UCL INSTITUTE OF EDUCATION

Some Secret Language:

How toddlers learn to understand movies

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> …we guess from some accidental scene…what cinema might do if left to its own devices. But what, then, are its devices? If it ceased to be a parasite, how would it walk erect? At present it is only from hints that one can frame any conjecture. … Is there, we ask, some secret language which we feel and see, but never speak, and, if so, could this be made visible to the eye?
> (Woolf 1926 (1994))

DECLARATION

I, Cary Bazalgette, confirm that the work presented in this thesis is my own. The work is original, and when information has been derived from other sources, appropriate references are provided.

ABSTRACT

The starting-point of this thesis is the hypothesis that, from at least 22 months old, children who watch movies (i.e. any moving-image media) may be learning how to make sense of them. Rather than looking for evidence of precursors to further learning (such as language, literacy or technological skills) or for the risks or benefits that movie-watching may entail, the thesis argues that viewing behaviour provides enough evidence about the practices and processes through which children of this age learn how understand movies, to indicate that this is a significant achievement, and has implications for later development.

Data were gathered during an ethnographic study of two of my grandchildren (dizygotic girl and boy twins), covering a 20-month period (from ages 22 to 42 months) but focusing particularly on their third year of life. Analysis of the resulting 12.7 hours of video, together with observational field notes and parental interviews, draws on a combination of sociocultural and embodied cognition approaches in addressing the challenges of interpreting two-year-olds' movie-viewing behaviour. Following the literature review in Chapter 1 and a description of the research design and method in Chapter 2, Chapter 3 provides a chronological account of three sequences of viewing events. The themes that emerged from the analysis of these sequences are discussed in Chapter 4, on emotion, and Chapter 5, on social and cultural learning.

The thesis recognizes the role of movie-watching in human ontogeny, arguing that it is driven by emotions, and enabled by embodied simulations, and that the early learning enabled by children's intensive – and often self-directed – viewing and re-viewing of movies is complementary to all their other cultural and social learning.

ACKNOWLEDGEMENTS
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TERMINOLOGY AND CONVENTIONS
Scholars, writers and policy-makers have struggled to find an appropriate term for referring to the moving-image media of film, television, computer games and video. For the sake of simplicity and brevity, I have adopted the term "movies" in this thesis, when generalizing about the films and television that the children watched, while reverting to "film" or "programme" where greater specificity is required.

I have indicated the children's age at different points by using the convention of a semi-colon between the year and month figures, as in "age 2;5".

Although the full extent of my study covered the 20 months from October 2011 to May 2013, and the twins' ages from 22 to 42 months, the primary focus of my data-gathering and analysis was on their third year of life, and I thus use the term "two-year-olds" when referring to the age-phase with which I am mainly concerned.

When describing the content of the videos that form the greater part of my data, I use the present tense. This means that in some sections I slip from past to present tense within the same paragraph. I use the term "viewing event" to describe the oocasions when the children watched a movie and I filmed them on video.

I have used two methods for enabling reader access to the movies I discuss and refer to: hyperlinks are marked in the text where web pages on the titles concerned were easily accessible in September 2017; footnotes are provided where access is more complex. I have cited the director, year and country of origin of feature films in brackets, following the titles.

40 of the 65 videos I made during my fieldwork are collected in my Research Group on Vimeo. The short film *Animatou* is also included in this Group. Access to these is available on request.

TABLE OF CONTENTS

LIST OF ILLUSTRATIONS

PAGE

TABLES

Some Secret Language
How Toddlers Learn to Understand Movies

INTRODUCTION

This introduction summarises the background to my research on how children learn about movies,[1] and concludes with an explanation of my research question and the hypothesis on which it is based. Coming to academic research relatively late in life, I consider it necessary to explain the ways in which the project evolved during my professional life, as well as through my personal roles as parent and grandparent.

i) Parenting

My initial interest in children's capacity to learn about movies began with informal observations of my own children (born in 1974 and 1976). Having taught in London secondary schools since 1967, I was interested in every aspect of my children's learning. But at the same time, I was involved in the early development of media education theory and resources: as part of the editorial board of *Screen Education* (Bolas 2009, p271); as a member of the editorial team that planned and produced the Inner London Education Authority (ILEA) Sixth Film Study Course (1991 onwards); and as a writer of classroom materials on movies for the ILEA English Centre, before I started work as an Education Officer at the British Film Institute (BFI) in 1979. Inevitably, this work also directed the focus of my attention on my own children. Certain unexpected moments have stuck in my mind ever since: my son as a baby, sitting on his father's lap to watch *Top of the Pops* (BBC 1964-2006), pulling his head back when a singer's face suddenly enlarged as the camera zoomed in; both children being terrified by a fight scene on TV in the film serial *King of the Rocket Men* (dir. Adreon, USA 1949), then finding that they could watch it calmly once I had turned down the enervating music sound track; my daughter (aged 4) at the end of her first experience of cinema – *The Wizard of Oz* (dir. Fleming, USA 1939) – kicking the seat in front in a fury and growling "I want *more*!" At the same age, my son explained to me why nobody in *Blue Peter* (BBC, from 1958) was allowed to look at the camera: "they want you to think you've just *burst* through the wall and found them making the programme!" Walking out of the cinema after seeing *Star Wars* (dir. Lucas, USA 1977), my daughter (aged 7) observed that "it's like a fairy story; there's a princess who's got to be rescued."

[1] I am using the term "movies" to refer to both film and television, following Carroll, N. (2010) Movies, the Moral Emotions, and Sympathy. *Midwest Studies in Philosophy,* 34.

As parents usually are, I was enthralled by what my children were able to understand, and intrigued by the unexpectedness of some of their responses. Their movie-related observations remained in my mind as my work in media education developed. Although my professional background was in secondary schooling, I was always conscious that the teenagers I taught already had many years of movie-watching experience behind them, and I came to believe that primary schools could be selling children short by neglecting their capacities for movie analysis and critique. During the 27 years I worked at the BFI, this was an argument I often deployed in teacher training courses and in conference papers.[2] With support from Her Majesty's Inspectorate (HMI), I set up a Primary Media Education Working Group in the 1980s (Bazalgette 1989) and for a year worked one day a week as a teaching assistant in a north Islington primary school: in both cases working alongside primary education specialists who helped develop my thinking about children and movies. When I became Head of BFI Education in 1998, I set up a publishing section that produced, among other things, anthologies of non-mainstream short films, together with teaching materials, that were sold widely to UK primary and secondary schools, and used in our teacher training courses (e.g. BFI 2004, BFI 2006).

ii) Professional experience

Throughout my professional career I was continually struck by teachers' almost invariable amazement at the high levels of confidence, articulacy and skill demonstrated by children when they are enabled to analyse movies, or to make their own videos. This happened consistently, whatever the age of the children being taught: Whitney, for example, describes three-year-olds in a Lincolnshire nursery school, responding to and analysing one of the films from the BFI anthologies (Whitney 2010). By the end of the 1990s I felt confident that children must be learning to understand movies at a very early stage in life, and that this could be an important factor in their later learning. I inserted an argument to this effect in a Government-commissioned report on film education, for which I acted as group convener (1999, paragraph 2.17)

From 1983 to 1999, my husband Terry Staples programmed the children's screenings at the National Film Theatre, and for four years ran the London Children's Film Festival, bringing a wide range of foreign language movies for children to the UK. Attending most of the screenings

[2] See http://carybazalgette.net/writing.html.

with our children gave me many opportunities to observe the responses of child audiences (which were normally in the 4-11 age range) to feature films that were usually from earlier periods and/or from other cultures. I noted the silences that indicated rapt attention, as well as the fidgeting, talking and toilet visits that signalled a lack of interest. I overheard comments and questions to parents and carers during the screenings, and listened to children's opinions in discussions with the filmmakers, script-writers and other industry specialists who occasionally came to post-screening sessions. In 1996 I organised a children's jury of 7-11-year-olds to judge four feature films for a BFI/Channel Four public event: this involved attending each screening with the children and discussing the movies in depth with them. Through all these experiences, through reflecting on them, and through discussing them with my husband and our children, my awareness of what kinds of movies children might be able to understand and enjoy, constantly developed (Bazalgette and Buckingham 1995).

This awareness is grounded in a cautious epistemology that includes a large measure of doubt about the extent to which we can ever know everything about how individuals engage with cultural products, along with beliefs that it involves extremely complex processes that are worth trying to explore, and that begin at a very early age (Kress 1997, Tomasello, Kruger and Ratner 1993, Trevarthen 1995, Bruner 1986).

iii) Grandparenting

After our first grandson was born in 2001, I seized what opportunities I could to observe him engaging with moving-image media. For example, when he was aged 2;3, I watched him for about an hour as he concentrated on selecting, viewing and re-viewing a section of *Monsters, Inc.* on video cassette. I was impressed by his focused attention on this task and used accounts of it in arguments to teachers about the value of recognising pre-schoolers' learning about movies (Bazalgette 2003). But as he lived in Italy, I saw him rarely and could not build up a longitudinal picture of how this learning developed.

When our daughter Phoebe gave birth to twins in December 2009, Terry and I soon became closely involved in their care, since they lived only a half-hour journey away. I began to consider the possibility of systematically observing the twins' encounters with movies. My interest in this started early. A photograph taken by Phoebe (Figure a.1) intrigued me: I had been unaware that Connie was watching the images in my camera as intently as I was, while I reviewed a series of photographs taken in the same room just a few moments earlier.

Figure a.1: Connie (aged 2 months) and me, looking at photos

It is well-known that babies of this age are certainly able to focus on visual images and that they are particularly interested in looking at images of human faces, especially those of people they know (Meltzoff 1994). I was moved and fascinated by this evidence of a baby's capacity to focus and concentrate – although I now acknowledge the possibility that she could have been equally interested in the frequent changes of image, as well as, or even instead of, actually recognising the faces that appeared as very small images on the camera's tiny screen.

I took photographs of the twins watching television as babies, and listened to Phoebe's accounts of their reactions to what they watched. But it was not until a family holiday in January 2011, when I first observed the fearful reactions described in Chapter 4, that I began to consider seriously the idea of doctoral research on how children learn to understand movies. My interest stemmed from the fact that the children (then aged 1;1) were somehow misinterpreting something that should have seemed perfectly innocuous. I wanted to try and understand how that misinterpretation might have come about. Phoebe and her husband Dickon were present when I first spoke about this idea, and asked them about the possibility of studying their children in a research project. They were positive about it from the start. Four months later they allowed me to make a video recording of the twins once again exhibiting the same reaction to the same programme. Thus my data gathering began early: I had realised that, at the age of 1;5, Connie and Alfie's television viewing was well-established and I therefore could not delay. My

doctoral research began formally just five months later. It took longer than expected, as I did little sustained or systematic work on the project during Terry's terminal illness between October 2013 and March 2015.

iv) Starting Point

My desire to study children's early learning about movies thus followed on from my professional and personal experience, throughout which I had held to the ontological assumption, drawn from classical film theory (e.g. Bazin 1967), that movies are cultural constructs (rather than "windows on the world"). From this, I and many others involved in the world of film education derived the following argument:

(a) That making sense of movies must be a learned skill;
(b) That this learning, like any other, can be encouraged and developed with others' help.

How I positioned this argument within the context of an arts organisation with a relatively marginal remit, had always been a matter for debate. I had defined the advocacy elements of my BFI role to include disseminating the argument to the formal education sector, including policy-makers. But in the context of the Blair governments' education policies (1997 – 2007),[3] it had seemed politic to support it with research findings that indicated (counter-intuitively to many teachers and most policy-makers) the association between good movie-comprehension skills in early childhood and later high attainment in print literacy (van den Broek 2001, van den Broek, Lorch and Thurlow 1996). This was an effective strategy with those education leaders and civil servants who were already enthusiastic about the cultural value of film and wanted an excuse to get it into the curriculum. But to the majority who were anxious about the possible effects of movie-watching, or explicitly hostile to these media, or worried about public opinion, it appeared as merely another opportunistic argument about non-literary cultural forms and practices that may drive up literacy attainment scores in school league tables, but are of no intrinsic importance. Thus almost all advocacy, in Anglophone countries, for education about movies as a major and distinctive cultural form, was marginalised by a dominant discourse about the risks or benefits that these media are assumed to present to children. This discourse has a long history, but it can also be seen in the broader historical context as a recurrent

[3] See for example the National Literacy Strategy, which informally supported our work: http://www.educationengland.org.uk/documents/literacytaskforce/implementation.html (retrieved 26th August 2017)

phenomenon accompanying all innovations in communications technology (Pecora, Murray and Wartella 2007). In the research context I refer to this as the "risk-benefit paradigm" and address it in the literature review (Section 1.3), in order to position my own research outside this paradigm.

v) Hypothesis and Research Question

In the preface to the second edition of his book *How To Read A Film*, James Monaco asks "Is it necessary, really, to learn how to read a film?" (Monaco 1981, p17). He immediately answers the question: "Obviously, anyone of minimal intelligence over the age of four can – more or less – grasp the basic content of a film, record, radio or television program without any special training." Monaco is a film critic, not a child development specialist, and can be forgiven his easy equation between learning and training, and for forgetting that we all also learn the much more complex verbal language without any special training. His comments also echo the widely-held view that movies are easy to understand and their meaning is obvious: a view upheld by the 6th-graders in 1984 who told Gavriel Salomon that "television is easy" and thus demands little invested mental effort compared to print, which is "tough" (Salomon 1984). But the dismissive tone of Monaco's remark distracts attention from its important subtext: that understanding these media does involve some specific skills, and that these skills are acquired before the age of four. This generates immediate questions: what are these skills? When, before the age of four, do children start to acquire them?

My research is based on the hypothesis that from at least age 22 months, children who watch movies must be starting to understand the strategies that movie-makers use to present characters, to establish diegeses and to construct narratives. This hypothesis provides an alternative to the working hypotheses that underpin most research on children and movies and indeed movie-makers: that as an iconic medium (Pierce, quoted by Wollen 1998, p83), movies constitute "a message without a code" (Barthes 1977, p17); that therefore we interpret them easily, on the basis of our perceptions of the real world. From this perspective, movies can – with some adjustments to content, pace and frames of reference – be made directly comprehensible to 18-month-olds and even younger (the argument of the "baby video" industry). But if movies really are that easy to understand, children in the age-group that I have studied would probably not be expending time and effort in viewing and re-viewing movies with the same amount of extreme concentration each time. Nor would they be watching movies that challenge their capacity to understand them. Film theory recognizes the immensely complex,

multimodal nature of movies, and has by no means finished arguing about what "making sense" of a movie actually does mean. So rather than categorising re-viewing behaviour – as most parents do – by either using the language of affect (as in "he really *loves* it") or by quasi-medical terms (as in "she's just *addicted* to it"), we could instead be investigating it on the basis of a hypothesis that it could be evidence of a learning process under way. It may well never be possible to identify and assess this learning process in the same way that we may be able to comment on a toddler's increasing verbal fluency, certify an eight-year-old's competence in riding a bicycle, or mark a 14-year-old's maths exam. It is a learning process that we can only infer through evidence, such as laughter or tension, or the questions they may ask and the comments they may make, that indicates a child's ability to follow an extended movie narrative.

Nevertheless, to investigate children's early engagements with movies does invite analogies with the "astonishing feat" (Britton 1970, p37) of language-learning. This is not to revert to the notion that movies literally have a language whose features can be matched with those of verbal language, but to recognise that the multimodal complexity of movies means that learning how to watch them may also be an astonishing feat, undertaken at the same time as language learning, but with nothing like the same level of support and reinforcement that children receive in their learning of verbal language. My own research questions, therefore, do not seek to test the hypothesis, but rather to gather data that support it, starting from the basic question, **how do children learn to make sense of movies?**

Investigating this has led me through many fields of inquiry, as described in Chapter 1: social learning and Intersubjectivity; the limited epistemology of the risk-benefit paradigm; developmental psychology and its different strands of learning *from*, or *about*, movies; cognitivist film theory; neuroscience and embodied cognition. Much of this account has foreshadowed my methodological decisions, as described in Chapter 2, to study my own grandchildren, to undertake a longitudinal, ethnographically-styled study, and to use video as my primary data-gathering tool.

CHAPTER ONE
LITERATURE REVIEW

INTRODUCTION

My research question, "how do children learn to make sense of movies?" lies at the intersection of several disciplines. Section 1.1 presents those aspects of film studies that have contributed to the epistemological position on which this thesis is based: that as complex, multimodal products of human cultures, movies demand considerable interpretive skills from their audiences. Although there is much debate about what these skills are, it is widely accepted in film studies that they are distinctive, that they need to be learned, and that movies are not a simulacrum of reality. Section 1.2 explains how I have drawn selectively from the vast literature on childhood to inform my understanding of the two children who are the subjects of my research. It has been important to include discussions of the social and cultural aspects of movie-viewing in early childhood. While for many film scholars, spectators are "schooled perceivers in contemporary Western culture" (Bordwell 1985, p34) sitting individually in darkened cinemas, the social context of viewing is actually a vital dimension of any audience experience, but particularly so for children watching at home. I have therefore also explored the literature on intersubjectivity and on the significance of the family in children's social and cultural development.

Section 1.3 deals with the ways in which children's relationship with movies have been studied, focusing particularly on what I term the "risk-benefit paradigm" that has long dominated Anglophone scholarship in this field. My research is deliberately positioned outside this paradigm and seeks to propose a different approach to children and movies that addresses the processes of learning rather than considering either the risks or the benefits of movie-watching.

Section 1.4 reviews the developing field of embodied cognition, which has led me into exploring some of the work in neuroscience on emotion and empathy. While sociocultural studies of children and media have rarely dealt with children under three, the concept of embodiment allows for a recognition of evolved, instinctive behaviours and a systematic analysis of their roles in two-year-olds' growing social and cultural identities and competences, enabling me to take a new perspective that extends and enhances existing research on this age-group.

A substantial part of this review thus draws together disciplines that rarely occupy even adjacent territories, let alone the same ground. Film studies contribute to my consideration of what "making sense of movies" might mean and early childhood studies contextualize my choice of the third year of life as an important period to study in addressing my research question, although the relative lack of research on two-year-olds in home settings poses an additional challenge. In bringing together film studies and early childhood studies, I worked across an ontological gap. For film studies, childhood is virtually non-existent. For early childhood studies, movies are usually of relatively marginal interest, despite scholars' concern with the child's social and cultural environments; except in the context of the "risk-benefit paradigm" which I discuss in Section 1.3. Theories based in embodied cognition have helped me to bridge this gap, enabling me to study the physical expression of two-year-olds' instinctive, emotional responses to movies together with the social contexts in which they encounter this major cultural form.

1.1 MOVIES

Davies observes that "knowing about television is not seen as particularly culturally valuable in our society, and tele-literate individuals are not considered to be in possession of specialised skills" (Davies 1997, p37). She counters these attitudes by suggesting that "it is possible that the processes by which the young mind learns language could be adapted to learning the codes of television" (ibid). The analogy, or metaphor, that movies have their own distinctive language, underlies most arguments in favour of the proposition that we have to learn how to understand them.

1.1.1 Is film a language?

The age-range I have studied – 1;10 to 3.6 years – is the period during which most children become fluent enough in verbal language to be understood by others outside their immediate family, thus gaining access to "the uses of language as reflecting and reproducing the accounts, stories, symbols, representations and legitimation processes of the culture" (Bruner and Haste 1987, p21). Might we broaden the concept of "language" to include the "cues" that Bordwell says films offer to the spectator (Bordwell 1985, p29), and the "secret language" hypothesised by Virginia Woolf in the quotation on my title page? Could we envisage an equivalence between movies and written language, so that learning to understand movies and learning to read could be discussed as analogous processes, as Davies suggests? In the context of public polemic, I have argued in the past that by the time they start school, children "have learned to decode the language of moving image media" (e.g. Bazalgette 2004): in doing so I assumed an easy

equivalence between, for example Bruner and Haste's account of language "as reflecting and reproducing the accounts, stories, symbols, representations and legitimation processes of the culture" (Bruner and Haste 1987, p21) and my own shorthand use of the same word to refer to the moving image's meaning-making processes, in order to advocate acceptance of the concept that both have to be learned in order to be understood. However, the concept of "the language of film", while well-established in basic film study courses[4] and given some credibility at that level by, for example, Bazin (Bazin 1967) and Monaco (Monaco 1981), has been debated extensively, though not conclusively, by film theorists (Metz 1972, Metz 1974, Spottiswoode 1950, reprinted 1973) in order to try and establish agreed analytic terms, analogous to the grammar of verbal language. Most of this debate ends up admitting that, while film does present us with "something like a language" (Woolf 1926 (1994)), it does not and cannot have a fully developed language with credible equivalents of vocabulary and syntax. However, this thesis assumes that there are syntactical rules in movies that have to be learned in order to make sense of movie narratives: an assumption that is absent from much of the research on children and media. It is this absence that motivates the title of the thesis: for many, the "language" of movies remains secret. It is in fact impossible to prove that children are learning these syntactical rules – perhaps better termed "formal features" – before they can articulate their interpretations of movies with any fluency, but I argue that it is possible to infer this from my observations of gains in narrative understanding by the age of 2;8 (see Section 5.6.2) and from the children's willingness to watch full-length feature films and to talk about them afterwards by the age of 3 (see Section 5.6.1).

1.1.2 Formal features of movies

A footnote in Branigan's 1992 book *Narrative Comprehension and Film* implies that the narrative functions of the meaning-making devices of movies are understood by children long before they learn to name them (if they ever do):

> It seems remarkable that no one has undertaken to discover what special problems of narrative comprehension may be posed to a child by filmed narratives. For example, when and how do children understand an eyeline match, screen direction, cross-cutting, an unusual angle, off-screen space, or non-diegetic sound? (Branigan 1992, p225)

But Messaris argues that many filmic devices, including for example eyeline matches, jump cuts and point of view shots, actually mimic people's everyday perceptions and instinctive behaviour

[4] For example http://www.kenstone.net/fcp_homepage/language_of_film.html; http://nofilmschool.com/2013/07/scorsese-essay-explains-importance-of-visual-literacy, etc. (retrieved 26th August 2017)

(Messaris 1994). He therefore suggests that "research with children is of questionable relevance to the issue of a specifically cinematic literacy," pointing out that "the children who participate in these studies are already veterans of many an evening spent in front of the tube" (pp 71-72). This would indicate that, if "cinematic literacy" exists at all, it is acquired effortlessly at a very early age. I reject the implicit conclusion here, that if learning is independently acquired and happens early on, it must also be so simple as to be not worth studying, but I accept Messaris' argument about the instinctiveness of many responses to film, and return to this in Section 1.4. The parallel between instinctive behaviour and a movie device such as the point of view shot is well illustrated by Bruner's account of how, even at nine months old, a child "looks out along the trajectory of an adult's 'point' and, finding nothing there, turns back to check not only the adult's direction of point but the line of visual regard as well" (Bruner 1990, p75): this is also later confirmed by the "mirror neuron" findings that have strengthened the case for embodied cognition (see Section 1.4.4, below). It does not, however, mean that the meanings of movies are fully accessible to anyone on first viewing.

Film theorists from the early 20th century onwards have produced a body of textual analysis that demonstrates movies' densely multimodal nature, even though many studies have only dealt with visual modes such as lighting, framing, colour, depth of field, camera angles and movement, mise en scène and editing (e.g. Bazin 1967, Branigan 1992, Eco 1976). Studies that additionally provide more than occasional glances at equally vital modes such as performance, costume, dialogue, music, sound design, duration and, in many cases, animation styles, are much rarer (e.g. Bordwell and Thompson 1980, Chattah 2015, Chion 1994, Feagin 1999, Lambert 1966). That I have been able to list fifteen modes here, each of which merely signposts a large and complex field for critical inquiry, emphasises the limitations of designating movies by simplistic labels such as "visual media," and of the short and somewhat arbitrary lists of "formal features" that have been used in developmental psychologists' experiments on children's comprehension of movies (see Section 1.1.3). Textual analysis of movies – exploring the detailed ways in which these modes are combined to generate meanings – was particularly prevalent in film studies during the 1970s and 80s, following the first publication of Wollen's influential book *Signs and Meanings in the Cinema* (Wollen 1998), but it remains a significant tool of film studies, particularly at introductory levels of study where it functions to open students' eyes to the complexity of movie texts and the wealth of resources available to movie-makers (e.g. Phillips 2000). I refer to it here simply to establish the nature of the hermeneutic

challenge that even apparently "simple" movies, such as those made for children (see Section 3.1.1), present to their viewers.

1.1.3 Children and the formal features of movies

Some developmental psychology scholars in the later 20th century recognised that research about children and television ought to include consideration of the medium's formal features. They ask questions that have also occurred in my own line of inquiry, and some at least recognize that very young children ought to be included in research studies. For example Collins (1975) wonders "why … older children (say, 11 or older) show less pronounced attitudinal and behavioral effects of television than younger children" and suggests that "older children appear less affected than younger ones because they comprehend the complexities of television dramatic plots more effectively and, therefore, are more selectively affected by television portrayals" (Collins 1975, p35). Although Collins' focus is on the effects of these features rather than the challenges of learning how to interpret them, he is implicitly acknowledging that television does have distinctive codes and conventions through which it constructs meaning, and implies that it takes time to learn these fully. Wartella's collection of texts on media and cognitive development (Wartella 1979a) includes Collins' account of further research on these lines, in which he admits that

> …it is conceivable, of course, that important qualitative changes occur earlier in development and that the second graders … represent a transition from earlier developmental states. This hypothesis cannot be evaluated without data from younger children, who have not been included in the research program so far because the markedly different procedures needed to test them would make comparison with older groups difficult. (Collins 1979, p37)

Wartella herself expresses concerns about the developmental models then widely in use and about the prominence of experimental methods: "obviously," she says, "longitudinal studies would be most useful" (Wartella 1979b) in attempting to study the development of younger children's "communicative activities" – an observation that would be repeated by others in later years (Lemish and Rice 1986, Linebarger and Vaala 2010, Moses 2008). But these scholars all accept the developmental approach which implies that understanding movies is part of a natural process of maturation.

However Salomon, in another chapter in Wartella's book, frames an intriguing set of questions about the specificities of television and their potential relationship to cognitive development, and does posit the possibility that the ability to interpret what he calls "symbolic modes" – a

very wide generalization which he uses in order to apply it across all art forms – is acquired through learning:

> What is the utility of specific skills which are cultivated by particular symbolic elements of the media? Do they develop at the expense of other skills? How can their development be facilitated? … If children can acquire particular symbolic modes by observational learning (say, as the result of imitating skill-supplanting elements) can they also learn to represent the world to themselves *in terms* of these elements? Thus, can some of the media's symbolic elements become internalised and used as 'tools of thought'? (Salomon 1979, p80)

Salomon identifies some of the key singularities of movies, for example montage, and "the spatialisation of time" (p 58); notes that children's learning about media "is hardly ever accompanied by any tutoring" (p 62); and asks questions about the further learning implications of children's early media encounters. These are all issues that I discuss in this thesis.

Bryant and Anderson's edited collection of studies, drawn largely from developmental psychology in the 1970s and 1980s, addressed "the act of television viewing itself"(Bryant and Anderson 1983, p xiii) before the expansion of the domestic VCR market (in the UK) and cable (in the US) radically changed the nature of most children's access to this medium, by enabling re-viewing at will. A key feature of this book is a determination to oppose the then dominant idea among developmental psychologists that visual attention in young viewers "is primarily reactive and controlled by the television set," arguing instead that "visual attention is actively under the control of the viewer, and is in the service of the viewer's efforts to understand the television program" (Anderson and Lorch 1983, p1). One implication of this argument is that television has distinctive features that need to be understood, so several of the chapters address questions about the specificities of televisual codes and conventions. For example, Meringoff et al (1983) are interested in "the distinctive cognitive consequences for children of their experience with television and other story-bearing media" (p 151) and recognise the relevance of classical film theory to their research questions:

> Descriptions of the specific ways that editing techniques are used to suggest associations between shots and to imply transitions in time and space have aroused our curiosity about children's ability to 'read' across film and television story lines. For instance, dissolves and jump cuts imply the passage of time only to those audience members who understand the meaning of those conventions. (Meringoff et al. 1983, p157)

But, like most of the book's contributors, their investigation involved older children (in their case 6-7-year olds and 10-11-year-olds). Huston and Wright ask (again, of older cohorts of children), "What's attractive about television? How does the child learn the codes of television and

become increasingly sophisticated in understanding its content?" (Huston and Wright 1983). But they admit that "…one interpretation of our failure to find large developmental differences might be that we have not sampled children early enough to locate the critical period for familiarisation with television" (Huston and Wright 1983, p43).

Like Collins in 1979, the contributors to Bryant and Anderson (1983) recognised the need to study younger children but clearly did not want to tackle the methodological challenges of trying to elicit awareness of movie codes and conventions from children who would be too young to articulate them. They were less conscious of the further limitations imposed on their inquiries by their very schematic accounts of what the "codes of television" are, as well as by their commitment to experimental methods, their cognitivist approach and their reliance on "age and stage" models of child development.

Two theories that are widely used in the developmental psychology literature on children and television are "attentional inertia" (i.e. that attentional engagement tends to deepen, the longer a gaze at the screen is sustained), and "the video deficit" (i.e. that infants and toddlers learn more readily from a live person than from television/video): both originated with Anderson (respectively, Anderson et al. 1979, Anderson and Pempek 2005). The research supporting the video deficit theory is almost entirely experimental, using imitation as evidence of learning, thus discounting a wide range of research that emphasizes the social, intersubjective processes of infant and toddler learning from live people (reviewed by Trevarthen and Aitken 2001) that are in any case very different from the instructional videos used in the experiments. Doubleday and Droege express some skepticism about the evidence for attentional inertia (Doubleday and Droege 1993), although Richards' account (Richards 2010, p213) makes a more convincing case by suggesting that attentiveness may well grow as a viewer's interest is aroused. Nevertheless, both theories have continued to be accepted and used as the basis for research (e.g. Barr and Wyss 2008, Pempek et al. 2010).

A general problem for this strand of research is the scholars' tendency to regard television as a visual (rather than audiovisual) medium, whose defining features reside in the technology – in particular, the screen – rather than in the institutional or aesthetic features that distinguish, for example, different genres and intended audiences. In addition, they make little reference to toddlers' own interests in re-viewing material, and discussions of "response" and "attention" focus largely on gaze, with little consideration of features such as bodily tension, posture, gesture (apart from pointing) and choice of position in relation to the screen. There is also some

confusion between "television" (i.e. material that is broadcast, either live or pre-recorded) and "video" (i.e. pre-recorded material that is shown on a monitor via a playback device) – a crucial distinction in the context of family or peer-group viewing, where discussion or interruptions are more likely, but can be managed easily when watching pre-recorded material or using a "smart TV" or portable device.

Despite the problems cited above, in much of the developmental psychologists' methods and findings on children and movies, I have reviewed those examples of their work where they have addressed questions like mine but have arrived at very different – and often ambivalent – conclusions, given their very different methods and ontological positions. It is also important work in the sense that it informs public discourse and parental attitudes, particularly in Anglophone countries. It is nevertheless a predominantly North American tradition, focused mainly on American movies for children, many of which differ markedly from those produced in other parts of the world.

1.1.4 Studies of movies for children

There has been relatively little serious analysis of movies for children, particularly children's television. Grodal's chapter on feature films for children situates them within larger arguments about cultural variation and human evolution, but offers many useful insights on how successful movies for children appeal to innate emotions such as caring, and the narrative roles of what he terms "functional bundles" such as "evil witch" or "shield" that can recur in different guises, but with the same narrative function, in very different movies (Grodal 2009, Chapter 2). Bazalgette and Staples attempt to differentiate between the mainstream, family-oriented feature film and what we argue are more genuinely "child-oriented" movies, although our example, *Where is My Friend's House?* (dir. Kiarostami, Iran 1987), is a somewhat esoteric choice (Bazalgette and Staples 1995).

Bignell discusses the *Teletubbies* series of television programmes for toddlers from a postmodernist and rather ironic perspective (Bignell 2005), while Briggs describes his son's viewing of the same series in autoethnographic study of childcare practices (Briggs 2006): both use detailed textual analysis to investigate the appeal of this series. Buckingham's account of the production and media reception of *Teletubbies* (Buckingham 2002a) signals the effects of the risk-benefit paradigm (see Section 1.3, below) in the programme-makers' concern to claim educational benefits while at the same time ensuring that children engage in "active viewing" –

described as “moving around, dancing, playing and singing along, predicting what will happen, asking and answering questions, and so on” (p56) with the implicit subtext that television-watching need not be passive, as is widely assumed (e.g. Leonard 2012). Buckingham acknowledges that analyses of children’s movies from an adult perspective “are easy games to play; but they tell us very little about how children themselves interpret and relate to what they watch” (p58): a knowledge gap which this thesis addresses. Howard and Roberts do study 14-24-month-olds watching a *Teletubbie*s programme (Howard and Roberts 2002), and note the level of attentiveness that the children showed, and their intense pleasure in recognizing familiar features of the series. They also anticipate the embodied cognition approach (see Section 1.4, below) in questioning “the traditional cognitive/affective binary” (pp334-5). But they are concerned with describing children’s responses to television (as opposed to my concern with analyzing these responses in in search of indicators about how they learn to watch it).

Steemers and Davies both provide detailed accounts of the institutional context of children’s television in the UK. Steemers uses interviews with producers of preschool television (Steemers 2010), which usefully indicate the lack of consensus about what constitutes appropriate programming for children (see also Section 3.1). Davies compares her institutional history of BBC children’s programmes with the findings of a large-scale survey of 5-13-year-olds (Davies 2001). The insights she records from this age-group make the salient point for this thesis that even the youngest of them can be knowledgeable and critically incisive about the television they watch, which I suggest would imply that the basis of these skills must have been established when they were younger still. In an earlier book (Davies 1997), Davies does indicate that this happens: “the fact that children do seem to learn to read television effortlessly does not mean that no teaching is going on” (p 37). But I would take issue with the term “effortlessly” here: my findings indicate that two-year-olds invest a great deal of energy in trying to “read” movies. The more difficult question is about what this “reading” – and learning how to do it – actually involve.

1.1.5 Children’s understanding of narratives

Evidence of the ability to follow movie narratives could be taken as a key sign that at least some learning about the formal features of movies has already taken place: learning that would happen in parallel with, and could be related closely to, an increase in verbal fluency. This progression is indicated in Chapter 3, discussed further in Chapter 5 and summarized in Chapter 6. In thinking about this, I have therefore drawn on accounts of children’s language

development and their engagements with other symbolic forms through play and social interaction.

In her study of language in cognitive development, Nelson traces the links between children's early experiences of episodes such as participatory routines, games and songs and the later emergence of the "linguistic/narrative world" (Nelson 1998, p91). She points to the importance of cultural artefacts such as clothes, furniture, toys, pictures, books, pretend play, and communication through shared gaze and pointing, as the foundations for symbolic communication; and to the importance of routine events in helping to develop the ability to hold in mind a potential sequence of actions. In her chapter "The Emergence of the Storied Mind" (pp 183-220) she acknowledges that "story understanding at 2 years has not been extensively studied, although it is widely observed that children hear books 'read' to them by parents from as early as 12 months" (p207). She emphasizes the significance of narrative both as a discourse genre and as a form of thinking, enabling children to handle temporal and causal relationships; she also recognizes the children's need for the repetition of stories.

All Nelson's arguments can be used in addressing children's experience of movies, even though she makes no reference to movies at all. What I see as a similar "structuring absence" (Dyer 2002, p83) characterizes Lancaster's findings from her fascinating study of a two-year-old making drawings and marks with her father (Lancaster 2001), based on detailed analysis of a video recording of the event. Her arguments in relation to the construction of still images closely parallel those that I make in relation to movies: "that young children are capable of complex abstract reasoning which is rooted in their physical and emotional engagement with the world", that "children are faced with a major interpretative problem when becoming familiar with symbolic images" and are "motivated by an expectation of significance about the symbolic systems they encounter" – a similar formulation to Bruner's phrase "readinesses for meaning" (Bruner 1990, p72) – which she does not tie only to language learning. I also saw, as she did, that the twins' "interpretative activity [is] mediated through physical and bodily resources, of which gaze is of major significance" and, using video as she did, I found "that the boundaries between young children's bodily and cognitive activity can be seen to be flexible, making many of their processes of reasoning and interpretation about systems of symbolic representation accessible to description" (quotations from abstract on p131). Kress also describes children's early drawings and makes a similar argument about the ways in which children will select salient aspects of what they want to represent: for example a child may use circles to represent a car, if

for him at that moment the wheels are the most important feature of the car (Kress 1997, pp14-15).

The absence of any reference to movies in these studies is not unusual in accounts of children's learning about symbolic systems (e.g. Bruner 1983, Halliday 1975). Saxton does refer to television (Saxton 2010, pp87-8), but only to ask whether children can derive a benefit from it in the form of language learning. The subtext here is that movies do not have the same cultural value as books and, because their meanings are supposedly accessible to all, they are not relevant to explorations of children's "expectations of significance".

A different way in to questions about narrative understanding can be found in the concept of modality judgments, which I take from Hodge and Tripp's proposal that the question of whether or not children believed that what they saw on television was "real" could more usefully be approached through the concept of "modality" as used in linguistics to "indicate degrees of certainty of a message." (Hodge and Tripp 1986, p 104). In other words, it makes better sense to investigate children's judgments about how real (or true) they think something in a movie is meant to be, rather than asking whether they think it is real or not, given that the notion of "pretend" is a complex issue in children's play. Harris's account of children's imagination is extremely pertinent here (Harris 2000). He argues that "the capacity to imagine alternative possibilities and to work out their implications emerges early in the course of children's development and lasts a lifetime" (p xi). Using observations of children and parents, he demonstrates that pretend play starts in the second year of life, and suggests that it is the foundation of "absorption in novels, films or theatre" in later life (p6). He offers a developmental hypothesis, in which very young children become completely absorbed in a story or a movie and "appraise it as if it were real" (p78). His counter-argument to the idea that children may "confuse fantasy and reality" (a recurrent trope in adult anxieties about movie effects – see Sections 1.3 and 5.5.1) is that children are perfectly well aware that fictional narratives and pretend play are not real, but that "this ontological distinction is not deployed in processing make-believe or story episodes" (ibid). Coleridge's account of the same phenomenon, expressed as "willing suspension of disbelief," equates it with "poetic faith" (Coleridge 2004 (1817), Chapter XIV); Harris describes it as an essential part of humans' early cultural development, associated with the paintings, bodily ornaments and burial practices that began to appear in the Upper Paleolithic period (p x). It could be argued that the ability to envisage alternative scenarios and their consequences must also have conferred evolutionary

advantages on those early humans who were good at it, for example in hunting or shelter construction.

The three features of pretence that Harris lists (p10), and says are all understood by two-year-olds, can be closely linked to an understanding of narrative. "Pretend stipulations" are like diegetic rules (see Section 3.1.3): they establish what is and is not possible in the imaginary setting. "Causal powers" operate in pretend scenarios to determine the results of an event or action; the "unfolding causal chain" contains the inexorable results that follow from the exercise of the first two features. Harris thus provides a way for me to link the pretend play that I observed – whether or not it was linked to movie-watching – to the children's growing ability to follow narratives.

Bordwell offers a different approach to understanding narrative, using constructivist theory to propose that viewers create movie narratives in their minds as they watch (Bordwell 1985). But writing from an embodied cognition perspective (see also Section 1.4), Wojciechowski draws on Dehaene's account of consciousness (Dehaene 2014) to problematize this process, given his argument that conscious access imposes a narrow bottleneck on our thoughts: "what reaches our conscious mind is la crème de la crème, the outcome of the very complex sieve that we call attention" (Wojciechowski 2015, p125). In other words, Bordwell's thesis relies on prodigious and probably impossible feats of memory: no one on a single viewing can take in all of the densely multimodal discourse of filmic narrative, yet experienced film-viewing adults do manage to keep following a movie narrative of 100 minutes or, in the case of box sets, much more. To solve this contradiction, Wojciechowski proposes the concept of diakresis: "a *separating out* of information that is salient enough to enter into our conscious awareness, and the distinguishing of the salient from everything else" (ibid; and see Section 5.6.1). To illustrate this in action, she provides a transcript of conversation between two people as they watch the opening sequence of *Titanic* (dir Cameron, US 1997) and exchange their diakretic concerns, showing "the transient, 'floating' quality of subjective and intersubjective filmic experience" (p137): an adult version of some of the viewing events I describe in this thesis. Diakresis can also be seen as analogous to Lancaster's and Kress's accounts of the way two-year-olds select their own decisions about salience in their drawings.

1.2 CHILDHOOD

By focusing on children in home settings, and investigating the development of their relationship with one major cultural form, I have had to draw very selectively on studies of childhood that deal with the social and cultural contexts of child development, and with children's learning. An exception, despite its reliance on laboratory settings (see Section 2.1 for my comments on this), is the major study of one-and two-year-olds under Kagan's direction in the late 1970s (Kagan 1981) which provided me with insights on key developmental changes in two-year-olds, such as: their sensitivity to violations of normative standards (see Section 4.2) and their growing "disposition to detect the dimensions shared by events, and to respond to that recognition by labelling" (Kagan p89; and see Section 5.6).

1.2.1 Studying children

I share Prout's interest in the possibility of developing childhood studies as a multi- or inter-disciplinary field, taking account of evolutionary perspectives and the sociology of the body (Prout 2005, Chapter 4), which was one of the prompts that led me to investigate the field of embodied cognition (see Section 1.4, below). I also share to some extent the critique of two of the "central commitments" of childhood studies that Hammersley interrogates: the assertion that children should be studied in their own right, and that children should be regarded as active agents (Hammersley 2017). I understand the ethics and politics of the principle "in their own right" and am critical of experimental methods and deficit models of childhood; like Prout, I find the concept of "agency" inadequately theorized in accounts of "children's agency" (Prout 1999, p16).

The tradition of respecting the rights and interests of learners dates back at least to Comenius in the 17th century (Pinder 1987), and in the field of research on children and media can now be seen in sociocultural scholars' emphases on popular culture. As examples of popular culture, Marsh refers to the texts "embedded within children's literacy practices in the home" and contrasts these with what they are expected to engage with in school (Marsh 2004). Buckingham offers a more politically pointed version of this contrast in his argument for the importance of popular culture both as "a key focus of [the] struggle for control" of schools and the curriculum (Buckingham 2007, p97) and several scholars stress the importance of respecting children's own cultural preferences, including popular cultural forms, as a legitimate aspect of formal schooling (e.g.Kissel 2011, Marsh 2000, Marsh and Millard 2005, Shegar and Weninger 2010). By citing consequent benefits in terms of children's increased motivation and improved

learning outcomes, and rejecting the focus on risks in public discourse about children and media, these arguments can be associated with the "risks and benefits" paradigm that dominates Anglophone research on children and media (see Section 1.3).

Children undoubtedly do have cultural preferences, which I discuss – and respect – in this thesis; but I share Hammersley's view that "most of the variation [in children's experiences and perspectives] will reflect characteristics that they share with adults" (Hammersley 2017, p115). In pointing out the continuities between infants and young children and adults in the development of social understanding and behaviour, Daum et al indicate that the distinction between children and adults may be less sharp than is often supposed (Daum, Somerville and Prinz 2009). In particular, two-year-olds' cultural preferences are exercised almost entirely amongst products and activities that have been selected by adults such as toys, clothes, DVDs, music, television programmes, outings, play dates, cereals and snacks. We could therefore reasonably add, to the "nested" ecological settings which Bronfenbrenner argues for in the study of human ontogeny (Bronfenbrenner 1977), the enormous, powerful setting constituted by the commercial world of child-oriented products which is initially negotiated by children's primary carers.

1.2.2 "Predispositions to culture"

Because the age-range I studied most intensively – 22 to 30 months (see Section 2.2), i.e. approximately the third year of life – appears relatively infrequently in the literature (Rowe 2008), I have broadened my searches to include studies of children who are younger than two. All three dimensions of my study – social, cultural and learning – have been the subject of intensive debate and changing paradigms. One interesting example of such debates is found in Tomasello et al and the numerous responses to their paper (Tomasello et al. 1993). Tomasello et al work with a particular view of culture, which they see as something that children "acquire" through learning: "Cultures are most clearly distinguished from other forms of social organization by the nature of their products - for example, material artifacts, social institutions, behavioral traditions, and languages" (p495). They are sharply criticized for this by Bruner:

> Only in the most banal sense does one 'acquire' culture: one enters it or is enabled by it or, to borrow Geertz's (1973) term, is constituted by it. Culture is not a set of responses to be mastered, but a way of knowing, of construing the world and others. To enter culture is not to add some element to one's 'natural' repertory, but to be transformed (p516).

Ingold adds another perspective:

> …mind and culture are not separate entities, lying on either side of a dichotomy between individual and society, but are rather mutually implicated in the processes by which human beings make their way in the world. In their attempts to understand these processes, anthropologists and psychologists have (or should have) the same objectives" (p526).

Writing about newborns, Trevarthen contributes an argument about "innate predispositions to culture" (p535), seen first in mother-infant intersubjectivity, and later in the ability to understand stories and thus to participate in the routine daily activities that he calls "the pragmatic tasks of culture." I see these three perspectives on the social/cultural debate as complementary, and salient in the context of what I observed: the twins watched movies, which are cultural artefacts, but which also invited them to witness a variety of "ways of knowing" in the form of characters' predicaments and quests. At the same time, the social context of immediate family members with whom they watched provided explanatory comments at one level, but at a deeper level, ways of behaving and responding to movies that were part of this particular family's cultural practices (see Chapter 5). But the sociocultural approach is not enough in a context where two-year-olds are clearly responding – non-verbally – to movies in individual and unexpected ways, and making determined choices about what to view and re-view: phenomena that cannot simply be ascribed to the sociocultural context. This is where the embodied cognition perspective has made a useful contribution to this study, as I discuss in Section 1.4.

1.2.3 Learning and play

For similar reasons, the kind of learning I investigate in this study does not readily align with much of the literature on early childhood learning, primarily because it cannot be clear, in the case of two-year-olds watching movies, what they actually are learning. Since they must have acquired enough familiarity with the formal features of movies, particularly through repeated viewings of the same material, to be able to follow and enjoy some narratives by the age of 3, this allows us to infer that learning has taken place, and also, sometimes, to infer where it may still be limited (see for example the *Finding Nemo* discussion in Section 5.6.1). For the purposes of this study I readily acknowledge sociocultural propositions such as Malaguzzi's statement that "children learn by interacting with their environment and actively transforming their relationships with the world of adults, things, events, and, in original ways, their peers. In a sense, children participate in constructing their identity and the identity of others" (Malaguzzi 1993), but he is primarily considering children in a nursery environment, not at home watching movies. The children did interact with movies and actively transform their relationship with

them; and in imitating characters on screen they experimented with aspects of identity, and to some extent this took place in co-viewing contexts which clearly fostered their understanding of the stories they were watching. But there was also an individual, idiosyncratic dimension to each child's viewing which, as I argue later, frequently related to instinctive emotional responses and to imaginative, playful engagements with what they were watching.

Vygotsky's discussion of the Zone of Proximal Development (ZPD) in relation to children playing, even when by themselves, is also relevant here: "in play a child always behaves beyond his average age, above his daily behaviour; in play it is as though he were a head taller than himself" (Vygotsky 1978, p102). I am interested in extending this account of play and the ZPD into the world of movie-watching, based on observations of the children's playful engagement with the screen and their interest in movies that presented them with interpretive challenges. Vygotsky sees play as "a major source of development" (p102), whose "essential attribute … is a rule that has become a desire" (p99), but he describes play with physical objects such as sticks: I investigate playful engagement with animated objects on a screen, either through imitation or actual touching, which may also be stimulated sometimes by comments or suggestions from adults in the room, but often seems to be completely individual. The question of "rules" in play here becomes an interesting one, in terms of considering what the rules are and how they are originated (see also my discussion of Harris in Section 1.1.5). At a later stage, playfulness in relation to movies frequently involves identification: claiming to be a character and to act out their typical behaviours. Again, rules play a role here, negotiated between the child and how they decide to interpret the character. Drawing on Bakhtin, Edmiston describes such negotiations as "authoring ethical identities", adopting some features of fictional characters and resisting others in a process that is almost experimental (Edmiston 2008, pp21-23). Edmiston's starting-point is observations of his own son from four years old onwards. There are added complexities, where identification with fictional characters is concerned, when observing much younger children, who are boy-and-girl twins, such as the question of gender, who is "allowed" to pretend to be which character, and how these negotiations may be refereed, or even instigated, by the adults watching with them (see Chapter 5).

Bruner invokes the ZPD in relation to mothers' talk with children as a way of enabling children to hear utterances in different contexts and thus to understand what language can do (Bruner 1986, Chapter 5). He also suggests that even a two-year-old "seems not only to negotiate sense in his exchanges with others but to carry the problems raised by [adult] ambiguities back into

the privacy of his own monologues" (ibid. p64). These insights can be extended to children hearing adult utterances in relation to the movies they are watching together. Likewise, Bruner's discussion of "joint attention" (Bruner 1983) provides a possible way of interrogating viewing events in which adults and children are both attending to the screen and at the same time attending to each other's' reactions: sometimes explicitly and directly (see Sections 3.2 and 3.3); sometimes apparently ignoring each other while still able to hear them.

1.2.4 Intersubjectivity

The title of Chapter 5 of this thesis is taken from Trevarthen's comment that "being part of culture is a need human beings are born with" (Trevarthen 1995, p5). His paper on infants' and toddlers' cultural learning (Trevarthen 1995) focuses on "what can be achieved cooperatively in companionship, through conversational negotiation" (p7). He describes the role of cultural forms such as music, jokes and games in helping to form the "protolanguage" through which the one-year-old can communicate with others through "vocalisations, facial expressions and gestures" (p11). Although he focuses mainly on infants and on toddlers under two, I found his insights – drawn from observational studies, which in some cases included his own family – illuminating in terms of the twins' experiences prior to the period of my research, and how these were sustained. For example, his assertion that "what the mother shows or says is picked up and it does influence what the [18-month-old] attends to and plays with" (p12) brought into focus the adult behaviour that was visible in the viewing events I recorded, and led to discoveries of minute instances of "picking up" (see for example Section 4.2.1). Being "curious about what children *want* to do – about their motivation" (p15) connected with my own principles as a teacher (drawn from, for example, Richmond 2017, Steedman 1982), turning my attention to the ways in which the twins negotiated – and evolved – their own motivations in the intersubjective contexts of shared viewing.

