing silence
Being put in solitary confinement is not a form of relaxing silence
Negative types of silence
Waiting is a form of silence
Mother couldn't stand silence when the kids had left home

Karen
Spatial - related to spaces
'types of spaces that have types of silence contained within them'
Two minutes silence
death is silence
Silence before panic
Silence prior to a storm

Maureen
Voluntary
Involuntary
Absence of noise i.e. external stimuli
Communication without speech
Silence of deafness - not really silent
Silence as a weapon
Silence as indecision

Appendix C: Questionnaire given to respondents in numero-qualitative survey

Please share your views and experience of silence and sound:
I am doing a research study on silence and sound and am trying to get lots of data from lots of different people. I would like to know about your ideas and experiences.

As silence seems to mean a lot of different things to different people, I am interested in trying to understand what people associate in their own lives with the idea of silence. As there is no such thing as absolute silence, I am also interested in what sounds people associate with silence and what sounds intrude on their notions of silence.

I would be very interested in your ideas. It will take about five minutes to help with this research. No names will be used in writing up this research.

Details

1) Are you Male? (M) or Female? (F)? ....

2) What is your age? ....

3) What is your occupation? ....

4) What country are you from? ....

Questions on silence

5) What positive associations do you have with silence ?

6) Under what circumstances do you most experience 'positive silence' ?

7) What sounds do you think of in relation to your positive associations with silence?

8) What are the sounds that would most intrude on your 'positive' silence?

9) Please add any other ideas or experiences on silence you wish to contribute:

Thank you very much for your help. It is greatly appreciated.

Appendix D: Sample summary of numero-qualitative data: positive and intrusive sounds and noise

Question 3: Positive sounds

Made by People		Transportation		Entertainment		Nature		Machines	
Made by self		Road noises	10	Music	10	Birds	41	Clocks ticking	8
		" the gentle murmur of traffic" " background noise like traffic"		" Loud music to get you going and calm relaxing music to calm you"		Wind/breeze (often in trees)	33	Electrical appliances humming	3
Heartbeat	15			Classical music	3	Water/streams	18	"The house settling"	3
Own thoughts	7			TV	4	Water/rain	13	Air conditioning	2
" the sound of me thinking to myself"								Central heating	1
				Radio	4	Water/sea	10	Radiator pipes	1
Own movement	1					Cats purring	3	Kettle boiling	1
Self and other people						Dogs breathing or barking in the distance	3	Village church bells	1
Breathing	23					Bees/insects humming	2	Phone	1

Appendix D: Sample summary of numero-qualitative data: positive and intrusive sounds and noise

Other people vocalising						" Bird sounds when the window's open"			
Family/neighbours chatting	5					" Distant winds and gentle waves"			
Distant voices	3								
Made by People		Transportation		Entertainment		Nature		Machines	
Children playing	2					"Soft, low pitched sounds such as waves"			
Prayers and hymns	1					" Continuous sounds at predictive intervals"			
Coughing	5								
Gentle snoring	3								
Sighing	1								
Movement									
People walking outside	3								
Pen across paper	4								
Rustling of paper eg turning pages	3								
Tapping of computer key	1								

Appendix D: Sample summary of numero-qualitative data: positive and intrusive sounds and noise

Question 4: Intrusive sounds

Made by People		Transportation		Entertainment		Nature		Machines	
Made by self		Traffic	31	Music	34	Dogs barking	6	Telephones	19
Own thoughts	3	Cars	16	TV	16	Birds	2	Mobiles	6
								(Telephones)	Total 25
Self and other people		Motor bikes	3	Radio	5	"My cats"	1	Alarms	14
Conversation	4	Car horn	7			Thunder	1	Road works	7
"People talking, especially to me"		Car alarm	6	"Someone playing loud music in another room"		Country animal sounds eg sheep, cows, cockerels	1	Ticking clock	6
Direct questioning	1	Icecream van	1			Wind, sea, air	1	Machinery	6
Someone calling my name	1							D.I.Y.	5
Other people vocalising								Door bell	4
								Repetitive noises eg bleeps	
Talking by others	41							Tap dripping	1
Raised voices/shouting	31								
Whispering	5								
" I'd rather they just talked normally"								"Another person's loud noise"	
Children playing	3							" Loud, unexpected, random"	