Trevarthen and Aitken, in their major review of research on infant intersubjectivity (Trevarthen and Aitken 2001) anticipate the arguments that are fundamental to embodied cognition (see Section 1.4). Stating that "we believe that the existence of specialized innate 'human-environment-expectant' social regulatory and intersubjective functions in the infant mind has been firmly established" (p4), they go on to reject Cartesian dualism (p20), citing Gibson (Gibson 1986 (1979)), and agreeing with neuroscientists such as Panksepp (Panksepp 2004) that emotions, "hitherto deemed complex, nonbasic, and acquired will have to be reinterpreted as primary and necessary to the child's entry into the social/cultural world, with all the rational,

linguistic and pragmatic conventions that the world offers" (p20). Also, after discussing the substantial evidence of "mirroring" activity in newborns, they cite Rizzolatti and Arbib's account of the discovery of mirror neurons (p23, and see also Section 1.4.1) who claim that "human language (as well as some dyadic forms of primate communication) evolved from a basic mechanism that was not originally related to communication: the capacity to recognize actions" (Rizzolatti and Arbib 1998, p193). Trevarthen and Aitken take this further in suggesting that a sense of narrative is already present in very young infants:

> The fascination that even 2-month-olds show for the narrative of feelings in protoconversations with a parent may hint at a further, much more important, function of innate human emotions. The feelings they project into the engagement seem to take on a life of their own, as if both adult and infant are each tracking the experiences of imagined protagonists - an other or others, different from themselves. Such a fictitious emotional experience appears even more clearly in the poetry of baby songs and nursery rhymes. Maybe the infant's absorption in the drama of the mother's talk or song is foreshadowing the wonderful inventive imagination that motivates fantasy play in toddlers (p20)

Echoing Hardy's claim for "narrative as a primary act of mind" (Hardy 1977), this offers an important perspective for interpreting toddlers' engagements with narrative movies (see Chapter 5).

1.3 THE RISK-BENEFIT PARADIGM

In 1917 an independent inquiry on children and the cinema, commissioned by the National Council for Public Morals, with the backing of the cinema exhibition sector (NCPM 1917), concluded that "the cinema, under wise guidance, may be made a powerful influence for good; if neglected, if its abuse is unchecked, its potentialities for evil are manifold." (p xxi). Much of the subsequent research on children and movies, at least in the Anglophone world, has taken place within the epistemological position marked out by that conclusion, in which movies are not considered as cultural products like literature, fine art or music, but rather as a kind of undifferentiated and uncontrollable force. Research questions about them can thus be positioned somewhere on a continuum between the risks that movies are assumed to present to children, and the benefits that they may offer, such as vocabulary acquisition or reasoning skills (e.g. Lauricella, Gola and Calvert 2011, Linebarger and Piotrowski 2009). I summarise here some key features of this paradigm, to clarify why I am positioning my study outside it.

Larger surveys and reviews have tended to settle in the middle of the continuum, as the NCPM's summary does. Ninety years later, Norma Pecora's introduction to a review of five decades of

US research on children and television (Pecora et al. 2007) struck a similar balance between risk and benefit: children "spend a great deal of time with content that has no known value to their development, but when they watch programs designed to provide education and information, they can profit considerably." (p 60). Similarly, Rideout et al's huge telephone survey for the Henry Kaiser Family Foundation (Rideout, Vandewater and Wartella 2003) assembled both positive and negative findings about parental behaviour and attitudes. But being in the middle of the continuum does not constitute neutrality: it is merely one of many possible positions in relation to risks and benefits.

The risk-benefit paradigm has been underpinned by research in the field of developmental psychology, particularly in the USA, on children's relationship to television. Linking questions of risk and benefit to television-viewing, while ignoring film, may be attributed to several factors. One may be that the peak of risk-benefit anxieties in relation to film-viewing had long been passed. Staples' chapter, "Flagrant and Dangerous Evils" (Staples 1997, pp29-41) describes the moral panics about children's cinema-going that flourished in the UK in the 1930s. These diminished in the face of the growing popularity of children's Saturday morning cinema clubs, and the success of films specifically aimed at child or family audiences. The major difference between cinema-going and television-watching in this period is that the former had to involve deliberate choices such as going out and buying tickets, while the latter took place in the home. More recently, the practice of having the television on all the time is seen by some researchers as particularly deplorable (e.g. Vandewater et al. 2005) and the implicitly passive term "exposure" is widely adopted by researchers in place of the more active "watching" (e.g. Christakis et al. 2004, Mar, Tackett and Moore 2010, Mistry et al. 2006, Stevens and Mulsow 2006), implying that television is an unavoidable presence, like the weather.

1.3.1 Risks and suspicions

At the risk end of the continuum, studies of children's television viewing have focused on effects in different areas. Many scholars claim to have found evidence of negative effects on children's development, behaviour and cognitive development (e.g. Christakis et al. 2004, Corcoran and Schneider 1983, Kirkorian et al. 2009, Kirkorian, Wartella and Anderson 2008, Masur and Flynn 2008, Mistry et al. 2006, Zimmerman and Christakis 2005). Others have focused on television's supposed negative effects on reading (e.g. Vandewater et al. 2005); theory of mind (Nathanson et al. 2013) reality judgments (e.g. Hui, Boguszewski and Lillard 2015); and language development (e.g. Zimmerman 2007). However, a subtext of suspicion is also evident in some

research that claims a more "balanced" view. For example, John and Dorothy Singer's overt position over many years of research (Singer and Singer 2005, Singer 1977) is that it is only the nature of some television content and excessive amounts of viewing that cause problems (Singer and Singer 2005, p82), but nevertheless they contrast the "ease of television or of the simple point-and-click video games" with "the more demanding but 'internalising' task and *promise* of reading" (p 6: their emphasis); they assert that television "competes for 'channel space' in the cognitive processes and internalisation of imaginative thought in children" (p 8) but also that "when we read, a more complicated cognitive process occurs than when we view television" (p 61). The Singers do not support these statements with research evidence: they simply display a persistent conviction that, while allowing that some of its content may be educationally useful, most television is shallow and meretricious, and therefore conclude that viewing needs to be carefully managed to minimise its risk to children.

A more nuanced "risk" subtext, simply acknowledging that some media-related behaviour could be detrimental to children, can be seen in major, well-researched studies, such as the large-scale EU Kids Online project and linked papers (Livingstone and Haddon 2009, Livingstone, Haddon and Gorzig 2012, Livingstone et al. 2017). In the context of the extensive media coverage that is given to more extreme publications about media risks to children (e.g. Keim 2011, Leonard 2012, Lotus , Palmer 2010, Sigman 2007), such studies aim to place risk in a better-informed context. It is notable that since the development of social media and portable devices in the early 21st century, the focus of "risk" has shifted from television to digital technologies, conforming to Winston's account of the technological determinist vision, in which popular discourse frames each new technology as a force "both elemental and unnatural" which somehow "emerges" of its own accord (Winston 1996, p2).

1.3.2 Benefits: learning from television

At the "benefits" end of the continuum, research focuses on benefits that relate to established educational and social priorities: literacy (Browne 1999, Marsh 2000, Robinson 1994); general learning and test scores (Bogatz and Ball 1971, Gentzkow and Shapiro 2006); family interaction; (Brody, Stoneman and Sanders 1980, Frazer 1981, Messaris 1983); language acquisition (Lemish and Rice 1986, Linebarger and Walker 2005); theory of mind (Mar et al. 2010); and moral judgments (Mares and Acosta 2008).

Substantial amounts of research from the early 1970s onwards sought evidence that children could learn from "educational" television, particularly the Children's Television Workshop's *The Electric Company* and *Sesame Street* (e.g. Bogatz and Ball 1971, Lesser 1972, Salomon 1974, Fowles and Horner 1975, Murphy 1991). Fowles and Horner (who were, respectively, CTW's Associate Director of Research and Director of Research) went further than most in making large claims for the impact of CTW programmes over the previous five years (Fowles and Horner 1974). Asserting that the 1972 restandardisation of the Stanford-Binet intelligence test had to be done because the average four-to-five-year old now "knew more than did his 1960 counterpart" and that this was likely to be due at least in part to the introduction of *Sesame Street* (an assertion which, even if genuinely demonstrable, would still merely be correlational) they argue that "television may be altering the course of acquisition of the most basic cognitive operations in children. The rate at which and the order in which children acquire basic cognitions about the workings of the physical and social world … may have changed" (p 4). After 1999, when the American Academy of Pediatrics recommended that TV viewing for children under two should be discouraged (AAP 1999) there was an increase, especially in the USA, of broadcaster-funded studies that sought to demonstrate the extent to which "baby TV" can lay the foundations for later learning (Anderson and Pempek 2005, Brown 2011).

A significant boost to research on infants and toddlers came from neuroscientific developments in the 1990s and 2000s that were popularly understood to stress "that infants' experiences during the first 3 years of rapid brain growth have a unique and powerful impact on its development, one that cannot readily be duplicated or reversed later when the 'sensitive period' for neural plasticity has passed" (Courage and Setliff 2010, p102). Courage and Howe point out that much of the public discourse oversimplified these findings (leading to the use of such terms as "hard-wired"); it certainly gave new life to the risk-benefit paradigm as researchers sought to prove that "baby TV" either did or did not harm children's development.

The risk-benefit paradigm continues to frame public debate on "children and media", as is demonstrated in the more than 700 million results of a Google search on that term (September 2017). I am positioning the present study outside it, because I believe that it is an adult-centred agenda that limits our capacity to recognise children's extraordinary, self-driven efforts to learn how to understand important cultural forms such as movies.

1.4 EMBODIED COGNITION

I encountered the field of embodied cognition relatively late in my research, through Coëgnarts and Kravanja's edited collection *Embodied Cognition and Cinema* (Coegnarts and Kravanja 2015): it prompted a radical change in my approach from the cognitivist position with which I began. It is beyond my scope here to review much of the film scholarship that has addressed embodiment: most of it has little relevance to my project, given its preoccupation with the adult individual viewer (Frampton 2006, Shaviro 1993, Sobchak 1992) and concepts such as cinephilia (Keathley 2006). In her phenomenological approach , Sobchak does consider the situation of a baby watching a film but adopts a severely adult-centric point of view: "until it knows or 'sees' itself as capable of seeing, the baby will not be able to see what it sees as that significant phenomenon we call film" – a baby is not, she says "a competent visual performer" (p52); a position with which most early childhood scholars would probably disagree. But I found embodied cognition to be particularly helpful in studying two-year-olds' intensely physical and emotional responses to movies. An important prefiguration of embodied cognition approaches, as far as film theory is concerned, is Anderson and Anderson's discussion of how Gibson's seminal book on visual perception (Gibson 1986 (1979)) might generate a rethink of how we perceive movies: "since evolution has provided no special capacity for processing patterns of light from a constructed fictional world, the visual system processes the information which specifies such a world as it processes information specifying the real world. Herein lies the key to the compelling impression of reality we feel when viewing a motion picture" (Anderson and Anderson 1996, p360)

Most embodied cognition scholars acknowledge the influence of Merleau-Ponty's work on perception (Merleau-Ponty 1962), which in turn links back to Husserl's and Heidegger's development of phenomenology. They also draw upon Gibson, and on Lakoff and Johnson's works on metaphor and philosophy (Lakoff and Johnson 1980, Lakoff and Johnson 1999). Gibson uses the term "proprioception" to describe the information that vision picks up from the way our bodies move in relation to the ground (p 183). Rutherford uses this to challenge the idea in film theory that the movie camera is like an eye in its disembodied functionality (Rutherford 2003). Lakoff and Johnson argue that much of our abstract thought is enabled by metaphors based on, for example, physical orientations such as "up" and "down" and "near" and "far" (Lakoff and Johnson 1980, Chapter 4). They show how deeply metaphoric thinking is embedded in our minds, and consequently how closely our minds are linked to our embodied perceptions

of the world around us, using senses such as touch, balance, gravity, temperature and sound location as much as they do vision.

What these writers have in common is "an account of space, time and the world as we 'live' them" (Merleau-Ponty 1962, pvii) and a rejection of the Cartesian separation of body and mind (Gibson 1986 (1979), p xiii). This was not new: Vaesen points out (Vaesen 2014) that Dewey, writing many years earlier and drawing on James' work on pragmatism in the 19th century, also rejected Cartesian dualism and argued that that "hands and feet, apparatus and appliances of all kinds are as much a part of [thinking] as changes in the brain" (Dewey 1916, p14). Vygotsky makes the same argument in his posthumously-published chapter on emotions, pointing out that Cartesian dualism led to the dominant 19th century view, eventually challenged by Darwin, that human emotions are merely "rudiments, meaningless vestiges" of animal behaviour, while he argues that they are "the basic phenomenon of the human soul, …the primary manifestations of the dual human nature combining the spirit and the body in one being" (Vygotsky 1999, p162). More recent "landmark" texts in the development of embodied cognition are Varela, Thompson and Rosch's *The Embodied Mind,* and Damasio's *Descartes' Error: Emotion, Reason and the Human Brain* (Damasio (1994) 2006, Varela, Thompson and Rosch 1991), both of which challenged what Shapiro calls "the tried-and-true ideas of old-school cognitivism" (Shapiro 2012, Introduction) in re-evaluating spontaneous aspects of human behaviour.

Two more recent texts have proved particularly pertinent to my research. Gallagher, (using the term "prenoetic" to designate hidden, inaccessible aspects of the structure of consciousness) investigates whether "experiences related to perception, memory, imagination, belief, judgment, and so forth, [are] shaped or structured prenoetically by the fact that they are embodied" (Gallagher 2005, Introduction). He draws upon the mirror neuron discoveries that I discuss in Section 1.4.1 (Gallagher 2005, p77) to link instinctive behaviour by infants to the later development of reflective consciousness. Daum et al set out an important argument for the particular relevance of embodied approaches in the study of infants and young children, in understanding their social as well as cognitive development:

> First, we argue that young infants provide ideal models for the study of embodied modes of understanding, interaction, and communication in a relatively pure and isolated form, because young infants must rely primarily on the production and perception of bodily states and movements in self and others to navigate their social world. Second, we suggest that infants and children also provide ideal models for studying the way in which emerging symbolic modes (language-based) of interaction and communication co-exist and cross talk with embodied (body-based) modes, because during the course of development infants and children are exposed to and

> acquire a formal symbolic language system. In other words, the study of early infancy and childhood offers the unique opportunity to separate out and disentangle what one finds closely intertwined in later social life. (Daum et al. 2009, p1196)

Given that studies of two-year-olds are relatively rare, Gallagher's and Daum et al's discussions of infant and child behaviour support the relevance of an embodied cognition approach to two-year-olds' viewing behaviour. But perhaps studies (such as this one) focusing on the academically much-neglected but crucial third year of life might also contribute to the development of theory in the field of embodied cognition.

1.4.1 Mirror neurons and embodied simulation

A research programme at the University of Parma in the 1980s found that "mirror neurons" in a macaque monkey's brain which discharge when the monkey performs a specific action, also discharge when it hears the sound related to the action and even if it simply observes the action performed by another (di Pellegrino et al. 1992). Later research established similar functions in the human brain (e.g. Fabbri-Destro and Rizzolatti 2008). A special issue of *Philosophical Transactions of the Royal Society* in 2014 reviewing progress in mirror neuron research was edited by Ferrari and Rizzolatti, who discuss the "wide impact on cognitive disciplines" of these discoveries, suggesting two reasons for their significance:

> The first is that their discovery put the problem of how we understand others at the forefront of neuroscience. The second is that, by showing that mirror neurons were basically motor neurons, they suggested a rather unexpected solution to this problem: the motor system is involved in understanding the actions and intentions of others (Ferrari and Rizzolatti 2014, p1).

The mirror neuron findings thus support earlier theories of embodiment with accounts of demonstrable processes in the brain that link body and mind. In a series of papers between 2001 and 2011 Gallese, one of the Parma researchers, developed the concept of "embodied simulation", based on the mirror neuron discoveries, to characterize the ways in which humans instinctively attempt to identify and assess other people's emotions, intentions and actions (Gallese 2001, Gallese and Lakoff 2005, Gallese and Sinigaglia 2011). "Simulation" in this context does not mean pretence or imitation, but the process of modelling an event or activity in order to understand it better. This potentially casts new light on the ways in which all humans mimic other people's expressions and gestures, often unconsciously: while some adults may comment on this as merely "cute" in infants and toddlers, it can more usefully be interpreted as a way of "trying out" the feelings that the bodily phenomena are expressing, and can relate to characters on screen as well as to real people. It may thus be a significant element of children's learning to follow narrative, when they recognize, relate to and imitate expressions, gestures and postures

of characters in movies, and sometimes also those of people watching with them (see for example Figures 3.15 and 3.16). It is particularly relevant in the study of two-year-olds, given that their linguistic fluency and ability to follow narratives are still developing. It seems possible that mirror neurons might have a particular role in movie-watching, given that the proprioceptive dimensions of normal visual perception are not then in play; however, investigating this was beyond the scope of my research.

Understanding the principles of embodied cognition enabled an important breakthrough in how I regarded my data. I began to consider the children's very early emotional responses to movies and their episodes of intense attentiveness as evidence of efforts to make sense of what they were watching, driven by evolved, instinctive, essential behaviours, rather than as developmentally early stages that would later be replaced by more sophisticated cognitive processes. This perspective enabled me to better address the problems of studying children aged between 1;10 and 3.5 years, and led me into investigating the neuroscientific underpinnings of concepts such as "evolved" and "instinctive" – terms regarded with some suspicion in cognitive and sociocultural traditions, but which can be fruitfully combined with sociocultural approaches, especially in studying children of this age.

1.4.2 Emotion

My readings in embodied cognition prompted me to explore further the emotional responses that were expressed through the children's bodily expressions and postures, in many of the viewing events I observed and filmed. For example, my initial interest in fearful responses was based on the supposition that these indicated the children's "mistaken" interpretations of what they were watching, such as being unaware of generic features that were supposed to signal humorous intent (see Section 4.2). But this seemed to disregard the intensity and longevity of these responses. I was intrigued to discover that Darwin's speculations about his son (aged 2;3) when he reacted to seeing large animals in cages at the zoo, anticipated later discoveries in neuroscientific research that connect emotions to survival in early evolutionary periods:

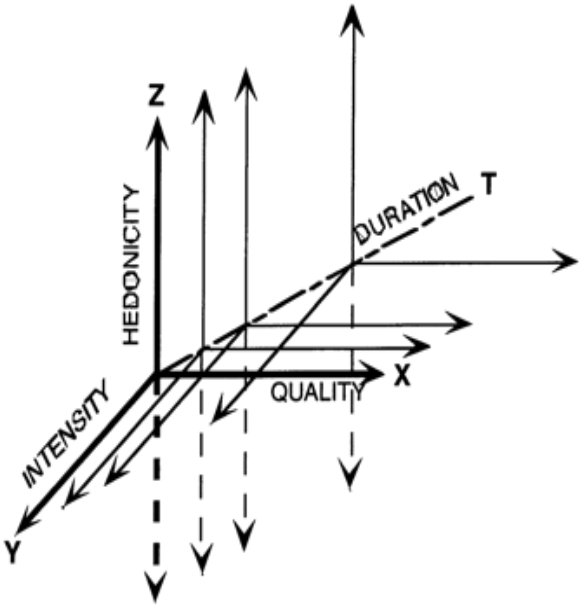
> He often said afterwards that he wished to go again, but not to see "beasts in houses"; and we could in no manner account for this fear. May we not suspect that the vague but very real fears of children, which are quite independent of experience, are the inherited effects of real dangers and abject superstitions during ancient savage times? (Darwin 1877, p288).

The neuroscientist and psychobiologist Panksepp (2004) describes emotional operating systems in the brain, making the same link, minus the judgmental note of "abject superstitions." His

argument is based on the proposition that "all mammals possess intrinsic psychobehavioural control systems" that, from birth, enable them to start learning and to survive (Panksepp 2004, p25; see also my discussion of Trevarthen in Section 1.2.4). He focuses first on the "powerful, primal emotional circuits" which are the ones "that appear to elaborate fear, anger, seeking and sorrow." He points out that there are many more emotional states, which we can identify through introspection, most of which are harder to research. But he argues that "the affective *power* of emotionality arises from subcortical systems that also sway the minds of 'lower' animals". The "ancient emotional systems" in the older strata of our brains are extremely powerful because in all animals they have an essential function: "to energise and guide organisms in their interactions with the world" (Panksepp 2004, p42). This echoes Vygotsky's claim that "action flows from bodily causes. It originates with a naturally essential force and is accomplished according to mechanical laws; its intensity contains the force of passions" (Vygotsky 1999, p165)

However, neither Panksepp nor Vygotsky is describing a biologically deterministic model in which emotions simply "drive" thought and action, but a more complex interrelationship between the physical and the psychological. Panksepp explains how emotional systems, centrally situated in the brain, "extensively interact, in strong and weak ways, with higher and lower brain functions" – i.e. with cognitive perceptual processes, *and* with autonomic processes (Panksepp 2004, p44). These processes are complex, and involve feedback loops that modulate the relationships between emotion, thought and action in ways that are unpredictable and vary widely between individuals.

Cabanac, a Canadian physiologist, uses a four-dimensional map to convey the complexity of the emotional experiences themselves (Cabanac 2002, p70):



In this map, four axes intersect:

X identifies the kind of mental event present in consciousness (sensation, memory recall, etc.);

Y is a measure of its intensity (barely experienced, faint, clear, loud, intense, etc.);

Z is the amount of pleasure or displeasure experienced, from extreme displeasure (negative), to extreme pleasure (positive);

T is time and describes the duration of the mental experience.

Figure 1.1 Cabanac's map of emotional experience

Cabanac argues that "emotion is any mental experience with high intensity and high hedonicity (pleasure/displeasure)" (Cabanac 2002, p76) but as his model shows, within any emotional state, its intensity, hedonicity and duration may vary independently. In the case of some of the responses I was analysing, all three of these were extremely high. Cabanac's model, unlike Panksepp's, easily accommodates the emotion of joy, which I discuss in Section 4.4. Sloan points out (Sloan 2011) that while "joy is sometimes mentioned in discussions of hedonism, happiness, desire, or religion, it is rarely considered in itself" (p419); it differs from other emotions in being an isolated, unpredictable occurrence, defined by its intensity and transience.

A useful note of caution – as well as an implied call for further research – is provided by the American neuroscientist Damasio (2000), against the idea that we have a "biological machinery" that is "preset" to deliver predictable emotions, cognition and behaviour. This idea has been resisted by most sociocultural scholars and is now superseded in neuroscience, as Damasio explains:

> In all probability, development and culture superpose the following influences on the preset devices: first, they shape what constitutes an adequate inducer of a given emotion; second, they shape some aspects of the expression of emotions; and third, they shape the cognition and behaviour which follows the deployment of an emotion. (Damasio 2000, p 127)

The Dutch psychologist Frijda (1986) warns that "there is no consensus about the definition of emotion; one may quarrel endlessly about the word" and suggests that we may as well assume

"that what we loosely call 'emotions' are responses to events that are important to the individual" before going on to consider what these responses consist of (Frijda 1986). Cabanac takes a similarly pragmatic approach, starting with one of the many lists in everyday discourse: "the term is taken for granted in itself and, most often, emotion is defined with reference to a list: anger, disgust, fear, joy, sadness, and surprise." His own definition is that emotions are "motivational states," all of which act to generate "behaviour oriented towards, or away from, the stimulus" (Cabanac 2002, p72). Panksepp asserts that there is "good biological evidence for seven innate emotional systems – fear, anger, sorrow, anticipatory eagerness, play, sexual lust and maternal nurturance"(Panksepp 2004, p47) – but he focuses particularly on the earliest evolutionary phases of human existence to identify four emotions that are likely to have arisen from basic environmental challenges: fear, panic, rage and seeking. He characterises "seeking" as the emotion that drives curiosity and investigation (p50), confirming Vygotsky's much earlier argument that "thought is … engendered by motivation, i.e., by our desires and needs, our interests and emotions" (Vygotsky 1986, p252). It is this concept in particular that I have taken up in my analysis of the focused attention that the children often displayed (see Section 4.1).

1.4.3 Emotion and movies

The growing body of scholarship in neuroscience and in film theory that traces the role of emotion in making sense of perceived phenomena shows how focused attention, and the indicators of tension that may go with it, can be read as the physical evidence of the complex but almost instantaneous processes at work in people's brains as they make sense of what they see and hear. There is now broad agreement among many film scholars that there is a neuroscientific basis to the proposition that emotions play a key role in driving our interpretation of movies, as they do our thinking and actions in general. Very little of this work has looked at children of any age, let alone toddlers. But logically, it is likely that two year olds, who are not prone to disguising their emotions, may display this physical evidence more than adults do, which is what my findings indicate (see Chapter 4).

Tan (1996) claims that film is "an emotion machine," relying heavily on Frijda's somewhat schematic account of the "laws of emotion" (Frijda 1986) his argument is however firmly located in "first generation cognitive science" (Lakoff and Johnson 1999, pp75-76), positioning emotion in a functionalist scenario, similar to uses and gratifications theory (Katz, Blumler and Gurevitch 1973-4) in that "it is directed towards the realization of what is important to the individual, that is, his or her concerns" (Tan 1996, p44).

Platinga and Smith's edited collection in 1999 is one of the first extensive engagements between film theory and the emotions, but still remains largely within functionalist approaches, using terms fashionable at the time, such as "hard-wired" (see Section 1.3.2) which betray a mechanistic approach to the role of emotions in audience response (Platinga and Smith 1999), although Feagin's contribution makes important points about the relationship between duration and affect: an aspect of movies that is rarely addressed in film studies (Feagin 1999). Smith's own book, four years later, shows a reliance on Piagetian models of learning development and on experimental psychology to back up his arguments (Smith 2003) despite the fact that these had been extensively challenged (by, for example, Bruner and Haste 1987, Donaldson 1978).

Keating (2006) does not explicitly adopt an embodied cognition perspective, but nevertheless invokes emotional responses in his attention to the processes of spectatorship, showing how it is possible to interpret these as an essential part of narrative comprehension. His focus is on "a complex weaving together of anticipation/culmination structures in which our emotional reactions to present events are just as important as our anticipatory reactions to future events" which he proposes as an alternative to the concept of the linear narrative (Keating 2006, p7). For two-year-olds, suspense and anticipation are a significant part of the re-viewing experience (see Section 3.3).

Grodal (2006) develops a model of film experience based on embodied cognition theory, which "describes the flow from perception, via emotional activation and cognitive processing, to motor action" and which he names "the PECMA flow" (Grodal 2006, p1). His account of the way viewers handle the reality-status of what they see provides an interesting argument against the conventional view: "the emotion-inducing limbic system will be activated whether we are confronted by a real wolf or by an audiovisual simulation of the wolf. The primary process when watching films is thus belief. Film viewing depends not on 'suspension of disbelief,' but 'suspension of belief' – diminishing our belief in what we perceive" (Grodal 2006, p154). This concept can be extended in the study of two-year-olds' responses to movies: in cases where they display what older viewers might term an inappropriate response, such as fear of a seemingly innocuous image or scene, it could be that for the two-year-old the instinctive emotional response overrides their ability to suspend instinctive belief (see Section 4.2.1). Grodal is one of the first film scholars to take on embodied cognition in a substantial way, and links it emphatically – if somewhat speculatively – to evolution and early human societies,

deriving recurrent story formats such as children and parents, or the threat of death from monsters, from the hunter-gatherer period. At the beginning of his 2009 book *Embodied Visions*, he declares that "film studies are in the midst of a major shift away from the paradigm [that humans are socially constructed and infinitely malleable] that has dominated most of the 20th century" into what he terms "evolutionary bioculturalism" (Grodal 2009, p3), which combines embodied and sociocultural approaches.

Hogan, dealing with textual analysis rather than directly discussing audience response, presents an argument about how emotions are integral to narrative, which is equally applicable to movies and to considerations of how they may be interpreted by viewers (Hogan 2010, p65). His proposal for an "affective narratology" consciously invokes the title of Panksepp's book *Affective Neuroscience* (Panksepp 2004), and argues that "narrative is fundamentally shaped and oriented by our emotion systems. Presenting a critical history of narratological theory, he builds on Genette's concept of "focalization" (referring to texts in which the story is told from the point of view of one of the characters) to argue that it must include the emotional elements that are inevitably incorporated in the "narrator's" point of view, even in the case of "zero-focalization" or "voice of god" narration, where the story is not filtered through a character: "narrators necessarily have emotions" (p77). Given the varied layers of narration provided in much of children's television, and the fact that many of the characters are not human, it is interesting to consider the different kinds of focalisation that they may be offering, and the different emotions they may be invoking.

1.4.3 Emotion and the audio dimensions of movies

Movies are widely referred to as "visual media" in popular discourse and other disciplines, and a great deal of film theory relies only on the visual dimension of movies. But in his foreword to Chion's book *Audiovision*, the film editor and sound designer Walter Murch points out that "we begin to hear before we are born, four and a half months after conception" (Chion 1994, pvii) and claims that the primacy of sound over image constitutes a "biological" approach which had triggered both his and Chion's interests in film (p xv). Juan Chattah cites Lakoff and Johnson's theories of metaphor (Lakoff and Johnson 1980) and bases his account of the relationship between music and emotion in movie-viewing on their arguments relating metaphoric thinking to human awareness of their shared physical environments. (Chattah 2015). Although much of his discussion of metaphor relates to discourse *about* music, he includes examples (pp 83-84) that link tempo to speed of movement (as in chase sequences) and pitch frequency to motion in

vertical space (as in the descending "swanee whistle" note that accompanies falls in many animated movies – see Section 3.4). Embodiment, he argues,

> …mediates signification, enabling the music to guide the audience's attention toward particular visual events, to shape the perception of segmentation at micro- and macro-levels, to trigger a myriad of bodily states, and ultimately to present a unique perspective on the discourse of characters and cinematic narrative. (p81)

Ward's account of the role of sound in movies is based on his professional experience as a sound designer, in other words not just on music but on the complex layers and modulations of both diegetic and non-diegetic sound. He makes the important point that "audition has the capacity to shape visual perception" (Ward 2015, p161) and builds on Gallese's concept of embodied simulation to challenge what he calls the "ocularcentric" bias of film studies. Much of sound design is concerned with the creation of "atmospheres": Ward describes this process as "a playful combination of auditory and visual fragments and a heightened manipulation of auditory spatialisation, temporal resolution and timbre" and points out that "our senses rarely work in isolation" (ibid). While film studies has tended to neglect this aspect of audience experience, the film industry certainly has not: modern cinemas have multiple loudspeakers installed at different locations and different heights in order to enhance viewers' sense of immersion in a three-dimensional space (Sbravatti 2016) and of the aural differences between, for example, interior and exterior spaces, provided by the films' multiple soundtracks.

The industry's heavy investment in this aspect of movies demonstrates the power of what Ward describes as "perceptual immersion," an unconscious process that abstracts and simulates physical experience, with the term "immersion" stressing the multidimensional context of viewing, as opposed to traditional models of forward-facing spectators. Ward contrasts this with "narrative immersion," a conscious process that abstracts and simulates social experience (p164). Although I did visit the cinema with the twins twice during my fieldwork period, it was not possible on these occasions to collect data on their responses to the immersive aural environment. However, their practice, during the first few months of my research, of watching movies extremely close to the screen, meant that the experience of perceptual – visual and aural – immersion was effectively available to them. However, the concept of immersion needs to be balanced with Wojciehowski's concept of diakresis: we may be immersed, but we still select the salient (Wojciechowski 2015).

I derive the potential directness of an individual child's engagement with the screen from Wojciechowski and Gallese's account of embodied simulation: "when we see someone acting or expressing a given emotional or somatosensory state, we can directly grasp its content without the need to reason explicitly about it" (Wojciechowski and Gallese 2011, p14); they add that "this can also occur when we *imagine* doing or perceiving something" (p17). This argument underpins their consideration of embodied simulation in the context of artistic fiction:

> In fact, artistic fiction is often more powerful than real life in evoking our emotional engagement and empathic involvement. Why? Perhaps because in aesthetic experience we can temporarily suspend our grip on the world of our daily occupation. We liberate new energies and put them into the service of a new dimension that, paradoxically, can be more vivid than prosaic reality. (p19)

Guerra, a film scholar in the University of Parma, produced a paper with Gallese on embodied simulation in film theory (Gallese and Guerra 2012), which recaps the mirror neuron findings and the embodied simulation theory before investigating the difference between the ways embodied simulation works in daily life, as we use our neural resources to "map" other people's behaviour, and the more "liberated" context of movie-watching, when "we find ourselves situated at a safe distance from what is being narrated on the screen and this magnifies our receptivity" (p196). This trajectory of development in Gallese's thought, linking the experiences of following narratives and of watching movies with the discovery of innate processes for understanding others' behaviour, has interesting implications for the present study. Children can be seen as "simulating" the behaviour of the characters they see on screen as they think about the stories they are watching, while at the same time they pick up aural and visual clues from others present (see Section 3.3.1). Likewise, playful appropriations and imitations of movie characters and situations enable children to explore the behaviour and feelings of others. Wojciechowski and Gallese state that embodied simulation "mediates the capacity to share the meaning of actions, basic motor intentions, feelings, and emotions with others, thus grounding our identification with and connectedness to others" (Wojciechowski and Gallese 2011). While the embodied simulation concept has so far been applied to real-life interactions, it may also be pertinent to our understanding of movie narratives, and as such, can transform approaches to movie-watching in early childhood (see Section 5.2).

1.4.5 Embodied cognition and other disciplines

Embodied cognition has been castigated for asserting itself as the basis for a revolutionary paradigm shift (Wheeler 2014) and for "imperialistically" attempting to account for everything through sensorimotor functions (Fiedler 2009). But others have seen the potential for linking it

to other fields, as I have in building in the emotional, social and cultural dimensions of movie-viewing to my analysis. Semin and Smith argue for a closer relationship between social psychology and situated, as well as embodied, cognition, since all three investigate the ways in which humans relate to one another in social situations (Semin and Smith 2002). Daum et al take this argument forward to include social cognition as well (Daum et al. 2009, p1196). The same argument supports my own investigation of children's developing capacity to make sense of movies, alongside their increasing linguistic fluency, in shared viewing experiences.

Pink compares the ways in which sensory anthropology and multimodality deal with the senses, the relationships between word and image, and ethnography (Pink 2011). She draws on phenomenology rather than on embodied cognition per se, but she mainly cites Ingold (Ingold 2008), who in turn draws on Merleau-Ponty (Merleau-Ponty 1962) and Gibson (Gibson 1986 (1979)): the work of both also underpins embodied cognition. She objects to Kress and Leeuwen's acceptance of five human senses, attached to five sense organs (Kress and Van Leeuwen 2001, p127) as a modern western construct. She emphasizes that the senses need to be understood as interconnected, and that "working with these ideas requires researcher engagements that go beyond observation and data collection to attend to the ways in which we might reflexively draw on our own existing biographical experiences (as researchers and film viewers) in order to imagine and recognize our sensory embodied responses to other people, objects, textures and more in film and video" (p266). I have also found it a logical extension of the embodied cognition approach to include sensory reflection – about expressions, gestures and postures, for example – in the process of data analysis.

Rather than appearing to demand a radical paradigmatic shift, therefore, embodied cognition offers ways of rethinking and extending existing fields and disciplines from the perspective of integrated minds and bodies. It has enabled me to analyse the children's emotional and physical responses to movies as part of the processes through which they make sense of what they see, hear and feel (see Section 4.1.1).

SUMMARY

In this chapter I have threaded my way through several fields and disciplines, indicating affinities and points of contact that illuminate my research question. I began by considering the extent to which movies may be said to have a language that is comparable to verbal/symbolic language, concluding that even though they don't, their multimodal density requires the development of specific skills in order to understand them fully. My discussion of developmental psychologists' approaches to children's engagements with the formal features of movies led on to a more general account of movies for children and whether there are convincing, or consistent, arguments about appropriate stylistic features for young audiences. Because the ability to follow movie narratives is an important indicator of children's prior learning, I have drawn on a range of pertinent studies of children's engagements with other forms of narrative, drawings, imaginative play and modality judgments, and introduce the concept of diakresis as an account of how we manage to make sense of densely multimodal movie narratives.

Starting with Hammersley's critique of childhood studies, and in particular his objections to the concept of studying children "in their own right", I reviewed three different approaches to children's learning and development: cultural learning, learning and play, and intersubjectivity. I problematized the concept of "learning" in the context of this study, given the challenges of understanding two-year-olds' engagements with a highly complex cultural form. I identified "risks and benefits" as the dominant paradigm in Anglophone research on children and movies, positioning my research outside and against it.

Introducing embodied cognition, I indicated its precursors and pointed out the significance of its reversal of the Cartesian separation of mind/body in helping me to make sense of the children's viewing behaviour, as well as its claims for the instinctive, evolved nature of many of the responses I observed. I went on to explain the significance of emotions as drivers of thought and action in response to embodied perceptions, their role in narrative understanding, and the importance of sound design and music as contributors to the interpretation of movies. I explained why the discovery of mirror neurons and the theory of "embodied simulation" that followed from it have been of particular interest to me in analyzing the social contexts of the children's viewing and its likely role in their developing capacity to follow and interpret narratives. It is thus a combination of embodied cognition and sociocultural approaches that has informed my analysis.

CHAPTER TWO
RESEARCH DESIGN AND METHOD

> It is here, in this interlocking of human meanings, of cultural codes and of forms, that there is the possibility of 'being surprised'. (Willis 1992, p80)

2.1 RATIONALE

Based on the hypothesis that two-year-old children must be learning how to make sense of movies, the present study aimed to find out whether convincing arguments could be made for this on the basis of observing and analyzing children's behaviour and utterances when they watch movies. Given that most two-year-olds lack verbal fluency and usually show heightened interest in – or anxiety about – the nature of any new situation, I do not believe that valid, generalizable evidence of such learning will ever be gained through experiments, interviews or tests, as in "the science of the strange behavior of children in strange situations with strange adults for the briefest possible periods of time" (Bronfenbrenner 1977, p513). My focus is on "the natural process by which children need to master cultural knowledge" (Trevarthen 2005). Indicators of this process are most likely to be gathered in contexts where children are relaxed and often in the company of known family members. In other contexts, there are too many new things that toddlers must pay attention to, and in any case, the sociable nature of family viewing makes a vital contribution to the cultural dimensions of the children's learning about movies (see Chapter 5).

2.2. THE RESEARCH

The research consisted of a longitudinal, ethnographically-styled study taking place over a 20-month period (September 2011 to May 2013). There was a period of intensive fieldwork from October 2011 to July 2012, covering the twins' ages from 1;10 to 2;7, preceded by some initial "trial" videos in September 2011 and followed by a period of observation and less frequent video filming until May 2013. It could be defined as a case study, although it does not meet Simons' criterion of multiple perspectives on a programme, policy, institution or system (Simons 2009). It does however conform to Gerring's account, which allows for small, qualitative studies, using participant observation in a real-life context (Gerring 2007, Chapter 2); and I take heart from Mitchell's assertion that "case studies should not be seen as offering typical examples but rather as offering 'telling' cases, that is, cases in which the particular circumstances around the

case make previously obscure theoretical relationships suddenly apparent...they are the means by which general theory may be developed" (Mitchell 1984, p239). This was certainly my aim.

My method of data-gathering was mainly through using video to document as many occasions as possible when the children were watching movies, but it also included direct observation of their movie-watching as well as some of their other play and talk, documented in field notes. In addition, I periodically interviewed the children's parents (Phoebe and Dickon): occasionally both of them, but more often Phoebe on her own. Shortly after I had completed the fieldwork, my husband Terry was diagnosed with terminal cancer: there followed 20 months during which I did little sustained or purposeful work on the project. Two months after his death in March 2015, I began the video analysis, and in late 2015 I began to access new work on embodied cognition and movies which led me to revise my epistemological assumptions (as described in Section 1.4).

When I formally began my doctoral study, the children were already aged 1;10 and I was highly conscious that time was slipping away: the children's relationship with movies was already complex and fast-developing. I was planning to observe events that could not readily be predicted, in settings that varied from day to day. As George Miller points out in his introduction to Weir's account of her son's bed-time monologues:

> "Children are very complicated things and there is simply not enough manpower available to study everything they do. Anyone who undertakes to study them is forced to make some very realistic decisions about what is and is not worth his time and effort" (George A. Miller, in Weir 1970, p15).

Many of my "realistic decisions" were forced rapidly upon me, rather than pre-planned. But the alternative – to have sought regular (and thus potentially more comparable) viewing sessions; to have anticipated how the room layout and the camera positions could have broadened the range of data I could gather – would have been stressful and intrusive to all involved. My three main methods of data collection were video and audio recording, observation and audio-recorded interviews, mainly with Phoebe but some with Dickon. I also maintained a single series of notebooks that combined reading notes, field notes and a research diary in a 16-volume (approximately 33,000-word) chronological collection, which I indexed in an Excel workbook as I went along and cross-referenced in my EndNote library.

2.2.1 Ethnography

As Rowe and others indicate, ethnographic studies of two-year-olds are rare (Rowe 2008), and Lealand points out that "among the thousands of research studies and policy statements on children and television, viewers under 5 years old are usually underrepresented and often ignored" despite general acceptance of the idea that the early years are the most formative (Lealand 1998, p4). Such studies inevitably involve "practical and logistical considerations including gaining access, involving children as active research participants and negotiating consents" (Plowman and Stevenson 2013, p330).

Gaining access and consents are only part of the problem: designing research strategies that can capture what Lemish and Rice call "the richness of the interactions surrounding the television experience," is a major challenge (Lemish and Rice 1986, p267; see also Figure 2:1). Nevertheless, many scholars have pointed out that longitudinal, home-based, ethnographically-styled research is essential if we are to gain a fuller understanding of very young children's engagements with media, given that these typically take place in the home environment (Hancock and Gillen 2007, Jordan 2006, Moses 2008, Plowman et al. 2012, Rowe 2008, Storm-Mathison 2016, Thomson et al. 2012).

Figure 2.1: "the richness of the interactions surrounding the television experience" – Alfie and Connie (aged 2;4) play at being caterpillars while listening to (but not watching) a film with Phoebe

But studying viewing behaviour with under-fives imposes some very particular requirements on the researcher. A visiting researcher, however regular and frequent her visits, will always bring with her some consciousness of the research purpose. However well-integrated she is with the

family, and however friendly and relaxed her relationship is with the child(ren), it will still not be the same as a longstanding family relationship. This is why I saw the possibility of undertaking a case study of my own grandchildren as a unique opportunity to address my research question in a context that was the nearest possible equivalent to what Plowman and Stevenson call "the quotidian in young children's lives at home" (Plowman and Stevenson 2013). The fact that the children concerned were girl and boy dizygotic twins was an added advantage, in that I did not have to deal with the dynamics of relationships between siblings of different ages, or with the particularities of monozygotic twins, but might have some opportunities to consider gender differences. This did not completely obviate the "visiting researcher" problems cited above, but it did minimize them.

2.2.2 Studies by family members

Scholars who have studied their own children, such as Piaget, Britton, Halliday, Weir and Edmiston have been deservedly influential in the fields of education, child development, language and literacy (Britton 1970, Edmiston 2008, Halliday 1975, Piaget 1928, Weir 1970). While access, consent and ethical issues in these contexts are different, and perhaps more complex, than in conventional ethnographies, there is a strong case to be made for the value of parental studies when the focus is on toddlers: children who are mobile, learning to talk, but whose language, and much of their behaviour, are idiosyncratic and hard for anyone outside the family to interpret. Similar arguments can be made in favour of studies by grandparents of their own grandchildren. Campbell studied his own granddaughter from a very early age, looking mainly at her experiences with written language and books (Campbell 1999). Much of what he says is paralleled in my own study: a two-year-old attentively watching a whole 25-minute programme about giraffes and bidding them goodbye at the end (pp45-50); demanding many repeat readings of books, just as the twins demanded repeat viewings (p142); recognizing the endings of television programmes by the appearance of the credits (pp152-3); enjoyment as a sign of learning (p7).

Few parental or grandparental studies focus exclusively on the media experiences of children under three. Robinson and Turnbull produced a case study of their god-daughter/daughter Veronica from birth to age six, using observational methods in the home to focus on the development of literacy but taking in a wider sweep of her other textual experiences across a range of media (Robinson and Turnbull 2005). Covering a six-year period in a single chapter, they use the "asset model" concept first proposed by Tyner, which "assumes that mass media and popular culture can work as a benefit to literacy instead of as a social deficit" (Tyner 1998,

p7); a necessary argument in the context of traditional literacy education, but essentially still locked within the "benefits" end of the risk-benefit continuum (see Section 1.3). Briggs also used observational methods to study his own son's encounters with *Teletubbies* for the child's first 18 months of life (Briggs 2006), in the context of a larger autoethnographic study of the ways in which his family's television viewing was "regulated discursively" as an aspect of "good parenting".

2.2.3 Grandmother as ethnographer

Where the role of grandparents in children's lives is studied, it seems that the focus tends to be on the reasons for, and the extent of, their care provision (Hank and Buber 2009, Pebley and Rudkin 1999, Welland 2011). From such studies, we know that 30% of all UK women aged 18 and over are grandmothers; 63% of grandparents with grandchildren under 16 look after their grandchildren; 50% of mothers returning to work after maternity leave rely on grandparents to look after their babies (Welland 2011). Drawing on British Social Attitudes Survey Data and statistics from the Department of Work and Pensions, Welland claimed that grandparents were then contributing some £3.9 billion to the UK economy through their childcare work (p 17); given the UK's economic problems since then, this figure is unlikely to have diminished. Research in 2013 by the US website www.grandparents.com revealed that 37% of all US households were grandparent-led and that the average age of grandparents was 48; that 75% were online and 60% had full- or part-time jobs; it predicted that all these figures were set to increase over the subsequent decade, apart from the average age, which was likely to fall. The commonplace cartoon image of a "granny" as a plump figure in a long black dress with her hair in a bun is considerably at odds with reality.

All grandparental childcare arrangements are the result of negotiations around "the availability (and willingness) of grandparents as well as … the needs (and preferences) of parents and their children and—to a lesser degree — … the quality of intergenerational ties" (Hank and Buber 2009, p55). It is therefore remarkable that there seems to be so little research literature on how grandparents themselves experience their role and may – or may not – come to terms with it. My more anecdotal "take" on such questions stems from the fascinated and ultimately powerless (and consequently, for many of us, largely guilt-free) gaze that grandparents find themselves bestowing upon the beings who have suddenly appointed them to a new social and familial status. Most grandparents probably "study" their grandchildren – "I just love to watch them" is a common grandparental comment – but where grandparents are in close and constant

contact with a grandchild, they are at least sometimes likely to be reflecting on the differences and similarities between themselves, their own child and the grandchild. In this case, they are observing physical, behavioural and developmental features, and may be less anxious than parents about the grandchild's developmental progress. This is certainly what I experienced, and have encountered amongst other grandparents.

While it was impossible to draw a consistent and firm boundary between my role as a grandmother and my role as a researcher, I constantly had to establish provisional protocols on a temporary basis, as I seized opportunities to observe the children' encounters with movies. I was a "participant observer" in the classic ethnographic sense by sharing the sofa with the children as I filmed them, but at the same time I was a co-viewer as we watched television and DVDs together. I could never "join in" as a quasi-child (Hammersley and Atkinson 1983, pp 77-78): I was in any case already "joined in" as Nana, who on occasion had to intervene to stop a fight or fetch a potty. I observed the children in the two home settings that were familiar to them, but one of these settings was my own home, where I was a wife as well as a grandmother; while in the other setting I was also a parent and a mother-in-law. I had to adjust (or, more often, shuttle between) these roles and my role as an ethnographer; meanwhile Phoebe, Dickon and Terry had to adjust to my being a researcher as well as, on many occasions, being included in the videos that I was recording. Our collective enthusiasm for the project had distracted us from considering in advance just how we would all negotiate these shifts and doubling-up of roles: in the first few months of the fieldwork this led to some tension and self-consciousness (see Sections 3.2 and 5.2.3) as the other adults in the family made assumptions about, or tried to second-guess, how I might be wanting to conduct my research in the busy, volatile viewing situation; at the same time I was still making decisions about this myself, and trying to express them unobtrusively.

Researching as a grandmother thus required a high level of reflexivity. I came into the project armed with certainties from my professional life as an advocate for the value of education about movies: the long process of data gathering, combined with wide reading, and the even longer period of reflection and data analysis, enabled me to revisit my assumptions and to critically review how I was constructing my theory (Finlay 2002). However, there are undeniably disadvantages in researching as a family member: it was impossible to impose a consistent system of data-gathering. There are thus regrettable gaps in the data, periods of intensive videoing interspersed with less frequent viewing events, and changes in the physical

arrangements in both households that rendered the quality of the videos very variable. Nevertheless, the fact that I knew the children extremely well – and continued a close relationship with them after the end of my fieldwork – made a very significant difference to the quality of my analysis. It meant that I could usually identify very subtle indicators of response, and interpret their behaviour, in ways that a visiting researcher with no prior knowledge of their subjects would not be able to do. And where I could not make such identifications or interpretations, I was able to discuss these with Phoebe. If we had to fall back on speculation (see for example Section 4.2), it was at least informed by our intimate knowledge of the children.

2.2.4 Studies of toddlers and movies

A small number of research studies since 1980 has attempted to study very young children's television-watching in home settings, but each has significant differences from my project. Brody et al's work investigates the effects of television-viewing on family socialization, but although they claim that their observations took place in "a familiar living room setting" this was in fact in a child and family centre and each observation only lasted 20 minutes, so their negative findings – that the children and the fathers engaged with each other less when the television was on – could well be ascribed to other causes (Brody et al. 1980). Messaris and Sarett provide a theoretical discussion of the possibilities for learning about narrative devices in television, but in relation to methods of further research point out that "observation must involve the actual presence of an observer in the houses of informants. Furthermore, because the observer's presence may, before it ceases to be a novelty, generate unacceptable adjustments in the behavior observed, this kind of observation cannot be limited to the briefer period of contact typically employed in interviews." (Messaris and Sarett 1981, p238). Unfortunately (for me at least) Messaris' own study of 113 families, two years later, involved children much older than two (Messaris 1983). Desmond et al aimed to "determine the extent to which family communication mediated…comprehension of television [by kindergarten and first grade children]" (Desmond et al. 1985, p461) but they observed this in a research centre and at school: it is unlikely that these provided a context that was much like home viewing.

Setting aside the differences between the technological contexts of the early 1980s and 2011/12 (relating both to viewing and to observation methods), Lemish and Rice's ethnographically-styled study of how television co-viewing with parents supports the language development of 16 toddlers (Lemish and Rice 1986) has the closest similarity to my project. But there are

nevertheless some significant differences, the most important being that they were not looking at the development of television comprehension and the children viewed episodes of only one programme: *Sesame Street.* But, as I do, they draw analogies between family co-viewing and joint reading of picture-books (see Section 5.4); they also note that the children viewed selectively and often attentively, thus contradicting many of the experimental studies. However, the quotations from transcripts in their paper suggest a considerable level of self-consciousness on the part of the parents, which may be ascribed to the fact that they interviewed the parents at each visit and asked the mothers to keep a log of their child's verbal behaviour during viewing, for the whole period of the fieldwork. Self-consciousness suggests that the parents may well have inflected their own behaviour towards the interests of the researchers. As a family member, I could identify self-conscious behaviour in analyzing my videos (see Sections 3.2 and 5.2.3). The adults involved were self-conscious at times (as was I), but more often they certainly were not, and Dickon and Phoebe were hardly self-conscious at all in their very informal interviews with me.

2.3 ETHICS

Researching my own grandchildren presented some challenging ethical issues about informed consent, about the kind of knowledge I was seeking and the validity of my findings.

2.3.1 Consent by the Children

Hughes and Helling confidently state that "of course, the developmental level of the subjects places limitations on the child's understanding. Infants and toddlers (birth-2.5 years) cannot give their consent. The child's cognitive and language limitations make it necessary for researchers to rely only on proxy consent from parents or legal guardians" (Hughes and Helling 1991, p228). While the Piagetian developmental model on which they were drawing had already been challenged (for example by Donaldson 1978), the fact remains that the extensive literature on the ethics of research with young children – which frequently cites Article 12 of the UN Convention on the Rights of the Child (eg Lansdown 2005) – rarely deals with children under the age of three. Alderson reflects this in saying that children aged three *may* be competent to consent (Alderson 2004, p 107) and Paglaiogou states that it is "difficult or almost impossible for [toddlers who as yet lack the development of language] to evaluate for themselves what participation in the research will mean for them" (Palaiologou 2012, Chapter 2, p2).

Connie and Alfie were 1;10 years old when my research formally began, and were clearly not mature enough for me to try and obtain their consent to participate simply by asking them. Einarsdottir's study of two-to-six year olds in a playgroup setting offers useful reflections on consent by the youngest children of her sample:

> The children didn't give their consent through formal means at the onset of the study; rather, they were asked each time they began activities connected to the study if they wanted to participate. The reason for this procedure was that the researchers believed this to be the best way. In other words, since the participating children were very young, it would be easier for them to decide each time if they wanted to participate. If the children were to give consent only in the beginning, they might not have understood what it meant, and they could also have forgotten it later. In retrospect, I have been wondering if this was the most appropriate method and if I shouldn't have introduced the study for the children in the beginning. If one does not introduce a study as a whole to the participants there is a danger that they feel they have been tricked into participating. However, with children so young, one has to consider very carefully how an introduction to the study could be approached in a constructive and useful way so it would have meaning for the children. (Einarsdottir 2007, p205)

This was effectively the procedure I followed, although the fact that I am the children's grandmother and was researching in home settings, meant that it happened even more informally. Before they could talk, the children's consent about participation in movie-watching was implicitly already secured, as part of an established bedtime ritual, for the *In the Night Garden* viewings in October and November of the same year and for the Eric Carle films between January and March 2012 (see Sections 3.2 and 3.3). By May 2012, when they were aged 2;5, their arguments with each other about what to watch had to be tactfully negotiated (or, failing that, arbitrated), but the question of whether they were going to watch anything never needed to be addressed, and if they found that they weren't interested in what was being shown, they would walk away and do something else. The exceptions to this were when I introduced something different from what they were used to (see Section 2.4.6), when I would announce that I was going to show them something new, that they might like. This mirrored Phoebe's own practice: trying out new things with them and accepting their responses:

> …with Babar,[5] they were looking at it very intently for kind of ten minutes and then they were like "don't like this, turn it off". They give it a chance, like "ok, what's it going to do?" it's not like kind of two seconds "no I don't like it", they will watch something for a good 10 to 15 minutes and then "no this isn't going anywhere that I like, turn it off now."
> (Phoebe, Interview on 12th April 2012)

[5] This was *Babar King of the Elephants*, an animated feature film by Nelvana Ltd and Astral Films, released theatrically by Alliance Films and direct to video by New Line Cinema in 1998.

However, there *was* also a sense in which the children were conscripted into participating, in that I regularly filmed them watching movies without announcing that I was doing so, or asking them whether they minded. They indicated little awareness of being filmed or photographed at age 1;9 when I began to try videoing them: as 21st century children, this was something they were very used to. For example in one of the early "trial videos" I made, of Alfie watching a TV mounted high on the wall of the John Lewis shoe department, Alfie twice seems to look at the camera, in each case as part of a quick glance towards me in response to my comments, (see Figure 2.2) but he soon walked away to investigate more accessible, and interesting, features of the shop.

Figure 2.2: Alfie (aged 1;9) notices me filming him in John Lewis shoe department

In later months, when he wasn't interested in watching what was on the TV, Alfie would occasionally approach me to try and take the iPhone in order to play with it: something I would negotiate by inviting him to look at the images on the screen, eg "look, I'm filming Connie!" and if necessary resist his attempts to snatch by declaring that "this is *my* toy". Connie rarely noticed my filming, or responded to it, even when, on one warm afternoon in October 2012, I fell asleep while filming and dropped the iPhone.

I was therefore operating a form of what Flewitt calls "provisional consent" (Flewitt 2005, p556), in which I would use explanations such as "I'm writing a book about you" or "it's about the ways you watch TV" when they asked what I was doing when making notes. They never asked for further explanations of these statements: genuine, enthusiastic adult interest in what they were doing was a normal part of their experience. Neither of them ever objected to my filming them; Connie did on one occasion object to my asking questions, but this was because she wanted to

go on watching the film, though Alfie was keen to answer them, albeit in a highly playful manner (see Section 3.4.3). If the children had objected to my videoing them, I would have had to terminate the project.

I did consider showing the children some of my videos during the fieldwork phase (2011 – 2013), but these were then only viewable on a small, elderly MacBook (see Section 2.5.2): the images and sound were unimpressive, and I anticipated that playing with the unfamiliar laptop itself would be a more irresistible attraction than watching the videos, given that they were often shown videos of themselves anyway. Occasionally, one or other of them would look at the iPhone screen as I was filming, and watch the other for a few moments, but this never interested them for long. In October 2012 I tried "interviewing" Alfie using the reverse screen on the iPhone so that he could see himself: this was very successful for about two minutes until "seeing myself on the screen" became a bone of contention between the two of them (see Section 2.4.2). In 2015, when the children were five, I had acquired a large-screen iMac and started showing them some of my videos on this: it was like the computer they had at home and therefore not something new that they needed to investigate. They found the videos greatly amusing and fascinating, and thus to some extent became actively engaged with the research (Harcourt 2011, p335): for example, Connie offered her own interpretation of her behaviour as a 17-month-old in the "Pontipine Moustache" episode (see Section 4.2.1), suggesting that she had thought the flying moustache was a bat. However, comments that depend on children's memories of when they were less than two are hard to validate: it is difficult to know whether Connie actually remembered what she saw at the time, or imposed her own later interpretation.

2.3.2 Permission and Consent by the Parents

Phoebe and Dickon were involved in my early discussions about the project before it even began. Their "collaboration and approval" (BERA 2011, Article 18) in relation to the nature and purpose of the project contributed the development of my research question; they were in a sense partners in the enterprise and gave their voluntary and informed consent to the children's participation from the moment that I started to think about it. As is often the case with infants and toddlers, the children's initial involvement was involuntary.

Alderson reminds us that in the research practice of telephone surveys about children's media use (Rideout et al. 2003, for example) children of all ages are unknowingly co-opted by their parents as research subjects (Alderson 2004, p 100). In the more complex case of parental

consent to children's involvement in longitudinal studies, questions need to be asked, as Hill points out, not only about parents' rights and motivations to give their consent on behalf of children, but also why: they may be acting in their own interests rather than those of the child; the researcher may be affecting the process by which they form their judgment (Hill 2005, p 71). In a sense, both these factors applied in this project. Phoebe and Dickon were frank about their own self-interest in having access to a mass of video material recording the children's early lives, which they felt the children themselves would find enjoyable and interesting in later life. And given her own background as the child of parents who both had professional interests in understanding children's relationships with movies, Phoebe was inevitably influenced by her own life history and experiences of being parented. As professionals working with children, both Phoebe and Dickon were also familiar with ethical issues involving children. It was clear from the many conversations they and I had had on this topic, that their interest in the issues my research was raising were genuine. I therefore judged that neither their self-interest nor my enthusiasm for the project affected their judgment in any way that diminished the ethical status of the project.

I did however additionally ask for Phoebe and Dickon's written consent to their own and the children' participation, to ensure that they understood the provisos I made about later use of the data: that any selection of video, photographic or audio material for presentation in conferences or other "live" settings would be subject to their specific consent; that assent to donating the data collected for this project to a library or archive, and to any publication or dissemination of any kind involving any of the data, would be given, or could be withheld, by them and, in due course, by the children themselves; and that Connie, Alfie, Phoebe and Dickon would have the right to allow their real names to be used in any future publication.

The family members also agreed at the outset that, while they would have opportunities to view and comment on any video and audio recordings, they would not see, hear or read transcripts of each other's interviews nor read any drafts of papers or my thesis while the research was still in progress. However, I did eventually ask the parents to read some sections and some conference papers based on the research, to be sure that they were happy with the ways I was describing them and the children, and that I was accurate about certain factual information. Phoebe and Dickon both became fascinated with the project and made some interesting contributions to my thinking: in particular, the important "used up" concept (see Section 5.6.3). While this relationship was generally positive, it became clear – especially in the first couple of months –

that none of us had anticipated quite how their relationship to the research would work out in practice, and some initial tensions can be seen in the videos made during the autumn of 2011 (see Section 3.2). But these were soon resolved as we all became used to the viewing-and-filming scenario.

2.3.3 Anonymization

Following the BERA guidelines (BERA 2011, Article 25), I initially decided that all the family names (except mine) would be anonymized in the thesis. But as time went on, Phoebe, Dickon and I began to question this principle. While the case for anonymization is relatively clear in the case of most academic studies of this age-group, which involve researchers studying social or cognitive issues, and gathering data in nurseries and daycare settings, or as weekly visitors to homes, it is less clear in the case of longitudinal studies of children at home, being undertaken – and published – by a close, named relative, or in the case of video material being the primary form of data collection. Scholars also continue to wrestle with the ethical issues raised by the use of "visual documentation", whether with photographs or video (and strictly speaking, the latter is an *audio*-visual medium, not merely visual). Robson's exploration of these questions suggests that choices about anonymization will vary from project to project (Robson 2011). Discussing the question of whether to put images of children on a website, Kaplan and Howes argue that it is

> "an overreaction to suggest that all images of children should be so anonymized as to make them completely unrecognizable. Children and their parents deserve a say in whether or not and how their images are made public in such a way and in certain situations it will be considered acceptable and valuable, by all parties, to have children's faces clear and visible. The responsibility, however, is on the researcher (in this instance) not to use any images which are contentious for any of the parties involved" (Kaplan and Howes 2010)

Macdonald found in the course of her research that her original decision to use pseudonyms had to be abandoned (Macdonald 2013, p259). Anonymisation of images – for example by disguising the children's faces (Flewitt 2005, p559, Schuck and Kearney 2006, pp459-60) – would not have been practicable in my project, given that important aspects of the data are facial expressions and directions of gaze.

Since the videos form an essential part of this thesis, all the family members are named in the videos, and I am open about the twins being my own grandchildren, my research can to some extent be seen as a type of autoethnography – a claim also made by Briggs in studying his own child (Briggs 2006). Anderson makes a case for analytic autoethnography, as distinct from

evocative authoethnography, in which researchers focus on personal experiences such as sickness or disability. He identifies five key features of analytic autoethnography, which also characterize my research: "ethnographic work in which the researcher is (1) complete member [in the research group or setting] researcher (CMR) status, (2) analytic reflexivity, (3) narrative visibility of the researcher's self, (4) dialogue with informants beyond the self, and (5) commitment to theoretical analysis (Anderson 2006, p378). Pointing out that "the traditional ethnographer is often largely invisible—a hidden and yet seemingly omniscient presence in ethnographic texts," (p383) he asserts that in autoethnography "the researcher is a highly visible social actor within the written text. The researcher's own feelings and experiences are incorporated into the story and considered as vital data for understanding the social world being observed" (p384). My reflexive approach to the research as a whole is underlined by the fact that my visible and audible presence in almost all of the videos had to be addressed in the analysis, where I identify and comment on my own actions and utterances as well as those of others.

Terry, Phoebe and Dickon are participants in many of the videos, playing a particularly important – though largely unconscious – role in one of the key themes of my findings: "social learning." It follows that the children are often named by the adults, and name each other, in many of the videos. Again, removing or disguising these utterances would remove important elements of the analysis: who says what to whom is an important element of the data, and often it is not only the names, but also the intonation and accompanying actions and/or gaze, that have contributed to my interpretation of what is going on. It could therefore be argued that this project is to some extent a *family* autoethnography.

I have returned to the anonymization question several times during the project with Phoebe and with Dickon, who also discussed it between themselves. By the age of six and a half the children were, in my and Phoebe's judgment, also capable of expressing a view on this issue. I discussed it with each of them individually: both said that they would prefer to be known by their own names. Of course their conception of publication, and of audiences consisting of people they do not know, was even more sketchy at this age than that of most adults.

A further argument against anonymization rests on the nature of my research questions. I did not seek to compare the children in terms of their capabilities or their levels of development, or to investigate their relationship with movies in terms of risk, either of which could be invidious

or shameful for themselves or for the family. My research is based on the same fundamental principles cited by Alderson in her discussion of ethical issues in research with children: "the principles of respect and justice concern doing 'good' research because it is the right, correct thing to do, such as always respecting children as sensitive, dignified human beings" (Alderson 2004, p98); not only in the sense that these principles governed my methodology, but also in the sense that my research question was generated out of an impatience with the risk-benefit paradigm, which too often relies on definitions of children as naïve and vulnerable in their relationship with movies, and on what Alderson calls "disrespectful and abusive methods" such as testing them in labs (Alderson 2004, p108). On this basis, the family did not merely agree to waiving anonymization: they were positively keen to do so.

2.4 FIELDWORK

2.4.1 Video

My primary focus was on capturing as much as I could on video, as a logical extension of my lifelong commitment to the distinctiveness and value of moving image media, expressed for example in my introduction to the Film Education Working Group's report (1999, pp 6-7), and in earlier publications (e.g. Bazalgette and Eke 1988) and since (e.g. Bazalgette 2010). Rather than regard video as a "digital visual tool" (Fleer 2014, p15) or as "visual recordings" (Sparrman 2005, p241), I have for many years stressed the importance of duration as an essential component of meaning (Bazalgette 2008) and recognized that the audio track is at least as important as the visual track, if not more so (Chattah 2015, Ward 2015). In this, video is merely a technological extension of what movies have always offered (recognizing that even before the introduction of recorded sound in 1929, screenings were usually accompanied by live music).

Movies are the supremely multimodal medium: a fact as yet somewhat neglected in the literature on multimodality (Bazalgette and Buckingham 2013). The importance of using video in data collection therefore resides in its capacity to record – or construct – the *relationship* between visual, aural and temporal phenomena. Schuck and Kearney (2006) usefully distinguish between video, which has existed since the 1950s, and digital video, which simply facilitates, both technologically and in cost terms, "the ability to annotate clips, find them easily, select clips for future use, and edit the video" (p450). They also acknowledge that "decisions about what to record and how to record it are not neutral" (p456). Video editing has potentially huge capacities to transform the meaning of "raw" video material, even including the practice of "in-camera" editing where the filmmaker produces sequence of shots rather than one continuous

take. But the videos I made for this research are not edited, and all consist of single takes, ranging in length from 26 seconds to over 48 minutes.

To record examples of the children's ordinary, day-to-day behaviour with moving-image media ("viewing events"), I had to be ready to respond to situations as they developed. I wanted to record at least one viewing event each week when the children were at our home, but never managed more than three of these per month, except on the rare occasions when I made several videos during one extended viewing event (see "Monsters" and "Animatou 3+4" in Appendix 1). In Phoebe's summer holidays when our childcare was much more randomly arranged, I made fewer videos. Thus my total of 65 videos, totaling 12.7 hours, shot between September 2011 and May 2013, only includes one from August 2012. The longer videos are mainly a continuous record of several different, or repeated, programmes or short films being watched, although some half-hour ones record the viewing of longer programmes such as *In the Night Garden* or *Tree Fu Tom*. One viewing event – ITNG Moustache – is included in the list but was not strictly speaking part of the project. The viewing was set up in May 2011 using a borrowed camcorder, to capture the reactions I already knew were likely to happen, in response to a particular episode (see Section 4.2.1). Most of my videos were made during the children's third year – December 2011 – December 2012. During and after this period there were 26 viewing events that for one reason or another I did not film, for which there are in most cases at least some Field Notes (see Section 2.4.4).

2.4.2 Video Technology

Once the project began, one of my earliest decisions was to use an iPhone 4 for both my video and audio recording. Having in the past used various types of camcorder and, before that, 16mm cameras, as well as participating in the making of several TV programmes, the iPhone was wonderfully liberating as a lightweight, compact and unobtrusive tool, with automatic focus, toleration of different light levels, and a reasonably good microphone. I was sometimes able to fix it up in advance, secured to a nearby piece of furniture with the help of a Gorilla flexible tripod, in a position where it seemed likely that the children would settle down. When using the tripod, I would use the "reverse screen" mode on the iPhone so that I could sit with the children but also see what was being recorded, and adjust the camera position if necessary; however, using a fixed camera often meant that I missed important moments (the list of viewing events in Appendix 1 indicates when the camera was "fixed" or "handheld"). The children did not necessarily sit together, or even sit at all, so I more frequently held the iPhone in one hand,

making decisions about framing as I went along, but trying to avoid camera wobble and sudden zip pans. I could keep the phone in my pocket, slip it out and start filming whenever it seemed appropriate. I could hold the phone in my lap or rest my hand on another bit of furniture while filming, because the filmed image is displayed full-screen on the phone, which also meant that I could keep an eye on the larger context and pan from one child to the other, reframing with relative ease, if I thought this was necessary, although it always meant that I risked missing some salient behaviour from the child I wasn't filming. With either fixed or hand-held camera, what I could capture was always partial, but that is the nature of movies. I made my own decisions about when to start and stop filming, often constrained by other demands such as starting and stopping the VCR or DVD player, or having to intervene in a dispute between the children. Often I would start filming and then discover that I was badly positioned to get both children in the frame: several of the early videos have sections where I am moving about, or where Phoebe or I are moving the furniture (see Figure 2.3).

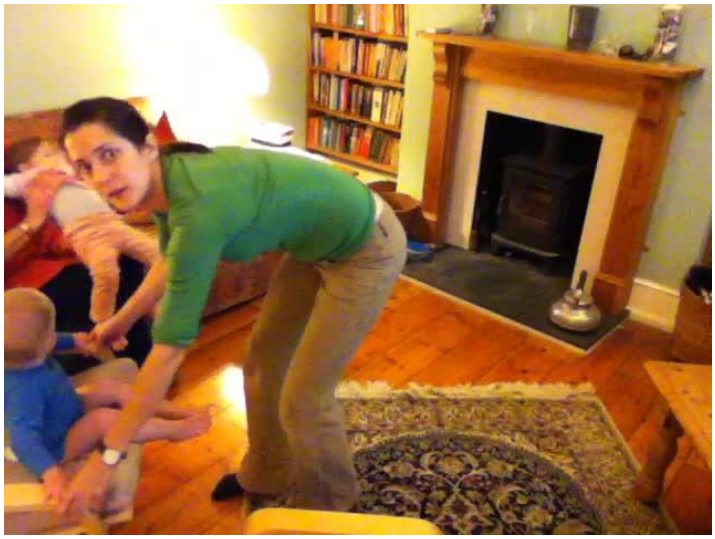


Figure 2.3: Framing: Phoebe pulls Alfie into shot; Connie squirms off Terry's lap

Framing is itself an editing device, in the sense that the filmmaker's deliberate positioning of the camera excludes everything except what can be captured within the frame. The capacity of the camera's microphone to capture sounds also functions as a default editor, in terms of what it can and cannot pick up. Using microphones attached to each person in the room (Flewitt 2006) would have vastly enriched the data, but was not going to be practical in the context of my research, and was in any case beyond my financial resources as a self-funded student. My worst mistake with the iPhone was to revert to the fixed camera mode for four viewing sessions between October and December 2012 (the children were 2;8 – 3 years old), where the light levels were too low for the camera and, because the iPhone was too close to the TV, the mic

failed to pick up much of what was probably very interesting dialogue. A potentially very successful idea that I tried spontaneously but only once, in October 2012, was to try interviewing Alfie (aged 2;10) with the iPhone on reverse screen so that he could see himself. His response was thoughtful and articulate, but Connie quickly joined in and began showing off to the camera, and Alfie wandered disconsolately away.

The only significant disadvantage of this kind of informal filming with a single hand-held camera is that it is very difficult to capture children's eye movements as they watch. I managed this only once: in the first viewing of *Animatou* (see Section 3.4.1). This can be done with a camera located inside the monitor, later matching the output to the movie being watched, thus enabling an investigation of facial expressions and gaze in response to identifiable items on screen and sound track. However, this would have been impossible to set up in the informal contexts where I was working, and in any case, like multiple microphones, it was beyond my financial resources.

Although Phoebe and Dickon did not acquire iPhones until Christmas 2012, the children were accustomed to being photographed and recorded by adults using a variety of small mobile devices. Being recorded on an iPhone – whether handheld or fixed – was ignored by the children almost all the time. It is clear from the videos that in virtually all of them the children are oblivious to being filmed. The only exceptions are rare occasions when only one of the children wanted to watch the television while the other moved closer to me, found out what I was doing, and immediately wanted to take over the filming themselves. The stage at which I stopped making videos – when the twins were aged 3;5 – was about the stage at which they did become a little self-conscious when being filmed, and would sometimes start "playing up" to the camera. They never objected to it, and they never asked me why I was doing it. The videos show many occasions where the children glance at the camera while their gaze is shifting around the room, but few where they give it focused attention. The "reverse screen" mode used for the fixed camera meant that the children occasionally noticed it with interest (see Figure 2.4); when it was handheld, the lens window was not very noticeable and was almost always ignored.

Figure 2.4: Alfie (aged 2;2) notices himself on screen as I adjust the fixed camera

2.4.3 Research settings

I made an early decision that the main setting for my data-gathering would be in our house, on the days that Terry and I looked after the children. I had tried observing and video-recording in Phoebe and Dickon's house, but felt that I had less control over the situation there, and insufficient knowledge of the other play options, attractions and routines that were available to the children there. We were keen to create a home-from-home at our house, with a bedroom and playroom for the children, and plenty of toys on hand that were only available at our house, not at theirs. So the children became very used to the journeys to and from our house, and developed their own rituals of things they liked to do while there. Our house is a three-storey Victorian terrace house: when I began my research, our living-room was on the first floor, and the large through-room on the ground floor was used partly as Terry's office but otherwise offered plenty of space for toy storage and play – and on one occasion for a viewing of *Mike the Knight* on his computer. By using a stair-gate and covering up the computer desk with a cloth, we were able to create a downstairs safe area analogous to the one at Phoebe and Dickon's house; but for watching television, we had to go upstairs to the living room. The first "trial video" I made was in this room on 13th September 2011 (see Figure 2.5) while I was still getting used to the filming process with the iPhone; four other very short ones were made on 26th September during a shopping expedition with Phoebe and the children (see Figure 2.2).

Figure 2.5: the television in our upstairs living room. Alfie (aged 1;10) notices what I am doing

Until the children were aged 2;7, the television was on a trolley in the corner of the living room; to ensure that they did not try to move it around, I placed a large coffee-table in front of it when they were in the house (Figure 2.5). Of course they immediately wanted to climb on the coffee table, to which I became quickly resigned, especially as it offered me another viewing practice to observe: i.e. sitting extremely close to the screen, and touching parts of the image (see Sections 3.2.1, 3.4.2 and 5.5.4). But this positioning, and the fact that I could easily shift the television and the chairs, cushions and stools on which the children liked to sit, also meant that I had several different viewpoints for video recording and observation.

In July 2012 we decided to rearrange our rooms and use our spaces better: the living-room was moved downstairs and Terry's office upstairs. The result (despite Alfie's protest that "this is an upside-down house, and I want it back to normal!") was that we had a large living-room/playroom downstairs, which included the television. We also reorganized the spare bedroom on the top floor, where the children had had their naps and sleepovers in travel cots from a very early age: this now had two single beds and some of the toys, the rest being downstairs in the "back half" of the living-room. These arrangements reflected the wider choice of activities that the children were opting for between the ages of 2;8 and 3;6, and the fact that they more frequently diverged in what they chose to do. The result in terms of this research was that, for the second 10 months of data gathering, the physical context for most observation and video recording was rather different from the first 10 months.

However, 23 of the 65 videoed viewing events did take place at the children's home, often after we had brought them back from our house. All these were in their living-room, with one excursion to the kitchen (see Section 4.3.4) and one to their home office to watch a video on the computer. The TV set in the living room was on a shelf about 85cm above the floor (i.e. the screen was just above the children's head height when they were 2;6) with all the associated boxes, wires and remote controls either concealed or on an even higher shelf. The living room, as in many families, was extensively "colonised" by the children's toys (Stevenson and Prout 2013, p139) and the two sofas were arranged – one at right angles, and the other opposite, the TV set – so that the whole family could easily watch together. Sometimes both children would sit on the sofa facing the TV; sometimes they each chose what they claimed was their "own sofa"; sometimes they stood in front of the TV, heads tilted up to watch the screen as closely as they could (Figure 2.6).

Figure 2.6: the children at home, aged 2;3, paying close attention to *Mary Poppins* (see also Section 5.2.5)

2.4.4 Field notes

Making field notes consistently and systematically was impossible as a participant observer of very young children. Since video was giving me extremely rich data on viewing events, observation was confined to times when I did not have access to my iPhone, events were happening so fast that I did not have time to get hold of it, or when I was involved in play activity and conversations, which had to be noted after they had happened. Perhaps the greatest disadvantage or being a participant observer in one's late 60s and early 70s is the weakness of one's short-term memory: I found I had frequently lost key words or turns of phrase even in the couple of minutes it took me to get to my notebook, but I could not possibly have stood around holding a notebook all the time. Consequently I did occasionally use audio

recording (again with the iPhone) to capture one or other of the children engaging in extended speech or conversations: I have 12 of these, most of which involve Alfie, who became a more fluent speaker earlier than Connie. But my written notes do provide a useful, if partial, record of some utterances, play tropes and activities that I happened to find interesting at the time, often made some hours or even days after the events I was writing about; they also include numerous comments from Phoebe – often by telephone – about what the children were currently viewing at home and how their tastes were changing. Since there were 26 viewings that I did not film, I made notes of most of these, capturing at least some of their physical and verbal responses. Many of the field notes are about their play, their language development, and their moods and preoccupations (such as Alfie's long preoccupation with the Thomas the Tank Engine story *Percy and the Haunted Mine* – see Section 4.3). The notes therefore also function as a form of reflection about what I was seeing and hearing as the project progressed.

In late November 2012, when the children were nearly three, they were highly intrigued by my note-taking. They were in any case fascinated by adult writing: by its speed and its almost scribble-like appearance (see Figure 2.7). They did not notice me making notes – mainly because I rarely did this when in plain view – but on the couple of occasions when they did notice, they wanted to know what I was doing. My answer was "because I'm writing a book – and it's about you!" They seemed to find this entirely reasonable: with five adults in caring roles, they had long accepted that they were objects of great interest whose activities were recorded in various formats and talked about to others.

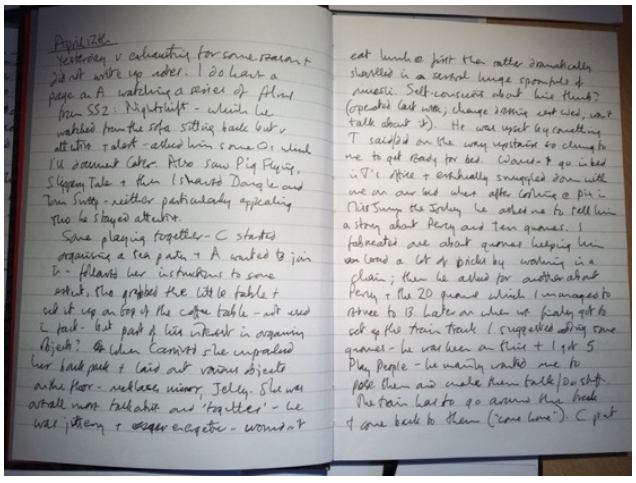


Figure 2.7: Field Notes, 12th April 2012

2.4.5 Interviews

I audio-recorded 12 semi-structured interviews between October 2011 and April 2013: eight with Phoebe, three with Phoebe and Dickon, and one with Dickon on his own. Inevitably, given that they took place between people in close and trusting relationships, and were in fact the only times when we had a chance for extended discussion about the children, the interviews would often include exchanges of information in which I sometimes had plenty to say as well. It was in this context that my identity as a family member was more of a disadvantage. Although I always began with, and intermittently referred to, a list of questions and topics, both Phoebe and Dickon soon included digressions, performative elements such as imitations, sound effects and variations in speaking style for dramatic effect. Often we would be drawn into comparisons between what had happened at their house, and what had happened at ours; I would include surprised comments and questions about things I had been previously unaware of. The only place and time when it was possible to interview either Phoebe or Dickon was at their house, in the evening after the children were in bed and after we had eaten together: consequently we were usually quite tired by the time we sat down to talk. On one occasion the children were in bed but not asleep, and Phoebe frequently had to leave the room to settle them down. Nevertheless, the interviews were a valuable source of information about what the children were doing at home, on their parents' thoughts about the children's behaviour with moving-image media, and on their own attitudes to, and ideas about, the material the children were watching. I was also able to organize occasional sessions in which Phoebe, and on one occasion Dickon as well, viewed some of the videos with me and discussed what they saw. All of these sessions were another way of testing out the validity of some of the initial codes that emerged as I transcribed the recordings and analysed them using MaxQDA.

2.4.6 Choosing what to watch

The nearest I could get to planning for a viewing event (i.e. an occasion on which they would watch something and I would film them watching it) during the children's weekly visits to our house, was to announce – and later on, when they were able to argue about it, to propose – some movie-viewing. Otherwise, viewings would be initiated by the children specifically asking to watch particular titles. The television was in the living room, which until early 2013 (age 3;1) was in a sense "on the way" to the bedroom, being on the first floor: they would usually be playing in the ground floor office and kitchen before their naps (see also Section 2.4.3). The first few viewings (see Section 3.2) happened just before their bath and bed time, as was also the case at their house. These were fairly chaotic as we worked out how to manage the viewing and filming, and the children interspersed periods of viewing with explorations of the room and

attempts to get close to the television. They stayed at our house overnight every week from September to December 2011, and we would also sometimes watch something together after breakfast (see Section 4.1). When we abandoned the sleepovers after Christmas 2011, the children still spent a day each week at our house, and both still had afternoon naps, so we would usually watch something before they went upstairs to bed. A routine was established: they would have a bottle of milk each, favourite chairs would be selected, and they would settle down to watch, often asking for repeat viewings. And as their daytime nap patterns became erratic, or when one wanted to watch something and the other did not, I would view with just one of them (see Sections 4.3.2 and 4.3.3). Whether I actually was a co-viewer with one or both of them depended very much on where they ended up sitting, or standing, and whether I could see their faces. In most positions, once I had the camera framed and if they kept in the same place, I could maintain the camera position and view with them, often (and in retrospect, too much at first) commenting as they watched.

At age 1;10, *In the Night Garden* had for a long time been their usual pre-bedtime viewing, so we would either watch the broadcast episode, or I would select it from Virgin Media catch-up, and start it when they were ready. But variations could happen, as with Connie's intent viewings of the CBeebies Bedtime Story broadcast (see Section 3.2.3) and of a broadcast of *Mr Bloom's Nursery* (see Section 4.1). I quickly became opportunistic in my filming, once I realized that using the iPhone handheld was a better way of capturing what was going on. But I would also deliberately set up a viewing event, as for example with the six sections of *Monsters Inc* which I went over to their house to film in early December 2012 (the week before the twins turned two), having heard from Phoebe that they had already watched it twice and wanted to see it again. Likewise, the Peppa Pig *Tug of War* event on Christmas Eve 2012 was deliberately staged because Phoebe had reported to me about Connie's distress at the climactic rope-breaking moment (see Section 4.2.3).

In the third month of my fieldwork, I started to experiment with introducing non-mainstream short films from some of the DVD anthologies we had published at the BFI (see Section i). On the first occasion, it was an impulsive decision when I was at the children's own home and the DVD in question happened to be handy. My post-hoc rationale here was that, being who I am, this is something I would have done anyway sooner or later. The children's response was so remarkable (see Section 4.1) and so much in line with the comments I had often heard from teachers (e.g. Whitney 2010) that I resolved to continue offering movies from these DVDs. But I

did not have to do this for long: the children were soon clamouring to see one or other of them over and over again (see Section 3.4); they also often found thumbnail images on the DVD covers and demanded to see the movies they referred to, so I took to leaving DVDs lying around that I thought they might like to see; several of these then also became candidates for repeat viewing, and all the viewing events I videoed from August to December 2012 (apart from *The Gruffalo's Child* – see Appendix 1) involve these movies. Thereafter, the remaining six videos were made at their house, and involve some of their current broadcast favourites at that time.

In autumn 2012, when they could talk fluently, and there were some firm favourites to which we returned often, I would ask them questions during the viewing (on one occasion pausing the movie as I did so, though Connie hated this (see Section 3.4.3) to try and elicit their interpretations of what they were watching, which sometimes produced interesting responses, and sometimes not.

Because Phoebe was always present at their house, and often brought the children over to us on her days off from work, in addition to their regular days with us, she appears in 29 of the 65 videos. Terry was almost always somewhere near but not necessarily in the room; Dickon appears in two videos. About half of the viewing events therefore involved just me and the children – usually both, but sometimes just one – for some or all of the time. As in so much of the project, this was not planned: my filming was usually opportunistic, and who else was in the room depended on other domestic demands.

2.5 ANALYSIS

In this section I summarise the different kinds of data I had accumulated over the 20 months of fieldwork, and describe the analytical approach and the software that I used for data analysis.

2.5.1 Data

By May 2013, when I completed my fieldwork, I had assembled 12.7 hours of video material, covering 64 viewing events, which involved 53 movies – ranging from very short movies or movie fragments, to extensive segments from three feature films. The titles included 24 episodes from 20 television series (see Appendix 1 for the full table of viewing events on video, and Appendix 2 for the list of titles watched). Eleven of the movies were ones I had suggested or were picked by the children from thumbnail images on the DVD cases; they had already seen the

other 32 movies, or episodes from the same series, at home. 37 of the viewings took place at our house, 23 at theirs, and four in the shoe department of the John Lewis department store.

I also had 13 interviews totaling 8.4 hours, and 90 sets of field notes, which include some notes on the filmed viewing events but also notes on 26 other viewing events that I did not film, and on numerous episodes of play and talk. The field notes continue until July 2013, plus a brief resumption in November 2013. I began my data analysis during 2012, as I transcribed the interviews and used MaxQDA in starting to develop a code system, first identifying broad categories such as Responses, Narrative, Attention and Preferences. These brought together the phenomena that I was beginning to observe in the videos with the topics that we addressed in our conversations, and provided what Dey calls "a parsimonious conceptual structure" (Dey 2007, pp168-9). The interviews with Phoebe added important background information, such as Alfie's developing fear of disappearances and endings, Connie's inarticulate night terrors, and the complex and evolving processes through which the children expressed their preferences and dislikes. But in the two interview sessions when she and Dickon and I had watched some of the videos together, she had also pointed out some of the tiny expressive features of tension in the children's faces and postures, that I had so far failed to notice.

2.5.2 Grounded Theory

In early 2015, after considering various CAQDAS packages, I decided on Transana as the most appropriate software for my purposes, given that it is specifically designed to support video analysis and can also allow two videos to be studied side by side. To make the best of this, and because my Mac-based video material would not transfer satisfactorily to my Windows PC, I decided to migrate to a large-screen Apple iMac where I could work more easily with several pages open at any one time. I was also by this time committed to a Grounded Theory approach, aware that I had been uncritically carrying forward my "media education" approach – i.e. making prior assumptions about what viewing would involve – rather than looking at the video material with a more open mind.

I approached Grounded Theory with caution, mindful of its "reputation for being positivist, philosophically naïve, and a refuge for the methodologically indecisive" (Bryant and Charmaz 2007, p45). But, with access to improved technology I began to see my material in a new light. A theoretical approach was genuinely "emerging from the data" (Glaser 1967) that I was gathering from the videos, that focused on the children's intensely physical engagement with movies, and

on the presence of adults in the room. I now realised that I was collecting data that related to the fact that they clearly *were* learning, and about the nature of that learning: emotionally-driven, self-directed, and socially negotiated. I adapted Strauss and Corbin's strategy of analysing choices of words, idioms and grammar (Strauss and Corbin 1998, p82) to focus more on physical phenomena such as gesture (Dosso and Whishaw 2012) and the children's bodily postures, facial expressions and direction of gaze when they were watching attentively.

2.5.3 Using Transana

Transana analysis software is designed with Grounded Theory very much in mind, and offers a flexible range of support to data analysis. I began by assigning each video (or "episode" as Transana terms them) to one of five Libraries, organised chronologically (September 2011 to May 2013), apart from the videos that related to three examples of repeat viewings over extended periods (Chapter 3). Transana enables a Keyword database as a way of storing and annotating a coding structure as it develops. I began building this as I transcribed, working through the videos chronologically, and making frequent revisions and frequent re-trawls through them, using Transana's "quick search" option to identify all the applications of a particular keyword.

At the same time, I used Transana's system for creating and coding some short clips and snapshots from the videos during the transcription stage, as I identified what already appeared to be significant moments illustrating phenomena such as "Gesture" (with its 10 keywords), six different categories of "Emotion," and "Attention" which initially had 20 keywords. Transana's Visualisation Window presents the sound track of each video as a wave-form, with each clip colour-coded according to the keywords assigned to it. Together with the adjacent Transcript and Media windows, this gave me flexible ways of reviewing and retrieving key moments.

Figure 2.8 indicates how this worked in practice, in this case with one of the four viewing events made on the same day (4th December 2012 – a week before the children's second birthday), as they watched *Monsters Inc* with Phoebe, at their house. Given that there are relatively few utterances made by any of the people in the room, but a wealth of often minute – and rapidly-changing – details of expression, posture and gesture, transcripts at this stage were formed in small "chunks" separated by time-codes, with "signpost" excerpts from the movie soundtrack incorporated in bold. Later, I would return to key moments to construct more multimodal transcripts with additional timecodes, especially to pin down correlations between screen

action, the childrens' responses, and contextual movement or sound. At this stage I had already made two clips from this event, which can be seen in the Visualisation Window (top left) with coloured bands indicating the keywords I had assigned to each clip. Transana allows each window to be resized independently, so when necessary I could watch the videos on a very large screen.

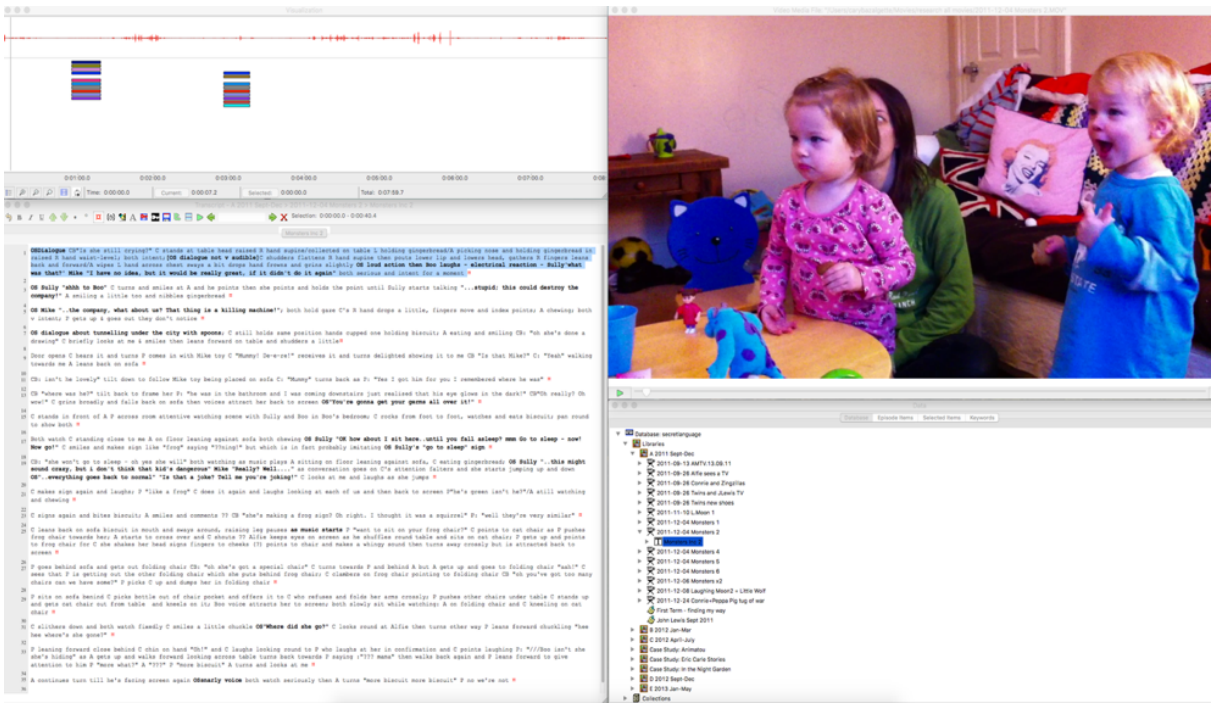


Figure 2.8: screen shot of Transana in use

Once I had completed the initial transcripts, I began to develop and revise my initial coding as I organised both old and new clips and snapshots into annotated Collections ("groups of conceptually-related bits of analytic data" as Transana defines them) and in correlating these with Keyword categories arrived at revisions and simplifications of the initial codes. At this stage I was here following a procedure along the lines of the abductive inferencing described by Reichertz as "a state of preparedness for being taken unprepared" (Reichertz 2007, pp 221-2). A major feature which I had not initially anticipated was the amount of adult intervention that took place in many of the viewings, which was clearly providing an additional dimension to the viewing experience, but whose effects it was hard to assess (see Chapter 5). Having in past publications and teacher training argued that children's early learning about movies was largely unmediated, (eg Bazalgette 2010, p 39) I had to swallow the fact that looking at – and listening to – the evidence did not always bear out this claim.

2.5.4 A new framework

Having worked on the data for four months, I turned back to theory in the form of new work on embodied cognition as interpreted by film scholars, and explored some of the discoveries in neuroscience that relate to it, in helping me revise the concepts of emotional and physical responses to movies that I was discovering in the data and to analyse them more rigorously (see Section 1.4).

I returned to the data with a new sense of purpose, reorganising and annotating the categories with which I had been working, somewhat along the lines of what Strauss and Corbin describe as axial coding and coding for process (Strauss and Corbin 1998, Chapters 9 and 11) although applied, in my case, to material that included few utterances and very little dialogue, but which was linked to densely complex material on screen. This prompted a re-investigation of key moments where I needed to understand better the relationship between elements of a movie such as a cut, a sound-track change or movement across the screen, and the behaviour of one or both children: something that could be extremely difficult to establish. In some of the videos it was possible to add an inlay window showing what the children were viewing, which could help with the correlation of timing but not necessarily with establishing the direction of each child's gaze. Nevertheless, through this iterative process I identified five consistent and recurrent features or "core categories" (Strauss and Corbin 1998, p104). These are: intensely focused attention as evidence of learning in progress; major emotional responses as both drivers and indicators of partial comprehension; the social context as a contributor to learning; modality judgments; and the emergence of narrative understanding.

2.6 STATUS OF THE RESEARCH

Here I discuss what claims can be made for the validity of my findings, set against my research method and my status as participant observer, and against the particular ethical decisions that followed from these.

2.6.1 Questions of Validity

Qualitative research projects using ethnographic methods and interpretive analyses can be challenged as to their validity, for example on the basis that such studies cannot be repeated in order to verify their results, or scaled up in order to study larger samples, and that generalisations cannot be made from subjective interpretations. Seen merely as the work of a

grandparent studying her own grandchildren, my research could be dismissed as merely subjective. But this would be to ignore the complex intersection of experiences and motivations that have driven it, and the epistemological and ontological positions that underpin it (see Chapter 1).

I have sought to construct a new theoretical approach to children's early relationship with movies that offers an alternative to the risk-benefit paradigm, in explaining this relationship as primarily a learning experience, and thus implicitly important for future research, for education, and for movie production aimed at this age-group. The validity of the research thus lies in its "generative promise" (Peshkin 1993, p23) as well as in the trustworthiness of the evidence I have gathered.

The necessity of using a longitudinal, ethnographic study in gathering evidence from two-year-olds, as argued above, accentuates the importance of the research design in providing grounds for validating the credibility of my findings. Angen, discussing validity in the context of qualitative research, says that "an interpretivist approach is attuned to the dialogical context of human understanding, arguing that we cannot step outside of our intersubjective involvement with the lifeworld and into some mythical, all-knowing, and neutral standpoint any more than we can give up our responsibility for taking a stand and adopt a solipsistic position" (Angen 2000, p384). While I agree with this argument, I recognize that the very particular kinds of intersubjective involvement that my research entailed need to be acknowledged.

My dual role as grandparent and researcher presents a potential challenge to the validity of my findings (I discuss this further in Section 2.2.3). My own emotional involvement with the children meant there was a risk that I would interpret some responses or behaviour as more significant or remarkable than would an observer external to the family. Here an important counterbalance is my long professional experience in debates about children and media, which has made me extremely wary of exaggerated claims on children's behalf. In addition, my reflexive approach and – though I did not plan for this – the extended period over which it took place, mitigated the sentimental awe with which I first viewed the video material.

As a family member, having to negotiate the necessarily opportunistic process of data-gathering, and the inherent challenges of trying to observe two-year-old twins, entailed a certain amount of what O'Brien (2010) refers to, in a positive sense, as the inevitable

"messiness" of ethnography. I take heart from her observation that "the more adept we become at recognizing, articulating, and sharing the 'messiness' of our research experiences, the more information we will be sharing with those who are trying to assess the reliability, or what I prefer to call the 'resonance,' of our observations" (O'Brien 2010, p480). Plowman and Stevenson provide cogent arguments in support of observation in the home, on the principle that the child's perceptions could best be understood through knowing more about their experiences and interactions in the place where they spend most time, with the people with whom they are closest" " (Plowman and Stevenson 2013, p334). But they also point out that "the kinds of challenges faced when doing fieldwork in the home are unknowable in advance, requiring a high level of flexibility" (p330): this was certainly my experience.

SUMMARY

I began this chapter by summarising the purpose and nature of the research and explaining the rationale for the methods I adopted. Acknowledging the relative rarity of longitudinal, ethnographic studies of this age-group, and the reasons for this, I cited other research on young children that has been undertaken by parents. I described the social and familial roles of grandparents and how these affected my own role as researcher in both positive and negative ways, and located this study in the context of the very few other ethnographic studies of two-year-olds and movies.

In the section on ethics, I addressed the issues of consent, by the children and by the parents, and the question of whether to use pseudonyms for the family members, explaining that both they and I came around to the view that there is no rationale for anonymization in this case.

In describing the fieldwork, I explained my choice of video as the main tool for data-gathering; the advantages of using an iPhone for filming; the research settings in the children's house and in ours; my use of field notes, and interviews with Phoebe and Dickon. I also outlined the various ways in which the movies the children watched were selected.

The analysis section of the chapter began with a summary of the data I had collected. A summary of the initial assumption which underlay my research is followed by an account of my decision to use a Grounded Theory approach to my data analysis, and how this led me to modify my research question. I described how I used Transana for my video data analysis, and how this,

together with my acquisition of a large-screen iMac, contributed to my recognition of a far wider range of responses and to the adoption of embodied cognition as a key element of my theoretical framework. Finally I discussed the status of my research, claiming that it is the coherence of my argument and the thoroughness with which I have explored and reflected on the data, that constitute its validity, and acknowledging, but justifying, my decision to study my own grandchildren.

The next three chapters describe my research findings. Chapter 3 uses three approximately consecutive sequences of viewing events which together cover the whole period of the fieldwork and shows how some of my findings began to emerge. Chapter 4 looks specifically at the children's emotional responses to movies and discusses different examples of these complex processes. Chapter 5 describes the family setting of the children's movie-watching and how a variety of viewing practices contributed to their growing awareness of modality and narrative. The final chapter draws together my conclusions and outlines their possible implications for education and media policies.

CHAPTER THREE
WATCHING MOVIES

This chapter begins with an account of debates about some key features of movies made specifically for child audiences, and addresses issues of representation and modality. The rest of the chapter deals with three viewing sequences: each consists of repeated viewings of the same programme series or film, and illustrates how the major themes of my findings began to emerge. *In the Night Garden* covers the period October-November 2011; *Eric Carle Films* occurs between February and May 2012, and *Animatou* is based on viewing events that took place throughout April-December 2012. Whereas my analyses in Chapters 4 and 5 are thematically grouped and cover numerous viewing events throughout the fieldwork period, the accounts in this chapter offer a more detailed, and chronological, account of the ways in which Alfie's and Connie's engagements with movies changed between the ages of 1;9 and 3. Each sequence provides an in-depth account full of detail about the real-life context and modes of viewing, for which I do not have space with all my descriptions of viewing events in this thesis. Each sequence provides a section of the overall chronological narrative of my fieldwork, and thus a frame of reference for the subsequent chapters, where chronology is not always followed. In each one, topics that I discuss in later chapters are identified within their original context, so this chapter remains largely descriptive.