Appendix D: Sample summary of numero-qualitative data: positive and intrusive sounds and noise

Children shouting	2							"Anything that makes demands on my quiet time"	
Made by People		Transportation		Entertainment		Nature		Machines	
Children arguing	2							" Loud, negative, violence, aggression"	
Neighbours talking late into night	2								
Drunk people going home	2								
Coughing	1								
Sniffing	1								
"Radio talk"	1								
Other sounds									
Doors banging	4								
"man-made"	4								
Doors knocking	2								
Typing on Computer " that bony clatter of fingertips on a keyboard"	1								

NB: Phones in each case could be considered in terms of people talking (as in answering a phone call which interrupts you) or in terms of annoying sounds such as ring tones.

Appendix E: Sample summary of numero-qualitative responses

Question 1: Associations with silence

Associations	Responses
Peace, calm, tranquillity, quiet, harmony	69
Thinking	61
Thinking and concentration (explicitly linked)	33
Thinking and reflection (explicitly linked)	13
Reflection	10
Relaxation	27
Feeling awkward, uncomfortable	16
Exams	10
School	6
Libraries	4
Death	4
Churches	3
Being alone	3
Having space	2
Waiting rooms	2
Not feeling well	2
Being bored	2
Feeling anxious	2
Punishment	1
Trouble	1
Fear	1
Anger	1
Paranoia	1
Being wrong	1
Hospitals	1
Security	1
Awareness	1

Question 2: Experiencing positive silence

Place	
Outdoors	25
Home	25
Church	9
Library	3
Bath	3
Work	2

Time	
Night	25
Early evening	15
Early morning	4

Appendix E: Sample summary of numero-qualitative responses

Activity	
Study time	20
Relaxation	20
Sleeping	19
Reading	15
Concentration	11
Formal remembrance occasion	7
Thinking time	6
Listening intently	2
Hugging someone	2
Remembering happy events	2
When learners are working quietly in class	1
When teachers and learners get on well	1

5. Additional Comments

	Please add any other ideas or experiences of silence you wish to contribute
1	
2	Although I associated silence with fear, positive silence brings thoughts of the opposite to fear
3	
4	Silence can be used to stimulate a desired response when used to interrogate people for information not freely given
5	High pitched noises
6	Silence is to be treasured as an escape from the madness of life
7	Short, sharp sounds that break the silence are the most annoying
8	React on people's reactions
9	Silence can move from being a positive experience to a negative one e.g. when walking etc initial silence is relaxing but you can begin to feel very remote and isolated and therefore insecure (e.g. there has been silence for so long, what if I am taken ill etc)
10	Noise will affect people differently and the type of noise i.e. baby crying may affect a none parent
11	Silence is relative to everyday life. Noisy jobs find silence easier to obtain
12	Silence is positive, but sometimes when in a group etc I do not like it. Sometimes silence between 2 people can be unnerving, but sometimes it can be comfortable
13	Different age groups have differing ideas on silence and preferences change with age
14	
15	I find it difficult to create silence even when presented with a rare opportunity to do so. Find physical stillness difficult to achieve
16	Can relax, think about things, reflect and plan
17	I visited Austria when at Sheffield Uni - Cultural Tourism Management. The place that I cannot forget for the concept of absolute silence was visiting Mauthausen Concentration Camp - no birds, no noises. I wrote a poem I was so touched with the experience
18	Silence - what bliss. It would be a luxury
19	Silence means a time of personal space. It does not have to last for hours - a few moments can be very therapeutic
20	In my opinion, 'silence' is a time when I am not speaking or being obliged to communicate verbally with anyone - external noises can contribute to this blissful experience
21	
22	When you feel silent i.e. sleep you are never actually experiencing silence as your brain is triggering thoughts and scenarios that do not involve silence i.e. dreams

Appendix E: Sample summary of numero-qualitative responses

23	When my daughter was first born - it seemed as though everyone who visited toned down the level of noise that they made - peaceful
24	The most vivid memory of silence I have is after my car accident. I remember it vividly because the only thing I could hear was the air rushing through the car. No sound from my companion, no engine sound - nothing. I now always have some form of noise in the house or car
25	Many people are happy with silence when by themselves, but uncomfortable with it in the presence of others, especially strangers. We don't have enough silence because we live in a world of noise. In the health service I often struggle to encourage people to be quiet whilst being massaged. In private practice it's easier because there is more time - 1hr instead of 0.5hr. Therefore is lack of time to do with lack of silence
26	
27	No noise at all can be unnerving - a feeling of abandonment and isolation
28	
29	I feel we hardly ever experience total silence now in the urban area where I live. Countryside has noise, but can be more restful I feel
30	A time to reflect on the day/ week/ experience. Time for me
31	
32	Silence in a group can be uncomfortable
33	
34	Silence, unless you live in a vacuum, cannot be attained. Silence is your tolerance level of noise
35	Silence to some is uncomfortable. It is how this is perceived. I notice this a lot involved in one to one coaching
36	
37	Personally, I use silence as a means of reflective development. Be it thought prior to answering a question or making a major decision
38	
39	
40	
41	
42	It's peaceful
43	
44	I think silence can be a good thing in the right environment but sometimes I don't like the silence in some places, such as libraries
45	
46	Calm and peace. Being able to think through things and reflect on your day/ life
47	
48	
49	Silence to me can also be when I am on my own listening to music or watching the TV
50	
51	
52	
53	
54	
55	I don't like to have a lot of silence to the point where I am in a room on my own and nothing else. I have to have a little noise in the background
56	Being alone, in a room, reading/ studying
57	

Appendix E: Sample summary of numero-qualitative responses

58	Sometimes silence can be uncomfortable i.e. in conversation
59	
60	
61	Being under water is also a positive silent experience
62	
63	Large open places e.g.. Loch Ness - So big and open yet very still and silent. Can be disturbing and scary
64	
65	
66	
67	
68	Music
69	Can also be awkward as well as positive
70	
71	Can be good e.g. if trying to concentrate or sleep. Can be bad - awkward in conversation
72	
73	
74	Created silence - when you block everything out of your mind. Similar to a meditation state
75	Silence can be good
76	
77	Inner thinking
78	
79	If I'm amongst friends and I instigate the silence I feel positive about it
80	
81	
82	
83	
84	
85	How do you know there's silence if you can't hear it? Surely silence is a noise to recognise its there
86	
87	
88	Silence is good- enables you to get time for yourself and review what is going on
89	Funerals - very silent - people are reflecting. On a bus - people who don't talk to anyone, sit in silence. Just before you go to sleep
90	Funerals - very silent, uncomfortable and sad, reflection. On bus, in café (social areas) people don't talk to each other if on own, reminds/ reflects on the world moving by and reminds everyone has their own life
91	Silence helps me to think and understand my day and things that happen in my life, normally I'm interacting with various people, so it's nice to have time on my own
92	
93	Listening to my 2.5 yr old when he sleeps
94	Stood in the place where I and a now departed friend used to fish in the Lake District
95	Children tucked up nice, safe and warm sleeping in bed
96	Is there absolute silence in space