3.1 MOVIES FOR CHILDREN

Here I discuss the characteristics of the kinds of material the children watched in all the viewing events I recorded, which were mostly broadcast television at first, and later diversified into DVD series, short films and the occasional feature film.

3.1.1 Institutional Perspectives

There is plenty of industry "wisdom" about what kinds of stylistic devices are suitable for children of different ages, derived in part from developmental psychology but also, especially in the UK, relying on producers' instinctive feelings about what will appeal to children (Steemers 2010, pp14-15). Steemers' interview with a BBC editor in 2008 identified rapid editing and technical tricks such as panning and zooming, confusing shots, bizarre angles, multi-cutting and "anything that messes with time" as elements that children's programming should avoid, in favour of wide shots "to establish where everybody is in relation to everyone else," and close-

ups to focus attention or provide clarity. Events have to happen on-screen, it is argued, so that children can develop a sense of cause and effect, and characters have to be seen speaking. However, Steemers also interviewed one writer for children's television who claimed that wide shots confuse two-year-olds because there is too much in the frame and they can't see it all, and that close-ups are confusing because they "break the rules". Where producers do discuss factors like this, it is clear that they are adopting, at least to some extent, a deficit model of early childhood, and are judging from an adult point of view what may and may not be "confusing" (see also Section 5.5.1), although the "busyness" of wide shots may have been a factor in the "battle for proximity" that I discuss in Section 3.2.1.

The same writer (interviewed by Steemers in 2007) pointed out that most "pre-school" television is actually pitched at "a generic four to five age range" which must mean children likely to be attending nursery school, who can converse with adults and other children outside their immediate family. However, an acknowledgement of the different needs of younger children had emerged in 1997 when Ragdoll Productions created *Teletubbies* for the BBC, specifically aimed at an audience aged between two and four. Although this stirred up much debate about its appropriateness, or lack of it, for this age-group, and indeed about whether they should be watching television at all (e.g. Buckingham 2002b, Linn and Poussaint 1999), this was the BBC's most profitable programme in world markets, with 365 episodes backed up by huge merchandising (Briggs 2007). It was followed in 2007 by *In the Night Garden*, a 100-programme commission, marketed worldwide, also aimed at two to four year olds. Both programmes were co-created and written by Andrew Davenport, and established their own rules about appropriate production styles for these age-groups. They include the use of static camera, long shots, keeping the action all within the frame, and making relatively few cuts (Steemers 2010). Buckingham remarks that "what amuses and engages a two-year-old is, by definition, unlikely to hold much interest for us" (Buckingham 2002b, p48). But in fact, as some academics have noted (e.g. Bignell 2005), Ragdoll's productions do offer quite complex interpretive challenges. Howard and Roberts' observational study of children aged between 14 and 24 months watching *Teletubbies* (Howard and Roberts 2002) includes detailed analyses of the episode that they used, and confirms the cognitive challenges that required the children "to exercise developing theories of cause and effect, prediction and inference" (p334). But the opening sequence of *In the Night Garden* is, in my opinion, a masterpiece of dreamlike modal and diegetic shifts (see Section 3.1.3) and heightened emotion, requiring quite a different kind of engagement from the theories cited by Howard and Roberts. By the time I started to observe

the twins watching the programme, they were extremely familiar with the opening sequence and showed little interest in it, although Phoebe said that when they first saw it, aged 3 months, they were "gobsmacked" (see Section 3.2).

3.1.2 Modality levels

The question of accessibility in movies for children raises interesting issues about modality levels. I am using Hodge and Tripp's version of "modality levels" here (Hodge and Tripp 1986, Chapter 4). Rather than considering modality as an inherent quality of the text, they describe modality levels in terms of the judgments made by viewers about how real, or true, a text or part of a text is meant to be. Kress and van Leeuwen develop this account by stressing that although "reality may be in the eye of the beholder, … the eye has had cultural training, and is located in a social setting and a history" (Kress and van Leeuwen 2006, p158). The "coding orientations" that they list (pp165-6) depend on what I would term "generic knowledge" – something that two-year-olds are in the early stages of developing.

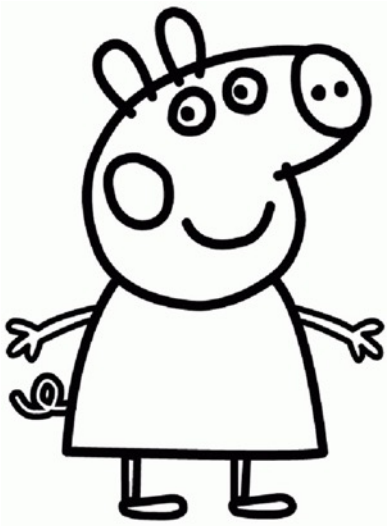


Figure 3.1: Peppa Pig: version for colouring in

Fantasy settings, animation, puppets and live actors inside puppet-style bodysuits feature very widely in movies for children, all of which appear in a hugely diverse range of styles. This rich modal diversity is clearly interesting for children. But in the niche sector of movies for preschoolers, producers also look for ways of simplifying faces, figures and backgrounds to ensure what they regard as accessibility. Some of this simplification relies on what is known about the importance of particular facial features for infants and toddlers (e.g. Farroni et al. 2002) so that, for example, large eyes feature frequently. But another source of simplification tends to be the drawing styles favoured by slightly older children. A comparison of Figure 3.1 with 3.2 and 3.3 indicates the level of this kind of simplification: the smiley mouth that appears in both of the children's drawings appears also in the Peppa Pig figure, but the dots-for-eyes feature of both of the children's drawings does not. Peppa Pig's stick-like legs and arms are also reminiscent of the limbs that children draw, although these may not feature fingers, or shoes. Peppa Pig therefore represents an adult version of what children are thought to draw: a compromise between "childish" and lifelike representations. But as Kress points out, when children draw they do not merely simplify: they "choose one aspect of the thing they want to represent as being criterial at that moment for the representation of an

object; they then choose the most plausible form which is available to them for its representation" (Kress 1997, pp14-15). In Lancaster's study of a two-year-old making a drawing with her father, she observes that drawing is "a hermeneutic process…in which children use all

Figure 3.2: Face – by Alfie, aged 3;8

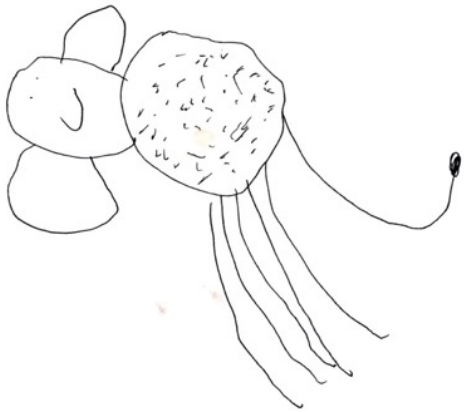


Figure 3.3: Elephant, by Connie, aged 4;7

the semiotic 'tools' at their disposal" (Lancaster 2001, p132). She challenges the notion of "simplification", pointing out that it is "something socially and technically constructed" (p134) – as we can see from the Peppa Pig figure, as well as from the varied graphic styles in hundreds of other movies, books, toys and packaging aimed at preschoolers. Nevertheless, children seem to quickly assimilate and understand each stylistic trope on its own terms, learning, with the help of adults (and, in the case of movies, voice-over commentary and/or dialogue) how to name each character, prop and setting. In relation to children's thinking about the semiotic codes of drawings, Lancaster quotes Ferreiro and Teberosky's account of children's early reading,: "Children pose deep questions to themselves. Their problems are not solved when they succeed in meaningfully identifying a letter or string of letters, because they try to understand not only these elements or the results but also, and above all, the nature of the system" (Ferreiro and Teberosky 1982, p172).

I want to extend this concept of trying to understand the nature of the system, to the work that children must be doing when trying to make sense of movies. Given that all visual representations involve myriad choices by the image-makers from the semiotic codes at their disposal, animated movies, with their hugely diverse styles even within the preschool television sector, present children with fascinating hermeneutic challenges. It is not surprising, therefore, that when they do encounter more complex images, they can be just as interested in figuring

out what it is they are looking at. One of the earliest instances of unexpectedly close attention that I observed in the children – at age 1;4, well before I began this research – was when I read them Astrid Lindgren's *The Tomten and the Fox* (Lindgren 1992): they were intrigued by Harald Wiberg's subtly coloured, dim-lit, detailed snowy landscapes, in which the characters are not placed centrally, in mid-shot or close-up, as they generally are in preschool television or indeed in many children's books. The children stared hard at each one for a minute or more before letting me turn the page (Figure 3.4).

Figure 3.4: Illustration from *The Tomten and the Fox*

This reaction matched their later behaviour with other stylistically unfamiliar texts: for example Connie's intense attention to *Mr Bloom's Nursery* (see Section 4.1, Chapter 4) and their lengthy period of interest in *Animatou* (see Section 3.4, below). In such cases, they seem to have been captivated, and certainly not put off, by the texts' unexpected features. These did not necessarily differ from what they were used to in terms of the kinds of "higher modality" that Kress and Van Leeuwen describe (eg colour saturation, focal resolution, complexity of background, unexpected soundtrack elements etc) but also in terms of features specific to movies, such as the combination of live action with puppets in *Mr Bloom's Nursery*, or the constantly deferred narrative resolution of *Animatou*.

3.1.3 Diegesis and modality

Another interesting aspect of children's television, when viewed through the lens of film theory, is how the programmes play with filmic conventions. Many of these conventions serve to create and maintain the important concept of diegesis. Branigan defines diegesis more precisely as "a collection of sense data which is represented as being at least partially accessible to a character"

and as "an imagined world" which is "governed by a particular set of laws" (Branigan 1992, p35); in basic Film Studies it is also often referred to as "the story world". But as Branigan points out, the "story world" concept has both diegetic and non-diegetic elements, if we accept that elements such as mood music, which we know are not experienced by the characters, are nevertheless "*about* the diegetic world of the character and are meant to aid the spectator in organizing and interpreting that world and its events"; an alternative view might be that the diegetic/non-diegetic differentiation, though crucial, cannot always be sharply defined. Branigan nevertheless argues that "the spectator's organization of information into diegetic and non-diegetic story worlds is a critical step in the comprehension of a narrative and in understanding the relationship of story events to our everyday world" (p 35). This organizational process – whether it involves a sharp differentiation or a more nuanced reflection on possibilities – is likely to be an important one for children in making sense of the movies that they watch, given that these texts offer a very wide range of diegeses that are deliberately fanciful and governed by a wide variety of "laws". Unlike the adult viewer of classic Hollywood cinema, children cannot necessarily draw on "real life" experiences to piece together all the diegetic elements of most children's programmes: like viewers of science fiction, they have to use clues within the text itself in order to understand the laws of each diegesis. But they may also make at least some comparisons between the programme diegeses and their own real life experiences even if, in the case of magical or fantasy settings, the story world is pleasurably *unlike* the child's own world. It follows that thinking about diegesis is crucial for the formation of modality judgments.

A significant difference between film and television is television's extensive use of direct address, both visually, as when a presenter looks into the lens, and verbally, as when a commentary is either provided by a visible person or simply heard. Live programmes such as news presentations or sports commentaries, which address the audience directly and make efforts to draw us into the programmes through their introductory sequences, can also be seen as extending the diegetic space, even into our own living rooms. Horton and Wohl suggest that this device deluded 1950s audiences into believing that they had a personal relationship with the presenter (Horton and Wohl 1956), although Alfie's perception in this respect was more complex (see Section 5.5.2). In addition, direct address serves to claim an enhanced modality status for the segments in which it appears: being apparently live, containing at least sections that happen in real time, it invites audience judgments that they are "real" and perhaps even

"true" even when, as often happens in children's programmes, it is an animated character who addresses the camera – Peppa Pig for example.

3.1.4 What the twins watched

The television that Connie and Alfie watched obviously differed from adult news and sport in subject-matter, in the scale and tempo of its introductions and in its emphatic, often excitable, mode of address. The pictorial "thumbnail" links on the websites of the channels that they mainly watched, CBeebies and Milkshake, show the pervasiveness of direct address in children's television. In July 2013, 28 of the 42 programme thumbnails on the CBeebies website showed figures gazing directly at the camera, who in nine of the thumbnails also displayed welcoming gestures and/or excited expressions. Almost all these programmes include some form of direct address, whether through presenters on camera, initial introductions by characters, or non-diegetic commentaries, both spoken and sung, and have opening sequences that draw viewers in to the "world" of the show by using zoom-ins or travelling shots.

The opportunity to re-view programmes further complicates the "liveness illusion", whether through recordings, catch-up TV or merely because broadcasters run and re-run each series, while at the same time providing a comforting normality. The present tense of the programme always exists and the diegesis can be re-entered at will. This is analogous to the pleasures of repetition and recognition involved in engagement with any well-known cultural product: for example Vermeer's "Girl with a Pearl Earring" will always be "there" looking at us whenever we return to the painting or to reproductions of it.[6] The credibility of children's programmes apparent "liveness" is accentuated by the fact that on channels such as CBeebies and Milkshake, they are introduced and commented on by live presenters in a studio who speak continuously to camera and use phrases such as "see you again soon" (although see Section 5.5.2 on how the children interpreted this).

Alfie and Connie also watched some "educational" programmes such as *Mr Maker*, *The Numtums*, *Alphablocks* and *The Lingo Show*: a genre which occupies a middle ground between fiction and non-fiction. Although these series are concerned with factual learning, they involve fictional animated characters who address the camera directly and enact brief narratives that involve art activities, counting, spelling or word learning within a fictional space that is either live, animated or a mixture of the two, and is unique to each programme. These kinds of

[6] Johannes Vermeer, "Girl with a Pearl Earring" (Meisje met de parel), c1665, now in the Maurtishuis, The Hague.

programme are closely related to the dozens of "educational" games for little children that are available online or as apps, and which the twins started enthusiastically playing (age 3) as soon as their parents acquired iPhone 5s at Christmas 2012. From age 2 onwards, the children did also occasionally watch feature films on DVD, starting with *Monsters, Inc,* a viewing which I recorded (see Sections 4.4 and 5.2.2). Feature film viewings tended to be deliberately planned and chosen by and for the children with both parents, and I observed very few of them. The challenges of watching a mainstream feature film at age 2 are considerable, given that they are aimed at family audiences and therefore include much that toddlers cannot understand, such as quick-fire dialogue and subtle cultural references (see Bazalgette and Staples 1995, for an extension of this argument). But the DVD menu enables easy re-viewing of selected scenes, which the children took advantage of with the films they found interesting, although they needed adult assistance to do so, unlike my Italian grandson who learned to manipulate the much simpler VCR system by the age of 2;3 (see Introduction).

A vast range of fictional "worlds", movie styles and genres was therefore available to the twins. Although many of these worlds would present to most adult viewers some generic similarities, each nevertheless offers some degree of complexity and distinctiveness in terms of visual and aural style, modality level, spatial logic, character types and social conventions.

3.2 *IN THE NIGHT GARDEN*

When I started my research in October 2011, Alfie and Connie had already been watching *In the Night Garden* on a fairly regular basis for 18 months: "I didn't introduce them to the telly to watch a specific programme until about three months when I put them in front of *In the Night Garden* and they were just gobsmacked" (Phoebe, Baseline Interview, 13th October 2011). By October 2011 they were already watching numerous other programmes, almost all from CBeebies, and all from broadcast television: she did not start borrowing library DVDs until December 2011, and the family did not get a TiVo box[7] until December 2012 (when the twins were 3 years old). But they maintained some interest in *In the Night Garden* into the autumn of 2011 (between the ages of 21.5 and 24 months) and could still refer to it a year later.

In the Night Garden (ITNG) was broadcast on the BBC CBeebies channel each evening at 6.20pm and by early 2011 had become a regular part of the twins' bedtime routine. In fact, one important original impulse for this research occurred in January 2011 when I observed their

[7] Set-top box recorders provided to Virgin Media cable subscribers

fearful reaction to two episodes of the programme: 'Mr Pontipine's Moustache Flies Away' and 'Runaway OgPog'. In anticipation of my initial registration for a PhD in October 2011, I made two videos (Moustache and OgPog) of the children re-watching these episodes on DVD in May 2011. Because their responses to these episodes were very distinctive, and happened nearly five months before my fieldwork started in earnest, most of my discussion of them is in Section 4.2.

When my fieldwork began in October 2011, the children stayed over at our house each Wednesday night, and to begin with Phoebe stayed as well. Terry and I looked after the children all day on Thursdays while she was at work, taking them back to their house in the late afternoon. She had already established watching ITNG at 6.20pm as a focal point before bedtime, so we did the same. I made four videos of these viewings: on 5th and 12th October (ITNG1 and ITNG2), and on 9th and 23rd November (ITNG3 and ITNG4). All the videos were filmed continuously, without breaks, and all except ITNG1 and 2 were filmed with a handheld iPhone4 (see Section 2.4.2). ITNG1, 2 and 3 each last approximately half an hour; ITNG4 lasts just under 15 minutes. The total amount of data for this viewing sequence is thus just over 106 minutes. My purpose here is not to offer a detailed analysis of each video, but to draw out some key themes which appeared first in these viewing events.

3.2.1 Logistics and the Battle for Proximity

While the research settings are discussed more fully in Section 2.4.3, some basic points relevant to the early stages of the research are necessary here.

Since they were babies, the children had for many months been used to sitting on a sofa at home, with or without an adult, watching a TV set that was positioned too high for them to reach. At our house, the TV set was on a trolley, with the cable box and DVD/VHS player in full view, so was a thrilling opportunity not only to investigate buttons and peer behind the set, but also to watch movies in enormous close-up. Phoebe was nervous about this, but I was interested in seeing how they would negotiate it, while remaining nervous myself about the accessibility of the cable and DVD boxes. Thus in each of the ITNG viewings there were struggles over logistics: amongst the adults, between one or more adults and one or both children, and between the children themselves. In ITNG1 (5th October 2011), the children are seen constantly experimenting with – or being coerced by adults into – different viewing positions which, with a fixed camera, created constant problems with framing (Figures 3.5-3.7).

Figure 3.5: sitting where they'd been put: ITNG 1 (aged 1;10)

Figure 3.6: Connie gets close to the TV: ITNG1

Figure 3.7: settled – but adults anxiously check the framing: ITNG1

The initial idea of placing the coffee table in front of the screen (just visible on the right-hand side of Figures 3.5, 3.6 and 3.7, and in the centre of Figure 3.8) was that the children would be able to sit on a lap or the footstool and watch from there. But the opportunity that they perceived in this arrangement was that they could climb up on it and get really close (Figure 3.8). Initially we tried to stop them doing this, but soon realized that this would be impossible to enforce. The first time I filmed them both gaining access to the screen without adult intervention – in ITNG2 (12th October 2011) – they were frustrated to find no buttons at all on the accessible parts of the TV set (Connie can be seen attempting to do this in Figure 3.8); but they discovered to their delight that they could reach down between the coffee table and the trolley top, and press buttons on the cable box, which produced interesting changes to the image on the screen, as well as general adult consternation.

Figure 3.8: investigating the technology: ITNG2 (aged 1;10)

By ITNG3, which was a month later (9th November 2011 – aged 1;11) when they were more relaxed and used to the room, and the adults were more relaxed about the whole situation, touching the screen became an important goal as well as close viewing. I first recorded this when Alfie was sitting on the stool to watch Macca Pacca and then the Tittifer "interlude" sequence of birds slowly nodding their heads. Alfie was particularly interested in the toucan's big beak: he named this, looking round at me as he did so, and when encouraged by both me and Phoebe with smiles and confirmatory "yes it is, big beak" comments (see also Sections 3.4.2 and 5.5.4), repeated "big beak" with hand gestures and then scrambled up to kneel on the stool so that he could reach the beak with his fingers (Figure 3.9).

Figure 3.9: Touching the big beak: ITNG3 (aged 1;11)

By 23rd November (ITNG4) they had become adept at shifting the stool to wherever they wanted it – often of course tussling over where it was to be located. The perfect solution – which occurs for both of them at different points in ITNG4 – was for one or other of them to gain possession of the stool while the other was distracted, haul it in front of the set and climb up on it to watch closely (Figure 3.10). The cable box was by now encased in a cardboard box and was no longer an attraction.

Figure 3.10: Alfie studies the Tombliboos: ITNG4 (aged 1;11)

Proximity to the screen was thus a high priority for them. The folk memory of 405-line images on bulging glass screens, which was supposed to be "bad for your eyes", lingers on. But few adults have actually tried watching a large modern flat screen with its tiny, densely-packed pixels in millions of colours, from a distance of six inches. It is a remarkable experience. The

images are still recognizable and the screen exceeds one's field of vision: in other words, it is more "lifelike" in the sense that one has to choose what to look at. The urge to get close may also be related to the assertion by Steemers' interviewee that wide shots are over-complex for two-year-olds (Steemers 2010, p127; and see Section 3.1.1). For an adult, striving to take in the multimodal array of image, movement, sound, mise-en-scène, iconography and genre in the service of narrative, getting close to the screen is unhelpful. For a 22-month-old, getting close to the screen may follow fundamental, evolved instincts, in which "the main sensory modalities (eg vision, hearing, touch)" (Damasio 2000, p159) must be employed together in the process of perception. Touching items on the screen has been imagined by some scholars as evidence about children's alleged inability to distinguish between "mere pictorial representations" and "real, physically-present objects" (for example: Flavell, Flavell and Green 1990, Pierroutsakos and DeLoache 2003); see also Section 5.5.4). But Damasio's invocation of evolved, instinctive behaviours offers a more plausible rationale for what the twins seemed to be doing when they touched the screen: toddlers tend to want to touch whatever they see, and feeling the warm smoothness of a flat-screen TV can be pleasurable.

3.2.2 Co-viewing and Social Learning

In ITNG1, 2 and 3, there are three adults in the room with the children for much of the programme, and because it is coming up to bedtime, there is constant movement: fetching bottles of milk; getting the children's beds ready; finding a potty and positioning it ready for use. The children are also constantly moving. It was exciting for them to be in our living room with the TV on at bed-time: there was so much to explore and so much choice about where to stand or sit when watching: this often led to conflict over items we had forgotten to hide or secure, like sticks from the kindling basket and soil from the plant pot. In addition, the adults exchanged comments with each other as well as addressing the children, either through direct comments or instructions, or through their own child-directed vocalisations. It was a rich experiential environment in which the role of the television programme was one, albeit often important, element. Adult talk at various levels formed part of the aural environment of much of their movie-watching, along with the voices, sounds and music emanating from the television (see also Sections 5.1, 5.2 and 5.3).

In this early sequence of viewings, Phoebe in particular is notably self-conscious about her role. Being in her parents' house; being involved with us in a long-planned project; being filmed: all

these factors made her less relaxed than usual. Her interventions are more sustained and explicit than they were later: for example at one point in ITNG3 she initiated an elaborate "going to bed" scene on the stool involving a Cindy doll, as a way of maintaining the children's interest in the going-to-bed scenes on screen that end every episode of ITNG (Figure 3.11).

Figure 3.11: Phoebe models "bed time": ITNG3 (aged 1;11)

Often, the children initiated dialogue themselves. At the beginning of every ITNG episode a familiar ritual is played out, first with Jacobi's voice-over "Iggle piggle, iggle onk, we're going to catch…." followed by the theme music for one or the other of the Night Garden vehicles: the Ninky Nonk train or the Pinky Ponk airship. Encouraged by Phoebe, the children delighted in identifying each vehicle by its theme tune, using invented signs, complementing the limited range of Makaton signs they had been using for many months: "up" for the Pinky Ponk, and "down" for the Ninky Nonk. In both ITNG2 and 3, it is the Ninky Nonk. In ITNG2, Alfie is sitting in an armchair as the programme begins; he watches intently then shrieks "Oh!" and points dramatically at the screen. Phoebe (sitting behind him) shouts "It's the Ninky Nonk!" and Alfie gestures a round-and-round movement, imitating the circular path of the Ninky Nonk as it appears on screen. Phoebe chortles with delight and he looks round to soak up her approval, grinning widely. At the beginning of ITNG3, both children are involved, jiggling around in front of the screen and turning to Phoebe to make the downward-pointing sign, to her excited approval. This was a well-established family routine and one they seemed to anticipate eagerly.

Approval, repetition and sharing are thus key elements of the family viewing experience: one that can be seen frequently in these videos as the children identify characters through

exclamations, pointing or signing, and turn to Phoebe for corroboration. The programme itself facilitates identifications through the voice-over, music and sounds, so that even if they are not watching the screen, the children's attention may be caught by the sound track. Although the children spoke very few clearly enunciated words in October and November 2011, they could still find ways of naming characters, or at least expressing recognition by pointing, using their version of Makaton signing, or vocalizing, all of which would usually elicit a strongly approving response. In ITNG1 (see Figure 3.7), both are at one point engrossed in watching the familiar introduction to the Pontipine family. Connie turns to Phoebe, making a sign which seems to involve raising her finger to her mouth (unclear because her back is to the camera). Phoebe smiles welcomingly as Connie turns, but then frowns in surprised disapproval as she makes the sign.

[C turns to P with R finger to mouth]

P Chocolate? *[tone of shocked disapproval]*

CB Moustache

P No, it's chocolate

P *[as C turns back and points at screen]* The moustache? *[tracing line above mouth]* or the chocolate? *[pointing finger to chin; C gestures again – back to camera so unseen]*

P Moustache! Oh yeah! *[OS music]* Here he is! The moustache man, yeah! *[goes forward to brush back C's hair]* Mr Pontipine, yes.

[C turns back to screen cackling triumphantly, leans on coffee table then turns and leans on stool; plays at leaning on and bouncing off; P claps; A watches; CB pulls A's legs together and flips them up and down in time to music; C disappears out of frame]

The "moustache" sign had been invented by Alfie some months before in a slightly more elaborated version with the finger being drawn across the lip and then flicked away from the face, deliberately invoking the "Mr Pontipine's Moustache Flies Away" episode which had given rise to an emotionally fraught viewing experience (see Section 4.2.1). By creating her own version here and sticking to it despite Phoebe's misinterpretation, Connie won a large reward of parental approval: not only verbal, but through Phoebe's delighted expression and her gentle touch in tucking Connie's hair behind her ear (see also Section 5.2).

3.2.3 Attentiveness and Pleasure

I was alerted to the likely importance of focused attention in September 2012 in the viewing event I filmed on 13th September 2011 (after ITNG 1 and 2; see Section 4.1). In my analysis for the ITNG sequence I noticed more evidence of it. There are many occasions in these viewings, and indeed in almost all my videos, where one or both of the children are apparently oblivious to everything in the room apart from the television. Adult utterances seem to be ignored (though of course this is not to say that they may not still be heard); the child[ren]'s gaze is fixed on the screen; they often approach the screen and get as close to it as they can. These occasions can be sustained for several minutes during which the child involved is intensely attentive to the screen.

During the flow of movement and talk in ITNG1, there is a period of ten minutes, starting at 05:41:00, during which both children watch the screen attentively, apart from a few brief interruptions, through short narrative sequences involving the Tombliboo and Pontipine characters. Connie spends most of this time standing at the coffee table as in Figures 3.6 and 3.7; Alfie is switched from Terry's lap to mine, and from mine to the potty and back again, during all of which he endeavours to keep his eyes focused on the screen; then each child is given a bottle of milk, which they drink holding the bottles at an angle so that they can see the screen (see also Figure 5.10). For much of this time Connie holds her right hand ready to point at the screen (Figure 3.12).

Figure 3.12: adults converse; children drink and watch: ITNG1 (aged 1;10)

At times either Phoebe or I utter comments, or converse with each other, as in the Pontipine sequence during the discovery of the missing Pontipine children, during which Phoebe holds Connie's milk bottle so that she can suck, watch and maintain her right hand position all at the same time (as in Figure 3.12):

CB *[chuckling]* It's like an advertisement for passive TV viewing!
C Oh! points *[OS PP babies pop out of flower pot]*
CB He's in the flowerpot
P How did they fit in there? *[OS counting]* No way! No! No! goodness. All the children? They were in a teeny tiny one? I can't believe it *[pops her finger in cheek as PPs pop out/VO counting/children take no notice; P tucks C's hair behind ear]*
CB There's some some quite funny stuff online about the Pontipines...

This pattern of adult exchanges of remarks, interspersed with commentary by Phoebe about the event on the screen and by periods of quiet attentiveness by all four of us, continues until the "story" section of the programme concludes, as always, with Jacobi saying "Isn't that a pip?" For most of this ten-minute period, including the 45 seconds when Phoebe is loudly "modelling" responses to the Pontipine children's reappearance, the children do not seem seem to notice what Phoebe and I say or do. They are intent on the images, movement and sound coming from the screen. Within a month – that is, by ITNG4 on 23rd November – these periods of intense attention were much longer, and often involved one or both children kneeling on the stool, close to the screen and sometimes touching it. In ITNG3 and 4, everyone involved was a bit more relaxed about the videoing of viewing sessions and the whole business of overnight stays at our house. Although both sessions included moments of adult confusion and impatience about practical and child management issues, and a great deal of non-viewing activity by the children, there were also moments of focused attention.

In ITNG3, Alfie climbs up to kneel on the stool in front of the screen, but Phoebe wants him to move so that Connie can watch too, saying "Now sit down, sit like that, put your legs down, ok, I don't want you getting too close; remember it's bad for your eyes and you need to let Connie see." Alfie looks over his shoulder a couple of times but is quickly engrossed in the introduction of Macca Pacca, a character he knows well both as a toy and as an on-screen figure. He reaches up at one point to gently lay the flat of his hand on the corner of the screen. Connie is sat down

next to him, but soon moves off-screen to investigate other interesting objects around the room; Alfie settles down to watch Macca Pacca build a pile of stones, gripping the edge of the trolley and looking up and down the pile as the voice-over counts them (Figure 3.13). He watches this sequence intently until the pile of six stones is triumphantly completed and celebrated by Macca Pacca. Then follows the event where Alfie abandons his seated position and scrambles to his knees so that he can reach the toucan's beak (see Figure 3.9).

Figure 3.13: Alfie watches another stone being added to the pile: ITNG3 (aged 1;11)

A similar event occurs with Connie two weeks later, in ITNG4. I am on my own with the children; ITNG itself has just ended and the CBeebies Bedtime Story is being announced. The children had been quite distracted by toys and other items around the room and I am ready to turn off the TV when Connie says she wants to hear the Bedtime Story. But she then gets off the sofa and wanders over to a toybox in the far corner of the room from the TV, where I follow her with the camera as she picks out the Sindy doll and examines her, while the CBeebies continuity link continues. Suddenly a voice, familiar to me but new, and evidently striking, to Connie, says "Hallo!" Connie looks up instantly and I exclaim "Oh, it's David Tennant reading the story!" Connie walks purposefully back towards the TV, throwing Cindy aside and seizing the stool to push it right up to the TV, climbs up to adopt the preferred kneeling position with her face close to the screen (Figure 3.14). I doubt that she can follow much if any of the story, but she is certainly attracted by Tennant's voice, which differs from those of most children's programme presenters in its lack of "child-directed" pitch and phrasing. As Figure 3.14 shows, she focuses intently on Tennant's face when he is on the screen, but also gently touches the images of the toys shown scattered about the set, and the illustrations from the story as they appeared –

looking especially, again, at the faces. The Bedtime Story uses rostrum camerawork[8] of the story book pictures, rather than animation, but this still means that the images change before Connie expects them to, and she seems intrigued by the challenge of trying to keep her finger or her gaze on objects that moved about the screen but are not animated. She maintains her attention for nearly four minutes, so much so that she fails to hear Phoebe coming back into the room, but when she finally does notice this, her attention becomes divided and soon she leaves the screen to join Phoebe on the sofa.

Figure 3.14: Connie meets David Tennant: ITNG4 (aged 1;11)

I had thought that ITNG was going to be a major theme of my research: with this in mind I had negotiated with Ragdoll Productions for a visit to their studios in Stratford-on-Avon to meet with their researcher, Annette Cunningham, to discuss the programme and to watch some of their vast stock of videos of children watching ITNG and other programmes that they have made. This was fascinating in many ways, but revealed – unsurprisingly – that almost all their videos were made in nurseries and day care centres. The few that were made in homes are usually with childminders, and feature siblings of different ages. The videos were made "to keep in touch with our audience": they did not undertake any longitudinal studies. Thus my fieldwork – with twins, longitudinally over 20 months, and in domestic settings familiar to the children, often with their mother present – is significantly different to Ragdoll's. But in any case, by the time I

[8] A rostrum camera is used to create moving images of a still picture.; in a sense, to "narrativize" it. The picture is placed on a platform below the camera, which can be moved in order to create an effect of scanning across the picture or of zooming slowly in and out. Thus parts of the picture can be revealed, in an order which fits the demands of the spoken and/or musical audio track.

met with Annette Cunningham on 10th February 2012, Alfie and Connie had long abandoned watching ITNG. It had been "used up" (see Section 5.6.3).

All these close encounters with the screen reveal that our initial anxieties about the children being "too close" to the screen were ill-founded. This was not curiosity about the technology – though this was a passing interest – but an intense desire to examine deliberately chosen sections of the programme as closely as they could. The fact that this was also intensely pleasurable became clear when they moved on to the Eric Carle films.

3.3 ERIC CARLE FILMS

By January 2012 the twins' movie-watching had diversified quite a lot. Phoebe had begun taking them to the local library to borrow books and DVDs such as *Monsters, Inc* and *Peppa Pig*; she had also come across different CBeebies programmes that they liked, such as *Baby Jake*. Amongst the library DVDs was *The Very Hungry Caterpillar and Other Stories* (The Illuminated Film Company for Scholastic Productions, 1993) which comprises five short animated films based on the text and illustrations in books by Eric Carle (Carle 1969, Carle 1975, Carle 1990, Carle 1998, Carle 2001) using voice-over readings of the stories by Roger McGough, except in *Papa, Please Get the Moon for Me*, which is read by Juliet Stevenson. *The Very Hungry Caterpillar* was the first book that Phoebe ever read to the children, when they were babies; given that it is a very simple story (a caterpillar emerges from the egg, eats more and more food every day for a week, then builds a cocoon and emerges as a butterfly) the children were already very familiar with it when they started to watch the DVD.

From January 2012 we had the twins at our house every Thursday, collecting them at 9.30am and returning them at around 6.00pm, transporting them to and fro by public transport in their double buggy. In addition, Phoebe often brought them over to our house on her non-work days, usually staying with them for the day. It was often on these occasions that I found it more manageable to film the children watching movies: consequently a major feature of the viewings in this case study is still the interaction between Phoebe and the children. But another key feature is that they were watching material that they already knew well. After the children had viewed some of the Eric Carle films at their house, Terry and I discovered that we had an old VHS videotape of the same collection and decided to offer them viewings of it at our house as well, unconstrained by the need to return the tape to the library.

The first video I made of them watching Eric Carle films (ECF1) was on 31st January 2012 and is the only one which does not include *The Very Hungry Caterpillar* but does include all the other films in the collection. ECF2 was made on 23rd February and shows them watching *Papa, Please Get the Moon for Me* and *The Very Hungry Caterpillar.* ECF3 on 27th February and ECF4 on 5th March both consist of *The Very Hungry Caterpillar* only, and two more videos of them viewing this were filmed on 3rd and 14th May. In this sequence I focus on the two viewings of *Papa, Please Get the Moon for Me* and the four viewings of *The Very Hungry Caterpillar,* which total approximately 70 minutes (for a summary of viewing events on video, see Appendix 1).

3.3.1 Language Development, Repetition and Reciprocity

By the end of January 2012 the children were aged nearly 2;2, and had reached a stage of language learning when many of their utterances were clear enough for me and Terry to understand, though there were still plenty of misunderstandings and my video transcripts are full of utterances that cannot be interpreted. They were no longer using Makaton signs, but they were pointing and gesturing, and copying many of the gestures they saw, as well as the words and phrases they heard.

The fact that they had already watched the Eric Carle films many times – especially *Papa, Please Get the Moon for Me* (PPGMM) and *The Very Hungry Caterpillar* (VHC) – offered them many opportunities for repeating words and phrases heard on screen and those uttered by their parents, and for making their own spontaneous comments. Along with the surprising dearth of academic interest in the phenomenon of "repeat viewing" that emerged in the 1980s with the introduction of domestic video player/recorders, little attention seems to have been given to the language learning opportunities that repeat viewing may be offering. Marks Greenfield cautiously suggests that repeat viewing on video (she suggests "twice"!) could help with reading (Marks Greenfield 1984, p9). Browne highlights the importance of the video revolution, pointing out that "research findings of 30, 20 or even 10 years ago may have only a limited applicability to current contexts" (Browne 1999, p2), and Krcmar's experiments indicated that repeat viewing helped 6-24-month-olds learn words (Krcmar 2010). There are clear parallels between the "routinized" opportunities for repeating "what others have said in previous recurrences of that situation" that occur during repeat viewings, and the function of such opportunities in language acquisition (Snow and Goldfield 1983).

Bruner stresses the importance of the child's social and communicative environment in the first two years of life, driven by what he terms "active means-end readiness" and "goal-directed activity", present even in newborns (Bruner 1983, pp 24-27), which is similar to Panksepp's concept of the "seeking" emotion (Panksepp 2004; see Chapter 4). Bruner also emphasizes the importance of parent-child games as a context for language learning (Bruner 1990). What the Eric Carle films show is a combination of all these factors: repeat viewing, driven by the children's eagerness to re-view, which they could express once they had ways of labelling the movies they liked, and involving opportunities to repeat words and phrases in a playful context.

All four videos show intensely busy interactions between the children, the adults and the movies, but the ones made when Phoebe was present show how joint viewing of a well-known movie becomes the perfect context for the pleasurable interaction described by Bruner in relation to parent-child game playing (Bruner 1983, p122). Indeed, some of the viewings have many of the characteristics of a game, in which the movie itself is a key element. Characters, events and voice-over utterances are eagerly identified and named at first; later on, they are excitedly anticipated. But the main factor is the need for reciprocity, as Phoebe pointed out in her interview with me on 12th April:

> P I think they feel more … maybe they feel like they might miss something if they start commenting on it the first time they see it. They're so busy, taking it in, and then when they can start to predict it, they can go "oh look!" and then they don't have to look at it cos they're pointing at you, "it's raining!" "wellies!" Cos then they want to watch what your reaction is.
>
> CB That's why they're looking at you, you mean.
>
> P Yes, like "oh, are you watching it with me?" like looking at you, going … like they're at that stage when they want you to repeat everything they say, or at least acknowledge it, you can't just sort of go, be looking at your own, like I was reading this and Alfie's going "it's raining" at me and if I kind of went "uh-huh" that's not enough, he wants me to go "yes, it's raining!" They want the confirmation and the interaction. With you. And they're learning words like that, as well. They're confirming that they know the names of that, in a sentence.

The amount of interaction between the children and adults – but especially Phoebe – is a major feature of all the videos in this case study (see also Section 5.2). Everything they watch is already familiar to them, and for the most part, established patterns of interaction are played through. The interactions that Phoebe describes in her April interview were already there in January, and were developing throughout the three months during which these viewings were filmed. Obviously this kind of playful reciprocity is harder to maintain with twins than with singletons. ECF1 shows how Phoebe manages to share attention between the children.

ECF1 was filmed on 31st January 2012, a very cold day when, unusually, the twins (aged 2;1) and Phoebe were at our house on a Tuesday afternoon: they were due to go back home after we'd watched the Eric Carle films. At the start of PPGMM, Phoebe is seated on the sofa with Alfie on her lap. Connie is standing in front of the coffee table, investigating the VHS tape case, apparently anxious that they are not about to see PPGMM, given that the front cover only features a large image of the hungry caterpillar. Finally, she finds the PPGMM thumbnail image on the back of the case, and exclaims "Moon!" delightedly, slamming the box back on to the table and starting to investigate what else is lying around there. Then she is ordered by Phoebe to "sit down on your bottom, and watch the telly": she moves to the stool placed just in front of Terry's chair, and sits down to watch. As the voice-over says "Papa, *please* get the moon for me," Connie opens her mouth wide and claps her hands, then places her fists together in imitation of Monica's supplicatory gesture (Figure 3.15). At the same time, Phoebe grimaces in sympathy with the pleading tone of the voice-over while simultaneously watching what Connie is doing. "Is that how she does it, Connie?" Phoebe asks, and as Connie turns to her, Phoebe clasps her own hands, with fingers interlaced, saying "She says 'Pleeease get the moon for me,' doesn't she?" Connie opens her hands, looks down at them, and attempts to clasp them in the same way (Figure 3.16).

Figure 3.15: Connie (aged 2;2) imitates Monica's gesture: ECF1

Figure 3.16: Connie tries to imitate Phoebe's clasped hands: ECF1

Meanwhile Alfie quietly repeats "Please get the moon for me", but Phoebe does not reply. Alfie is relaxed in her embrace: he doesn't get verbal responses, but he does have bodily contact.

Phoebe then goes on to "gloss" the shot in the film in which Monica's father responds to Monica's plea for the moon by simply making an "aha!' expression and then exiting from the frame. Phoebe provides an utterance which does not occur in the film: "And what does Papa say? 'Right then… ("right then" repeats Alfie) ...off I go, get that moon, hmm.'" Connie's hands are left loosely clasped as before and she chews her cheek, her attention once more fixed on the screen, waiting for Papa to reappear (as she knows he will) with a very long ladder. This kind of dialogue is sustained over the next two minutes as the children eagerly respond to the sequence of events through which Papa gets hold of the moon once it has waned to a suitable size, climbs down the ladder with it, and Monica dances with it until it shrinks away to nothing (for details of the dialogue in ECF1, see the table, below).

At this point Phoebe, who has been yawning since the film began, almost falls asleep and barely responds to the "mew! mew!" sounds Connie makes when Monica's cat appears on screen. Either because of this, or because what they regard as the most interesting part of the film is over, the children get up and move around the room until Alfie falls, bangs his head on the stool and cries; both children then end up back on Phoebe's lap for the start of *The Very Quiet Cricket*, Alfie subdued and still a bit tearful; Connie leaning back relaxed. The dialogue between the three of them through this viewing, and the following one – *The Mixed-up Chameleon* – is quieter and involves fewer comments and gestures. Like *The Very Hungry Caterpillar* (VHC), both films follow a repetitive pattern as the protagonists meets a series of other creatures. The children anticipate the voice-over and name the cricket's encounters, with Phoebe sleepily acknowledging each one and repeating the name correctly. But when the next film starts (*I See a*

Song) even this activity peters out: Phoebe is asleep (Figure 3.14) and the children continue to watch quietly until the resolution of the story when Connie points at the screen, saying "Happy now!" although she too is almost asleep.

Figure 3.17: Phoebe sleeps through an Eric Carle film

They continue to watch *I See a Song* in silence. Most of this involves abstract animation in time to the music: they are attentive, but do not, at the end, ask to see it again, which is what would normally happen if they were deeply engaged and intrigued – as I show in Section 3.4.

The pattern of spontaneous and responsive utterances during this viewing demonstrates what is almost a four-way reciprocity, involving Phoebe, both children, and the voice-over and images on screen. One or other of the children would initiate an anticipation of, or a response to, something on the screen, to which she would respond, usually offering an "extension" of the gesture or utterance. Alternatively, the children would repeat words spoken either by Phoebe or by the voice-over, to which, again, Phoebe would often respond approvingly. During *The Very Quiet Cricket* in ECF1, Phoebe also asked questions about what was coming next. There were also some other subdued exchanges but they were not picked up by the camera: for this viewing, I hand-held the iPhone but stayed on a chair at the side of the room, concentrating almost all the time on the children's and Phoebe's faces. This worked well when Connie was close to me on the stool, but less well when the three of them were on the sofa some eight feet away from me. I did move closer to them right at the end when Phoebe was asleep and the children were so absorbed in *I See a Song* that they took no notice of my move. What I was keen to avoid in this sort of situation was that one of them – usually Alfie – would notice that I was holding the iPhone and would come over and want to play with it.

The table on the next page shows the differences between Connie's and Alfie's utterances in ECF1. Connie's numerous spontaneous comments include anticipatory remarks, and are addressed to the rest of the people in the room. Alfie's utterances engage directly with characters, with the voice-over or with Phoebe's questions; he also repeats two of Phoebe's utterances, while Connie does not. Connie's utterance "Hi!" is the only spontaneous anticipation of the voice-over during this viewing; the other two are made in response to questions from Phoebe: in other words, joining in with the game of anticipating what was about to appear. The higher number of comments from Connie in relation to PPGMM may be due to the fact that for this part of the viewing she was sitting on her own, closer to the screen, and more or less equidistant from the three adults.

Alfie's exclamations "Get down!" (which was repeated several times) and "Daddy come back!" were uttered when Papa was climbing the long ladder up to the moon: Alfie seemed quite anxious about the precariousness of a ladder being balanced on a mountaintop and propped against the moon, and may have been anticipating the moment a little later when Papa grasps hold of the moon, causing the ladder to wobble dangerously until it props itself against a star instead. His repeat of Phoebe's phrase "we get spots" relates to an extended explanation she gave when Alfie named the mosquitoes in advance of their appearance on screen, at which I pointed to a large wooden model of a mosquito that hung on our living room wall: Phoebe was concerned to make it clear that mosquitoes are actually very small, but that they do bite us and "we get spots". The salience of this exchange was that, three weeks later in ECF2, while waiting for me to rewind the tape, Alfie remembers this, pointing to the wooden mosquito and exclaiming "big 'quito!"

CONNIE'S AND ALFIE'S UTTERANCES DURING EC1 VIDEO					
Film	**Spontaneous Comments**	**Anticipating Voice-over**	**Repeating Voice-over**	**Responding to Phoebe Question**	**Repeating Phoebe Utterance**
Papa, Please Get the Moon For me	Moon! (identifying film from tape box)				Right den (right then)
	BIG mountain!		Up on a mountain		
	Moon! (anticipating appearance)				
	No! (anticipating impossibility of Papa grasping the moon)				
	Nose (with gesture to face, looking at full moon image)				
	Daddy come down!				
	Get down!				
	Daddy come back				
	[F?]unny! (as moon shrinks)				
	Mew, mew! (when cat appears on screen)				
The Very Quiet Cricket		Hi!			
		'ay' 'anti' (praying mantis)			
				ib 'is 'eg toge' (rub his legs together)	
				'pittle bug	
	'pittlebug go 'way				
				Um bee (bumble bee)	
		'quitoes			
					We ge' 'pots (we get spots)
	Bye bye 'quitoes (as mosquitoes disappear)				
The Mixed-up Chameleon			Mi'ed (mixed) up Chamee		
			'parking geen (sparkling green)		
	Buky..buky one (spiky one)				
			Anober cicket		
	Happy now! (as chameleon returns home)				

ECF2 shows them watching PPGMM and VHC, on 23rd February 2012, ie three weeks after ECF1. This time, Phoebe was not there, they were in a much more wide-awake state, and in any case were now even more familiar with both films. I used a fixed camera to start with which, while Alfie was also out of the room, captures an exchange between me and Connie in which I initially fail to understand what she is referring to (because she says “adder” for “ladder”). Then she points out the ladder on the screen in PPGMM (Figures 3.18 and 3.19). These images also show her carefully positioned hands on the edge of the trolley: a characteristic of attentive viewing to which I return in Section 4.1.

Figure 3.18: ECF2: Connie (aged 2;2) watches PPGMM, close to the screen

Figure 3.19: ECF2: Connie points out the very long ladder

Once Alfie and Terry arrive with bottles of milk, the children's viewing positions become more fluid: both stand and walk around; stopping to chew on the bottle teats at moments when they watch attentively; disappearing out of the fixed-camera frame and then re-entering; maintaining comments and dialogue with me intermittently throughout. Their utterances during ECF2 demonstrate that Connie is making mainly spontaneous comments, accompanied by gestures and movements, whereas Alfie also responds to the voice-over and to my questions or comments. This probably reflects their linguistic competence at the time, Alfie being readier to understand what is said. He also makes syntactical modifications of the voice-over in his utterances. "Moon é-ing 'maller" (moon getting smaller) refers to, but does not repeat, the voice-over statement "the moon got smaller and smaller": he changes the voice-over's verb tense to the present, matching his status as a commentator to the viewing in the here-and-now. Repeating the final word of the voice-over's statement "until finally it disappeared altogether," he says "all a eba". But later in his own comment on the ending of the film when Monica sees the new moon, he says "aw gevver" and then modifies it again to "e aw gevver" (they're all together) which is not only more clearly enunciated but also has a different meaning.

Once VHC starts, I position them both on the stool in front of Terry's armchair, and shift the fixed camera to achieve a wider angle (Figure 3.20). At different points during the viewing of VHC, each of them gets up and goes closer to the screen until I ask them to move so that the other can see; the rest of the time they are attentive and excited, interacting both with me and with the screen, fidgeting on the stool but remaining attentive, gesturing and commenting constantly.

Figure 3.20: Alfie (aged 2;2) points out the egg on the leaf in VHC

A two-minute extract from the transcript demonstrates the fluidity of this viewing event, full of movement, gesture, and exchanges between me and the children (transcript includes extracts from voice-over – VO):

A *[points]* Dere da egg!
CB That's the egg
C *[points]* Moon! *[draws one leg up]*
A De kind of leaf
C *[points]* A bik haan! A bik haan!
T A big hand?
CB Sun I think it must be
VO *One Sunday morning the warm sun came up and pop! Out of the egg... [C points]*
A [*points]* caterpillar!
C Me! *[pointing back at herself]* Me! *[looking at CB]*
CB Is that you? *[A continuing to point]*
C Yeh!
CB Oh! *[A hand drops*]
CB Are you a caterpillar?
C *[draws hands together then points behind both ears]* ear ear
A *[points again]* Apple! ..Apple! *[C mimes bite and gulp]*
CB That's the apple, yeah, you knew the apple was coming, didn't you?
C Cung
A Dat apple
C Cung *[A points]* Ga be da cung
VO *On Monday, he ate through...*
A On Monday
CB *[assent]*Monday . . .there he goes, inside the apple
C 'side d'apple...p'um! [inaudible] *[looking at CB]* p'um!
A 'side d' apple..core
C *[does more big bites 1st at screen 2nd with eyes swivelling to CB; both watch]*
A *[still, holding bottle, C fidgeting bottle >< knees]* Be a going[?] *[at screen]* Be a going *[at CB]*
CB Where's he going?
A Cocoon.. [?]
CB What's he eating now? Oh it's still plums isn't it?
VO *On Wednesday, he ate through three plums*
A T'ree p'ums! *[at screen]* T'ree p'ums! *At CB*
[C drinking again]
A *[getting up]* More p'ums *[walking forward]* more
CB *[inaudible]*
A Uh?

CB There's lots of plums on the tree, aren't there?
[A stands holding bottle watching]
VO On Thursday, he ate through four strawberries
A *[points v emphatic]* DAT der caterpillar! *[leans forward pointing more]* DERE da caterpillar!

When Connie exclaims "Ear! Ear!" (in response to my questions "Is that you?" and "Are you a caterpillar?" after she had pointed to herself, saying "Me! Me!") she draws her hands together and then cups them around her ears. The possible explanation for this is that she interprets the caterpillar's large antennae as ears. But this does anticipate the imitation game that Phoebe plays with her on 27th February (see below). "Ga be da" is probably "going to be the.." and "cung" is probably "plum".

Later, she utters "Walking! Walking!" when the caterpillar is revealed as having become "a big fat caterpillar" and is shown crawling along: she adopts a comic trotting movement and does a circuit of the room, chuckling as she goes. "Many! Many!" is accompanied by swishing her raised forefingers from side to side, and refers to the fact that the new butterfly is joined by several others, though the swelling, joyous music score at this point probably contributes to the sense of triumph. Her demand for "more humming" remains mysterious, both to me and to Phoebe, but was extremely loud and emphatic, and accompanied by waving fists.

It is noticeable that her comments on PPGMM mostly anticipate the action, while those on VHC are mainly naming and labelling. This may relate to the fact that she is watching much of PPGMM sitting on her own, whereas for the viewing of VHC they are side by side on the stool and Alfie is extremely active in commenting and gesturing. However, she is more active in terms of gestures, her proposition that she is the caterpillar, jogging around the room and, when the butterflies appear, leaning forward and slicing her pointing hand towards the screen several times in a dramatic "counting" gesture.

There are several new developments in Alfie's utterances in ECF2. He is very alert and excited, accompanying many of his utterances with excited and dramatic points at the screen: in Figure 3.20 he has also stood up to lend even more emphasis to his identification of the caterpillar's egg on a leaf. The performative qualities of their utterances are noticeable here, and they are very much aware of my presence, turning to me to repeat what they have said, and to get a response. Looking at the screen, Alfie repeats my comment "tummy hurts", referring to the caterpillar's stomach-ache after over-eating, and then turns and repeats it again directly to me,

adding a highly emotional emphasis (which I had not used) – responding, perhaps, to the caterpillar's yellow face and anguished expression in close-up on screen: "Tummy hurts!"

The important issue here is that both children are actively anticipating, commenting on and responding to events in the story and utterances in the voice-over. Even if they had not been watching with adults making their own comments and asking questions, they might still have been undertaking this complex engagement with the film. The nature of their engagement goes some way towards explaining why children demand to watch the movies that they are interested in, over and over again. They are developing their language skills and their memory, and consolidating their understanding of the story, through the game-like rituals of anticipation and naming which also provide evidence of diakresis (see Section 5.6.1). The presence of adults in the room, also actively watching with the children, can contribute to this pleasurable pastime, though as I will show in Chapter 5, adult questions and comments can sometimes be marginal to the children's concerns or at cross-purposes with them. They may present baffling distractions, and they may be simply ignored. What the adult presence also does is to model attitudes to movies. If the movie to be viewed is chosen purposefully and through negotiation; if the adults are paying attention and making their own comments – comprehensible to the children or not – and issuing instructions like "sit still and watch" or "let Connie see as well;" then as Frazer argues, "children acquire from those around them the concept that television is sometimes seriously and continuously regarded, and occasionally model this behavior" (Frazer 1981, p320).

Just four days later than ECF2, Phoebe brought the twins over to our house on Monday 27th February and took the Caterpillar-viewing game rituals to a new level. Aware of Connie's claim that she "was" the Caterpillar, Phoebe organized the viewing herself (see also Section 5.2.3). Alfie, seated on Terry's lap, and eagerly pointing, anticipating and naming as before, was somewhat marginalized. Phoebe had brought a dish of fruit into the living room: she sat on the floor next to the stool where Connie was encouraged to sit, and as soon as the caterpillar hatched out she spoke over the on-screen voice, emphasizing: "Connie! You're a tiny very hungry Connie!" At first Connie says "No!" but she soon decides to join in the game, accurately mimicking the caterpillar's exaggerated chomping (Figure 3.21). Throughout the film, Phoebe addresses questions to Connie and when the caterpillar gets on to soft fruit, offers her a strawberry stuck on a fork. Connie eats it, asks for another and goes to the screen to offer it to the caterpillar, who by now is also eating a strawberry (Figure 3.22). Apart from anticipating the appearance of the butterflies at the end, and waving her finger as before while exclaiming

"Many!" the rest of the viewing is an enjoyable playtime for Connie: playing up to Phoebe's amused approval, jabbing the fork into the TV screen, and eating more bits of strawberry. Alfie, who can hardly get a word in edgeways, sits quietly on Terry's lap, watching attentively.

Figure 3.21: Connie (aged 2;3) does "caterpillar chewing" imitation for Phoebe: ECF3

Figure 3.22: Connie offers the caterpillar a strawberry: ECF3

By the next ECF viewing, just two weeks later than ECF3 (5th March 2012), it is clear that the social games and rituals of Caterpillar-viewing have taken on a life of their own and become the main reason for watching. This was another Monday (i.e. not our regular child-care day) and Phoebe had brought the twins over to our house. This time they are more tired: they sit on the sofa with Phoebe and watch quietly; she does not interrogate them and they just make occasional comments and gestures, waiting for what is now the main excuse for watching VHC: jumping about and pretending to be butterflies when the butterfly emerges from the cocoon. Enjoying this, they ask for the film again; while I am rewinding the tape, Connie gets tired of being a butterfly and Phoebe encourages her to "wriggle along the floor like a caterpillar." Alfie

joins in and this game extends for several minutes (Figure 3.23). *The Very Hungry Caterpillar* had perhaps become a pretext for family play, rather than something they wanted to watch attentively: thus they had "used it up" (see Sections 3.3.2 – final paragraph – and 5.5.3).

Figure 3.23: being caterpillars (aged 2;4): ECF4

When the sequence of food items in the caterpillar's Saturday blow-out starts to drift across the screen, Alfie returns to the TV and starts to point, saying "It da orange!" But by the time his finger lands on the screen, it ends up positioned on the chocolate cake. Alfie holds his finger there for some time, watching the food images that slide past. When there is a brief cutaway to the caterpillar, he shifts his finger to the caterpillar's eye, but holds it on the screen through the dissolve back to yet more food images. During the next cutaway to the caterpillar chewing, he holds his finger on the screen but turns to me, saying (incorrectly) "he's better". More food images pass, with his finger still on the screen, but when the genuinely sick caterpillar appears he starts to repeat "he's better" but then (perhaps realizing his mistake and losing interest) he turns away from the screen and walks purposely towards me and my camera, hoping for the chance to hold it himself. This phenomenon of touching the screen (see also Section 3.2) recurs several times during their viewings and is discussed in more detail below in Section 3.4.2.

3.3.2 Choice, Preference, and Ownership

One of my research interests was to find out what the children did, and did not, want to watch. This was a frequent topic of my interviews with Phoebe. On 15th April 2012, when the children were two years and four months old, she described to me how the process of choice had developed:

> Whenever we sit down to watch the telly I'll go "what do you want to watch?" You know, there's a limited choice, but there is a choice, and it's normally stuff that they've chosen from the library, so, you know, I think it was around Christmas that we started to get a couple of DVDs each week just, you know, to try and break up the monotony of CBeebies. Now, CBeebies is starting to break up the monotony of the DVDs! But, they've got control over it, so they've been saying, "Oh I don't like this one" or, I dunno, or "I want to watch this one" like with *Meg and Mog* they want to watch the baby octopus one, and with *Peppa Pig* they like the ice-skating one, or … so they've got a lot more control over what they watch, and they know that – they understand now that with a DVD, they can watch it again. And also they can just request Mr Tumble[9] at any time, and I can call it up on Catch-Up. There are certain things on CBeebies, like *Baby Jake*, that they call for. There are three things, basically, Mr Tumble, *Mr Maker*, and *Baby Jake*. Those there the three things that they want to watch on CBeebies and the rest of the stuff, they'll watch, but you know, they'll never watch *In the Night Garden* any more. Occasionally they will, if I just like put it on, then they'll go like "ooh, haven't seen this for a while" but normally they've got an idea in their head, "right I wanna watch …" you know now, at the moment, yesterday and today it's *Teletubbies*. It just happened that I say to Connie, well you know, look what else we've got here, cos she was just kind of umming and ah-ing, *Little Princess*, oh yes there's only got five episodes and she's seen them all hundreds of times and she's a bit bored of that really – what else is there? Well we do have the *Teletubbies*. And she said like "ooh, *Teletubbies*. Let's put it on." They're just RIVETED by it.

So by the time this interview took place, the twins were watching a wider range of movies and every viewing was preceded by extended debates about what to watch. They were now interested in differentiating their preferences. On 3rd May, Connie asked for "cat and mouse" (her name for *Animatou*) which they had first watched on 9th April 2012 and which I discuss in Section 3.4. They had already seen it four times: Connie was particularly fascinated by it, and tended to ask for it immediately whenever I asked what they wanted to watch. It features a cat: Connie had some stuffed toy cats, liked to try and draw cats, and was known by the family to be interested in cats and kittens. Either because of this, or because he was miffed by her always getting her request in first, Alfie seemed to regard it as "her film" and therefore as a prompt for him to ask for something else. Alfie asked for "Caterpillar". *Animatou* was viewed first, after which there was the tedious business of switching machines and winding the tape, with which both children were keen to assist, leading to irritation on my part, both with them and with the technology. As the film finally begins, Alfie is sitting on the stool next to me, and Connie is sitting on the floor just in front of him. Alfie is eager to stake his claim to this film:

A I ask for da caterpillar!
CB You asked for the caterpillar
A Connie as' for da cat and da mouse *[patting C's head]*
CB That's right

[9] Character played by Justin Fletcher in the BBC children's series *Something Special*.

C *[turns round]* No! Me as' caterpillar!

CB You asked for the caterpillar too? OK!

A *[pats her on the head again]* Connie as' for da cat and da mouse, I as' for da caterpillar

CB *[moves forward to get C's bottle; C turns arm raised to hit A; CB wards it off]* Er, Connie! You've got the caterpillar now!

C *[takes bottle and turns back looking down then puts bottle in mouth, raises head to screen, whips bottle out again]* There's the egg!

But in fact their attention to the film is much more intermittent than in the previous viewing that I filmed. The eager naming and predicting has gone. Connie ignores the film for much of the time, first examining and folding a piece of paper, then scampering round the room in an imitation of Pingu, which Terry and I both find very amusing. There is also a contretemps over milk bottles. I scoop her on to my lap and we finally both pay attention to the screen while the butterfly scene plays out. I then turn off the VCR and TV, ready to whisk the children away for a nap, and turn to find Alfie leaning forward, hands on the trolley, gently licking the still-warm screen. "Are you licking the telly?" I ask. He wipes the screen with one hand and then licks it again. "You're licking the butterflies" I suggest. Alfie pauses, as if to consider this idea, but then catches sight of the camera fixed to the mantelpiece and walks towards it, fascinated.

One more viewing of VHC was requested on 14th May, following *Animatou* on another Monday when Phoebe had brought the twins over to our house. I was reluctant to show It to them again: neither of the children was feeling very well and the viewing (in contrast to the *Animatou* viewing that precedes it) is fraught with arguments and adult reprimands, culminating in a repeat of the screen-licking stunt, by both children this time and while VHC is still playing. Phoebe attempts to stop this but I tell her it's all right, which irritates her, and the children turn away to look for something more provocative to do, such as grabbing the camera or pulling out the wires from behind the television. Thus the EFC sequence of viewings came to an end, much to everyone's relief.

In my interview with Phoebe on 15th April, we focused on the question of what the children did and didn't like, and how to account for their movie preferences. But a question we found equally intriguing was why they would stop watching something they used to like. Parents tend to say "they've grown out of it" or "they've got bored with it". We wanted to try and think about the phenomenon differently. It seemed in the case of most of the movies they watched that

their interest eventually ran out: the children had got all they could from it, or "used it up" (see Section 5.6.3). A notable exception, however, was *Animatou*.

3.4 *ANIMATOU*

Animatou (dir Luyet, Switzerland 2007)[10] is one of the films included in an animated short film compilation resource for primary schools for which I co-wrote the teachers' guide (Bazalgette and Oatley 2012). It is a 5.5 minute non-mainstream film, originally made for the Animatou film festival in Geneva, and not intended for children. It uses the cat-chases-mouse trope of Tom and Jerry and other classic animation series in order to show the development of animation through five key techniques: drawn, painted cel, sand, clay and 3D computer animation.

I describe my choices about what movies to show the children in Section 2.4.6: I had not originally intended to use non-mainstream material, but on an impulse one evening at the children's house in November 2011 (aged 1;11) I showed them *Laughing Moon* . I was so taken aback by their very intense reaction (see Section 4.1) that I was tempted to show them other independent short films, rationalizing this by arguing that as their grandmother, I would in any case be showing them films that I knew and thought they would like. I videoed their first viewing of *Animatou* on 9th April 2012 and videoed 12 repeat viewings from then until 13th December 2012; but my field notes record eleven other viewings during 2013, and in subsequent years they occasionally watched it again, still evidently finding it pleasurable and interesting. So in a sense this is one film that they never "used up."

3.4.1 Encountering Something New, and Re-viewing

I showed *Animatou* to the twins for the first time on the morning of 9th April 2012, when they were two years and four months old. Phoebe was with us as well: she had never seen it either. The opening sequence of the film introduces the mouse and then the cat as hand-drawn figures, and mixes the live action of the animator's hand and work table with the animated action of the figures.

The beginning of the video is awkward. I'm filming with a handheld camera: Alfie is already in front of the screen but I remember that I have a cup of coffee on the mantelpiece and rush to grab it before panning round to find the best position from which to see the children. Both have

[10] A detailed description of *Animatou* is online at http://www.filmworkshop.com/animatou and the complete film is available in my Research Group on Vimeo.

now walked up close to the screen; each grips the trolley with one hand, gazing intently at the screen with their mouths open (Figure 3.24).

Figure 3.24: Both children watch *Animatou* for the first time (aged 2;4)

They retain these positions for almost the whole film. Because they are so close to the screen they have to choose what to look at during the rapid chase sequences, scanning the screen intently and not always looking at the same things: for example, when the cat runs off a cliff and starts to fall, Alfie follows it down and off the bottom of the screen, while Connie keeps flicking up her eyes, following the series of brief shots during which the cat changes into a lump of clay. After each chase sequence, the elaborated rhythmic sound track and sound effects that accompany the chases change to a tapping rhythm and an urgent rising tone that accompanies a speeded-up live-action sequence where an animator creates a cat image in a new medium, the first being painted cel[11]. At this point of unexpectedly altered diegesis in the movie, both children lick their lips and Alfie wipes his nose with his hand.

The cel sequence ends with both cat and mouse running into darkness. Two eyes appear in the dark and the sound track changes again to a rhythmic buzzing; both children frown slightly and their breathing becomes noticeable as the eyes swivel to and fro. This sequence is potentially more mysterious as the animator's hand uses a fine-nozzle air blower to puff away the sand and create a white cat's face in the middle of the black screen. The hand disappears and the cat's

[11] In cel animation, images are painted on to transparent sheets or "cels" so that figures can be easily superimposed on to backgrounds

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body starts to appear in stages as it swipes the darkness away to search for the mouse which keeps running across the screen and disappearing again. The children continue to frown and lick their lips, relaxing slightly as the chase resumes with the animals running in profile along a black line representing the ground. When the line ends, the cat performs the classic cartoon "oops!" shock-suspension in mid-air before falling: on the way, it is replaced by a black blob which lands on another animation table as a lump of clay. Hands appear and start speeding up to form the clay around a wire armature. Perhaps Alfie is prompted, by Terry blowing his nose in the background, to remember that there are other people in the room: he turns to look very briefly at Phoebe sitting on the floor behind him and then up at me, commenting "[inaudible] now!" then wiping his nose with his hand again, turning back to the screen. The clay cat is complete: a finger enters the screen to poke at its head, which becomes animated. Alfie says "Dere's another cat" and both children wipe their noses again.

The cat now walks across the animation table to a computer screen and spots a digital mouse running across it. Enraged, the cat flexes its paws and long metal claws, then dives through the computer screen. A reverse angle shot shows it emerging as a digital armature – a 3D figure made of white netting – inside the computer, which looks like a rather dilapidated workshop, illuminated by a single, swinging, buzzing light bulb. Alfie points and looks up at me, saying "it's another cat" turning further and wiping his nose while he looks at Phoebe, then turning back to the screen.

The cat seems to peer through the TV screen at the audience; then a change of angle shows the computer animator's hands dimly outside the computer, flickering over the keyboard, trying out different body-colours for the cat, who somersaults in surprise each time. The light bulb inside the computer flickers and goes out; seen from outside the computer, the cat jumps up to the inside of the darkened screen and peers through. Alfie turns to me and asks "has it gone wrong?" before turning back to the screen to see the mouse on the animator's desk, now in the form of a computer mouse which sprouts ears, eyes and whiskers. Both children appear to be a bit more tense as they watch the final sequence, scanning the screen urgently, with anxious expressions. The cat hammers angrily on the inside of the inside of the computer screen, and the mouse struggles to get away: in doing so, it pulls its tail – or USB cable – out of the keyboard and the picture vanishes to a white dot. The children look perplexed, and turn to glance at me and at Phoebe, who gives a sharp intake of breath and says "wow!" in a low voice. She and I

exchange comments during the credits sequence (which is illustrated by clips from the movie), which the children watch intently and Alfie says "wanna watch it again."

The second viewing of *Animatou* took place a few minutes after the first. Connie went to sit on Phoebe's lap on the floor, but Alfie stayed next to me (seated on the stool from where I hoped to be able to frame all three of them). But Alfie lingered beside me, hoping to have a go at holding the camera, until he was distracted by the film which was now reaching the end of the painted cel sequence. He remained standing, close to me, and all three watched intently (Figure 3.25).

Figure 3.25: Phoebe and children re-view *Animatou*.

From the sand animation sequence onwards, the viewing included comments from all four of us, intent and focused together on the screen:

A A wub a mouse
P It's sand animation
CB Sorry? Sand?
P Sand animation
CB Or iron fi- I dunno, yes, I think it's maybe I don't know quite how – anyway – he blows it – he's blowing it, with a little puffer [all 3 watch]
C *[points]* Oh, it' cat"
P It is a cat...It's a bit like Max,[12] isn't it? With a...
A *[v serious and swaying slightly as he stands]*
P Ooop whee... *[as cat starts to fall]*
P Ooop plop

[12] A reference to the protagonist in Maurice Sendak's 1963 book *Where the Wild Things Are.*

A Whatanow[?]
C *[points]* Cat!
P ooh what's that?"
C Cat!"
P He's making a cat isn't he? He's making it out of clay!
A Jump! *[jigging as cat is finished]*.. am u wa
P Yes? Ok let me see...he jumps where?...Into the- *[A breathes in and tosses head]* The computer?
C MOUSE!
CB Ooh look at his claws!
P Ooh he's jumped in!
C Wo now? *[wiping nose]*
P Now, he's a computer...animated...cat
C *[points]* ooaauw *[as light buzzes]*
P Bellybutton
CB He's an armature
P Why's he got a bellybutton?
CB Well, cats have bellybuttons *[P looks skeptical]* they must do
C *[points again as cat starts to somersault]*
P Oop! Oop! ... he says stop, stop!
CB Oooh
P Finish! *[C and A both lick lips]*
CB I don't think he likes being a computer cat, does he?"
C *[wipes nose and looks down briefly]*
P That's what happens when you unplug a computer! It stops.
CB Look, a different person does all the drawings; it's a woman who does the – er –sand, actually
A [inaudible] *[credits end]* Want it again

This conversation forms the basis of the children's gestures and comments in many later re-viewings as they point and refer to what they felt to be key moments. A process starts to emerge here: watch the movie carefully and silently the first time; watch it again with adults, sharing responses, naming key moments, characters and character features, actions; watch it subsequently, following the "signposts" of salient past comments. To the film's intended audience of professional animators, it is witty and ingenious; to the twins it seemed to remain interestingly puzzling. They may have been pondering questions such as: what is "real" and what is not? Or, as Hodge and Tripp suggest, they may be considering what is *meant* to be real (Hodge and Tripp 1986, Chapter 4); or why the cat and the setting keep changing. It is hard, if not impossible, to understand what engages their attention. If, as many scholars suggest, the primary purpose of movies is to engage our emotions (Carroll 2010, Grodal 2009, Keating 2006, Platinga and Smith 1999, Smith 2003, Tan 1996), what kinds of emotion does *Animatou* appeal

to? Perhaps its main affective impact lies in its playful structure. The constant reworking of a simple trope, as in the Roadrunner series, which is based on one rule: "The Coyote never catches the Roadrunner," has lasting appeal in other popular cultural forms such as sitcom and can be a reliable way of inducing laughter (see Alfie's comment on this in Section 5.6.2). However, *Animatou* is not very funny: the emotion it elicits for Phoebe in the second viewing seems to be mainly surprise. For adults, surprise tends not to generate a desire to see something over and over again, or at least not more than two or three times. But the children continued to ask to see *Animatou* at least 20 times over the next eight months and, even when they were as old as six and were reminded of it, were interested in seeing it yet again. Each time, they would watch some or all of it equally attentively. So a key feature of my analysis of the *Animatou* viewing sequence is, what drew the children to re-viewing *Animatou* at least 20 times?

3.4.2 Touching the Screen

The third and fourth viewings of the film took place on the same day (22nd April 2012 – the children were aged 2;4). That day, we had visitors: three other children, two of whom were a similar age to Alfie and Connie, and one a baby; the two mothers were also there, and stood near the door to watch *Animatou*. Four of the children, including Connie, sat on the sofa, while Alfie was off-screen on Terry's lap. Phoebe sat on the floor, closer to the TV. In my data analysis, apart from noting that they were all fairly attentive, I have not paid much attention to the reactions of the other children, because I did not know them well enough to interpret their expressions and movements. The salient feature of the viewing, for me, is Connie's behaviour. As soon as the film starts, she gets up from the sofa with an expression of delight and determination, and goes to sit on Phoebe's lap, just as she had done in *Animatou*2 (Figure 3.26). This gave me a problem at the time because I thought it would be interesting to capture the other children's reactions. But I could not frame them all, so had to pan between the sofa and Phoebe on the floor, thus missing a lot of responses in both cases. She sits upright and forward on Phoebe's lap, her hands gathered and resting on her thighs, her right forefinger and thumb pinched together; several times she points to the screen and exclaims "Cat!" or "It's a cat!". When the film ends, there is an extensive discussion about what to watch next. Alfie shouts "caterpillar!" but is ignored; eventually Connie's loud demands for "Cat!" win the argument and the film starts again.

Figure 3.26: Connie springs forward at start of *Animatou* 3

Alfie sits near the screen but on the floor; Connie walks up to the screen and watches closely, her left hand on the trolley and her right hand free to touch the screen, which she does frequently, in between holding her right forefinger in her mouth (Figure 3.27).

She continues to watch, while behind her Phoebe has a conversation with one of the mothers. With low-level background noise, and Alfie outside her field of vision, Connie is in a sense watching on her own. When the youngest child falls off the sofa and bangs her head on the floor, Connie does turn to look as the child screams in pain, is comforted and taken out of the room; then she turns back to the screen. She is distracted again when Alfie asks for milk, but turns back again when the buzzing digital mouse zips across the screen.

Figure 3.27: Connie watches mouse on screen: *Animatou* 4

When the digital cat appears, she gathers both hands and holds them at waist level, watching intently. She then places her right hand on the screen, apparently aiming for the swinging light bulb, but the shot changes and her hand lands on the digital cat as it turns towards the "audience". Connie repositions her hand to cover the cat's bellybutton (see Section 5.5.4, for further discussion of this moment); in a second, the cat moves again: Connie once more moves her hand to delicately touch the end of the cat's tail with her forefinger (Figure 3.28).

Figure 3.28: Connie touches the cat's tail: *Animatou* 4

A few seconds later, during the colour-change sequence, one of the other children starts to comment on the film, for the first time, saying "changed to red," and her mother engages her with further questions. Connie turns away from the screen and goes to look for Phoebe.

3.4.3 Modality Judgments and Narrative

The next two viewings of *Animatou*, on 3rd and 14th May 2012, were the ones that preceded – and sharply contrasted with – the rather chaotic viewings of *The Very Hungry Caterpillar*, where "cat and mouse" was Connie's choice and "caterpillar" was Alfie's (see above, Section 3.3.2). In both viewings, Connie stands close to the screen for *Animatou* and Alfie sits behind her; he joins her at the screen for VHC. During *Animatou* I ask questions such as "what's that?" or "what's he doing?" to which Connie responds; Alfie's only response is in the sand animation sequence which, as we shall see, was the one the particularly interested him. The seventh viewing did not happen until 12th July, and begins with Connie on her own, sitting on the stool fairly close to the screen; Alfie comes in halfway through and sits on the sofa. Later that month, after Terry and I had reorganized our house, much of their viewing in the new living room took place on the sofa,

which was now a little closer to the screen. At age 2;7, the twins' days of standing close to the screen were more or less over.

The July, August and September viewings were striking in terms of what the children said, mainly in response to my questions. On 12th July it was, as usual, Connie who had asked for "cat and mouse:" she came and sat on the stool while Alfie was still out of the room with Terry. My video starts when the mouse is already on the screen. Connie sits leaning forward, swaying in time to the rhythm of the sound track, gazing intensely and eagerly at the screen. "Is that a real mouse?" I ask. She replies immediately, smiling confidently and not taking her eyes off the screen: "No, it's a p'tend mouse" (Figure 3.29).

Figure 3.29: Connie (aged 2;7) makes a modality judgment: *Animatou* 7

I am intrigued by this because earlier responses to this kind of question were usually more playful, saying "yes" or "that's me!" as part of the game. I replied "Is it?" and she affirmed "yeah!" in a descending, assertive tone. A few seconds later I ask whether the cat is real, but she ignores the question because she is already starting to point and shout "HO DRAWIN'!" Later – during the painted cel sequence chase – I repeat the question and Connie replies confidently "yeah". It is interesting that she distinguishes between the drawn mouse and the painted cat, who moves through a three-dimensional setting, jumping out of a window, dropping into a busy street with cars rushing to and fro. Connie's modality judgment here may be based on the enhanced realism of the painted cat character, as opposed to the simple line drawing of the initial appearance of the mouse. During this sequence she also very softly murmurs a version of the statement "He's told him wi' de road" which recurs in the 8th viewing (see below).

At the beginning of the sand animation sequence, Connie stops drinking her milk and loudly says a phrase twice which sounds like "she hurts it" (which must be a reference to my explaining the technique as "squirting air" to move the sand, and to our knowledge – from the credits – that this animator is a woman); then immediately shouts "It's a TIGER!" as the cat's face appears, and then "IT'S A CAT!" Identifying the cat as it appears in its various guises had become Connie's favourite routine with the film. In the clay animation sequence she made a rapid sequence of comments:

C It must be a cat";
C *[as cat head appears]* Ooh!
C OOH! It's a CAT!" *[smiling]*
CB Is it a different cat?"
C Yeh! *[beat]* It a b'ue cat!
CB Oh yes, it's blue, isn't he?
C *[drinks again]* He's a nice cat!
CB You like that one? *[On-screen growling]* he's got claws! *[C's face a bit serious; holds cup steady at throat level]* Is that a different cat?
A *[pulls cup spout out of mouth]* It IS a different cat

This is Alfie's first contribution to the discussion. At this period he was quite preoccupied with the idea of "spookiness" – of light and shadow, and ghosts. He was constantly asking me to re-read him *Percy and the Haunted Mine*, a Thomas the Tank Engine story that involves mine buildings sinking into the ground due to subsidence (see also Section 4.2). His contributions to the *Animatou* viewings tend to focus on the black screen at the beginning of the sand animation sequence, and the appearance of the two white eyes, swivelling around in the darkness, then the reveal of the the cat face with its cross expression. From the first viewing, Alfie would always show signs of tension at this point: in the 5th viewing he calls out "Giant!" at this point; in the 6th he says "a owl".

The 8th viewing of *Animatou*, five weeks later on 25th August, caught the children (aged 2;8) in a more wide-awake and talkative mood. Connie had asked for "cat and mouse", as usual, and responds to the opening of the film with delight (Figure 3.30). She watches the whole film leaning forward intently, chuckling at favourite points, and repeating the kinds of comment made in previous viewings, at the same points: drawing the cat, the cat's appearance in the sand sequence; the computer sequence. Alfie also watches intently but with a fixed, serious expression. He makes no spontaneous comments, but responds to my questions promptly and seriously (see also Section 5.6.2).

Figure 3.30: Connie's delight at *Animatou* 8

This viewing marks a change in Alfie's relationship with the film. He is able to express ideas about the narrative structure, and uses a new way of expressing his dislike of the black screen and staring eyes at the opening of the sand sequence. He had long been frightened of the dark and of "spooky" things, liked to play with torches to light up dim places, and often observed, closely and repeatedly, his toy trains going into and emerging from dark tunnels. But here he expresses his feelings more clearly, labelling the eyes as "stupid eyes" (probably in preference to admitting that they were "scary eyes"); and stated "I think it's a ghost" which could be seen as a step forward from his previous practice of simply calling out "ghost!" when the eyes appeared: he is expressing his own response rather than simply naming a character, and is able to respond, soberly and thoughtfully, with a "yes" when I ask "Is it scary?" so he is using his comments on the film to help him deal with his own emotions. I discuss Alfie's fear of endings further in Section 4.3.1.

Connie reassures Alfie about the appearance of the disembodied cat, saying "It's a cat Alfie" in a "rise-fall-rise" reassuring tone, not as an assertive or contradicting statement, and she turns slightly to Alfie as she says it. She has clearly recognized his fear, which she does not share, but which arouses her sympathy (Trevarthen 2005). While Alfie sees and responds to risk and the unknown, Connie perceives that she can correct and perhaps thus resolve the fear which she believes to be unfounded.

The ninth viewing of *Animatou* took place three weeks later, on 13th September 2012, when the children were aged 2;9. As before, they sit in different positions on the sofa: Alfie leaning back

with his legs tucked up; Connie sitting upright with her hands gathered in her lap (Figure 3.31). Considering that by now they had watched this film more than ten times over a period of six months, it is interesting that they both still maintain an intense attentiveness, with serious faces and fixed gaze, throughout the viewing. Unlike the excited naming games and physical imitation that had characterized the VHC viewings until May, their comments are mostly quiet, as if self-directed.

Figure 3.31: both thoughtfully attentive: *Animatou* 9

Connie whispers "what's happened?" (echoing my constant question) as the initial chase sequence finishes, wipes her mouth with the back of her hand and resumes her cupped hands position. Alfie says "nasty" as the sand sequence begins and Connie says "cat" as the cat's face appears in the sand. Only one comment is addressed to anyone else: when the sand cat is transformed into a lump of black clay, Connie turns to me with a big grin and calls out "It's all black!" All the other remarks are subdued and barely audible. But at the end, Alfie utters the default question clearly and loudly:

A What's happened?
CB What did you see? ...what happened to the mouse? ...did the mouse get away?
A Yes but then. . .the cat. . . kept running after him
CB Yeah, but at the end, did the mouse get away?
A *[starting to mouth spout then lowers cup; turns to me; licks lips]* Yes but I wanted to watch some more *[licking lips again]*
CB You wanted to see some more?
A Yes
[C leans forward to pick up cup]
CB OK...you wanted the film to go on?

A *[looking at screen as credits play]* Yes but it's finishing at the end

Actually watching the screen at the end of the film and talking about the fact that it is ending was something that would become impossible for Alfie three months later. His anxieties about endings and disappearances are discussed more fully in Section 4.3.4. It is interesting that here he is able to express something of his feelings about endings and to contrast these with the inexorable fact of the film coming to an end. But in the case of *Animatou*, it is possible that here he is also expressing his dissatisfaction with the surprise ending: we don't know what happens to the mouse, or whether the cat stays trapped in the computer for ever. For knowledgeable adults, it's an amusing variation on a classic theme: for children, it could be frustrating.

Unfortunately, three of the four viewings that followed – on 22nd October, 19th November and 13th December – were made on a fixed camera that was badly positioned: too close to the TV and thus picking up too much sound from it; facing table lamps that cast a glare and made it hard to see details of the children's expressions and gestures. By now the film was clearly becoming something of an expected ritual at our house: it didn't happen every time they came, but was asked for when they felt like snuggling down to enjoy something familiar. However, they were still attentive all the time when they watched it.

On 22nd October (aged 2;10) they first watched *A Slippery Tale* (Dir Seidel, Germany 2004), which they had seen before, and *Lucia* (Dir Gönnert, Germany 2004), which Connie had seen before, and wanted to see again, but which Alfie had not seen, and did not like when he did see it, since it was set in a hospital, at night time, and he had experienced staying in hospital for an operation. Both were shown on the BFI's DVD *Story Shorts 2* (2006). They were then both keen to watch *Animatou* again. We watch all three films sitting together on the sofa, filmed with a fixed camera which picks up very little of their comments or reactions. They were attentive throughout, however, making just a couple of the comments they had often made before: "ghost!" at the beginning of the sand animation sequence, and naming the colours in the computer animation sequence. Connie reaches up to brush her hair back at the same moment as the animator's hand reaches into the screen to jog the clay cat's head into motion: possibly an example of embodied simulation (Gallese 2003). Gallese argues that the process of simulating others' actions is undertaken "to produce a better understanding of a given situation," linking imitation, empathy and mind reading (p521). This would also signify here that a high level of detail about the film is now established in Connie's memory. In no other

sequence does an animator's hand appear after a speeded-up figure-creation sequence, and at no other point does the cat have to be prompted to start moving. Connie starts the movement of her hand towards her own head just as the animator's hand starts to appear. She might be underlining what she already sees as a notable moment; or she may still be trying to work out why it happens: either way, it may indicate her close attention and deep involvement with the film.

At the beginning of the next viewing (aged 2;11), their former positions are reversed: Alfie is sitting upright on the edge of the sofa, licking his lips; Connie is slumped back in the corner of the sofa, legs drawn up, picking her nose. I sit down beside her and we all watch: however the sound is so loud and the video focus so poor, due to low lighting, that it is impossible to hear the few comments that are made, or to interpret the children's expressions. The session then continues for 50 minutes while we watch a selection of short films from the *Animagine* and *Story Shorts* DVDs: most selected by them from memory. So this was a cosy winter's evening viewing of mostly familiar material, about which little can be said except that they were attentive throughout and made many comments.

The viewing on 22nd November, three days later, is very different. It is daytime, and they have arranged themselves on the sofa facing each other, with a flannelette sheet spread out to cover their legs. By this time the twins were fluent talkers. I was curious about their continuing commitment to this movie, and decided to try and risk what I knew might be an irritating procedure: stopping the movie from time to time and asking questions (Figure 3.32). As it turned out, it was only Connie who was irritated: Alfie enjoyed answering questions, albeit in a playful way. Once again this reflects their differing relationships to *Animatou*: Connie, for whom cats were her favourite animal, saw it as "her" film, to be re-viewed pleasurably and with relish; Alfie was readier to address the puzzles it presents.

Figure 3.32: I question them (aged 2.11) about *Animatou* (12th viewing)

Alfie's answers to the questions quickly turn into playful exchanges which extend each pause in the screening; Connie soon gets impatient at my "teacherly" procedure and her interventions mainly consist of shouting "TURN IT ON NOW!" Alfie's playful responses to the still frame generated the following conversations:

Cel painting sequence:

A Who's those two hands?
CB *[stops film]* Yes, whose are those two hands?
C the cat's/A *[inaudible]*
CB The cat's? Are they the cat's hands?
C Turn it on now!
CB OK
A *[pointing]*I think those are a daddy's hands painting the cat!
CB They're daddy's hands?
A They're the da' they're daddy's hands holding the paper to paint the cat in black and blue and – white and black and ..Purple!
CB Purple. OK
A And pink!

Sand animation sequence

CB whose eyes are those?"
A They're um *[claps R hand over his eyes]* they're my eyes"
CB They're your eyes

A Yes. They ARE my eyes
C *[turning slightly to me]* They're a bit like your eyes
CB They're a bit like my eyes
C *[inaudible]* your eyes
A They're MY eyes *[clapping hand over eyes again]*
CB Alfie says they're his eyes
A They're my eyes
CB Your eyes are blue
C Turn it on now!

Computer animation sequence

CB could you go into the telly, into the computer?"
A raises his R hand
C no-o-
A I could – but I could JUMP through it!
CB Could you? You could jump through it? How – have you tried?
C I haven't! *[leaning back on sofa arm]*
A And stop that cat from chasing the mouse
CB you'd stop the cat from chasing the mouse? Would you?"
C *[sitting forward] [inaudible]* very fast!
A I's stop *[inaudible]* stop chasing the mouse over! *[holding out L hand palm forward in 'stop' mode]* At once! Cat, don't hit the mouse!"[*hitting motion]*

These exchanges are playful and light-hearted (see also Section 5.6.2). Alfie takes on board my questions and comments and adds surreal extensions. But the variation on the "daddy" ascription of the hands in the painting sequence is intriguing: "a daddy", "the da[ddy]" and "daddy" each positions the "daddy" very differently. There then follows a game in which Alfie claims to be able to see the mouse on screen and we all end up standing close to the still image on screen in a playful "where?"/" There!" exchange with Alfie poking his fingers on to the screen and exclaiming "I can make blue spots" (as he dents the plastic surface). Finally he goes back to the coffee table and Connie watches the final few seconds of the film standing close to the screen, exclaiming "THERE'S the mouse!" as the computer mouse appears, then watching the credits attentively right to the end, while I ask "what happened to the mouse?" and Alfie replies "It kept running! …. That's just a naughty mouse. And it's a naughty mouse and a naughty cat. Both naughty. Both naughty.." then becoming more interested in manipulating the big torch he has just noticed lying on the table.

My 13th and final video of their *Animatou* viewings is on 13th December 2012, two days after their third birthday. It is in poor light and out of focus. They both take up positions as the film starts: Alfie sitting upright on the edge of the sofa and Connie standing at the coffee table. Both watch attentively throughout, with very few comments except for the following exchange after the cat enters the computer, appearing inside as the "white netting" digital armature:

CB What's he made of?"
C *[looks at screen and licks lips quickly, purses lips slightly, goes on watching]* He's not made of anything!" *[shaking head slightly on last word]*

Perhaps Connie is focusing here on the fact that the digital armature is transparent (see Figure 3.28); it is interesting that she gives this some thought and watches the cat before delivering this verdict.

Thus ended my filmed sequence of *Animatou* viewings, although they continued to watch it occasionally for the next three years. The film differs from most of the other things that they watched, in that its diegeses constantly change without – at least as far as the children are concerned – any rationale: live action is mixed on-screen with animation, and there are rapid cuts between settings that differ in both structure and stylistic presentation, with no information about how the two animals get from one to another. At the same time the chase format is entirely familiar: a predator chases a smaller, much smarter and more agile prey, and never quite catches it. This combination of simple, repeated "story" and puzzling style and structure evidently appealed tremendously to the children and must have rewarded their continued re-viewings.

If the rewards for their investment of time in this film had simply been the pleasure of familiarity, the children would not have continued to maintain their alert, often frowning, attentiveness each time they watched. Connie repeatedly responded with delight when the film began (see Figures 3.26, 3.29 and 3.30), and noted the transitions from one sequence to another, excitedly identifying the cat each time it reappeared in another guise. For the first nine viewings that I filmed, she is seen standing or sitting upright, and leaning forward as she watches, while Alfie, after the first and second viewings, sits back. While he tends to stay still and fairly impassive, it is he who makes far more spontaneous comments: from "Dere's another cat" in the first viewing, to "He's not a real cat, he's a pretend cat" in the 12th viewing, with a

particular focus on the sand sequence, which he still found disturbing. He is also first to respond to questions (when there is a response, that is: many of my questions were ignored).

What these repeated responses indicate is that, in their repeated viewings, the children sought – and found – repetitions of their initial emotional reactions, whether pleasurable or fearful. Perhaps it was a function of the film's stylistic and structural "strangeness" that guaranteed the repeat of these emotional "buzz" moments and maintained their commitment to studying the continual diegetic switches. As Miall (1988) says "affect … acts in an anticipatory manner," setting up processes of prediction and comprehension (Miall 1988) as well as the anticipation of the repeated emotional experience. For its intended audience of animation professionals and enthusiasts, *Animatou* has little concern with affect: its chase narrative has a mechanical quality, functioning merely to enable the demonstration of different animation styles. But the children invested the film with affect, "reading" the cat's changing expressions and the mouse's wiliness. They "knew" – with no evidence from the film to support it – that the cat wanted to eat the mouse, from their generic knowledge of cat-and-mouse stories in other films and in books. But their emotional responses must have drawn upon a wider range of experience: fear of the dark; instinctive fears of speed and sudden obstacles; the cat's anger, as shown in its expressions and urgency of movement; the mouse's bravery and cheekiness as shown in the first few seconds of the film. Recognising these again and again clearly generated pleasure.

In terms of social learning, the first viewing of the film was interestingly different from others, being completely devoid of adult comment, apart from Phoebe's low-voiced "wow!" at the end. In contrast, Phoebe and I make comments throughout the second viewing, including our exchange about cats' bellybuttons, which Connie seems to remember a fortnight later when she deliberately moves her hand to cover the digital armature cat's bellybutton (see also Section 5.5.4). During this viewing, it's Connie who repeatedly identifies the cat in its new guises, while Alfie comments on actions: rubbing [out?] the mouse in the sand sequence; the cat's jump in the computer sequence. Throughout these 13 viewings, the level of adult involvement is very different from the ECF viewings. There is little playful dialogue or imitation: most of the screenings involve me on my own with the children. Most of my questions seek to elicit their modality judgments, but are usually ignored; the only one they take up and use, almost ritually, and without answering it except during their 8th viewing (see Section 5.6.2), is my "what happened?"question. It is only the last screening that ends in laughter and games, initiated by Alfie's pretence that he can see the mouse inside the computer.

To some extent, the nature of their engagement with the film diverges during this period. Alfie, who initially gained more facility with language than Connie and enjoyed repeating phrases that he had heard, was readier to name and comment on character actions. Connie tended to engage intensely with the film, displaying her pleasure at particular moments like the drawing of the cat. In discussions about what to watch, she would be more likely to ask for "cat and mouse" while Alfie would ask for something else. Cats and kittens remained her favourite animals and toys long after my fieldwork period, and they both seemed to regard *Animatou* as "her" film, whereas Alfie had a succession of favourites.

SUMMARY

These three case studies offer samples from most of the fieldwork period: from the early stages when the children were 22 months old and had watched a very limited range of movies, to the end of 2012 when they were just three years old and their viewing had greatly diversified. This was the period in which they learned to talk, and encountered an increasingly wide range of cultural, social and physical activities.

The case studies provide snapshots of their developing engagement with movies during this period. The *In the Night Garden* viewings show them each exercising their own choices about the segments to which they wanted to pay close attention, seizing the opportunity to get really close to the screen. In the Eric Carle Films viewings, the social context becomes more important, with excited anticipation and identification of characters and incidents, shared with the adults in the room. With *Animatou*, they respond to the challenge of a more complex and enigmatic movie. They embark on a much longer process of studying the film through repeated viewings: becoming able to make modality judgments and to reflect on elements of narrative such as character motivation.

This overview also indicates the beginnings of the major themes that emerge from my data analysis. These were manifested in many different ways throughout the 44 other viewings that I recorded during my fieldwork and the 26 other viewing observations annotated in my Field Notes. *In the Night Garden*, *The Very Hungry Caterpillar* and *Animatou* were not the only movies to which the children made some extended commitment, but they are the ones for which I was able to gather enough data over a long enough period to enable a chronological account of how these themes developed. Their periods of viewing with focused attention lead into Chapter 4's

account of the role of emotion in early movie-watching. My observations of the social context of their viewing, their modality judgments and evidence of their growing narrative comprehension, are discussed in my account of these aspects of their cultural learning in Chapter 5. In these chapters I pay less attention to chronology and focus more on analysis and discussion of these themes and the different ways in which they were manifested.

CHAPTER FOUR
THE ROLE OF EMOTION IN EARLY MOVIE-WATCHING

In this chapter I use my analyses of numerous viewing events between May 2011 and May 2013 (i.e.the fieldwork period plus the "trial videos") to trace the ways in which postures, muscle tone, gestures, expressions and vocalisations gave clues about some of the children's emotional responses to the movies they were watching. Starting with the phenomenon of focused attention, which was noticeable from my trial videos onwards, and linking examples of this to the material that they were watching at the time, I describe and explain the multiple physical signs that indicate the emotions that seemed to be driving the children's attention, and thus contributing to the development of their viewing preferences: their desire to re-view selected movies, and to avoid others. I describe some of the viewing events in which negative emotions were powerfully expressed, and suggest ways in which these responses may have been triggered in these specific situations. Further accounts of how the children's gestures, expressions and vocalisations changed over the fieldwork period build up a more nuanced picture of the range of emotions in play and indicate how these may have been contributing to their growing sophistication as viewers.

4.1 FOCUSED ATTENTION

The "seeking" concept as described by Panksepp seems particularly relevant to the intense engagement I was observing in the twins as they watched the movies that interested them. While the other three "basic" emotions that Panksepp describes (fear, anger and sorrow) obviously relate to the environmentally dangerous lives and close social interdependence of early humans, "seeking" is equally important as a survival mechanism. Essential to feelings of engagement and excitement, it generates anticipation and investigation, not only in doing things like foraging and finding shelter, but also "gradually helps cement the perception of causal connections in the world and thereby creates ideas" (Panksepp 2004, pp144-149). Panksepp does not refer to any physical signs that would indicate the presence of this emotion, but Damasio's account of consciousness, citing wakefulness and attention, encouraged me to see "focused attention" as a key sign of "seeking":

> Consciousness results in *enhanced* wakefulness and *focused* attention, both of which improve image[13] processing for certain contents and can thus help optimize immediate and planned responses. The organism's engagement with an object intensifies its ability

[13] Damasio does not mean visual images, but "neural patterns or maps based on the momentary selection of neurons and circuits engaged by the interaction"

> to process that object sensorily and also increases the opportunity to be engaged by other objects – the organism gets ready for more encounters and for more-detailed interactions.
> (Damasio 2000, pp 182-3)

I became aware of focused attention on 13th September 2011, in my first trial attempt at filming a viewing event with the iPhone camera (AMTV Mr Bloom – see Appendix 1): this was before my research had formally started and was merely a "tryout" in the living-room context. But after I had accumulated many examples of this behaviour and begun to analyse them, I returned to this video and decided to include it in my analysis. It enabled me to look more closely at what I had initially characterized to myself in general terms as "staying still and watching TV" and led me to see it as a key sign of the children's commitment to making sense of movies. Before discussing this further, I shall describe examples of the "focused attention" phenomenon and the physical indicators that characterized it, starting with the AMTV Mr Bloom event.

The children stayed overnight at our house without Phoebe for the first time on 12th-13th September 2011 (aged 1;9). On the morning of the 13th, we brought them up to the living room with their breakfast of eggy bread and turned on CBeebies to see what was showing, in order that I could try to video their viewing for the first time. Mr Bloom's Nursery had already started: this was a show they had seen before but Phoebe had not mentioned it as something they particularly liked or had watched often. Connie, standing some way from the television, was immediately attentive, and I started to film her, holding the iPhone in one hand.

But I am almost immediately distracted by Alfie climbing on to the coffee table in front of the television and reaching out for the on/off button on top of the set (see Battle for Proximity, Chapter 3). I call "Alfie!" warningly and he starts to climb down, accidentally kicking a plate of food on to the floor as he does so. By the time this is sorted out and I reframe Connie in the viewfinder, she has walked forward to the left-hand end of the coffee table and placed her hands upon it. In this position she watches, almost without moving, for just over six minutes: past the end of the programme, through the CBeebies studio presentation and the trailer that follows, and into the next programme, Dirtgirlworld (see Figure 4.1).

Figure 4.1: Connie (aged 1;9) maintains the same position for 6 minutes 3 seconds.

While she is doing this, Alfie at one point attempts to take the iPhone away from me, until he is distracted by a song and dance sequence in the programme and starts to watch, standing in front of the coffee table and swaying in time to the music. Connie glances at him very briefly. Terry gets up and sidles over to Connie, suggesting that she dance as well. She looks up at him blankly and then resumes her intent gaze on the screen, conceding to his suggestion by making a very slight swaying movement of her upper body. Alfie returns to me to try and seize the iPhone, and I can be heard trying to talk him out of this until he too is attracted to the screen again when the CBeebies presenter appears. Eventually Connie remembers the eggy bread on the plate in front of her, stabs a slice with her fork and eats it, stabs another, carries it around the table to approach the screen again, and starts to climb on to the table, swinging up her leg close to the mug of coffee. I give up trying to film this and go forward to grab her, turning off the camera.

4.1.1 Physical Phenomena

While this event provided me with useful guidance on future attempts to film in the living room, my later analysis uncovered numerous physical details that signal the intensity of Connie's attention. I saw that instead of casually resting her hands where they have happened to fall on the coffee table, Connie has splayed her fingers and opposed her thumbs in way that is enough to keep her body stable, but comfortable, as she maintains her gaze. She is positioned at an angle of less than 45˚ to the screen, which must give her a distorted view, but her gaze remains steady, with a slight frown, her lips slightly pursed and her lower jaw forward (Figure 4.2).

Figure 4.2: Connie's position when she arrived at the coffee table

On the two occasions during the viewing when she briefly looks away from the screen, she returns to exactly this position, resuming the same expression. There are some very slight variations as the viewing continues: she blinks a little more often when there is a major change of scene (back to the studio/into a short sequence of real-life children in a playground); she licks her lips twice; and when a trailer of Justin's House appears with a close-up of Justin Fletcher (to her, a face and voice familiar from viewings at home) speaking excitedly to camera, her lower jaw juts forward more. It is difficult to see when she is following on-screen movement, due to her frown and the fact that her eyes are turned away from the camera, but she does do this to some extent.