Appendix E: Sample summary of numero-qualitative responses

97	From an early age, I was encouraged to value the experience of silence and to use such time to reflect on one-self and others. As a painter, I use silence (sometimes achieved through very loud music) to enable inner silence or to block out, distracting sounds and thoughts
98	I have used recording studios in the past. The true silence is almost dizzying. There is no reflected noise from the walls/ floor.
99	To enjoy silence is to feel relaxed not to be worrying about day to day issues. The opportunity to think about what you want to think about
100	With an autistic (Aspergers) son, who constantly verbalises, sings, makes some noise, silence is a very precious time for my own thoughts
101	Silence is pleasant and productive for me
102	At night time, there has to be very little background noise to constitute silence. During the day there can be many more sounds
103	Silence is not always a good thing
104	
105	
106	It's brilliant!
107	
108	It doesn't need to be quiet for you to be silent
109	Silence after an explosion - bombs in NI.
110	Total' silence in soundproof room was an interesting experience though not very pleasant
111	Silence comes from within and one of my experiences of silence is the peace from watching a new baby sleep!
112	Living alone, don't like silence. Always have radio on. Switch off - last thing. Switch on as soon as I get up. Take music or radio when walking alone
113	I think silence is vital for bringing balance to busy lives
114	
115	
116	
117	Not very relaxing. Personally I like some background noise
118	Most of the time, silence is awful unless you want to relax on your own e.g. night time
119	
120	Silence isn't peaceful unless there is some sort of quiet, positive noise i.e. water trickling. If it is totally silent it can be quite frightening and lonely
121	
122	Shhh...
123	
124	
125	
126	
127	
129	It really depends on what 'mood' I'm in and how I'm feeling as to how I use silence - the majority of the time I want silence is if I'm working at home or just want to chill out alone
128	
130	Not a positive experience personally
131	It is good to have silence to help children gather their thoughts. Not all the time though
132	

Appendix E: Sample summary of numero-qualitative responses

133	
134	
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136	
137	
138	Some noises you don't realise are there such as fridge humming can only be heard when everything else is quiet. Silence is still
139	I once went to a football match with 15,000 people at the break a detective came onto the pitch to appeal for help in finding a child's murderer. It was the most eerie silence I had ever experience every single person was silent as the detective was speaking and then when he left the pitch to a round of applause this really cut the silence
140	Night walking with the dog
141	Sometimes you can experience 'an uncomfortable silence' when involved in an awkward situation
142	
143	Too much can be a sign of a personal problem that needs attention
144	
145	I love it. It is great to have silence and to be able to think your own thoughts
146	Talking in a quiet manner is something to silent study
147	Being able to concentrate, think or sleep in an environment that aids this. Silence is peaceful, not stressful and conducive to rest
148	Inner peace, calm, relaxation
149	Complete calmness, still, peaceful and tranquil
150	Silence can be found whilst 'noise' is present i.e. washers, radio, children playing. Real silence can be obtained in one's own mind if you train yourself to filter out 'sound'
151	Silence is golden. Keeping quiet when you are provoked.
152	
153	Silence is golden'
154	Silence doesn't always mean no noise. Silent time is when there is no intrusion into your thinking. Different people can cope with different types/ levels of background noise during silent time
155	Silence should not just be a respectful display. We should find time each day to have some silent time for reflection.
156	Silence helps me to make sense of what is happening around me. Silence can be uncomfortable in conversations
157	I don't really like to be in silence and always like to have music playing. This makes me feel much more relaxed
158	Silence' is when I shut the outside world out of my head and I can just be. This is when inspirational thoughts and ideas have room to pop into my brain!
159	Working with small children means in the nursery environment I can work and 'I do not' hear the children - even when they are noisy. At home I hear - and don't like to hear - children shouting outside
160	
161	Sometimes deliberately I become very silent just to experience how people who cannot talk feel. I want to feel and share the pain or else I would never realise and take life for granted
162	Silence is good Silence can be ???? if other people are there. We all need silence sometimes
163	Gives you time to think things through
164	Find it difficult to concentrate on task/ activities with silence