In my video analysis, I began to collect more examples of what I coded as "features of attention", where the careful maintenance of body or limb positions indicate the maintenance of focused attention. Connie's position in this video is what I later characterized as "bracing", based on more frequent and obvious manifestations by Alfie. He does this briefly during my next experimental filming, in the children's shoe department of the John Lewis department store two weeks later, when he is suddenly attracted to a TV screen showing CBeebies while he is climbing on the furniture, intermittently grasping the tops of the partitions behind him and beside him. At the moments when he drops both arms but continues to watch, it can be seen how unstable a toddler's body is when trying to hold it still. Of course, as Jensenius at al point out (Jensenius, Bjerkestrand and Johnson 2014, p208), nobody can stand completely still, but given that toddlers' centre of gravity is higher than that of older children and adults (Huelke 1998, p98), two-year-olds have to find ways of supporting themselves if they want to maintain steady visual

contact with a large area of moving images. So bracing is often just an essential response to keep the body stable. But in some cases – mainly involving Alfie – it seemed to be more than this, as other viewing events indicated.

At the children's house a month after the *Mr Bloom's Nursery* viewing event, when they were aged 1;11, I first showed them *Laughing Moon*, a non-mainstream short film (see my rationale for showing these types of movie in Section 2.4.6).[14] This time, in my video, it is Connie who shows intermittent attention, while Alfie immediately adopts an extreme "braced" position (see Figure 4.3). His left arm is straight and his hand is positioned rather

Figure 4.3: Alfie (aged 1;11) "braces" himself to watch *Laughing Moon.*

awkwardly on the table; the other hand on the chair. This puts him in a slightly twisted position, which he maintains for the six minutes of the film, incorporating several startled reactions to sudden noises from the screen without losing the positions of his arms and hands. The film involves many sudden changes in the sound track while the "tangram" style shapes on screen keep reconfiguring as different kinds of animals and people. While Alfie tensely anticipates more loud noises, Connie divides her time between trying to open and read a book back to front, and gazing attentively at the screen for short periods, semi-braced, and exclaiming "ooh!" at things she seems to find surprising and/or recognizable. Occasionally she points, and for parts of the time places one hand on her belly or chest (Figure 4.3).

[14] *Laughing Moon* is unavailable online but several extracts are provided in a video tutorial for teachers at https://vimeo.com/52791467. It was published in the BFI short film compilation, *Starting Stories*, in 2004.

When they saw the film for a second time a month later, the day after their second birthday, my video shows Alfie adopting another "braced" position, this time leaning against the sofa at our house, together with a serious expression and downturned mouth, while Connie sits attentively in the armchair, her jutting jaw possibly indicating her own tension, although Phoebe suggests this could be due to teething (see Figure 4.4):

Figure 4.4: waiting for more noises: second viewing of *Laughing Moon* (age 2)

At this point Alfie has already jumped twice at loud noises (a pop, and a little later, rock music); although Connie was also highly sensitive to noise, here she seems more intent on naming the figures she recognizes, with her hands at the ready for Makaton signing (see Section 3.2.2); but from her posture and the position of her feet, it is clear that she is quite relaxed. As the film goes on, both get a little more used to the film's playful "what next?" project, but retain some signs of tension as they watch it attentively right to the end, Alfie asking for "more!" as it finishes.

As the project continued, I collected these and many other examples of what I coded as "features of attention". The terms I adopted were: bracing, fixed gaze, frown, chewing cheek, hand collection, hand grip, hand stationing, hand(s) tucked, hand(s) to mouth, heavy breathing, open mouth, licking lips, wiping nose, jutting jaw, tensing jaw. Some of these terms need elucidation. "Hand grip" refers to any occasion where either of them (and sometimes both) gripped on to a piece of furniture, as a form of bracing. The metal TV trolley at our house had holes and edges which lent themselves very conveniently to this action. In my video of their first viewing of *Animatou*, for example, they each grip the trolley with one hand (see yellow highlight in Figure 4.5). In the same image, Alfie is frowning (see green highlight) but Connie is not: this

illustrates how slight and fleeting the appearance of a frown can be on a toddler's face. Here they also both have their mouths open. This usually meant that sooner or later they would be licking their lips, perhaps because their breathing – often involving deeper breaths as they concentrated – made their lips dry; but it was also noticeable that lip-licking was more likely to occur at moments such as changes of scene, perhaps because their concentration was slightly broken at such moments. During this viewing, as in many others, their noses would be running and from time to time they would hastily wipe their forearms across their faces, not wishing to miss a moment of the movie.

Figure 4.5: aged 2;4, watching *Animatou* (1st viewing)

My coding of two of the three hand positions I had observed was taken from Dosso and Whishaw:

> When a gesture or a sequence of such gestures ends, the hands are brought to a rest position. In previous work it has been observed that in such rest positions the hands tend to assume one of two poses: Collection, in which the digits are lightly semi-flexed and closed, and Stationing, in which the digits are open and the digits and palm contact the body or a surface. (Dosso and Whishaw 2012, p85)

Although the position of the children's hands often seemed quite random at the beginning of a period of focused attention, in that they just seemed to be left wherever they happened to be when their attention was drawn to the screen, they were often careful to maintain them in that position: resuming it after nose-wiping, for example. Connie often "collected" her hands in her lap while watching movies, not only during the project but long after it as well (see Figures 4.6a and 4.6b).

Figure 4.6a: Connie aged 2;10

Figure 4.6b: Connie aged 6;8

A perhaps more deliberate hand positioning was the "hand(s) tucked" phenomenon. I observed this more rarely: it may indicate a higher level of tension, and could also be considered as a gentler form of bracing. When Alfie watched *Baboon on the Moon* (dir. Duriez, UK 2002)[15] for the second time he tucked his fists down by his sides as he sat on the sofa (see Figure 4.7, and Section 4.3.2).

Figure 4.7: Alfie's "tucked hands" watching *Baboon on the Moon* (age 2;6)

[15] *Baboon on the Moon* is on Vimeo at https://vimeo.com/58445945; also published by the BFI in *Starting Stories 1* (2004)

Connie often adopted a similar pose, but tucking her hands on to her thighs, for example when watching *Cyber* (dir. Eling Germany 2007)[16] another film which, although they had chosen to watch it, they both found slightly alarming (see yellow highlight in Figure 4.8).

Figure 4.8: Connie's "tucked hands" when watching *Cyber* (aged 2;11)

Occasionally Alfie could be seen moving his jaw with his mouth closed, though this was almost imperceptible. Connie's cheek-chewing was more frequent, and was first pointed out to me by Phoebe when we were viewing the early videos together. The video in question was the "staged" viewing of the *Peppa Pig* episode *Sports Day* (see Sections 2.4.6 and 4.2.3). Because Phoebe was conscious of her own habit of cheek-chewing, she suddenly noticed, when viewing the video some time later, that Connie is doing it too as she waits for the key moment (see green highlight in Figure 4.9).

Figure 4.9: Connie (aged 2) chews her cheek while watching *Peppa Pig Sports Day*

[16] *Cyber* is available on Vimeo at https://vimeo.com/192453855 (Both Vimeo versions retrieved 26th August 2017)

Valuing attention merely for its own sake is a default mode for disciplinarian pedagogues, and I was astonished to realise the extent to which it had still been an element of my thinking at the beginning of this project. Like all of us, toddlers pay attention to things because they want to – but why do they want to? Connie and Alfie did not regard any movie as inherently desirable simply because it was a movie. From early on, before there was anything else on offer to them other than broadcast television, they exercised choice about their television-watching (see also Section 5.6). The mirror neuron discoveries and the concept of embodied simulation (see Section 1.4.1) suggest that the experience of actually imitating some of the expressions and postures that the children adopted might offer insights into the mental processes that generate them. I would hesitate to argue for this as constituting a reliable scientific method, but having tried it, I can assert that it certainly helped me to reflect on what they were doing.

4.1.2 Seeking what?

The children were obviously paying attention to material with qualities that interested them. But what these qualities were, is by no means obvious. In the case of the two viewing events I described in the previous section – *Mr Bloom's Nursery* (to which Connie gave extremely focused attention and Alfie did not) and *Laughing Moon* (to which Alfie gave extremely focused attention, and Connie did so intermittently) – the movies were very different in style, genre and mode of address. One was mainstream children's entertainment, garishly coloured and hectically multimodal; the other a semi-abstract, mainly black and white, minimal-narrative animation. And as the three viewing sequences in Chapter 3 demonstrate, the other movies they watched repeatedly were different from both of these as well as from each other. The children's tastes were eclectic, and changing, but they were not frivolous: as I explain in Section 5.6.3, they watched their chosen movies repeatedly until they had "used them up."

However, this still leaves open the question of what the children may have been engaged or excited by; what they might have been anticipating or investigating; whether they actually were perceiving causal connections in movie narratives.

Everyday discourse, as exemplified in social media discussions about toddlers' engagements with movies, uses the language of affect in describing focused attention on movies, as in "she just loves it" and "it's his favourite." But the kinds of focused attention I have described do not seem to indicate the sort of simple, unalloyed pleasure that is implied in those terms. The idea that Connie might have been driven by "seeking" as she walked towards the screen to watch *Mr*

Bloom's Nursery, and sought pleasure in investigating the intellectual challenge it offered her, matches the serious expression and bodily tension she deployed as she did so.

The children's responses to movies, therefore, were influenced by many factors: their individual predispositions and states of mind at any given time; what they were watching; the social context of viewing (see Chapter 5) and the intensity, hedonicity and duration of their instinctive, but varied, emotional reactions (Cabanac 2002, and see also Section 1.4). The question here is how that complex matrix of factors sparked, from time to time and in either or both children, the "seeking" emotion that engendered such intense bodily and mental alertness and attentiveness. Examples of this are described in Chapter 3, such as standing close to the screen (see Section 3.2.1), and sometimes touching it (See Sections 3.4.2 and 5.5.4). The examples described above reveal the fine detail that shows how extensively the "seeking" emotion can generate physical alertness.

It has to be admitted right away that it is impossible to determine exactly what generated the children's attention in each of these events, especially as they said little about their emotional responses until around age 2;6. But, based on scrutiny of the extensive video evidence, some speculation about contributory factors is possible. The sudden appearance on screen of *Mr Bloom's Nursery* (when it may not have been clear to the children what we had gone upstairs to the living room for) instantly seized Connie's interest. Although they had seen the programme before, and were familiar with the presenter-led format and excitable tone of a lot of other CBeebies content, this was not one of their regular preferences. But it may also be significant that this followed their first overnight stay at our house without Phoebe and the first time they had watched television at our house in the morning: Connie could have been a bit tense about this (and probably so were Terry and I) and so she initially seized on the semi-familiar appearance of the programme as something reassuring. And as Phoebe pointed out a month later, "they're definitely different in the way they watch, cos I mean she – like me – will focus on it completely and just be totally drawn into it and undistractable – but he is a lot less like that he's a lot more easily distractable" (Interview 1, 13th October 2012; children aged 1;10).

It is therefore possible that even when both children were displaying similar signs of intense attention to a movie, they may have been seeking different things as they watched. The fact they looked at different parts of the screen during the first *Animatou* viewing (Section 3.4.1) might be one indicator that the children's different interests or needs led them to focus on

different things (see also my comments on diakresis in Section 5.6.1). As explained in Section 2.4.2, I was rarely able to study their direction of gaze because this was, inevitably, only significant when they were really close to the screen, which made it difficult to get their faces in shot.

4.1.3 Different Responses; Ambivalent Feelings

More obviously significant is the fact that four of the other viewing events from which I have drawn particularly striking examples of focused attention each involves one of the non-mainstream movies that feature increasingly in the viewing events I filmed from Spring 2012 onwards. A few years later Alfie referred to these DVDs as "your videos". Clearly, watching one or more of them had become part of the ritual of being at our house. Although there are plenty of examples of one or the other, or both, of them being highly attentive at least some of the time to familiar material produced for children (see Sections 3.2 and 3.3), it is certainly the case that whenever they saw – or re-viewed – movies that were stylistically and structurally different from what they were used to – and this would include mainstream feature films and some children's TV series when they saw them for the first time – their "seeking" emotion seems to have been more intense and of longer duration. This would suggest that it may have been differences such as visual design (e.g. animation style), variety of framing positions, the pace of editing and the motivation of shot changes, the lack of voice-over commentary or direct address to camera, camera and, in the case of some of the non-mainstream material, absence of narrative closure, that intrigued one or other of them and made them want to watch specific movies again (see also my discussion of re-viewing in Section 5.6). One of them would often ask for "more" immediately a newly-introduced movie had finished, even if was not subsequently asked for, or selected from DVD cover icons or on-screen menus. Of course, this disparity of preferences frequently led to extended negotiations about what to watch (see Section 3.1.4).

It also seems that, on second and subsequent viewings of material to which they had a strong commitment, other emotions may have come into play. In the case of *Laughing Moon*, Alfie guesses from the opening seconds of their first viewing that the loud noises they had heard might recur (Figure 4.3). There is therefore an element of apprehension in his attentiveness. On the second viewing (Figure 4.4), he remains apprehensive, but they have both worked out the "project" of the movie: using the constantly reconfigured Tangram pieces and the sound track to encourage the viewer to identify each new character and situation as it appears. This regenerates their seeking emotion and provides the pleasurable outcome of successful

identification. For example, Alfie sways when he hears the rock music and grins brightly at me; when a dog appears, Connie quickly jabs her forefingers downwards in the Makaton sign for "dog".

The children had already seen *Baboon on the Moon* and *Cyber* in the viewings illustrated in Figures 4.7 and 4.8, but the "tucked hands" position shown in both may also relate to continued apprehension. Alfie (here aged 2;6) had asked for a re-viewing of "baboon" (which he had watched for the first time earlier that day) but somehow by the time I got it on the screen he revealed that he had been expecting something different; however he settles to watch it anyway. I am sitting so close to him that I do not at first notice the fists tucked down at his sides, anxiously awaiting the mysteriously sad ending (for further discussion of this, see Section 4.3.2). In the case of *Cyber* (they were almost 3 by then), they had both seen it before and had asked to see it again: they never expressed fear or anxiety about the film but Connie in particular is clearly taken aback by the violence with which the character is repeatedly thrown out of the "cyber world" of the game he is playing and back into the dull living room, smack on his face on the floor, and Alfie says at the end that he doesn't like the character. At the end of this 5-minute re-viewing, in which they both watch very attentively, breathing noticeably and licking their lips, and in Connie's case with her hands tucked for the entire film (see Figure 4.8), Alfie turns to me and says "I like him" (ie the character); and he then adds "But I don't wanna see him again." Connie asks for a different film, and both of them look at me. I asked, "Is it scary, that one?" Connie promptly answers "yes" and simultaneously Alfie begins to say "no", quickly changing it to "yes" as though deferring to Connie's greater certainty.

So when they are ambivalent about the potential scariness of a movie, the seeking emotion is clearly still in force: they are interested in watching it, but at the same time a sense of apprehension is complicating their feelings: they are keen to investigate, but also wary. There were several movies about which they held this combination of emotions, not only during viewings but also in discussions about what to watch, changing their minds frequently before settling on a compromise. This happened with increasing frequency after the age of 2;6 (i.e. after mid-2012). It would seem during these exchanges that the seeking and fear emotions were battling for supremacy: they wanted to find out more about a particular movie; it still held intellectual challenges for them in terms of "what happened" (for further discussion of this, see Section 5.6); but at the same time, fear is warning them to retreat from this choice. Of course an added complication for each of these children was the fact that most of these choices had to be

negotiated with a twin: there were no criteria of seniority or "suitability" to invoke. In these circumstances, then, it seems likely that the seeking emotion kept them alert and attentive, while the noticeability of features such as heavy breathing, bracing, lip-licking etc. would relate to the fear emotion's level of intensity as in Cabanac's Y axis (see Figure 1.1). The precarious balance between the positive, "forward-moving" promise of seeking, and the negative, "running away" warning of fear, can tip in either direction. This ambivalence never went away, and indeed it is part of what keeps us all glued to the screen or the page when following a thriller or horror narrative. In Figure 4.10 the children can be seen clearly managing their curiosity/fear ambivalence as they re-view a scene that had previously alarmed them, in the feature film *My Neighbour Totoro* (dir. Miyazaki, Japan 1988): riveted, but hunched and huddled together – with each other, and with their teddy bears – for comfort.

Figure 4.10: watching *My Neighbour Totoro* (aged 3;5); compare with Figure 5.14

In the next section, I will describe some events when negative emotions won out over seeking, and explore how these feelings were manifested and negotiated in their movie-watching.

4.2 FEAR AND DISTRESS

In this section I describe and discuss three early viewing events and two subsequent, related episodes, in which fear seemed to be at least a key part of the emotion processes that drove the children's responses. Fear is one of the most basic and primitive emotions, essential to humans' early survival. Panksepp links it to the motor action of running away (Panksepp 2004, p 50). But as I shall show, probably only the first of the events discussed in the following section can be primarily linked to physical fear. In each of the others, different processes also seem to be involved.

4.2.1 Mr Pontipine's Moustache

During a family holiday in January 2011, Connie (then aged 1;1) had become very distressed when watching an episode of *In the Night Garden*, "Mr Pontipine's Moustache Flies Away." My interest in this phenomenon was part of what prompted my decision to embark on my doctoral research. In anticipation of my university enrolment in September 2011, Phoebe and I deliberately set up another showing of the episode at the twins' home in May (when they were aged 1;5), at their normal *In the Night Garden* viewing time of 6.20pm, between supper and bedtime, and filmed their behaviour on a borrowed camcorder.

The episode deals with the Pontipines, a family of two adults and eight children, all tiny skittle-shaped puppets who live in a house at the base of a tree in the Night Garden. They all dress in red and look almost alike, except that Mr Pontipine has a large and luxuriant black moustache. Many of the Pontipine stories involve the whole family bringing their dining table outside so that they can eat their supper in the garden, or sometimes even further afield. There is always some glitch in their plans which provides the business of the story: in this episode it is that Mr Pontipine's moustache suddenly detaches itself from his face and flies away, rather like a large moth. It lands in a number of different places – the chimney, the bridge over the stream, the roof of the gazebo and finally on the rear propeller of the Pinky Ponk, a large airship-like vessel that flies around the Night Garden from time to time. The whole Pontipine family troop around the garden trying to retrieve the moustache, aided by the binoculars that Mrs Pontipine always carries. But each time before they get close, the moustache flies away again accompanied by a "swanee whistle" sound. The episode thus has a somewhat surreal tone: the flying moustache is completely unmotivated and its escape is never explained, although it is finally recovered.

The video shows that at the start of the "staged" screening in May, Connie is wandering around the room, but soon settles on the sofa near Phoebe; Alfie is already snuggled up on the other side of Phoebe. Both children are drinking their evening bottles of milk, and are gazing fixedly at the screen. As the Pontipines' "having supper outside" scenario unfolds, Connie stops sucking on her bottle and lowers it; her breathing rhythm also slows and deepens. At the moment that the moustache flies away, she starts to whimper; Phoebe turns to her and pats her leg, asking "are you ok?" at which Connie bursts into full-throated screams. Phoebe gathers her up and comforts her, but Connie continues to shriek, while maintaining her gaze at the screen and batting her hand up and down, as though to repel something near her. Alfie simply freezes: Phoebe could

feel that his body was rigid. The video shows him maintaining a fixed gaze and tense jaw but an unchanging expression, and taking no notice of Connie. Connie soon squirms away, gets off the sofa and toddles to the door, on which she bangs as if begging to be set free. Her screams are renewed each time the moustache flies and the "swanee whistle" recurs; however at the same time she keeps turning back to watch the screen intently. Phoebe gathers up Alfie and sits with both twins in a huddle at the side of the sofa, from where both she and Connie can peep intermittently at the screen, while Alfie twists around to maintain his gaze Figure 4.11).

Figure 4.11: At age 1;5: fear of flying moustache (inlay shows image currently on screen)

Phoebe murmurs comforting phrases to the twins, such as "it'll all be all right in the end, remember", and Connie's screams gradually subside. When the moustache is finally restored to Mr Pontipine's face, Connie claps; both twins then calmly watch the "story" section of the programme (which takes place at the characters' "bedtime" and reprises the narrative episode embedded in the programme, but illustrated this time with simplified, flat illustrations in pastel colours and with very limited animation). The whole event takes over 20 minutes.

Mr Pontipine's moustache subsequently became a shared feature of family talk and play, exploring both its "creepy" and amusing features. It soon became clear to Phoebe and Dickon that the twins usually recognised enough about the episode to identify it at an early stage when it reappeared on broadcast TV. Sometimes they were mistaken: nearly a year after the first fearful episode, on 2nd January 2012, I observed Connie (aged 2;1) watching a broadcast of *In the Night Garden* that showed the Pontipines carrying their dining table into the garden: she began to call out "No! No!" and had to be reassured that this was not the now notorious moustache episode.

It is impossible to tell from the video event in May 2011 whether Alfie is equally frightened by the moustache but is showing his fear in a different way, or whether it is partly Connie's extreme reaction that is alarming him. When he had begun to talk, he provided the most extensive and interesting evidence of his own continuing concerns with the Pontipine Moustache. A year after Connie's first outburst, we noticed in the local library a copy of the BBC's *In the Night Garden Annual* for 2012 which contains a re-telling of the moustache story with drawings and text. I sat down with the twins (aged 2;1) on 19th January and started to read this to them, without any preliminaries. At first there was an electric silence, and at the moustache's first escape Connie's mouth turned down a little, but quite quickly they became more relaxed and involved, as with any other picture book. The text in this book is minimal, so I was ad libbing the story, adding in comments and questions such as "where's it gone now? Oh, there it is!" At the end, Connie asked for "More!" but Alfie said "No, where's Iggle Piggle?" (another Night Garden character, featured elsewhere in the book). I decided to favour Connie and read the story again; she was happy to trace with her finger the trajectory of the moustache, shown by dotted lines on the page, and Alfie was content to listen again after all. But this time when the story finished, she went off to play with other toys, while Alfie stayed with me and now wanted the Pontipine story yet again. He started to say "poor Mr Pontipine!" (which I had probably said during the ad libbed "reading") and repeated this several times, but then began to formulate his own statements: "Put it back!" and "Can't catch it!" He was quite tense and extremely emphatic as he repeated these over and over, pointing to the page. When Terry came over to see what was going on, Alfie showed him the picture of the moustache stuck to the propeller of the Pinky Ponk and exclaimed "wings like a bird!" – which again may have been recalled from something I had said earlier. Then, becoming more relaxed and happily engaged, he began a mime of gathering something up by sweeping his hands together, palm to palm, as though he were sweeping together the "wings" of the moustache, and saying "put it back", possibly inspired to some extent by a page in the book which invites the reader to colour in the moustache outline on various objects around the Night Garden. Finally he wanted to give it back to me: to gather it up from the air and place it on my face, reversing the "sweeping up" gesture with a "spreading down" one.

At this point I started to make a short audio recording of what was going on but it is almost impossible – even with the help of his parents – to interpret much of what he is saying. He says something about the moustache getting stuck on, or flying out of, the door; he refers to the daddy (Mr Pontipine) doing the cooking today – pointing to the final scene of the story where

the family are all gathered for their meal again, and perhaps also referring (in Dickon's opinion) to conversations he had had with Alfie about "whether Daddy or Mummy is cooking today". All these utterances are extremely emphatic. With the "gathering and placing" gestures, he says "put it back [on?] Nana!" and then reverts to the mantra "[you?] can't catch it!". Despite the difficulty of interpreting the actual words he uses in this recording, the important point is that he is very energised and focused: what he is saying is clearly important to him. But after a few moments, as though the problem had been well and truly exorcised, he asks to "go away" [from this story] and to find the one about Iggle Piggle instead. It is hard to figure out what drove this incident. But if I did indeed introduce the "bird" analogy, which is likely, then it is possible that he was intrigued by this idea and wanted to pursue it. This would be another example of Trevarthen's comment that "what the mother shows or says is picked up and it does influence what the [18-month-old] attends to and plays with" (p12) (Trevarthen 1995, p12; see also Section 1.2.4).

4.2.2 Macca Pacca's Og Pog

Alfie's negative responses to TV during this period were less flamboyant than Connie's but may well have been just as intense and perhaps longer-lasting. A day or two after the initial Pontipine Moustache event in January 2011, Alfie (aged 1;1) watched another episode of *In the Night Garden* in which Macca Pacca's Og-Pog ran away downhill. Macca Pacca is a small, rotund troglodyte creature who likes to collect smooth round stones, and to wash these as well as the faces of other characters. To facilitate this he has a kind of bicycle-cum-shopping trolley, called an Og-Pog, on which he carries a large sponge and a trumpet, and which he laboriously pushes everywhere he goes. On this occasion he parks the Og-Pog at the top of a slope and, while he is otherwise engaged in washing some stones, the Og-Pog starts to roll away downhill. All the other characters in the Night Garden join in the chase to catch up with the Og-Pog. Alfie became upset at this, cried bitterly and scrambled to Phoebe for comfort. When we all watched the episode again a day or two later, his distress was more contained. He didn't cry, but snuggled up to Phoebe to watch the rest of the episode over his shoulder – which I photographed (Figure 4.12).

Figure 4.12: Alfie (aged 1;1) watches the runaway Og-Pog

In May 2011, I videoed Alfie and Connie watching this episode again: Alfie shows a little nervousness when the Og-Pog commences its roll – turning to Phoebe and clinging to her in a similar position to that shown in Figure 4.12 – but is otherwise untroubled and watches the whole programme attentively. By this time he in particular is able to point to things on the screen and vocalise sounds expressing surprise and recognition, and to respond to music with rocking and swaying.

4.2.3 Peppa Pig and the Tug of War

Connie's next distressed response to something apparently innocuous was in December 2011 when they were just over 2 years old and were well into repeat viewing of library DVDs. *Peppa Pig* (Astley Baker Davies for Channel 5, 2004-2009) had become a new focus of interest. Phoebe signalled to me that Connie had been upset by one episode on this DVD, so when Terry and I came to the house on 24th December to deliver Christmas presents I also took the opportunity to video the twins re-viewing this episode for what was by then at least the fifth time.

The episode in question is "Sports Day". The *Peppa Pig* episodes contain several constant features: interaction between Peppa Pig and her friends (each of which is a different animal), and between Peppa Pig and her parents; Peppa Pig's tendency to chatter a lot; all the characters falling down at the end and laughing. The animation is two-dimensional and in soft colours with very little background; the characters are very simply drawn and have little detail (see also Section 3.1). The focus of attention is on the characters' mouths, which are quite large and more

carefully animated to match the audio track of characters' speech, which is very clearly and naturalistically performed by children and adults. All the programmes include quite a lot of talk, so following the programme involves listening to and watching the characters speaking. In "Sports Day", Peppa Pig and her friends take part in various sporting events such as the relay race and the high jump. Daddy Pig is also there: Peppa constantly wastes time talking to him and thus keeps on failing to win any prizes. The last event of the day is the tug-of-war: all the characters line up on two sides and start to pull on the rope. A close-up on the rope shows it starting to fray and the voice-over warns that they are tugging so hard that the rope may break. It does break with a twang, and the characters all fall over, laughing.

In my video Alfie has positioned himself right in front of the TV in the "braced" position, his hands resting on the shelf. Connie stands about two feet from the TV, and in a slightly less "engaged" pose, with her hands behind her resting on the couch which is at right angles to the screen (see Figure 4.13). She is thus gazing slightly to her left in order to watch the screen. For most of the programme she maintains this position, gazing intently at the screen with a very serious, almost frowning expression, licking her lips from time to time and chewing her cheek (see Figure 4.9). As the rope-breaking moment approaches she half-turns to Phoebe, as if anticipating the crisis moment, but then turns back again to the screen. When the rope actually breaks, she suddenly turns to her right, away from the screen (glancing at the camera as she does so) and sweeps her left arm around at shoulder height, bending her knees and dropping dramatically to the floor, so that she ends up on her knees, her back to the screen, and emits a loud scream, shaking her hands as she screams and then gathering breath for the next scream. Phoebe's hands reach down for her and she scrambles up to cling to Phoebe sitting on the couch, and continues to cry violently, her mouth big and square, tears flowing freely, but still glancing at the screen. Phoebe cuddles her and says "you don't like it when the rope breaks, do you?" Connie gasps "Yeah!" and immediately starts to calm down; Phoebe continues to wipe away her tears and cuddle her, and Connie relaxes, watching the TV again. This entire sequence takes about one minute.

Figure 4.13: Aged 2: waiting for the rope to break (*Peppa Pig Sports Day*)

In contrast to her continuing fear of seeing the Pontipine moustache again, Connie chose to re-view this episode frequently, and her distressed responses – which already in December 2011 had a histrionic air to them – gradually diminished:

P No she got less and less upset by it. She would – yes that's it – one time I was watching her through the back of the tent, so she had no clue that I was watching her.

CB Through the what?

P We have a tent, ok, and there's a flap, and she was lying on her tummy watching the telly out of the flap, and in the back there's a little window, and I could see her, she couldn't really see me at all, I was way behind her and right out of sight. She was watching the telly and I was like, I'm just going to watch what she does, when this bit comes up, so I was watching her, and the rope snapped, and she went "snnff-huhhh" [breathes in and out very deliberately]. She sighed, and then she bit herself.

CB Where?

P On her hand. And I went "don't bite!" and she went "OOH!" [laughter] I went "Connie, don't bite" and she went "Ooh, who's that? Watching me?" [laughter again] and I was a bit .. saddened by that – she does … turn things inward like that; I don't like it, but … she doesn't have a way of expressing herself about it yet, she doesn't, she's not as confident with speaking as Alfie is. (Phoebe, Interview 5, 15th March 2012 – children aged 2;4)

4.2.4 Possible Triggers for Fear and Distress

The Pontipine Moustache event seems to be a clear instance of the fear emotion triggering instant motor actions: screaming, trying to run away, and attempting to swipe at the flying moustache. When she saw this video four years later, Connie said "I thought it was a bat" and although the "bat" diagnosis may have been unwarranted (at the age of 1;5, her wildlife recognition skills had been a lot less developed), there doesn't have to be any recognition involved in the activation of fear when an object seems to be flying towards one, as any experience of a 3D movie will confirm.

But Alfie's distress about the runaway Og Pog and Connie's about the breaking rope in the Tug-of-War seem less clearly motivated. I think there are several possibilities here. One is to note that both involve the breaking of an attachment: the Og Pog breaks away from its rightful place near Macca Pacca; the rope breaks and throws everyone on to the ground. It is tempting therefore to see both in terms of attachment theory (Bowlby 1975) and, perhaps particularly in the case of the broken rope, to Winnicott's account of a child using string as a metaphor for his separation anxiety (Winnicott 1960). But they both very clearly relate to Kagan's account of how 18-24-month-olds can often be distressed by what they see as violations of states of affairs "which adults have indicated are proper": his examples include broken toys, damaged or dirty clothing, things missing from their usual places (Kagan 1981, Chapter 5). He links this to their interest in categorizing objects into groups sharing physical or functional similarities (p 88). It was certainly the case that both children went through a period in their third year of being fascinated by order: in Connie's case, assembling toy animals into rows, often differentiated by species; in Alfie's case, playing with a Micki wooden train set and watching the train disappear into a tunnel and then appear safely again. He was also greatly preoccupied with a Thomas the Tank Engine story, *Percy and the Haunted Mine*, which included some startlingly gloomy illustrations of abandoned mine buildings mysteriously sinking into the ground.[17] He devised many ways of pulling the buildings up again: "with a very big rope," for example, and for several weeks demanded that I read him the story and make up some more reassuring sequels to tell him. Safety and danger were thus, for him, important preoccupations.

Of course the Pontipine Moustache episode could also be seen as about the breaking of an attachment; though I am by no means certain that when the twins were aged 1;1 they had ever

[17] *Percy and the Haunted Mine* is a book based on the 13th episode of the 6th TV series from the Thomas and Friends brand from Gullane (Thomas) Ltd: http://www.thomasandfriends.com/en-gb (retrieved 26th August, 2017). The images in the book are stills from the TV episode.

seen anyone with a moustache (which were not fashionable at that period), let alone developed any concept of what a moustache is; they were certainly rather taken aback in December 2012 (aged just 2) on a train journey when they noticed some men with moustaches and kept staring anxiously at them. Could it be that *In the Night Garden* had inadvertently given them the idea that a moustache is some kind of parasitic creature that lives on some people's mouths but can fly away at will? Probably not: like Connie's idea that she had "thought it was a bat," both concepts depend on more contextual and biological knowledge than a one-year-old is likely to possess. The Og Pog event, however, could be seen as evidence of Alfie being able to grasp at least one basic element of story structure: the disruption of narrative equilibrium that sets the story events in motion (Todorov 1966). The concept of "disruption" does not have to be very sophisticated to cause distress: toddlers can object as much as anyone else to items being, in their opinion, out of place. Alfie could probably perceive the Og Pog's escape as disruption, and be upset about it, without having to be aware of the generic conventions that tell older viewers it is bound to be rescued. But with the tug-of-war episode, it is possible that Connie was already attuned to the convention that a narrative containing several failed efforts is likely to conclude with a final successful one: the episode follows the series' own convention of ending each episode with falling down and laughter, which in this case may have been overridden by Connie's expectation that Peppa (and in this case the other girls as well) had to finally succeed at something.

Although further fearful and distressed events happened over the rest of the fieldwork period, none of them indicated that fear was their primary driving force. The events which I will describe in the next section all related to a sense of sadness, but at the same time were clearly tied to other emotions, including the fear of separation.

4.3 SADNESS AND ANXIETY

Grodal (2009, Chapter 6) devotes a chapter to "Sadness, Melodrama and Rituals of Loss and Death" in which he not only describes the emotions felt by audiences as they watch sad films, but also seeks to explain why these films are popular. But the theories he offers to explain why people seek out sad movies and like watching them again all relate to highly socialized individuals, i.e. adults and perhaps older children. One theory – that watching sad events in movies contributes to our sense of social bonding and the "sublime submission" of accepting what we all know cannot be avoided – does at least relate to the basic contagiousness of sorrow: we may feel like crying when we see someone else cry – as mirror neuron research

explains (Ferrari and Rizzolatti 2014). This may have been the case in the children's viewings of *Baboon on the Moon* (see below) although doubtless here the sad music also contributes to the emotional response. In this section I consider viewing events in which the children felt very sad, and describe how – far from seeking to re-live these experiences – the anxiety they felt about the prospect of re-experiencing "the sad bits" led them to resist seeing them again. They also showed continuing fears that related to deeper anxieties, which in Alfie's case particularly manifested themselves as an anxiety about the endings of movies.

Sadness is primarily linked to separation and loss. Panksepp identifies maternal nurturance as one of the "innate emotional systems" essential to early humans' evolutionary survival. When successful, it results in the maternal and social bonding that facilitates individual and group survival. Panic (as distinct from fear), one of the four emotions that Panksepp links to human's early environmental challenges, is sparked off in situations where the maternal or social bonds are – or seem to be – broken (Panksepp 2004, Chapter 3, p50) and results in, for example, the anguished crying that is usually very successful in catching caregivers' attention. Sadness is what follows if the separation is prolonged: Grodal calls it "a more passive form of separation reaction" (Grodal 2009, p 127). But my focus here is on the children's recognition of sadness in a movie. I first saw this when I showed *The Tiny Fish* (dir. Ryabov, Russia 2006)[18] to them both (aged 2;5): at the end, they both turned to me, their eyes brimming with tears. To my later chagrin and dismay, I did not film this viewing event, and did not make notes on it until at least five weeks later. An account of some of the features of their emotional development at this time is necessary here.

4.3.1 Separations and Endings

During this period there were a number of changes in the twins' emotional behaviour generally, which Phoebe reported to me at length, and which I also sometimes observed. All can be interpreted as relating to anxieties "about separation, from the parents and from body products" (Woods and Pretorius 2016). A continuing issue, which affected both of them but particularly Alfie, was a fear of endings. At the end of my video of the two first viewings of *Animatou* on 9th April 2012, when they were aged 2;4, Alfie instantly asks to watch it for a third time, but as it is lunchtime, this is refused. Alfie angrily flounces away towards the door, but my camera remains on Phoebe who comments "he's very attached to whatever he's watching – we watched Mr Tumble, and he burst into tears cos that finished. Any time a thing finishes, it's like

[18] Available on YouTube at https://www.youtube.com/watch?v=6DFCpR6eMkc

a major catastrophe at the moment." A month later, my interview with Phoebe on 14th May concentrated on a number of developmental changes (at age 2;5) that we had both noticed. Connie now had an increased interest in what Phoebe calls "relationship toys, so she has collections, she has like all the toys in her bed sorted into pairs of mummy and baby, a big thing and a small thing … I mean like she's got sort of twenty toys in her bed." Meanwhile Alfie was using a naming/conversational trope to manage many everyday routines, as in this dinnertime dialogue, reported by Phoebe:

A Make the water talk to me! Hallo water!

P Oh, hallo, I'm your water. Are you going to drink me up?

A Yeah!

P OK then, Here we go!

She followed this with an account of similar scenarios of conversations with the poo in his nappy, which had to thank him (via Phoebe) for letting it out and then ask to "go down the water slide in the toilet." Phoebe then added a lengthy description of Alfie's anxieties about the plug being pulled out of the bath and the water running away while he was still in it.

In the same interview, she explained that he now dealt with the movie-ending issue by turning off the television: "He knows when the end of the programme's coming and he goes and turns it off before it finishes."

At the same time, she reported that Connie had developed a different kind of separation anxiety, similar to her much earlier distress about the breaking rope, and possibly even the Moustache:

> …they listened to a story last night about a bear buying a hat for the moon, and he loses his hat, and at the end of the story Connie threw herself on the floor in a rage and I was like "Connie what are you cross with?" and she said "Hat!" and I was "Ooh, are you cross cos they lost the hat?" "Yes!" (ibid)

Shortly after this, on 21st June 2012 (aged 2;6), the children both watched *Baboon on the Moon* (Duriez, UK 2002)[19] for the first time in the morning, and later in the day, Alfie watched it again on his own. Phoebe had brought the children over to our house and was keen for me to see them watching their current favourite, *Dipdap* (Ragdoll for BBC, 2011-2013): a very short and simple animation that uses a single drawn line which constantly configures traps and surprises for a little character called Dipdap. They watch it attentively, chuckling at the appropriate moments; Terry suggests that its appeal is similar to that of *Laughing Moon.* There is then some

[19] Available on Vimeo at https://vimeo.com/58445945 (retrieved 26th August 2017); also published by the BFI in *Starting Stories 1*, (2004)

argument about what to watch next, looking at DVD covers while I wrestle with recalcitrant technology. I am keen to see what they make of *Baboon on the Moon*, given my experience of working with Early Years teachers (see for example Whitney 2010) and eventually we settle to watch it, Phoebe sitting on the floor close to the TV with Alfie – who by this time was feeling very sleepy – on her lap. Connie is more alert.

4.3.2 *Baboon on the Moon*

The film, which is made in chunky clay and paper 3D model animation, shows the daily routine of a baboon who lives in a small house on the moon. His job is to start up an engine every day which, when he pulls a lever, illuminates the Moon. After that he sits on the edge of a crater from where he can see the Earth, at which he gazes tearfully, hearing in his head the noises of animals and birds in the African jungle. He plays a sad tune on a trumpet as the film ends.

The film starts with a slow zoom-in to the baboon's house, during which we start to hear the baboon's snoring, which is very quiet at first. I had asked Phoebe and the children to listen carefully. Connie whispers a question to Phoebe who replies "What can you hear?" After a few more seconds' viewing she points to the screen whispering "Mummy!" and Phoebe whispers back "is it Mummy snoring?" (Phoebe is a notorious snorer). Connie whispers "Mummy" again and then turns to point at Phoebe, saying brightly "It's you, Mummy!" Phoebe replies "It's me sleeping." At this point the baboon's radio alarm goes off and Connie is very surprised to see the baboon lying asleep in bed. She enthusiastically continues the "guessing game" dialogue:

C *[raises R forefinger]* Ooh. What dat? What is de man?
P *[chuckling]*It's, it's a baboon
[On-Screen music starts}
C *[points again]* It's a pig!
P It's a bit like a pig
CB Makes a noise like a pig, doesn't he?
C *[sharp intake of breath]* It's a boy!"
P ooh
C *[after the baboon gets up and reveals its long hair]*It's a 'ady!
P It's a lady?
C yeh
P OK
[All 3 watch intently as baboon goes to bathroom]
C What is - what 'is name?
P I don't know. What do you think his name might be?
[On-screen: baboon brushes his teeth]

C b'u'in 'is teep
P he is
[On-screen CU: baboon's hand stirring a cup of tea; cut to LS kitchen]
C makin' 'imsel' a tea .... he' dwinkin it!

At this point, Phoebe's mobile rings: she gets up, answering it, and leaves the room to talk. The children are momentarily distracted now that the "game" seems to be over: Alfie ends up sitting on the stool next to Terry. Connie, after wandering back to the coffee table to examine the DVDs again, is encouraged by me to watch the film: she returns to stand in front of the screen with her hands on the trolley. Alfie is by now watching more intently and both comment on the rest of the film: for example Alfie doesn't recognize the Earth but calls out "a pear planet" in reference to the simplified, pear-shape of South America on the screen. During the final sequence, as the music starts, Alfie seems sure that "the man" is going to sleep, which he then switches to "Mummy going to sleep". Connie watches intently as the music continues to the end of the credits. At this point Phoebe (who has never seen the film before) comes back in and asks brightly "What happened?" Connie dips her head briefly and then turns to look at Phoebe, her eyes shining with tears (Figure 4.14):

Figure 4.14: Connie (aged 2;6) responds to the sad ending of *Baboon on the Moon*

Phoebe asks anxiously "What happened?" Connie lowers her head again and turns back to the screen. Phoebe asks again, "What happened in the film?" For a moment Connie stands very still, her left hand still gripping the edge of the trolley, with her head dipped slightly to the side and her lower lip pushed out. Then she sighs and turns to walk towards Phoebe, who says "ooh, was it a sad one?" Connie replies "yeah" in slow sad tones and is gathered up for a hug with Phoebe,

hiding her face. Then she pulls away and points at the screen, saying quite brightly “YOU were there Mummy!” Phoebe asks “But what happened to the baboon?” Connie brings her pointing finger back to her lower lip and ponders for a second, then says “It … cried” “Did he cry?” Phoebe asks. Connie thinks for a moment and then says “No” (possibly seeking to avoid the obvious next question if she said “yes”, which would have been “why?”). Both Phoebe and I then ask again about the crying, but Connie is already on to the next thing: pointing to the screen, which is now showing the DVD menu, she asks for the film *Little Wolf* (which also involves the moon). I pan to Alfie at this point, who is now close to the screen, pointing at the baboon icon and saying “Dat.” Phoebe tries again to get him to tell her what happened in the film, but Alfie just produces a series of slow, considered statements:

“I liked the moon”

“I like the dark”

“I like to go to the moon”

He then said that he wanted to watch “Baboon” again, at which Connie immediately said “NO!” But we agreed that we would watch it again after their nap. As it happened, Alfie woke first, ready to watch. I sat next to him on the sofa as the film began, as usual holding the iPhone low down where he was unlikely to notice it (see Section 2.3.1). Alfie watches intently and points to the moon in the opening zoom-in, observing that “it’s getting bigger…it’s getting bigger and bigger!” I ask “what can you hear?” He first mouths “Mummy” silently, then turns to me “I can hear Mummy” (Figure 4.15):

Figure 4.15: Alfie (aged 2;6) tells me that it's Mummy snoring

He turns back to watch the film extremely intently, sitting upright and breathing noticeably. As the film continues he shows some signs of tension: licking his lips, pushing his jaw forward. His

cheek muscles move slightly as though he is chewing or swallowing and he purses his lips. As the baboon starts to play the trumpet, his mouth relaxes: his face lowers a little and he leans forward. His eyes are very slightly narrowed and a tiny bit tearful (Figure 4.16):

Figure 4.16: Alfie responds to the film's sad ending

As the credits roll (with the trumpet still playing) Alfie initiates a conversation which quickly gets into an interesting series of cross-purposes as Alfie keeps changing the subject and I try to keep up:

A *[turns to me]* Don' wanna baboon
CB you want the baboon?
A *[looks past me and shakes head slightly]* No
CB You don't want the baboon?
A I don' like er baboon
CB You don't like him?
A Yeh
CB Why don't you like him?
A [turns back to me slightly] I like Mummy, in bed...I like Mummy in the office[20]
CB Mmhmm
A *[tilts his head away]* and I wanna ask Mummy a question *[slides forward and stands up]*
CB What's the question you want to ask her?

[20] "the office" refers to the room in their house where the computer was and where they would sometimes watch movies online with Phoebe

A *[stands beside me looking down at table then up jiggles slightly]* I been watching Baboon Mummy *[v softly]*

CB Are you going to tell her?

A Yeah

CB What're you going to tell her?

A *[looks up]* The big big moon and the big big train...the train is SO LONG! *[gesturing "length" with both hands raised]*

CB Which train is that? The train you made?

A No

CB Which train? Is there a train in the film?

A No there isn't! *[sigh]* The long train on the track that we saw, and we got on it, and we went for a tiny ride[21] on the big train!

CB Today?

A Yeh

CB Oh, the train to Finsbury Park?

A yeah[nodding]

CB Oh, that one, ok

A exhales and gives an 'about time!' sort of smile – i.e. finally he got through to me?

CB What does the baboon do, in the film?

A looks L then sits back a bit on the sofa, relaxed

CB Does he go on a train?

A Yeh [pause] the baboon doesn' go on a train

CB he does? Or he doesn't?

A he doesn't

CB No

A He stay - he stays in the dark

CB He stays in the dark, does he?

A Yeh

CB What does he do in the dark?

A *[twists mouth, tongue caught between lips, tilts head to side - licks lips]* smokes comes out *[turns away]* smokes comes out...smokes comes out the chimney *[sitting back on sofa and looking more confident/smiling]*

CB It does, doesn't it? Why does the smoke come out of the chimney, do you think? Does he make it come out?

A Yeh *[reaching up with R hand]* He press de lever *[pulling hand down again]*

CB Ah, I see

[21] "Tiny ride" was their term for when both of them sat on the footrest of the double buggy, rather than in their seats.

A Steams comes out [raising and lowering hand again][22]

CB And then what happens?

A *[purses lips and looks away, bouncing slightly; then leans back and forward]* The *Rhyme Rocket* comes. The *Rhyme Rocket* comes.[23]

CB *[perplexed]*The - the rocket comes?

A yeah *[nb difference in tone here between the 'yeah' of enunciating something he really saw, and this which is about something in his head?]*

CB Does a rocket come?

A Yeah *[nodding]*

CB OK, what, erm, did you see a rocket?

A Yeah I did

CB Was he in the rocket?

A No he wasn't! *[shaking head]*

CB oh..

A *[sucks in left side of mouth and mutters]* ?and he?..was in the rocket *[then turns away]*

CB What does he do after he pulls the lever?

A *[stands away from sofa turned a bit towards me jaw still shoved to R - bored?]* Steams comes out

CB Oh yes

[A turns to face sofa leaning back against coffee table looking down]

CB Does he play the trumpet?

A *[stands and turns again looking past me, then looks up]* Yeah, he does *[more serious]* It's a toy! *[turning back to leaning on table position and looking at me]*

CB Is it a toy trumpet? Ok

[A starts shuffling sideways away from me and round the edge of the table]

It seems likely that for both children, this film spoke to the intense emotional struggles with which they were contending in daily life, like most two-and-a-half year olds. In the class of six-year-olds whose responses to the same film are described by Whitney, one child said that "Baboon is sad because he misses his mummy and daddy. He wants to go home but the Earth is too far away to get there. He plays a sad song to let mum and dad know that he is sad and on

[22] Alfie remembers, but switches the order of, the sequence in which the baboon enters the engine house and is heard clattering the machinery, after which smoke emerges from the engine house chimney. The baboon then pulls a lever and the moon lights up.
[23] At the time I was unaware of this programme (https://www.youtube.com/watch?v=P-1kmMDQsWM; retrieved 26th August 2017) so was unable to understand Alfie's reference to it as another attempt to change the subject.

the moon" (Whitney 2010, p 79). This encapsulates much of what Connie and Alfie probably felt about the film, but in more sophisticated terms than they could express at that time. Whitney also describes how the film generated a whole term's activities in a nursery school, built around the children's powerful affective responses which led to the idea of inviting Baboon to come and live with them in the nursery (pp 82 – 83).

It was clearly a challenge for the twins to deal with the sadness they felt on seeing tears trickling down the baboon's face and hearing the sad trumpet music, combined with slow dissolves between shots. The trumpet starts with a solo over a shot of the baboon with his trumpet pointing towards Earth, which is in soft focus. As this dissolves to a shot of just Earth, in sharp focus, in space, soft piano (ie non-diegetic) music joins the continuing trumpet solo. Panksepp and Bernatzky suggest that

> A solo instrument, like a trumpet or cello, emerging suddenly from a softer orchestral background, is especially evocative. Accordingly, we have entertained the possibility that chills arise substantially from feelings triggered by sad music that contains acoustic properties similar to the separation call of young animals, the primal cry of despair to signal caretakers to exhibit social care and attention (Panksepp and Bernatzsky 2002, p143).

The "sadness" of this piece of music is also invoked by its being composed in the modern Phrygian mode, which is similar to the minor scale: commonly used in traditional Spanish music and in some modern jazz. A resonant atmosphere[24] dimension has also been incorporated in the sound design, so that the overall effect of the sound track is one of loneliness.

Both children almost cry in sympathy; but quickly seek ways of escaping this unexpected sadness. Phoebe's immediate recognition of Connie's state of mind and the subsequent hug enable Connie to move on quite quickly. Alfie both does and does not want to say anything about the film: in Phoebe's absence he imagines her comforting presence and seeks to change the subject, to which I am not responsive, although after the exchange quoted above, we move on to more familiar topics of mutual interest, such as how to use the TV remote control. But it may also be the fact that Alfie had already seen the film once, when he was in a quite relaxed and sleepy state. This may have helped him manage the second viewing with more equanimity. But their subsequent desire to escape or avoid powerful sad feelings was what characterized the following events.

[24] "atmospheres" are an acoustic resource with which sound designers can indicate the kind of space within which the action takes place, e.g. indoors, outdoors, confined space, large space, etc; as well as other contexts e.g. rain, traffic, etc.

4.3.3 *The Tiny Fish*

Connie's second viewing of *The Tiny Fish*, which took place just ten days later, on 28th June, provoked a very different response. It was a hot day, and she had just woken up from her nap, with sweaty tangled hair and a sleepy expression; Alfie was still asleep. She asked to watch "the girl and the fish" and settled back on the sofa holding her two stuffed elephant toys, her knees drawn up. The first part of the film ends with a scene on a frozen lake where the little girl protagonist[25] meets an old man fishing through a hole in the ice. He catches a fish and throws it down on the ice, chuckling gloatingly, but the girl is distressed to see the fish's frightened struggles, and throws it back into the water. The old man instantly snatches it out angrily, stuffs it into his bag and walks away across the ice: slow piano music starts while the girl watches him go, with an expression of dismay on her face as the sombre music continues to play (Figure 4.17).

Figure 4.17: shock and dismay in *The Tiny Fish*

Throughout this sequence, Connie has been showing signs of anxious tension, breathing more heavily and jutting out her jaw as the old man stuffs the fish into the bag. At the first notes of the piano music, she gathers up a toy in each hand and hurls them away (Figure 4.18).

[25] Ryabov has stated online that this character is meant to be a boy, but I had always thought it was a girl and so has everyone I've ever shown the film to, so I will persist in this error here.

Figure 4.18: Connie (aged 2;6) throws her toys away, in response to the killing of the tiny fish

One toy lands on the floor but the other remains on the sofa; she repositions it on the left beside herself and turns to the camera briefly with an expression that could denote either anguish or rage – and possibly she also turned to check my reaction (Figure 4.19).

Figure 4.19: Connie turns to the camera/me: appeal or reproof?

She then turns back to watch, leaning her head against the sofa, watching the long, deep-focus shot of the old man trudging away as snow starts to fall ever more thickly, and his boots are heard crunching through it. She raises her right hand to point to the screen, saying wonderingly "It 'tartin' to 'now" [It's starting to snow] and watches the rest of the film attentively, only showing a little anxiety during the dream sequence, and tremulously asking me to "turn it off now" as soon as the paper cutout fish has been returned to the lake and miraculously comes

alive again (perhaps here she fears another sudden snatching of the fish by the old man), but I talk her through to the girl's return home with her cat at dusk.

Why she decided to throw her beloved elephant toys on the floor remains unclear. Clearly she had remembered, or realized, that the fish was not going to be rescued this time. There is a possible parallel with the on-screen action of the girl throwing the fish back into the water. So it could be that Connie is instinctively trying to reverse events and re-play the throwing-down action, but successfully this time. However, the action suggests rage rather than sadness. She may be cross with herself: that the fish-killing moment simply came before she expected it to and she had failed to ask me to stop the film, because her seeking emotion had won out over her anxiety over having to endure the sad bit. Or she may be angry – rather as she was with the breaking tug-of-war rope, six months earlier – that the man still threw the fish into the bag, despite her hope that this time he might not. After all many of us, when watching *Romeo and Juliet*, harbour a vestigial, irrational hope that this time Juliet will wake up before Romeo kills himself. Panksepp's argument that rage is aroused by frustration (Panksepp 2004, p 50) might account for Connie's apparent rage here. But Keating (2006) offers a different theory, which can also be invoked here despite his "Hollywood narrative" reference. He suggests that two kinds of emotions are at work when we watch a protagonist dealing with challenges:

> First, we have an anticipatory emotion: hope. A Hollywood narrative typically encourages us to anticipate future events and revelations. If these anticipated outcomes are emotionally weighted (generally, by sympathy for the protagonist), we experience hope: hope that the protagonist achieves his or her goals. By throwing obstacles in the way of the protagonist the narrative can generate another anticipatory emotion: fear that the protagonist will fail. (Keating 2006, p7)

It is significant that Connie does not immediately throw the toys when the old man retrieves the fish, but at the sound of the first few, slow notes of the piano music. As Walsh (2011) argues, (with reference to Mithen 2005, Brown 2000, Donald 1991, Sissanyake 2000, Wray 2000) music probably pre-dates language in human evolution, so "it is plausible to suppose that the relationship between narrative and music is more fundamental, more primitive, than the relation between either one and language or symbolic thought"(Walsh 2011, pp 54-5). The tempo and pitch of these notes simply suggests an irreversible, sad finality and it may simply be this that triggers an instinctive response for Connie. I think it is also possible that she is identifying the music, and the slow walk away, as signalling the ending, and so feels not only distressed but also cheated by such an unsatisfactory resolution.

What we see here is an interesting range of possibilities concerning a two-year-old's difficulties with movie narratives. Once children have enough generic knowledge, they can expect that a sad event early in a film is likely to be resolved later, thus increasing the desire to find out how this happens. At two, it is hard to remember the whole narrative arc from a first viewing. In this case the sentimental resolution (as expressed in Ryabov's YouTube comment "kindness of the baby soul is capable to work a miracle")[26] may also be hard to remember, given that it rests on the belief that desire can change the course of real-life events. So if the rest of the film has been forgotten, the girl's failure to save the fish at this point just seems irretrievably tragic: the viewer's sympathy is with her and yet she has failed. But then Connie's sudden change of mood must also be accounted for. Her brief violent action – a reprise in miniature of her anguished paroxysms over the Pontipine Moustache and the *Peppa Pig* Tug-of-War – may have functioned cathartically as a way of defusing her distress; maybe she was just immediately intrigued and distracted by the start of the snowfall; or reassured by my calmness. The fact that the snowfall begins here signals further action in the story; it might be prompting Connie to remember that the film does go on: the next scene will involve igloo-building and will have quite a different mood. The competing possibilities for interpreting Connie's behaviour here cannot be resolved by ever-closer analysis of the video evidence: emotional responses cannot always be "read" from expressions and gestures. What is important, I suggest, is that we do at least allow for a two-year-old's responses being complex and conflicting.

Neither of them wanted to watch the movie again until 23rd March 2013 when Alfie (aged 3;3), who by then was not having a daytime nap (though Connie still did), asked to see some movies while she was still asleep. He first watched *Animatou* three times and then chose *The Tiny Fish*: with a little encouragement from me he managed to watch it right through quite calmly, only getting nervous during the scary dream sequence. But four months later, on 27th June (aged 3;6), he dealt with it quite differently. At their request I had shown them a series of movies chosen by them from the *Animagine* DVD menu, and ended up with *The Tiny Fish.* When it came to the fish-in-the-bag scene, Alfie began to weep hysterically, screaming "TURN IT OFF!" He had to be left alone for a while to recover, after which I talked with them about the film for a bit and Connie then decided she wanted to watch it through to the end – but Alfie immediately ran out of the room.

[26] https://www.youtube.com/watch?v=6DFCpR6eMkc (retrieved 26th August 2017)

It seems therefore that Connie had found successful ways of dealing with her powerful negative emotions; perhaps even her earlier, apparently fearful, outbursts also had a cathartic effect. This may relate to the fact that she was able to re-view the *Peppa Pig* episode until she had, as it were, drained its emotional charge, without adult help. Alfie, in contrast, sought adult involvement in his extensive set of concerns during the autumn of 2012 – part sad, part anxious – stemming from his preoccupation with *Percy and the Haunted Mine* (see Fear section, above) and amplified by watching *The Gruffalo's Child* in September 2012 (aged 2;9). He used these stories to generate games about "spooky" things: darkness, the use of torches, and the concepts of rescue and safety. Connie sometimes joined in – happily running about in a local woodland with a stick, screaming "monsters!" for example. In November 2012 (aged nearly 2) Alfie instituted a scenario at the "soft play" area in the local sports centre which we visited often: Terry reported to me that Alfie liked to "save" Connie by making her stay at the bottom of a particularly steep staircase until he came to her rescue – which, Terry said, consisted mainly of kissing her rather than resolving the supposed jeopardy.

4.3.4 Running Away from Endings

However, Alfie's anxiety about endings continued for a long time. First mentioned in April 2012 (when he was aged 2;4) it continued for nearly a year: several of my videos from the autumn of 2012 show Alfie running from the room as soon as he anticipated (usually

Figure 4.20: Alfie (aged 3;1) ready to run away from an ending

correctly, even with something unfamiliar) that a programme was about to end. Finally, on 11th January 2013 (aged 3;1) when I videoed them watching a *Meg and Mog* episode (Absolutely Productions, UK 2003-2004) at their house, I caught Alfie on camera checking the screen as he prepared to run from the room, his jaw clenched and lips pursed (Figure 4.20) and decided to follow him out to the kitchen where Phoebe was preparing their dinner.

In the kitchen, the following dialogue takes place:

[A pulling a highchair out from table]

CB Why are you out here Alfie, don't you want to watch the programme?

[A pushes the chair towards the door then turns to table and swings from the edge of it]

P Alfie why don't you go and watch the end of *Meg and Mog* and then come in?

A Come come come on

CB Want to come with me and watch it?

A *[turns and runs to P bouncing up and down]* No with YO-O-O-OU *[He clings to her legs]*

P No with Nana, look Nana wants to watch it, she hasn't seen it before

A No you get

P Why? Why do I have to come?

A Because [inaudible]

[A clings to her legs trying to climb up her and burying his face in her crotch; she lifts him up]

P Are you frightened? Did you say you're frightened?

[P picks him up and sits him on her hip so she can look him in the face; he waves R hand then reaches for something on fridge door as P walks forward]

A Yes

CB What are you frightened of Alfie?

P What's frightening about Meg and Mog? We love Meg and Mog don't we?

CB Is it frightening to see the ending?

A *[flexes body and jiggles]* Ye-e-e-h *[shuddering and smiling a little]*

P Why is it frightening when it ends?

A *[squirming round and tipping over sideways]* Because you come

P Because I come?

A Come come come onnnn

[She carries him past CB into hallway]

P It's not frightening when it ends when I'm there, is it? *P walks to living room carrying A]*

P But it's frightening when it ends when I'm not there.

[P enters living room and puts him down on sofa]

P OK. I understand. Thank you for telling me. You're going to be all right.

In fact Alfie was not all right at that point because as soon as Phoebe left the room, he ran out again before the programme finally did end. But it did seem that this conversation – especially the agreement that it was the *ending* that frightened him – had a cathartic effect. His "Ye-e-e-h" answer surged out of his mouth, as he shuddered as though relaxing from extreme tension. His statement that it was frightening "because you come" is correctly interpreted by Phoebe as "because I want you to come (i.e. be there)." This exchange seemed like an important moment, and his fear of endings did diminish subsequently. But one notable feature of this conversation, which I shall address more fully in the following chapter, is the futility of adult questions such as "what are you frightened of?" and "What's frightening about Meg and Mog?" which, like our constant refrain of "what happened?" are clearly too complicated for the children to attempt any kind of answer (see Section 5.6).

4.4 JOY

Joyful responses, in the viewing events I videoed, seem to be associated with the intellectual delight of working something out successfully, getting something right, and the social approval that follows. As Sloan points out (Sloan 2011), joy is relatively short-lived, but intense and exuberant (p422): I identified relatively few examples of it in the twins, all of which relate to achievements of understanding and communicating with others, and all of which I describe in this comparatively brief section.

I am distinguishing joy from the quiet pleasure of viewing, expressed in relaxed attentiveness, which happens often. An early example of a joyful response occurs in ITNG 1 (see Section 3.2.2) when Phoebe at first misreads Connie's attempt to share the invented "moustache" sign with Connie, but after asking her to repeat it, interprets it correctly. Connie cackles with delight and buzzes from Phoebe to the coffee table, then plays at leaning on and bouncing off the stool, physically expressing her joy at achieving successful understanding. Similar joyful excitement happens several times during *In the Night Garden* viewing events (see Section 3.2), where the

children are both thrilled to have Phoebe's undivided attention in the novel environment of our living room: they enjoy jumping around and Makaton-signing at the many moments that this programme offers for anticipating what is about to appear. Alfie's delighted recognition of the imminent arrival of the Ninky Nonk, in the ITNG2 viewing event, accompanied by a round-and-round gesture to indicate the train's circular route as it arrives, is joyfully shared with Phoebe.

Excited pointing and the joyful acceptance of adult approval happened several times in the Eric Carle Films viewings (see Section 3.3). For example, when Alfie points and shouts "there's the egg!" at the beginning of *The Very Hungry Caterpillar*, he flings his left arm forward so violently that his shoulder is hunched up (see Figure 4.21; Figures 3.20, 3.23 and 5.4 also illustrate joyful behaviour in relation to this movie: pointing again at the appearance of the egg; pretending to be caterpillars, crawling along the top of the coffee table (which they were not allowed to do at home) in Figure 3.20; all delighted – yet again – at the appearance of the butterflies in Figure 5.4.

The moments of joy that I observed are thus closely related to comprehension and the achievement of sharing this with others. While adults' experiences of joy tend to be more varied, as in Sloan's examples of "good fortune, a beautiful day, or being in love", these two-year-olds' joyful moments related closely to their central preoccupations of learning to communicate, to understand, and to share these achievements with adults. Given how frequently adults misunderstand what toddlers are trying to communicate (see for example my baffled exchanges with Alfie in the discussion about *Baboon on the Moon*, in Section 4.3.2) this excitement is understandable.

Figure 4.21 Alfie (aged 2.2) sees the caterpillar's egg

At one point in the viewing of *Monsters, Inc* (dir. Unkrich and Silverman, USA 2001), a week before their second birthday, Phoebe suddenly leaves the room and comes back holding a toy version of the monster Mike, which she had retrieved from the bathroom. Connie seizes it with delight and turns to show it to me (Figure 4.22):

Figure 4.22: Connie (aged 2) seizes the Mike toy and turns joyfully to me

She has immediately understood why Phoebe fetched the toy and eagerly anticipates my pleasure and interest in the phenomenon of the Mike character being in the room and on the screen at the same time.

Thus, at the beginning of the fieldwork period, joyfulness was very much associated with the shared experience of viewing, which I discuss in more detail in Chapter 5. Later on, extrovert joyful moments like these while watching movies had almost disappeared. It was Connie who occasionally showed a spontaneous, joyful response, as for example in my eighth video of an *Animatou* viewing (see Figure 3.27) when she delightedly recognizes the cheeky behaviour of the mouse at the beginning of the film. The strength of her fascination with this film began early, as indicated in Figure 3.26 when she springs off the sofa to get closer to the screen, at the start of my video of their fourth viewing, which starts with her sharing the sofa with three other children: there is a sharp contrast between her excited gaze and their serious faces. Alfie's joyful moments were more closely connected to sharing experiences with adults, as in his performance of the *Tree Fu Tom* action sequence (see Section 5.2.3 and Figure 5.7) where his exuberance relates particularly to the fact that he is doing the actions with Dickon. Connie's own little burst of joy at the end of that viewing event also relates to Dickon's approval but, in contrast to Alfie's, is centred on the fact that she managed to perform the correct movements by herself.

It could be argued that joy is the goal of the seeking emotion: the intense pleasure experienced when we achieve understanding, satisfy a long-felt need, discover something new or hitherto lost, or complete a difficult task. Connie had on the whole a more analytic engagement with movies, as opposed to Alfie's emotional involvement. She thus displayed the joys of discovery and recognition more than he did, given that his commitment to movies tended to move towards the relief of tension or, as in the *Tiny Fish* episode, a fierce resistance to repeating the feelings of anguish that he had experienced before. Overall, however, joy was very much connected to the intersubjective pleasures of convivial co-viewing, which I discuss in the next chapter.

SUMMARY

This chapter began with an account of the ways in which the children's intense attention to movies could manifest itself, with details of the many physical features that signalled this attentiveness, particularly in the first seven months of the fieldwork. Examples were described from viewings of *Mr Bloom's Nursery*, *Laughing Moon*, *Animatou*, *Baboon on the Moon*, *Cyber*, and *Peppa Pig*, in which each of the children displayed extended periods of highly focused attention, demonstrated by many bodily postures, expressions and gestures. But I argued that attentiveness alone does not get us very far in understanding why the children were attentive to

some movies and not others. Drawing particularly on Panksepp's (2004) account of emotions as the drivers of motor action, including focused attention, and Cabanac's (2002) suggestion that the intensity, hedonicity and duration of emotional states govern their valence, I suggest that these theories – especially Panksepp's account of the "seeking" emotion – help to illuminate the children's attentive behaviour. The stylistic and structural features of the movies to which they were particularly attentive give clues to what may have triggered the "seeking" response. In making this claim I am stressing that at this age, children's drive to make sense of narrative is clearly not simply a sociocultural phenomenon: many of these attentive episodes bore no relation to the co-viewers' behaviour. Often when co-viewers were attentive, the children were not, and vice-versa. The children made their own choices about what to focus their attention on, and I am arguing here that, for two-year-olds, these choices must often be initiated by evolved, instinctive emotions, rather than by social or cultural experiences. As Vygotsky points out, "the causation and origin of our thoughts" take place in "a dynamic system of meaning in which the affective and the intellectual unite" (Vygotsky 1986, p10). This is not to deny that social and cultural experiences were also significant in the children's developing ability to understand movies, as the next chapter shows.

Some emotional responses clearly triggered aversions. Having described the children's early responses to movies that clearly were driven by powerful feelings of fear: "Mr Pontipine's Moustache Flies Away" and "The Og Pog Runs Away," both from *In the Night Garden,* and "Sports Day" from *Peppa Pig*, I discussed what elements of these movies may have generated these fears. A common theme of "separation" in these three episodes indicates that this may have been the basis of their fear. Moving on to sadness and anxiety, I contrasted the children's resistance to re-viewing sad films, with Grodal's (2009) concern to finds out why sad films are very successful with adult audiences. They saw a few movies that they thought were sad during the summer and autumn of 2012 – between the ages of 2;6 and 3 – and which they did not want to watch again, despite being extremely attentive in their first and second viewings. I gave an account of their emotional preoccupations during this period, which were particularly associated with fears of separation and loss. Their responses to *Baboon on the Moon* and *The Tiny Fish* seem to have been closely linked to these precoccupations, and resulted in their reluctance to re-view these films. I explored Alfie's fear of endings and how this was managed by the family, and then moved on to a discussion of joy: something very much related to the social context of viewing, and more evident in the earlier stages of the fieldwork.

CHAPTER FIVE
BECOMING PART OF A CULTURE

> *Watching and listening to infants and toddlers I have come to the view that being part of culture is a need human beings are born with - that culture, whatever its contents, is a natural function. The essential motivation is one that strives to comprehend the world by sharing experiences and purposes with other minds, that makes evaluations of reality, not as a scientist is trained to do by experimenting to eliminate differences of understanding so reality can be exposed free of human attitudes and emotions, but in active negotiation of creative imaginings that are valued for their human-made unreality.* (Trevarthen 1995, p5)

This chapter deals with three of the ways in which Connie and Alfie learned about aspects of their culture. As Trevarthen indicates in the quotation above, this is an intensely interactive, social process. I identify five distinct modes[27] of co-viewing with adults: co-viewing was not necessarily the children's predominant viewing practice, but it was one that offered them models for relating to movies, and clues to the meaning and structure of what they were watching. I then discuss their growing confidence in making modality judgments – assessing how real or true something is meant to be (Hodge and Tripp 1986, p 104) – which I believe to be a key "way in" to recognizing the generic status of cultural artefacts and thus to understanding and enjoying them. Finally, I consider the different kinds of evidence I had gathered that seem to indicate developments in their understanding of narrative.

5.1 FAMILY VIEWING PRACTICES

It is important that the children's co-viewing with adults is seen within the wider context of the way movie-viewing was organized in the family. In Phoebe's interview of 15th April 2012 (when the children were 2;4, and she was working part-time: this account relates to days when she was at home) she describes their viewing patterns at that time. Although she refers to "telly" throughout, she is clearly talking about catch-up TV and DVDs as well as broadcast television:

> There's kind of particular pockets of the day when the telly's available to them and they sort of know that and probably look forward to it so when they get up in the morning, they don't have any television till after breakfast, and then they might watch a bit of television after breakfast while they have their milk, and I will get the buggy ready to go to the park, or have a cup of coffee myself, you know, have five minutes to myself to get dressed, or whatever I need to do, and around that time of the morning it's normally about quarter to ten and Mr Tumble's on[28], or they'll request a DVD, that they particularly want. Luckily, most of the time they want the same thing!

[27] I am using "mode" here in the non-specialist sense of "a way or manner in which something occurs or is experienced, expressed, or done" (https://en.oxforddictionaries.com/definition/mode).

[28] This refers to the CBeebies programme *Something Special*, presented by Justin Fletcher as the character "Mr Tumble."

…
They could watch for an hour. More likely half an hour, but depending on what time they woke up, or what else is going on. Which doesn't sound great – I don't like the idea of them watching an hour of telly in the morning, but they do sometimes, but depending on what time they woke up, or what else is going on, it can be sort of between half an hour and an hour…
…
And then yeah, after lunch, before nap, again when they're drinking their milk. It's very much milk-oriented, actually! They have about quarter of an hour, they want that really, they have about quarter of an hour of whatever they want to watch, and then they'll go upstairs … sometimes I will just say, right, it's milk and telly time, right, now into the living room, because I want to get them out of my, from under my feet. But if they're playing really nicely, and you know they're not kind of swarming around and fighting and they're both engaged in doing something, then I won't mention it. If they're quite happily reading a book, or play – whatever they want to do, if it's not watching the telly, then I won't mention it, and say let's watch the telly, it's just normally I do resort to kind of "come on, get out of my life, please I can't cope with this any more." Erm, and … [yawns] sorry, erm … and then when they wake up from nap, it's often that I've woken up from a nap as well, or that they're drinking their milk, I'll have a cup of coffee or something and we'll sit down, watch a bit of telly – and then we spend the rest of the afternoon playing, or going out and they don't watch it I don't have it on at all till – sometimes I do have it on before – if I'm cooking something that takes a lot of preparation and me standing around in the kitchen, risotto or something, then I might if they're getting really, again, swarming and not able to kind of focus on anything in particular, I'll go "ok watch the telly then, whatever, sit and watch that." Sometimes she'll want to watch the telly and he won't, it's never the other way round.

Two relatively short periods of co-viewing with an adult are mentioned here; the rest is the children usually co-viewing together while Phoebe gets on with household tasks. I have quoted this at length in order to demonstrate how, as her train of thought unfolds, Phoebe gradually reveals the amount of movie-watching the children do without an adult present. She begins by claiming that they watch for short periods ("pockets of the day") that are planned in advance, but as the interview goes on she refers to situations where she lets the children watch movies: "five minutes to myself to get dressed or whatever I need to do," "swarming around and fighting" and "not able to kind of focus on anything in particular." This was before the children started nursery school, which they did in January 2013 when they were just 3. They would then often have their breakfast in front of the TV before being taken to nursery. By the time of the later viewing events that I filmed in early 2013, they were also often having their evening meal in front of the TV as well.

5.1.1 TV as Childminder

The viewings I filmed were thus not typical of the children's daily experience of movies. Phoebe's choice of words and careful detail indicate her consciousness of the much-criticised "TV as child-minder" scenario. Social media discussions of children's movie-watching have many contributors who display the same nervous sub-text about the "risks" of too much "exposure" – the latter being a term widely used by researchers (e.g. Christakis et al. 2004, Mar et al. 2010, Mistry et al. 2006, Stevens and Mulsow 2006, Vandewater et al. 2005). Although it is extremely common and understandable for carers to take advantage of movie-watching as a way of occupying children at busy times, especially where they are managing more than one child all day, it is deplored in much of the developmental psychology research (cited above) that has focused on amounts of children's "exposure" to television (in particular) and it is this view that tends to dominate public discourse. The implication of Phoebe's account of the children's daily pattern of movie-watching is that they must have spent at least as much time watching on their own as they did with adults or other children. It is likely that at least some of this time they would have been highly attentive (Figure 5.1); at other times they would have been in "couch potato" mode (Figure 5.2):

Figure 5.1: relaxed but attentive viewing mode at age 2;1 (watching *Baby Jake*)

Figure 5.2: Alfie (aged 2;7) winds down with the *Peppa Pig* "Pirates" episode at the end of a busy day

But some scholars have identified factors other than mere "exposure" that are significant in considering children's relationship with movies. Foster and Watkins re-ran the study by Christakis et al (Christakis et al. 2004) which claims that the number of hours of television watched by children in samples taken at age 1 and again at 3, could predict whether or not they would have attentional problems at age 7. These findings did not hold up in Foster and Watkins' repeat study:

> …the context in which children watch television matters. Viewing behaviour—duration (hours watched) and content (what is watched), with whom children watch (parents, peers, siblings), and how they watch (restricted, monitoring) are important factors to consider. (Foster and Watkins 2010, p369)

Also, as Durkin usefully reminds us, frequency does not correlate with salience (Durkin 1985, pp 68-69). Although children may spend a lot of time watching on their own, or watching material that does not command their most intense attention, this does not necessarily override the possibly greater salience of the less frequent occasions on which they watch with adults, or watch material that greatly interests them and that they want to watch repeatedly. In other words, some of the factors that Foster and Watkins list may be more important than others.

5.1.2 Others in the Room

As I shall show in this chapter, Alfie and Connie clearly enjoyed watching movies with their caregivers: this indicates that viewing in a social context was important for them. Bruner points out that "it is obvious that an enormous amount of the activity of the child during the first year and a half of life is extraordinarily social and communicative. Social interaction appears to be both self-propelled and self-rewarding." (Bruner 1983, p27) This remains the case in the third

year of life, and given their greater social experience, increased powers of memory and linguistic ability, It is likely that social interactions also generated moments of high salience during viewing events. Of course the presence of adults, and their frequent expressions of amused approval and physical contact, reinforces the family bonds of affection. But it also helps to shape children's perception of what movie-watching is all about: a social occasion in which what is seen and heard on the screen is to be shared and enjoyed, and can be questioned and commented upon. The way the adults watch – where they sit; the amount of attention they give to the screen – models the cultural status of movies within the family. Movie-watching with adults could therefore be considered as part of the "observing and 'listening in'" learning processes described by Rogoff et al (Rogoff et al. 2003) and to Tomasello's account of how infants "'tune in' to the attention and behavior of adults towards outside entities" (Tomasello et al. 2005). How movie watching is framed – in the case of this family, deliberately choosing what to watch, and watching films or programmes right through to the end – was part of the cultural practices that Phoebe had herself learned as a child, and which she replicated with her own children. As Vygotsky says, "human learning presupposes a specific social nature and a process by which children grow into the intellectual life of those around them" (Vygotsky 1978, p 88). Social learning about movie-watching was thus a part of how Alfie and Connie came "to learn about the culture they [had] been born into" (Trevarthen 1995, p 7) and thus it is likely that it also influenced the way they watched movies on their own.

My research method precluded any data-gathering on what happened when the children watched television on their own, since I was always in the room filming them. So this study deals with viewing contexts where there was always at least one adult in the room, and often two or three. In a few of these contexts, there was one adult (me) and only one of the children: the other being asleep or with another adult somewhere else, usually by choice. In this chapter I am focusing particularly on those occasions when Phoebe was present, with me and both children; and sometimes with Terry or Dickon as well. I also discuss how my presence may have influenced the children's engagements with movies, especially the ones they came to expect to see at our house. I only filmed two events where they watched movies with other children present, so I did not build up a picture of how this may have influenced the way they watched. So my interest here is in how adult co-viewers may have contributed to the "contextual meaning" described by Frazer:

> …television takes on contextual meaning based on the actions of those around it. There can be no question that the child is often active in the television environment, both physically and socially. The view of a passive receiver, even under the most sedate

> viewing conditions, is an underestimation of the abilities of the child to understand and shape experiences. Clearly from the examples given above, even young children are capable of manipulating the television environment so as to create either a parallel or an interactive context. To attempt a blanket characterization of television viewing as one or the other is to ignore the observed behavior recorded here (Frazer 1981, p319).

Phoebe was present in 36 of the 64 viewing events I filmed; Dickon was present in three of them, and Terry is visible in 18, but was present nearby or in the house for most of the viewing events: he rarely took an active role. Obviously I was present in all of them, though I am rarely visible on screen. I can be heard in many of them, as the transcripts quoted in this thesis reveal: sometimes commenting to another adult, often making short comments or responsive sounds (eg "ooh") directed at the children, and asking direct questions of one or both children. On two occasions ("Baby Jake + 4 Kids" and "Animatou 3+4+5kids" – see Appendix 1) there are other children and several other adults in and out of the room.

5.1.3 Watching Together

Those film theorists who take account of embodied cognition (e.g. Coegnarts and Kravanja 2015) make little acknowledgement of the varied social contexts of movie-watching, but stick to the traditional Film Studies view of the individual adult movie-goer seated in a cinema and rarely aware of the behaviour of others in the audience except in the case of genre movies such as horror (Clover 1992). Allowing for broadcast and catch-up television, DVDs, streamed movies to both fixed and portable devices, repeat viewings on all these platforms, and of course online material such as YouTube videos, millions more viewers every day are watching movies in locations other than cinemas. Most movie-watchers then, like the twins, are not watching movies in darkness and may well be watching with others. The children could hear their co-viewers; when they looked at them rather than the screen, they could see their expressions and gestures, and how they positioned themselves in relation to the screen; and when they sat close to a co-viewer, they could feel their physical responses – whether instinctive or intended. All these factors contributed to the shared, social character of the viewing experience and therefore to the ways in which the children felt and thought about it, and how they remembered it. But the different viewing practices within which all these responses were embedded contributed to their salience.

Despite its widespread presence in UK homes for more than 30 years, few scholars have addressed the impact of video technology and, more recently, TV catch-up services and DVD, on the repeat-viewing practices of families with toddlers. Krendl looks at the extent to which

preschoolers (ie 3-year-olds and older) mastered VCR technology (Krendl 1993); Skouteris et al look at repeat viewing by the same age-group, but only in the context of learning *from* video content (Skouteris et al. 2007); Matthews investigated the memories that the "first cable/VCR generation" had of their childhood viewing, which did not reach back as far as their earliest childhood (Matthews 2003). Marsh acknowledges "the need to constantly revisit and/or re-present the story as experienced" but she includes movie-related play and draws her data from parental questionnaires and interviews rather than from observation (Marsh 2004, pp57-58). Frazer's observationally-based study does take account of children's real behaviour in the home and how it relates to that of their parents:

> Exploring is the activity in which children first bring television into their world. These activities range from physical attention to the sounds, motion, and characters to experimental manipulation of knobs and buttons: Children acquire from those around them the concept that television is sometimes seriously and continuously regarded, and occasionally model this behavior. (Frazer 1981, p320)

However, Frazer's study pre-dates the advent of video, let alone catch-up television, online streaming and DVDs, and focuses mainly on three-to-6-year-olds. His claim that it is only serious and continuous television-viewing that is modelled – and then only occasionally – on parental behaviour, is not borne out by my research.

5.2 CO-VIEWING PRACTICES

Many different modes of co-viewing practices were displayed by adults across the 64 viewing events that I filmed. I have identified five modes that were distinctive, and recurrent: these would rarely dominate an entire viewing event, but would occur at times, and often two or more modes can be seen during some of the longer events. I have named the five modes as:

Active co-viewing

Cuddled-up co-viewing

Self-conscious co-viewing

Co-viewing with questions

Adult-level co-viewing.

5.2.1 Active Co-viewing

In Chapter 3 I provide many instances of talkative, highly responsive behaviour by adults when viewing with the children, which I am designating as "active co-viewing", involving at least one adult and the children as they watched movies with which they were very familiar through

repeated viewings. These occasionally involved me, although this was only filmed if I happened to have set up a fixed camera (Figure 5.3):

Figure 5.3: watching *Animatou* for the fifth time (aged 2;5)

In the earlier stages of the study, it was more often Phoebe who initiated and sustained active co-viewing, when watching movies at our house with the children. Being such well-known stories, the Eric Carle movies offered many opportunities to play "what's coming next?" guessing games and to react with excitement and delight when the expected moment occurred (Figure 5.4).

Figure 5.4: everyone reacts when the butterflies appear at the end of *The Very Hungry Caterpillar* (age 2;5)

For the first ten months of my fieldwork, this was the most common viewing mode. It reflects what we as a family considered to be the appropriate way of watching movies with children. Phoebe also described to me how this also happened at their house:

P I think they feel more … maybe they feel like they might miss something if they start commenting on it the first time they see it. They're so busy, taking it in, and then when they can start to predict it, they can go "oh look!" and then they don't have to look at it cos they're pointing at you, "it's raining!" "wellies!" Cos then they want to watch what your reaction is. (Interview, 12th March 2012)

From the video collection I can identify 13 occasions where active co-viewing took up all or most of the viewing event, but it also featured often as a short part of many other events as well. It was therefore the dominant form of "modelling" that we offered the children: that movies would normally be watched attentively, with comments and shared, usually pleasurable, responses. There is nothing very unusual about this mode of viewing: a somewhat self-conscious version of it forms the entire appeal of the Channel 4 "reality" show *Gogglebox*.

5.2.2 Cuddled-up Co-Viewing

On some occasions, an adult would watch with both children closely cuddled up on their lap, or next to them on the sofa (e.g. Figure 3.17). Sometimes the children would demand this; sometimes an adult would suggest it – and the children would probably, though not necessarily, agree. The adult would usually be Phoebe, but not always: in Figure 5.5 for example, Connie, Terry and Alfie are watching, for the third time, the highly – though playfully – violent opening sequence of the feature film *Monsters, Inc* (dir. Docter, USA 2001) on 4th December 2011 – a week before their second birthday. This was the first feature film they had ever watched, but it was one they had prepared for in the sense that they acquired character toys – Mike and Sully – before they first saw the film. Terry's frown, smile and loosely clasped hands indicate attention but also an element of appreciative, if somewhat anxious, knowingness; the children, although sitting back comfortably on his lap, are seriously attentive. If they are still at all tense about the violence of the scene, it is likely to be mitigated by their closeness to Terry and his enclosing arms: possibly Connie is attempting to link her fingers in imitation of his clasped hands (see also her attempts to copy Phoebe doing this in Figures 3.15 and 3.16). Alfie points and exclaims "There!" as the monster starts to rear up over the bed (2.42 minutes into the scene); during the chaotic violence that ensues, Terry is chuckling, which the children can probably feel. Alfie points several times more; Connie points just twice briefly: first just before the opening scene changes abruptly when the "scary" bedroom sequence is revealed to be a corporate training

exercise; then just as Sully is first seen, asleep in bed. Apart from this both children remain attentive and relatively still.

Figure 5.5: With Terry, watching the opening of *Monsters, Inc*, aged nearly 2

5.2.3 Self-conscious Co-viewing

On a very few occasions, one of the parents would initiate a co-viewing mode that seemed to be planned and conscious of the research context. I have designated this "self-conscious co-viewing": one example is Phoebe's game of encouraging Connie to mimic the Hungry Caterpillar's fruit-eating in February 2012 (twins aged 2;2), which Connie excitedly joined in with but Alfie, sitting on Terry's lap, ignored (Figure 5.6; see also Section 3.3), while Terry was extremely bored.

Figure 5.6: Connie imitates the Caterpillar for Phoebe while Alfie maintains his gaze on the screen

Phoebe also set up a highly-staged family viewing of *The Wizard of Oz* (Dir. Fleming, USA 1939) at their house in April 2013 when she impressed upon the children (then aged 3;4) that it was the first "big movie" that she ever saw in a cinema. She provided popcorn and videoed the viewing for me: she and Dickon comment frequently throughout, in an effort to help them understand the story.

Figure 5.7: performing *Tree Fu Tom* actions (aged 2;7)

A similarly "performative" event is shown in Figure 5.7, when Dickon encouraged the twins to perform the "big world magic" exercises that punctuate every episode of Tree Fu Tom (see also Section 5.6). Like Dickon, Alfie is clearly aware of my presence here, and is enjoying showing off, while Connie is focused on getting the movements right. In Figure 5.7 she is watching Alfie closely: as in the viewing of an Eric Carle film five months earlier (see Figures 3.15 and 3.16) she is still interested in achieving a "proper" hand clasp. At the end of the sequence, she does her own version of the exercises, unnoticed by Dickon and Alfie, and apparently not particularly aware of me either, but when she exclaims "I done it!" she is congratulated by Dickon anyway (even though he hadn't been watching her) and is joyfully gratified.

From May 2012 onwards (i.e. from the twins' age 2;5) there was an increasing number of viewings in which I was on my own with the children, often watching non-mainstream short films (see Chapter 2, and also Section 3.1.4). In some of the *Animatou* viewings (Section 3.4), and in others where the movie being watched is new to the children, I am a self-conscious viewer, aware that they may not be able to follow the movie and commenting frequently about what is happening.

An interesting example of co-viewing occurs in another of the videos I made of the viewing of *Monsters, Inc* (see also "cuddled-up viewing," above) just before the children turned two. This occurs shortly after the moment, when Phoebe fetches a toy version of the character Mike (see Joy section, Chapter 4). In an early scene when the big blue monster Sully is trying to get the child Boo to go to sleep (an extremely familiar and amusing saga to any two-year-old) he makes a gesture, jutting his hand forward from just below his face, as he says "Go to sleep – NOW!" Connie smilingly imitates this gesture, looking at me (Figure 5.8):

Figure 5.8: Connie (aged 2) imitates Sully's "go to sleep!" gesture

I'm looking at her and haven't noticed Sully's gesture; Phoebe is looking at the screen and hasn't noticed Connie's gesture. As the scene continues there are pleasurable exchanges of glances and smiles, and Connie starts making the gesture again. Phoebe now notices it but forgets that Sully had made it earlier: as it is similar to the Makaton sign for "frog" she makes the rather too ingenious assumption that Connie is signing to communicate that Mike looks like a frog (being squat and green). Connie is intrigued by this novel suggestion, looks intently at the screen again, and repeats the sign several times, to Phoebe's pleased approval. So in this example, typical of many misunderstandings between adult and child, Connie is happy to go with the misunderstanding, since her ability at this stage to follow the narrative in detail is limited, the concept of Mike looking like a frog is worth considering, and she is in any case already enjoying Phoebe's participation in the viewing event. Here we can see self-conscious co-viewing as an example of what Bruner (Bruner 1983) calls "a predictable format of interaction" (p18) where "the child and his caretaker readily combine elements…to extract meanings, assign

interpretations, and infer intentions" (p29). Bruner is writing about play here, but his remarks are equally relevant to co-viewing.

5.2.4 Co-viewing with Questions

On occasions, throughout the project, Phoebe and I both asked questions of the children about what they thought was going on in the movie they were watching. Firstly, co-viewing with questions supplemented their existing interest in naming things on the screen: one of us would ask "what's that?" or "what's happening?" which might or might not receive a reply, but established a practice of asking questions about what was being watched. This encouraged the children to ask the same types of question themselves, or simply to identify characters, objects or actions even if nobody had asked a question. The exchanges between Connie and Phoebe during the first viewing of *Baboon on the Moon* illustrate this (see transcript in Section 4.3.2). Later, when I was more often the only adult present for most or all of a viewing event, I cautiously began to ask more complex questions, for example seeking modality judgments with my "is it a real mouse?" question, which I first asked Connie (aged 2;7) about the mouse in *Animatou* on her seventh viewing (see Figure 3.26) I was so taken by her immediate, amused response that it is "a pretend mouse" that I asked similar questions again several times in relation to other movies. When they began habitually to choose movies from the *Animagine* or *Starting Stories* DVDs as part of the ritual of being at our house, my questions became more ambitious. In the 12th viewing of *Animatou* I paused the DVD several times throughout the film and asked several questions, much to Alfie's excited response and Connie's irritation (see Section 3.4.3). This "teacherly" behaviour emerged from my professional experiences with older children's viewings of non-mainstream movies (see Section i): I would probably have done it even more had I not been trying, at least most of the time, to maintain my role as unobtrusive observer. From early on in the *Animatou* viewing sequence I began asking "what happened?" at the abrupt end of the film: to the extent that eventually the children started asking it themselves in a ritualistic way at the end of each viewing of the movie.

5.2.5 Adult-level Co-viewing

On other occasions, adults would watch with the children but exchange comments and other responses such as groans or laughter, to which the children seemed to pay little attention. There is an example of this adult-level co-viewing in Section 3.2.3; a more extended example occurred in a viewing of the "Step in Time" sequence from *Mary Poppins* (Dir. Stevenson, US 1964) which

Phoebe had invited us to watch with the children at their house, following her earlier observation of them being fascinated by it (Figure 5.9):

Figure 5.9: Connie (aged 2;4) concentrates on *Mary Poppins* as the adults laugh and comment

Terry, Phoebe and I all giggle over the excesses of this musical number ("It doesn't know when to stop, does it?" Terry comments at one point) while both children – viewing it for the second time – concentrate intensely. Alfie stands close to the screen, bracing himself with his arms on the shelf, for the whole of this sequence (see Figure 2.6); in the section where Mary Poppins joins in the dance, Alfie's head movements clearly show that he is trying to follow the character's rapid movements in her swirling red dress amongst the dark-clothed chimney sweeps. But despite the children's apparent obliviousness to the adult talk, we cannot rule out the possibility that they are picking up clues about our mood and attitudes, as they would with any background adult conversation. At two points in the transcript Connie does make whispered repetitions of adult phrases that presumably intrigued her, i.e. "a load of rubbish" (echoing Phoebe's comment before the movie had started, referring to the idiosyncrasies of the DVD menu) and "bugger off" (echoing a comment I made about the film's bland portrayal of the working class, as the sweeps scamper merrily away into the night).

Apart from the relatively rare "self-conscious co-viewing" mode, none of these five modes was pre-planned. They emerged spontaneously, depending on the mood of the adult(s) and/or the children. Pre-planning anything with two-year-olds is always a potential challenge: the child-managing ethos of this family was to "go with the flow" wherever possible. So one of the primary formative influences on the children's perceptions of movie-watching was that it was meant to be pleasurable and relaxed, and that their interests and preferences were often

paramount – in contrast to situations where conflicts of interest potentially occurred, such as eating dinner, going to bed or travelling on public transport. The children's preferences were therefore a key factor in initiating both active and cuddled-up co-viewing. One or more adults would probably set the scene by arranging the seating, dishing out the bottles of milk or offering a lap to sit on, but where the children settled once they actually started watching, and how long they stayed there, would be their choice. Often, as discussed in Chapter 3 and in Section 4.1, they could spend part or all of a viewing standing or sitting alone and attentive to the screen, apparently oblivious to everything else in the room.

A transcript extract from 18th June 2012 (twins aged 2;6) when the children were watching *Dipdap* indicates a typical viewing event where there is a "flow" from one mode of co-viewing to another within the space of three and a half minutes. Unusually, it starts when the viewing has already begun and I am filming as I enter the room:

CB *[entering room with camera]* ...'re they watching?
T *Dipdap*
CB *[moves round to rocking chair to frame the kids, both on stool with milk bottles; T is out of frame in armchair; P is out of frame kneeling on floor looking at TV guide]* What's this?
P What's this Connie?
C *[takes bottle fractionally out of mouth] Dipdap [pauses to watch with teat on lips]*
C+A *[both watch for 70 seconds then C resumes sucking; A's bottle drops gently as he watches attentively then resumes; both continue to watch while sucking]*
T (inaudible)
CB Yeah ... I've seen a film of primary kids watching it
C *[lowers bottle looks at P and chuckles; then at screen]*
T Not entirely unlike the tangram film *[ie* Laughing Moon*]*
P Yeah
CB That's what I was thinking
C Mummy *[wiping mouth with back of hand, frowning a little]* Bubble *Dipdap*! 'n bubble *Dipdap*!
P Well, maybe you can watch that later, on the computer with Nana
CB There's a "bubble *Dipdap*"?
C *[resumes sucking]*
P Oh! *...[sharp breath]* What is it?
A *[smiles and turns slightly still with bottle in mouth]*
C A carrot
P Yeah*![laughing]*
C It big*![with teat in mouth]* A wabbit
A *[smiles and half-turns again – recognition]*
TV DIPDAAAP!*(signals end of programme)*
P *[throws TV guide on to table]*
C *[looks towards table]*

CB Can we turn it on and see if they want anything from there?
P *[reaches for DVDs]* Want one of these?
CB Yeh *[whispered]*
P *[to C+A]* Which one do you want?
C *[lowers bottle and looks at DVD cover with finger ready to point]* This one
P You want that one?
CB OK
P *Tree Fu Tom* is another-
CB *[to Terry]* Can you turn it over to - erm - sorry erm..gimme the grey one - the grey one *[reaching for remote control while still filming]*
C *Tee fu tom? [lowering bottle and fiddling with teat]* will u *tree fu tom*?
CB Turn it over to..
P *Tree Fu Tom* isn't on right now
CB Turn it over to..
T *[irritably]* What, Cary?
P Watch *Tree Fu Tom* later
C+A *[resume drinking]*

This was the same viewing event that a few minutes later included the children's first viewing of *Baboon on the Moon* (see Section 4.3.2). The children are seated close together and watching what was one of their current favourites: Terry had never seen it before and he and I exchange comments on it (his reference to "the tangram film" is to *Laughing Moon* – see Section 4.1). *Dipdap* involves guessing what shape is going to appear next: Phoebe and the children enjoy this, with Connie naming things while Alfie meets Phoebe's gaze and smiles knowingly. There then follows a typical debate about what to watch next, followed by a switchover from broadcast TV on the cable box to a DVD on a separate player, which always involved a tiresome scramble to change remote controls; complicated here by Connie threatening to demand *Tree Fu Tom* instead. The children watch most of *Dipdap* attentively and quietly, each holding their bottle tilted so that they can watch the screen while drinking their milk (Figure 5.10).

Figure 5.10: drinking and watching *Dipdap* (aged 2;6)

The three adults in the room are seated around them (but outside the frame of Figure 5.10): Terry behind them, me filming from their right; Phoebe sitting on the floor close to them and to the television. The programme's music and comical sound effects reflect the little character's confusion and contortions as it gets entangled in the animated line that twirls around into unexpected shapes. The children are familiar with it and are ready to guess what each shape is meant to be. At the same time, the adults exchange comments. It's a relaxed, convivial scene until the adults' irritable exchange after the programme ends.

In each of these viewing modes, Wojciechowski and Gallese's argument about "embodied simulation" may well be in play. They argue that "by means of the neural format we share with other human beings, and, to an extent, with some animals, as well, we can map others' actions onto our own motor system, as well as others' emotions and sensations onto our own viscero-motor and somatosensory systems" (Wojciechowski and Gallese 2011). In this paper they focus primarily upon neuroscience's discovery of mirror neurons, established through finding links between visual images and cortical activity. What is important about this, they argue, is that the physical experience of simulating particular gestures, expressions or postures can give one an idea of the feelings that generate them. This phenomenon is exploited as a conscious technique in dance therapy and theatrical performance (Thom 2010). But in the quotation above and elsewhere, they hint that embodied simulation may also be triggered by mechanisms other than visual perception. It certainly seemed to me that the twins' responses to movies sometimes related to their awareness of the physical disposition and mood of the others in the room,

especially through bodily contact with them, rather than to what they saw. Equally probable, however, is that they heard and may have registered the sounds made by others, which is what I discuss in the next section.

5.3 LISTENING TO ADULTS

In Section 3.2.2 I suggest that the children were immersed in an acoustic ensemble that included the movie sound track but also the varied utterances of the adults, sometimes directed at the children, sometimes at each other. In these viewing sessions, the people in the room offer and share interpretations of what is appearing on the screen and model emotional responses such as laughter, anxiety, sympathy, admiration, through sounds such as gasps, grunts, chuckles and "paralanguage" (Desmond et al. 1985, p463) such as "uh-oh," "ooh," "mmm" etc. In addition, the adults' utterances often echo or supplement those of the voice-over and point to fragments of narrative, as in "oh dear, Iggle Piggle has lost his blanket" or "where have the children gone?" Some of this can be ascribed to our self-consciousness early in the project, but it did continue to some extent throughout the project on many of the occasions when there was more than one adult in the room. The *Dibdab* transcript (above) shows how this was still the case some six months further into the project, with the added dimension of one or other of the children contributing their own, now more fluent, verbal comments.

In all three of the "co-viewing" modes I have outlined, the "paralanguage" I mentioned above seems to consist of almost involuntary, "emotional" sounds, which supplement and extend the verbal comments that may be addressed to the children, or to (an)other adult(s) in the room. This "social noise" forms, especially for the children who are still negotiating the complexity of movies, an additional dimension to the sound design of the movie even if, as in the *Dipdap* transcript, they seem to pay little conscious attention to it.

Castigating the tendency in Film Studies "to emphasise the visual whilst dwelling upon the narrative" (Ward 2015, p 155), Ward points out that "sound has the capacity to shape visual perception and steer visual attention" (p 158). As a sound designer himself, Ward takes his examples from cinema, but the children's TV that the children watched also included what he defines as "a process by which many sound fragments are created, selected, organized, and blended into a unified, coherent and immersive auditory image" (p 161). While I am not suggesting that the children could not tell the difference between sound from the screen and sound in the room, I do believe that, given toddlers' acute awareness of what adults do and say

(Trevarthen 2005, pp63-64), both verbal comments and emotive sounds from family members may have contributed to their "reading" of a movie in the ways that Ward suggests when he comments on:

> …the capacity of sound to intensify the 'energy' of a scene, even if the visual image is 'slow' or 'empty.' This last phenomenon – the energy of a scene – is as subtle as it is significant, for it refers, in movie-making terms, to an audience's engaged attention. (pp 159 – 160)

This is borne out by the way in which the children themselves contributed to the "aural ensemble" of viewing events: pointing, calling out "oh!" and "ooh!" and naming characters, in a variety of tonal patterns. Many of these sounds – whether from adults or from children – became ritualized, as an expected part of the "social sound track" for movies they watched often.

It is important to note that comments, reactions and explanations did not only come from the adults and children in the room, but also from the movies themselves. Children's television (with rare exceptions such as *Dipdap*) is full of voice-over guidance to viewers (see also Section 1.1.4), through both narration and commentary, and through characters' mode of address. Derek Jacobi's *In the Night Garden* voice-over effectively supplants adult co-viewer comment, with his exclamations of "ooh, look at that!" and his question "who's this?" as a new character appears, switching immediately to participant dialogue such as "Hallo, Upsy Daisy! How are you today?" This in itself models a playful relationship to the programme for child viewers, which is nevertheless conceptually complex as it switches between diegetic and non-diegetic modes. In *Peppa Pig* there is a similarly complex mix of verbal address: Peppa herself speaks to camera at the beginning; the characters speak to each other during each story; there is also an invisible narrator (John Sparkes) who explains things to the audience, underlining events on screen as in "look out, the rope is breaking!" in the Tug-of-War episode (see Section 4.2). In contrast, none of the non-mainstream or feature films that the children watched contained any voice-overs or address to camera, and in fact most of the non-mainstream short movies they saw had no dialogue at all. This was probably a factor in motivating the adults' tendency to contribute more comments and emotive sounds during these viewings.

5.4 THE SIGNIFICANCE OF CO-VIEWING

The idea that parents ought to co-view with children is not new. The Nuffield Foundation-sponsored study in the 1950s, *Television and the Child*, stresses its value, though in terms different from mine:

> …it is so useful if parents can find the time to watch with the younger children or, failing that, encourage them to talk to them about the programme afterward. In this way one can see if there is anything that disturbs the child, and use the opportunity for building on the new impressions he has gained (Himmelweit, Oppenheim and Vince 1958, p 49).

Allowing for changes in style and tone, the advice to parents offered in that study accords broadly with the kind of advice found on social media today. A Google search using "manage my child's tv watching" in January 2017 turned up more than 3 million results, of which all but one of the 10 on the first page focused on the amount of time spent viewing and how to reduce it: another illustration of the risk-benefit paradigm's prevalence. The default subtext here remains the same: that parental supervision is necessary to counteract the potentially negative effects of television. But the first three of the five types of co-viewing practices that I observed offer striking parallels between the likely outcomes of family viewing and the positive values attributed to the practice of parents reading books to children. In both cases, ways of engaging with the cultural product are modelled for the child, and an ongoing dialogue takes place – especially in the case of picture books – with questions, answers and comments being made by both adult and child. In both cases, the situation is usually pleasurable and relaxed, reinforcing the bonds between adults and children. Shared reading is seen as an important way of building children's vocabulary and preparing them for later learning, especially through re-reading favourite stories (Snow and Goldfield 1983); Adrian et al suggest that parents' use of "mental state language" in shared reading could be associated with the development of theory of mind (Adrian et al. 2005) in the sense of being able to recognize, and reflect upon, the emotional states of others. This also happens in shared viewing.

There are however obvious differences between shared reading and shared viewing. Shared viewing really is shared in the sense that adults and children watch the screen together and may respond simultaneously: the adult has no consciously performative role. In the "active co-viewing" mode, emotional responses in the form of spontaneous vocalisations, such as "ooh!" in a variety of intonations – generated and shared by both children and adults – are a feature of several of the "family viewings" I filmed, and they obviously occurred alongside the sound track of the movies themselves, rather than being interpolated, as they would be in a reading session. At the same time, the children's excited exclamations and pointing are clearly addressed to the

adults in the room. In the earlier viewing events, such as the *In the Night Garden* sequence described in Section 3.2, the children are constantly turning to Phoebe for recognition and approval of their ability to anticipate what is coming next and to name – or sign – what it is. There is much chuckling and delighted approval from the adults. In the later sequence of *The Very Hungry Caterpillar* viewing events (see Section 3.3), where the movies watched are well-known to everyone present, adult responses are less often sought. Later still, they would comment on actions as well as characters in the story, in ways that revealed their different preoccupations (see Section 5.6).

The co-viewing practices that I observed very much bear out Tomasello's account of joint attentional processes. Drawing on Vygotsky, he first concludes that "extended periods of joint attentional focus" are "'hot spots' for early language learning" (p74); but he extends this to acknowledge that

> …routine joint interactions may scaffold to an even greater degree. Apparently, joint attention with an adult on a perceptually present object provides a type of nonlinguistic support that allows the child to assume the topic and thus to concentrate on making appropriate comments and responses to adult utterances. (Tomasello et al. 1993, p77)

Co-viewing of movies would seem to present a perfect example of "joint attention with an adult on a perceptually present object." But given that the "perceptually present objects" in this case have the complexity and rich multimodality of even the simplest children's television, co-viewing must offer potential for scaffolding not only verbal language but also essential cultural skills and practices such as the capacity for modality judgments.

5.5 MODALITY JUDGMENTS

I am taking the concept of "modality judgments" from a chapter in Hodge and Tripp's 1986 book *Children and Television* (see also Sections 1.1.5 and 3.1.2). Drawing on linguistic theory, they propose that the question of whether or not children believe that what they see on television is "real" could more usefully be approached through the concept of "modality" as used in linguistics to "indicate degrees of certainty of a message." (Hodge and Tripp 1986, p 104). This provided an important challenge to the extensive academic concern in the 1970s and 1980s about the effects on children of representation of violence on television (for a review of earlier literature on this, see Chandler 1997). Hodge and Tripp's chapter remains useful in its account of modality judgments as a way of *calibrating* the assumed reality status of movies, as opposed to many scholars' continued insistence on making simple "real vs not-real" distinctions (eg Hui et

al. 2015). In applying it to television, they go beyond the focus of Kress and van Leeuwen's later discussion of modality judgements, which is concerned almost entirely with still images (Kress and van Leeuwen 2006, Chapter 5).

5.5.1 "Confusion"

The insistence on a "real vs not-real" distinction encourages scholars to argue that when children do not seem able to make this distinction, they must be "confused" about the relationship between representations of scenes in movies or still images, and real life. For example, Troseth claims to demonstrate this "confusion" by citing a two-year-old whom she observed "watching a home video of herself and her family building a tower of books and blocks. She retrieved a block and tried to hand it to the people on the set, saying, 'Here.'" (Troseth 2010, pp156-7). Assuming that this must signify confusion, Troseth argues that two-year-old children still "need to master a set of conventions comprising the 'grammar' of video." But even two-year-olds' engagements with movies may be ontologically complex. Flavell et al's work in the 1980s on children's "pretend-real" distinctions (Flavell, Flavell and Green 1987) offers a usefully nuanced view on how children may come to develop clearer judgments about the "reality" of objects: "once the ability to simultaneously think of something as pretend this but really that is sufficiently developed, it may be available for transfer to appearance-reality and perspectival situations" (see also my discussion of Harris in Section 1.1.5). However, this does not address the social contexts in which ideas about "pretend" and "real" are developing.

As my discussion of co-viewing indicates, two-year-olds are immersed in a world of fluctuating behavioural modes, where they can negotiate – or ignore – agendas set by adults. In the case of movie-watching, the adults may model watching quietly and seriously; they may encourage watching playfully, commenting on and even imitating actions on the screen; they may be talking to each other and taking no notice of what the children are doing; or they may not even be in the room. At the same time, two-year-olds have their own varied agendas for movie-watching, ranging from focused attention through playful engagement to ignoring the screen altogether. Each of these modes has a bearing on reality-status: not only of what is being watched, but also on associated comments and behaviour. Thus when Connie (aged 2;2) was watching the "Painting" episode of Peppa Pig, in which Daddy Pig puts on a beret when he paints a picture, and she was reminded by Phoebe that she too had a beret, she rushed to find her own beret and put it on: (Figure 5.11).

Figure 5.11 Connie becomes Daddy Pig

As she poses in front of the screen, she murmurs "me Daddy Pig" and then more confidently repeats this as she turns to Phoebe, who interprets her utterance as "like Daddy Pig." But Connie insists "ME Daddy Pig!" until Phoebe agrees with her. In a playful context, it is perfectly possible to *be* Daddy Pig when one feels like it, without ceasing to be Connie. In his important essay "Television as Educator" (Tripp 1992), David Tripp summarises a six-year-old's responses to adults' insistence on precise distinctions between real and not-real: "Well you can call them real if you look at them like this. But if you look at them like that, they're not" (p 263).

5.5.2 Playing with Modality Judgments

The "slipperiness" of fantasy-reality distinctions is illustrated in the following exchange which occurred on 31st July 2013, when the children were aged 3;7. Phoebe suddenly decided to ask the children about their modality judgments in relation to the continuity presenter they were watching on Milkshake (Channel 5) who was talking about the Jellyjamm animated series, set on "Planet Jammbo". I quickly snatched up my iPhone and began an audio-recording, whose quality is considerably compromised by the loud TV sound so that several utterances are inaudible and speakers sometimes difficult to identify, but in which Phoebe's bright tone of voice clearly indicates that her questions are intended to be playful.

P Can we go and see … can we go to the castle, where they live?
C? Yeah

P we can? *[pause/loud sound track]* No?
A? *[??teacher? + inaudible]*
P ooh look! *[Presenter VO let's go to Planet Jammbo!]* You think she can see us?
A? I think she can!
P You think she can see us? Do you think that she can see us, that lady?
A? Yeah
P Is she waving at you and saying hallo?
A? Yeah
P Do you think we could go and sit in that room with her? That'd be good wouldn't it?
C? Yeah
P Yeah?
A I'd get to know her name
P Yeah I don't know her name either, I wonder. If we went there, we could ask her, couldn't we?
C+A Yeah
A *[inaudible]* …and we could see her kids
P see her what? Oh you'd like to see her kids [A yes] you'd like to see her children *[both children talk at once]*
A They're Milkshakers[29]
P They're Milkshakers? Her kids are? Ah so when she's saying 'hello Milkshakers, well done Milkshakers' is she talking to her children?
A Yes. I think she is
P Oh I thought she was talking to you. Is she not talking to you?
A I think she was talking to her children.

P Ah I see *[both children talk at once]* They were asleep, her children?
A Or waiting outside *[A – inaudible]* So she's inside, and they're outside. *[TV noise]* What about Jammbo? Could we go to Jammbo Planet? Do you think we can? It'd be fun to go to Jammbo, wouldn't it Connie? How would we get there? Connie? *[TV noise]* How would we get to Jammbo?
C We'd jump through the telly
P We'd jump through the telly *[TV noise]* Shall we do it now? Go on then.
C No-o! [P no?] The glass's come off
P Oh I see, the glass has go to come off the telly and then we could jump through. Aah. Do you think we could go to Jammbo Alfie?
A *[decidedly]* I think we could!
P Oh. Ok.

Phoebe asks apparently serious questions about the reality status of what they are seeing, but she also adds several clear invitations to fantasise: "that'd be good, wouldn't it?" and "it'd be fun to go to Jammbo." Alfie plays along with this; Phoebe eventually decides to encourage

[29] Continuity presenters on Milkshake address the child audience as "Milkshakers;" perhaps this is what leads Alfie to conclude that he is not one of them.

Connie to join in with her theory about how to get to Planet Jammbo. But Phoebe also manages to extract two interesting and probably serious theories from the children: that the continuity presenter is speaking to "her" children (Alfie may be thinking of her as a teacher rather than as a parent here) who remain invisible to us; that "the glass" has to be taken off the TV screen before one can jump through it. Here Connie may be proffering this as a technical objection to Phoebe's perhaps rather alarming proposal that they might try to jump through the TV screen there and then; but it is also interesting that she refers to it as "glass," when she has ample experience of touching the screen surface and must know that it is not made of glass. It could be that the reference to "jumping through the screen" may remind her of the moment in *Animatou* when the cat not only does jump through a screen (though it is a computer screen rather than a TV) but also taps on it with its claws, making a sharp "glass-like" sound, and later hammers on it loudly from inside. In this dialogue, both children demonstrate a willingness to join adults in the sort of playful conspiracy that Woolley describes as "fantastical thinking"(Woolley 1997, p992).

5.5.3 Exploring the Fantasy-Reality Distinction

The children's explorations of fantasy-reality distinctions came up several times in my interviews with Phoebe and Dickon. When the children were 1;10, Phoebe told me about their relationship with the highly realistic animal glove puppets that they liked adults to "animate" for them:

P It is almost like they think they're real, in a way, but they know that when I take my hand out then it's not real any more.
CB So they're enjoying the tension between almost real and not really real at all?
P Yeah. (Baseline Interview, 13th October 2011).

Three months later, when it was midwinter and the children had had numerous opportunities to see the moon, Dickon recounted an exchange with Connie about the Eric Carle book and film *Papa Please get the Moon for Me* (see Case Study 2, Chapter 3):

D The first time she saw the programme, the DVD, the next day, we saw the moon, and she was saying "oooeeeh! Get me the moon!" … And I said "I can't get you the moon!" you know, and erm so when we watch it, I say "no one can get you the moon" in one breath, and in another breath, it's like, yeah, daddy can get a ladder and go to the top of a mountain, you know, so they know there's a reality/non-reality, sort of, you know, relationship vis a vis TV, so the first time she's seen it, she asked me to get the moon and she kind of expected me to, and when I said no, I can't, she was angry, but now she sort of understands that I can't get the moon
CB Was she really angry?
D Yeah! She was like GRRR, doing all that, but like when she watches it now, she doesn't

> get all angry with me cos I can't get her the moon. And when we see the moon, she might reach up to it, but she doesn't expect me to get it. I think he also wanted it, he was going "I want it. I want it" and he was trying to sort of, as though he was pinching it off the screen, but I don't think he really thought he was going to get it off the screen. (Interview 19th January 2012; see also my discussion of "screen-touching" in Section 5.4.4)

"Getting the moon" featured in two other movies that the children saw - *Laughing Moon* and *Little Wolf*.[30] This is of course a familiar thread in the vast array of magical and fantasy scenarios in cultural products for children, including literature and movies, and extending to toys and games. In this wider context, some scholars offer more nuanced accounts which are closer to the indulgently ambivalent line that both Phoebe and Dickon take in these interviews. Woolley points out that "both children and adults entertain fantastical beliefs and also engage in magical thinking" (Woolley 1997, p991) and urges that we should think in terms of "a continuum of ontological commitment to what we think the world is really like" (p991). She also points out that there is a dearth of research about this topic on children between the ages of 18 months and 3 years, suggesting that it may be in this period that "boundary confusion" takes place. A later paper (Sharon and Woolley 2004) – although based, again, on 3-6-year-olds – argues that, "rather than having misplaced the boundary between real and fantastical entities, young children are still in the process of actively constructing it" (p 308). But "active construction" implies individual effort: an important dimension of the twins' exploration of modality, as exemplified above and also in the self-conscious co-viewing events, was its sociable playfulness. The innumerable games and rituals from peek-a-boo onwards, that parents and carers play with children, are ways of safely exploring emotions, desires, jeopardy and safety, identities, ethics, metaphor – and modality (Edmiston 2008), within the pleasurable safety of intersubjectivity (Trevarthen 2005). Edmiston takes from performance theory the idea of the *provisionality* of play: that it is a context in which we see the world as dynamic and changing: this can be seen clearly in two-year-olds' avid experimentation with the boundaries of the real.

Another aspect of this exploration could be seen in Connie and Alfie's interest in touching the screen. Their interest in this occurred within the 18-month-3 year period where Woolley surmises that "boundary confusion" may take place. Studies of infants by Troseth and by Pierroutsakos and DeLoache suggest that attempts to touch objects represented in pictures demonstrate this confusion (Pierroutsakos and DeLoache 2003, Troseth 2010). Having studied

[30] Little Wolf (dir An Vrombaut, UK 2008) is available at https://www.youtube.com/watch?v=TrnpDk6TdXo (retrieved 2nd September 2017).

the ways in which the twins reached out to touch the TV screen (see Section 3.4.2) I want to offer another perspective, which suggests that "boundary experimentation" might be a more appropriate term.

5.5.4 Touching the Screen

The episodes of careful, directed screen-touching that I describe in Chapter 3 differ from occasions when the children are touching the screen to point out something to an adult, as Connie does with the ladder in PPGMM (Figure 3.16) and from playful interactions like the strawberry offering in ECF3 (Figure 3.19). I only saw it done in second or subsequent viewings, except with *Taps* (see Figure 5.13) and usually it happened when the child concerned was close to the screen on their own. It is a considered, exploratory gesture, and in most cases seems to start with a single item (eg beak, teddy bear, orange, cat's tail) but then the child's attention seems to be drawn to the uncontrollable flow of images that is an essential feature of movies. Thus two things are going on during screen-touching: the attraction of the original object and the change of the child's original focus to the flow of images beneath the finger. On each occasion, screen-touching starts when an object or character is in close-up, and the child's gaze then shifts to scan the moving images or, as in Figures 3.9 and 3.14, to accommodate a change of shot. The touching is gentle and exploratory, and ends quickly, perhaps when the child realizes that by concentrating of a small sector of the image, they are missing what else is going on in the film or, in Alfie's case in ECF4 (Section 3.3), he is missing what is going on elsewhere in the room.

While one must be cautious in enlisting film theorists in a discussion of a two-year-old's engagement with the screen, Grodal's discussion of art films (Grodal 2009, Chapter 9) offers some interesting pointers towards what may be happening . Drawing on Lakoff and Johnson's distinction between a basic-level category (eg "chair") and a superordinate category (eg "furniture") (Lakoff and Johnson 1999), Grodal suggests that a viewer may find it impossible to perceive a superordinate category across a series of images in an art film: "the abstract disembodied nature of this type of representation has emotional consequences, for here the viewer cannot have the tense emotional involvement that he or she experiences with concrete phenomena that allow for embodied interaction" (Grodal, p 209). *Animatou* is an art film in the sense that it invokes – for adult viewers at least – a "higher meaning" in that it is really about the history of animation, not cats chasing mice. But as far as Alfie and Connie are concerned, it is about a cat and a mouse or, arguably, a series of cats and mice. Because the appearance of the

cat, in particular, keeps on being changed, perhaps the troubling yet compelling attraction of the film to Connie and Alfie is concerned with the extent to which they feel they can maintain allegiance to the characters. They know about chase formulae, but normally one either wants the pursuer to be successful, or the pursued to get away. Each sequence in *Animatou* momentarily offers this possibility, but then it is quickly snatched away. Thus the film may have, for the children, an "abstract disembodied nature."

The flow of brightly coloured, semi-abstract images of fruit and other food items in the "Saturday" section of VHC also could also have "art film" properties – at least for two-year-olds – in that they drift across the screen, without a location or a narrative rationale: they are just "there." Connie and Alfie seem to want to do what most of us want to do with art objects, if exhibition staff would allow it, which is to touch the art object, to explore its "there-ness." This is not about whether the chocolate cake or the cat are "real" or not: at this level of exploration they are self-evidently real images on a real screen. The urge to touch, I suggest, is not about attempting to find a "real" object within the screen, but about exploring the screen reality further: for example, finding out whether the object's texture can be felt, or enjoying the sight of an object passing beneath one's finger without tactile evidence of its passing. Having tried this myself, I also find it fascinating: almost hypnotic.

But in one screen-touching moment (see also Figure 3.28) there could be a specific rationale. At this point, Connie may have remembered that when she watched the movie for the second time, two weeks earlier, Phoebe and I had had a brief conversation during this scene, about whether cats have bellybuttons or not. Standing close to the screen, Connie lays her hand on the digital armature that represents the cat at this point, covering its bellybutton. She may well be deliberately masking it, because her mother had thought it shouldn't be there (see Figure 5.12).

Figure 5.12: Connie (aged 2;4) covers the cat's bellybutton

Embodiment theory reminds us of the fact that we experience the world through all our senses, and that emotion is the initial trigger of our responses (Panksepp 2004). Film's high modality status – sound, image, movement, colour, depth of field, duration – generates instinctive emotional responses, whether or not we are able to fit these into a causal chain of narrative. At two years old, Alfie and Connie quickly cottoned on to the game-like structure of predictable appearances and actions which characterizes all the movies discussed in Chapter 3. But, especially when viewing close up to a large screen, they found themselves confronted with images which did not seem to connect with the basic story elements that they already knew. Sequences like the food flow in VHC, the toys scattered around David Tennant in *Bedtime Story* and the cat's uncharacteristic stillness in the *Animatou* computer sequence, were both fascinating and disembodied: they didn't seem to belong anywhere. To a two-year-old, they may be like what Grodal calls *temps mort*: "periods in a film where nothing happens" (Grodal 2009, p 211). He claims that

> Such experiences are felt to be more permanent than the emotions and feelings cued by an ever-changing online narrative. This sense of permanence is central to the experience of higher meaning; since the meanings cannot be straightforwardly visualized, it is the saturated sense of some transcendent and abstract meaning that anchors the experience. (Grodal, *ibid*)

While Grodal is describing adult experience here, we cannot discount the possibility that for a two-year-old the movement and change of images underneath their pointing finger may be a richly mysterious moment, drawing their attention to some of the basic characteristics of movies: they move; the movement cannot be stopped; the images change. What is coming next? Something new, or something I can remember, and name? To Connie and Alfie, being able to identify and name things on the screen was their priority at this stage of movie-watching, and touching the screen was initially linked to this: pointing out the toucan's big beak in ITNG and pointing out the very long ladder in PPGMM were social activities. But the later pointing events were not social: they both touched the screen – or held on to their touch – in moments of quiet contemplation.

A further (and, in terms of my data, final) episode of screen-touching occurred later on when the children were aged 2;5 and were watching *Taps* for the first time. This was the only occasion when they actually did look as though they were trying to manipulate objects on the screen (Figure 5.13).

Figure 5.13: Both children (aged 2;5) reach for the taps

Two of the tap characters have bent over and turned to look crossly at the right-hand tap. Connie brushes her hand across the left-hand tap while Alfie pokes at the middle tap with his forefinger, exclaiming "up tap!" exhorting it to resume its original upright position (which it soon does). But even these gestures are tentative. They are, I suggest, still *exploring* the modality of the image, rather than being "confused" about it. It is important to state that at this point, the family did not own an iPad or a smart phone: the children had virtually no experience of

"swiping" a screen and had not yet shown any other indications of knowing touch-screen technology.

Connie and Alfie's temperamental differences added yet another dimension to their explorations of modality. Dickon and I discussed these differences in an early interview:

D [for Alfie] the Gruffalo story was … all about fear and status and relationships, whereas Connie's much more, erm, seeing the pattern and the sequential, you know, she learns the story, it seems to me, whereas Alfie's looking at the story and at the relationships., but she knows it, she knows what's coming next.

CB Which is kind of like their behaviour, isn't it, that Alfie's I feel always more kind of aware other people [D: other people's attitudes] whereas Connie is interested in how do things work –

D Yeah, "how am I going to get into that!" [laughter]

CB Yeah, "can I take it apart?"

D Exactly! Yeah, what are the workings of it, whereas Alfie's much more in tune with people's energies, he's a lot more interactive, which makes him more fearful, with new people, and situations. (Interview 19th January 2012)

5.5.5 Identities

Alfie often wanted to invent scenarios and play them out. It was he who would more often ask me to use a favourite pair of glove puppets – a lion and a monkey – to enact scenes that expressed the resolution of quarrels and the reinstatement of sibling friendship. One day in December 2012 (i.e. when he was almost 3) after Terry had been cross with him, Alfie took the female of a pair of conventionally "gendered" toy fish from our bathroom and tucked it into our bed, "to get better" – perhaps to reassure himself after Terry's telling-off. He then continued this ritual for several weeks, every time he came to our house. I refer in Section 4.2 to his invention of "rescue" scenarios; in Section 4.3.3 to his preoccupation with the "spooky" scenes of collapsing buildings and foggy landscapes in *Percy and the Haunted Mine;* and in Section 4.3.4 to his anxiety about story endings. It seems to me that at least one common thread between all these scenarios was that of testing the reality of apparent threats and seeking ways to render them innocuous.

If Connie had turbulent anxieties like Alfie's, she did not act them out in the same way. Her modes of dealing with emotional crises tended to be inward-turning, silent and rejecting, until she felt ready for comfort. For some time her speech was a lot less fluent than Alfie's, which no doubt made it harder for her to initiate fantasy scenarios with others. But on 5th July 2012 (aged 2;7) she suddenly came out with a complete, perfectly articulated sentence, demonstrating not only her newly developed fluency but also her developing sense of self (Bauer, Larkina and

Deocampo 2011): "I'm not in the kitchen with Grandad any more, I'm in here with you, Nana." Working things out for herself, naming things, and finding out how things work, remain some of her major characteristics. So her engagements with modality judgments, when she felt like doing so, tended to be considered and precise. It was also in July 2012 when I first asked her whether the drawn mouse at the beginning of *Animatou* was real and she answered, instantly and confidently, with a relaxed smile, that "it's a p'tend mouse" (see Section 3.4 and Figure 3.29) and she continued to offer interesting responses to my questions about this movie's multiple modality levels, including, eventually, at age 2;10, "I don't know" in response to my question about where the animated mouse has come from when it suddenly drops on to the animator's "real" desk from the top edge of a sheet of paper – an example of "awareness of the self's actions, intentions, states and competences" as described by Kagan (Kagan 1981, p118). In the same month, on an occasion when I was alone with Connie at nap time, she asked me to read her "the dragon one" ie *The Paper Bag Princess* (Munsch 1980) and, before I could start reading, asked me "Is it true?" (I replied that dragons aren't true but that people do sometimes change their minds about whom they want to marry).

However, both children remained resistant to the concept of known figures adopting different identities. At age 2;11, both refused to believe that Justin Fletcher played all the different characters in Gigglebiz, and furthermore disagreed that he was the same person who played Mr Tumble in their former favourite Something Special. This is consistent with Fernie's finding (Fernie 1981) that more than half of his sample of 5-year-olds did not understand that TV characters are played by actors (quoted by Chandler, 1997). However, the movie industry has since the early 20th century assiduously sought to blur the boundary between stars and their roles, playing on the power of desire to affect everyone's modality judgments (Woolley 1997). This perhaps correlates with Connie's extreme distress on Boxing Day 2012 (aged 3) when she saw an animated e-card I had made, using JibJab, which featured a cut-out photo of Dickon's face rolling helplessly downhill inside a large snowball. Her affection for her father and concern for his wellbeing overrode her usually quite astute modality judgments. Strangely, Alfie laughed at this card along with the rest of the family: perhaps in his case it was the social solidarity of laughter that overrode the alarm about Dickon's fate that we would have expected him to have. Two years later, when they had both become fans of the BBC's *Walking with Dinosaurs* series featuring Nigel Marven and amazingly realistic CGI dinosaurs, Alfie did know that the dinosaurs were not real, but nevertheless would argue that "if you could get really deep down in the sea, you *might* find dinosaurs" – such was his hope that some of them might have survived somewhere. I also know that the dinosaurs aren't real, but this does not stop my mirror neurons

making me shrink away instinctively (even while watching the programmes on my own) when Nigel Marven gets too close to one.

As Hodge and Tripp (1986) point out, therefore, "judgements about 'reality' are complex, fluid and subjective." Modality is "so strongly affected by innumerable forces that it cannot be treated as a simple variable" (p 130). But to my mind it is the very complexity and variability of modality judgments that make them such an interesting and important part of children's developing understanding of movies, and their roles in our culture. It is being interested in the fine distinctions and guesswork that are involved in modality judgements, that is a large part of the pleasure of movie-watching, and of being able to understand narrative.

5.6 UNDERSTANDING NARRATIVE

In Section 1.1.5 I cited key components of the ability to follow narrative, such as understanding character motivation, recognizing causal sequences and holding earlier narrative events in memory. I certainly regard these as essential to the mental toolkit for understanding most of the kinds of narrative that the children engaged with during the period of my fieldwork. But there is more to understanding movie narratives than being able to put together the bare bones of a linear chain. Keating suggests that "it might be more useful to see [narrative] as a complex weaving together of anticipation/culmination structures in which our emotional reactions to present events are just as important as our anticipatory reactions to future events" (Keating 2006, p4). Based on the principle that "narrative is fundamentally shaped and oriented by our emotion systems" (p 65), Hogan argues that the structural analyses of "classical narratology," though valuable, have neglected to consider emotion and failed to recognize that "to identify an event or attribute a cause to it are both functions of emotional response" (Hogan 2010, p 67). My interest here is not in attempting to provide yet another theory of narrative per se, but to identify aspects of the children's relationship with movies that may throw fresh light on the early stages of what Hardy refers to as a "primary act of mind" (Hardy 1977)and Hogan describes as "a passion for plot" (Hogan 2010).

5.6.1 Diakresis

Wojciehowski's account of diakresis – the process through which, as we watch, we separate out what is salient enough to enter into our conscious awareness (see also Section 1.1.5) – can be adapted to help consider the two-year-old viewer (Wojciechowski 2015). Wojciehowski's adult

viewers know (or think they know) what is narratively salient as they watch; two-year-olds may not: but this does not merely mean that they "make mistakes" or "miss out" on features that "really are" salient to the narrative. What two-year-olds are undoubtedly doing as they watch with focused attention, is separating out what is salient *for them* (for example in Connie's case in April 2012, the cat's bellybutton – see previous section). As they get older, their memory capacity increases, they see more movies and acquire wider knowledge of their culture, and they will refine their ideas about salience. But the important thing is that they are already using diakresis as a mechanism for making sense of what they watch. And, as I have discussed in Chapter 4, a major part of what drives their ideas of salience, at least initially, must be emotion (the other part being the promptings of co-viewers, as I have discussed earlier).

An interesting example of this process at work can be seen in Alfie's and Connie's different responses to the film *Finding Nemo* (dir. Stanton and Unkrich, USA 2003) which they watched on Boxing Day 2012, when they were just 3. I did not observe this: it was recounted to me by Phoebe. As the reconstituted nuclear family of Nemo, Marlin and Dory swam happily away at the end, Connie remarked "now they're going to find the Mummy." To Phoebe's protest that "the mummy is dead, eaten by the nasty fish," Connie retorted that she didn't see the mummy get eaten. A re-viewing of the beginning of the movie revealed this to be true: we do not actually see Nemo's mother Coral get eaten (of course not: it would be too horrible for family viewing). But Connie had been unable to "correctly" interpret the death scene: not only because the death is implied and not shown, but also because she could not countenance it emotionally. Instead, she constructed what was, for her, an alternative narrative enigma – where has the mummy gone? – and held on to it for over 100 minutes. Alfie, being more interested in the lost male child, was content to follow Pixar's version and not worry too much about what had happened to Coral. Neither of them had yet got hold of the generic knowledge and the concomitant awareness of convention that would enable them to accept that Coral was dead and gone, but each of them was using diakresis as they identified what they found to be emotionally salient. Narratives often play deliberately on viewers' and readers' diakretic efforts, deliberately misleading them into thinking that they know what is going to happen, and then confounding expectations with a surprise ending.

The Pontipine and Og-Pog fear episodes that originally happened when the children were 13 months old, and the *Peppa Pig* episode that alarmed Connie at age 1;11 illustrate more extreme instances of diakresis (see Sections 4.2.2 and 4.2.3). Their emotional distress about escaped

objects and a snapped rope created a response that could be called "mega-salience," overriding other concerns. Having discussed this at length in Chapter 4, I now want to pick up from my discussion of the "seeking" emotion, which I left at the point of speculating that it may have been stimulated particularly by movies that were stylistically and structurally different from what the children were used to: *Animatou* is an obvious example, but the children gave intense attention at least initially to anything that was new, as Phoebe pointed out in her interview with me on 15th March 2012 (when the children were aged 2;4):

P I think when they've seen something for the first time they're so awestruck by it that they tend to be very focused on it and then when they see it again they can start to predict what's going to happen.

. . . . .

So like with *Babar*, they were looking at it very intently for kind of ten minutes and then they were like "don't like this, turn it off". They give it a chance, like "ok, what's it going to do?" it's not like kind of two seconds "no I don't like it", they will watch something for a good 10 to 15 minutes and then "no this isn't going anywhere that I like, turn it off now."

In her first comment here, Phoebe implies that the children were using repeat viewings in order to establish narrative recall. It is certainly the case that with extremely familiar movies such as *The Very Hungry Caterpillar* and *The Very Quiet Cricket* (see Section 3.3) they enormously enjoyed exercising their skills in recalling and predicting what was about to appear. But this is not the same as recognizing a causal chain of events, such as a character wanting to do or get something, or an event precipitating a further event or action, both of which rely on memory. In Bauer's account of infant and toddler memory (Bauer 2002) she points out that "the capacity for recall has been linked with the ability to provide a verbal report" (p137) but describes experiments involving imitation which show "that long-term recall processes are emergent by 9 months, and that they become reliable over the 2nd year" (p138) even though at this age the children struggled to respond to the question "what happened?" whether referring to movies or to real life.

5.6.2 Memory, Laughter and Recognizing Motivation

However, another key indicator of memory development is the ability to laugh at a comic climax in a story. In March 2012, when Connie and Alfie were aged 2;3, Phoebe observed them spontaneously laughing at a movie (for the first time, she thought). This was the *Puddles* episode of *Teletubbies* Series 1, which involves suspense and surprise. Laughter indicates a significant step forward in narrative understanding, and is dependent on memory in order to

hold in mind the build-up to a gag. Viewers and readers either have to be able to anticipate the payoff and be delighted when it eventually happens; or to be surprised by the payoff and enjoy features such as appropriateness, skill, character typicality and narrative neatness.

Being able to articulate an account of narrative features such as character motivation and story structure is much more challenging. During the children's 8th viewing of *Animatou* when they were aged 2;8, three very brief exchanges signal Alfie's readiness to talk about his understanding of the narrative:

[On screen: the "real" desk appears as the cel painting sequence begins]

CB Oh! What's happening now?
A He's gonna paint it. His cat *[licks lips]*
CB Who's going to do that?
A+C The man
CB Aha. The man *[on-screen: painting finishes]*

Here, Alfie and Connie both ascribe agency to "the man" ("he's gonna paint it") in the cel painting sequence, but Alfie also ascribes ownership ("his cat"), inferring relationships between characters in the film: a key basis for later understanding of character motivation in narrative. As Branigan (1992) points out, "comprehending a narrative event requires at least recognizing how agents interact with one another in a *causal* framework" (Branigan 1992, p101). Fitting the painting process into a causal framework (ie, the sequence needs to demonstrate the cel animation process) would demand sophisticated cultural knowledge, but the building blocks of "agency" and "relationship" are nevertheless an important foundation and he reveals that he is on the way to articulating them.

[Both serious now gripping cups as cat and mouse enter arcade]
A He's gonna catch him again
CB Will he catch him?
A Almost

It is tempting to load major implications on to Alfie's response here. By realizing – and articulating – that the key narrative element of *Animatou* is that the cat always "almost" catches the mouse, he unconsciously sums up the appeal of Warner Brothers and Halas and Batchelor cartoons from the 1940s onwards, in which the "almost catching him" trope is the key to the emotional drivers of audience response. These can include: anxiety about whether the pursuer will achieve his goal; curiosity about how he will be foiled this time; delight in the ridiculous

ingenuity of the escape – and, in the case of the Roadrunner, vestigial sympathy at yet another terrible punishment for the Coyote's hubris. Alfie is here able to express an insight that may, later, enable him to unlock further reflections on "chase" formulae in narrative. Previously, he would only state that the cat "doesn't" catch, or eat, the mouse. So this is an interesting step forward. Harris discusses 2-to-3;8-year olds' uses of "almost" when talking about real-life events such as "I almost fell down" (Harris 2000, p126), asserting that this provides "clear evidence that two- and three-year-old children understand how an observed action might have turned out differently" (ibid). Being able to observe this in a movie could be construed as more sophisticated, given that, for all their multimodality, movies cannot provide the same density of experiential data as does real life.

Alfie reflected further on the film after it had ended. He had taken to repeating the query I often made at the end of this film and in other viewings as well: "What happened?" usually as a kind of stock response that does not seem to expect an answer, especially as it was usually followed by me asking "well, what do <u>you</u> think happened?" But here he voluntarily, and for the first time, addresses the question to another adult in the room (Terry):

A What's happened Grandad?"
T Er..um..has the film finished?
[A drinks]
CB Yeah, Grandad can't see it from where he's sitting *[A lowers cup and looks at T]* Can you tell him what happened?"
A *[drops cup on floor and sits forward]* He tried to catch him but he would've but *[falling back on sofa]* the mouse ran as fast as he could and then NEARLY got him!
T Nearly. Not quite?
A No-wuh! *[flinging legs forward then levering himself upright]*

This exchange amplifies the ("almost") comment he makes during the film, and underlines the fact that he can now remember, and is now able and willing to recount, the essential features of a story: using bodily movement together with his utterances to underline and amplify the force and importance of what he has to say, for which he does not yet have many words or much fluency. They were both by now just about at the stage of beginning to be able to handle the "what happened?" question. But I believe that this understanding was at least partially grounded in the evidence of embodied simulation that I have noted at several points: see Sections 1.4.4, 3.4.3, 5.2.5 and 5.5.5; in other words, that narrative understanding emerges from evolved, instinctive behaviour that enables us to note, imitate and begin to understand the

actions of others – including those on screen – and therefore that it begins at a very early age. Hood et al were interested to discover that 2-3-year-olds could articulate causal relations, thus contradicting Piaget's view that this could not happen until the age of 7 or 8 (Hood, Bloom and Brainerd 1979) – but they as well as Piaget were dependent on children's levels of verbal fluency. What I have described suggests that narrative understanding may begin well before verbal fluency, and that movie-watching may play a key role in helping to develop this.

5.6.3 Changing Preferences and "Using It Up"

Here I want to step back again and discuss what had been going on in the five months between the twins' laughter at Teletubbies and the beginnings of their ability to articulate elements of narrative. A key factor in their viewing during this period was their increased interest in seeking out new movies to watch. In her interview with me on 15th March 2012 (when the children were aged 2;3) Phoebe pondered their shifting movie preferences:

P *Peppa Pig* was MASSIVE for ages, wasn't it, they just…
CB How long is "ages"?
P A couple of months.
CB And it's not any more?
P Mmm … they had it last week – and they got a bit bored of it – we've watched all the ones they have at the library – now, a couple of times, and they see – say one DVD has ten episodes on it, and they watch it, you know, they see probably each episode five or six times…

However, we were both conscious that these expressions – "massive," "bored of it" – were not capturing what we felt was going on as the children's preferences changed over time. It was Phoebe who came up with the phrase "used it up" during one of our informal telephone conversations. Over time we agreed that this best reflected our sense that the children were "working" to make sense of movies until they reached a point where they wanted a new challenge.

Over the following six months (age 2;4 to 2;9) the children's viewing preferences started to include movies that were notably more complex that what they had seen so far. The prime example here was Tree Fu Tom, a series to which the children developed great loyalty from spring 2012 (aged 2;4) despite Phoebe's concern that it was too old for them (it is aimed at 2-6 year olds – a very wide range). Each episode, which is 28 minutes long, starts with a live-action sequence, accompanied by a rousing choral song, to introduce Tom as he emerges from his house and runs into the woods where he is transformed into a tiny, animated version of himself that whirls up into Treetopolis, a miniature world located in an old tree, presided over by a benevolent, vaguely Asian human female called Treetog. There he has adventures with various

characters including a feisty Texan butterfly called Ariela (with whom Connie closely identified). The dialogue is entirely diegetic and is fluent enough to keep six-year-olds watching. It was certainly beyond the children's linguistic capabilities when they were 2;4, but nevertheless, the programme as a whole kept them interested for several months until they had "used it up." There is a lot of fast action and rapid changes of shot and framing: 28 minutes of this represents a considerable demand on memory. The show is designed to help children with dyspraxia and other movement disorders, so the action periodically stops while Tom models a series of exercises direct to camera, ostensibly to invoke "big world magic" in order to resolve a tricky situation. Figure 5.7 (above) shows Dickon encouraging the children (aged 2;7) to copy the actions. This soon became the least interesting part of the programme for them: on 18th October 2012 when Connie (aged 2;10) was watching it on her own with me, she spent each of these sequences literally rolling around with boredom or looking for other things to play with. It seems that within five months (or probably less) they saw through the over-determined use of direct address which required them to believe that Tom really could see them and that their imitation of his actions could contribute to the narrative outcome by creating "big world magic".

But from their initial engagements with it in April 2012 (aged 2;4) they watched it often on Virgin Catch-up, and adopted phrases and actions from the programme. Alfie playfully identified with Tree Fu Tom, performing "big world magic" to open the doors of a tube train; calling out "we're a team!" when he found his swing's movements in the local playground harmonizing with that of another (unknown) child swinging next to him; and shouting "Disaster Strikes!" when he pooed in his pants. Connie liked to whirl things around her head and yell "yee hi!" in imitation of Ariela with her lasso. But her gendered identification was not necessarily maintained when Alfie was not around: by herself, she would readily claim that *she* was Tree Fu Tom. The children's interest in this programme continued into the autumn of 2012, being finally overtaken by *Abney and Teal*, a new animated series from Ragdoll (production company for *Teletubbies* and *In the Night Garden*) which was more carefully tailored to their age-group and in many ways less talky and stylistically complex, and less demanding on memory, than *Tree Fu Tom*, although, like other Ragdoll productions, its diegetic "rules" are more playfully variable.

I discuss *Tree Fu Tom*'s unfortunate gender and class stereotypes in my blog post at http://toddlersandtv.blogspot.co.uk/2012/09/learning-to-watch-tv.html, but there is no doubt that it served to introduce the children to extended narratives and a much more complex visual style than they had been used to, and they had to watch each episode intensively several times

before they had "used it up," and as a new series appeared while this was going on, there was a lot of watching to do, which was dependent on scheduling since this was before they had a cable box:

CB so how many times do they have to watch them before they know them, do you think?
P Couple? Three times? Till they really kind of go "I want the diddle diddle dur one"
CB But they're still learning it even then though [yeah] cos there's still more to suck out of it.
P Yeah but when the next series started, it was almost like it was too much hard work, to keep seeing these new ones every single day. So they weren't – they kept going – they wanted "I want the old ones" they didn't say the old ones, they said "I want the whatever ones" so I was "They're not on at the moment, that is finished, there's new ones now, and you know, they'll keep showing these for a long time and then you know, they might show the other ones again, but … so 'the squizzle one' (they call it) that's not on, and it won't be on for a very long time." I think they've kind of got that now, they've kind of, they've let go of those and they're now into this new batch, but it took them a little while, to become used to the new stories.

Phoebe's expressions "too much hard work" and my "more to suck out of it" both invoke the "using it up" concept, based on the perception that the children were engaged in independent study when they were watching new material, and needed repeat viewings in order to maximize their understanding. *Tree Fu Tom* presented them with considerable demands on their memory. Wojciehowski emphasises how heavily diakresis depends on "the persistence and decay of narrative within individual memory" (Wojciechowski 2015, p123) and draws on Dehaene's account of the "bottleneck" of conscious access to demonstrate how complex the process is of identifying *and remembering* what the viewer finds to be salient in a movie. The fact that memory in two-year-olds is still developing (Bauer et al. 2011) reminds us that the process of following a movie narrative is harder for children than for older viewers. But not only did the children "work hard" to make sense of movies, watching them repeatedly until they could do so: they also swiftly moved on to other movies that were often more challenging, confirming Kagan's finding that from age 2;2 onwards, children deliberately set themselves difficult problems (Kagan 1981, p130). Campbell suggests that his granddaughter wants to memorise "and therefore control" the books read to her" (Campbell 1999); she demands repeated readings "because of her sheer delight in the text, but it also enables her to know the book and so acquire ownership of the words" (p143). I am not sure what the terms "control" and "ownership" mean here, except as a way of describing the ability to remember a narrative and therefore understand, and perhaps reflect on it. He has less to say about how Alice moved on from one book to another, which was a key feature of the twins' developing expertise in

managing their viewing. I find Lancaster's "expectation of significance" a more apt concept to explain what drove the children's growing confidence as movie-watchers (Lancaster 2001).

A glimpse of where this development of understanding was leading may be seen in my final video in May 2013, when they were aged 3;5 and were re-watching selected scenes from the animated feature *My Neighbour Totoro* (dir Miyazaki, Japan 1988). Another mode of co-viewing had been established: cuddling up together with their teddies and confident with the feature-length narrative, but supporting each other in braving what were still alarming features of the movie, but which they remembered and knew when to expect: Totoro's loud roars; the suspenseful search for the lost child Mei; the friendly but weird Cat Bus (Figure 5.14).

Figure 5.14: co-viewing with teddies and each other (age 3;5): *My Neighbour Totoro*

It is worth comparing this image with the very similar Figure 4.10. A cursory glance might suggest that they are the same image, but they are not. In 4.10 Alfie's right shoulder is hunched and his right knee is drawn up; Connie has shrunk down so far that she is just peeping around the big teddy bear: both are anxious about the first appearance of the "totoro" creatures, one of which makes fearsomely loud noises. In 5.14, Alfie's shoulder and knee are both relaxed; Connie is more upright and her head is tilted attentively as she watches. In 4.10, they are managing their feelings of ambivalence between curiosity and fear before the first appearance of the big Totoro; here, they are pleasurably anticipating the reconstitution of the human family at the end of the film. Connie comments on a sequence of shots, naming the "Cat Bus" and commenting "isn't it strong!" then "on the tightrope" (as the Cat Bus balances on telephone wires) and turning back to me "isn't it 'mazing!" Later, when the mother and father are talking in the hospital room while the children Satziki and her sister Mei hide in the branches of a tree outside, Alfie predicts what is about to happen: "they're going to throw something down." This

is accurate in plot terms but is not actually shown: the mother thinks she sees the children in the tree but when the father looks they have vanished. He then finds their parting present lying on the bed: it's a maize cob, on whose outer leaves Mei has scratched "Mummy". Alfie has internalized the culmination of the scene and imagined the "missing" shot.

SUMMARY

"Reading" and enjoying movies is an important part of our culture. The basic premise of my research is that children have to *learn* how to make sense of movies, and that a significant part of this learning must take place before children are able to express their understandings verbally. This chapter has explored three significant and linked factors that contribute to this learning: the social context of viewing, which I discussed in terms of the five modes of co-viewing practice that I observed; the development of the children's interest in making modality judgments; and, growing out of both of these, a developing, largely self-driven set of skills (of which memory was a significant component) in following and interpreting narrative.

The five co-viewing modes were drawn from just over half of the viewing events that I videoed, where other adult(s) were present. On the basis of Phoebe's account of the patterns of the children's own viewing practices, as well what I observed in their house, these modes are not very typical of their day-to-day viewing. So they provide indicators and examples, rather than a critical mass of evidence, of what was available to the children when adults were watching with them, to some extent in terms of direct comments and questions, but more importantly in terms of the viewing practices and attitudes to movies that the adults modelled, both through their bodily dispositions and relationships to the screen, and through their own instinctive physical and verbal responses. I have drawn links and comparisons between this analysis and other cultural practices with children such as shared reading.

The extent to which the children either could – or wanted to – make modality judgments, was explored in the second main section, drawing on Hodge and Tripp's use of this term to denote viewer judgments about how true or real a movie is meant to be. Complicating factors here were the amounts of fantastical play that children were encouraged to engage in, and which were promoted by their caregivers: it is therefore Woolley's concept of a "continuum of ontological commitment" that makes better sense here than some scholars' use of the term "boundary confusion" over children's supposed failure to distinguish between fact and fiction

(Woolley 1997). The phenomenon of getting close to the screen, and touching it, was examined again in this context, as were the children's temperamental differences and how these may have affected their modality judgments.

The final section of the chapter dealt with the children's growing ability to follow narratives. Wojciehowski's (2015) concept of diakresis was important here, and I cited instances in which emotion plays a stronger role in two-year-olds' identification of salient information in a movie, than it does for adults, where it is part of a larger cultural repertoire. Referring back to the role of embodied simulation in developing empathy with characters seen on screen, I argued that narrative understanding begins well before verbal fluency, and that movie-watching may play a key role in helping to develop this. Noting the futility of constantly asking the children "what happened?" I described how they sought out new and more challenging material to watch, thus necessitating many re-viewings, until they felt they could remember and understand them enough, and so had "used them up." An interesting feature here was their interest in engaging with movies that were almost certainly at the far edge of their capacity to follow dialogue and shot changes, but which would therefore reward frequent re-viewing.

CHAPTER 6
CONCLUSIONS

This chapter summarises the main features of this research and the findings that I hope may generate further studies.

6.1 Research Question

In this thesis, I take a new approach to children's relationship with movies. Studying a pair of twins between the ages of 22 and 42 months, I looked for evidence that they were learning how to make sense of movies. This differs from most other scholars' work on children and media, in that I focused primarily on the third year of life, ignored questions about the risks or benefits of movie-watching, and posited my research question on the hypothesis that children must initially learn how to understand movies' complex formal features and generic conventions, before they can follow and enjoy extended movie narratives.

As I explain in the Introduction, my professional experience in moving-image media education led me to ask how children learn to make sense of movies. The evidence from teachers, and from some of the developmental psychologists who have studied children's television viewing (see Section 1.1.3), is that this must happen very early on in life. In order to investigate this question further, I seized the opportunity of studying my own twin grandchildren, thus enabling me to undertake a longitudinal, ethnographic study as an appropriate way of gathering evidence about the everyday activities of very young children.

The literature review in Chapter 2 emphasises the numerous challenges that confronted me. There is a dearth of research on children under 3 (Rowe 2008), especially in home contexts (Plowman 2013) and even less on this age-group's relationships with movies (Lealand 1998). Rather than looking for what have so far been seen as precursors to further learning (such as language, literacy or technological skills) or for the risks or benefits that movie-watching may entail, I focused on the possibility that viewing behaviour may provide evidence about the practices and processes through which children of this age are already learning how to make sense of movies. This meant that I was attempting to build theory on the basis of widely separate, if not actually antagonistic, traditions: drawing on film studies to map out the hermeneutic puzzles that very young viewers must face, and searching studies of infancy and

early childhood to help me understand the remarkable video material that I was starting to collect (see Sections 1.1.5 and 1.2).

6.2 Theoretical Framework

Sociocultural perspectives on children's learning and development, including their relationships with media, were helpful to me in exploring the convivial and often boisterous family viewing events that I had recorded (Chapter 5). There was always at least one adult (me) with the children in the viewing events that I recorded and observed, and often two or three, especially in the earlier phase of the fieldwork. It seems probable that the adult presence contributed in important ways to the children's developing understanding. The adults' voices created an "aural ensemble" of movie sound tracks, murmured reactions to the movies, direct address to the children and conversation amongst themselves, which at some points may have directed the children's attention or supplied ready interpretations, but also continually modelled the family's attitude to movies, including how they should be watched, the existence of personal preferences, and the cultural values attached to them. This undoubtedly contributed to the children's expectations of the movies they watched. In addition, sharing enjoyment and achieving shared interpretations (sometimes after initial misunderstanding – see section 3.2.2) were immensely pleasurable and satisfying (see Section 4.4) and thus played an important role in the family's sense of solidarity and identity.

But in considering the children's intensely physical and often idiosyncratic responses to what they watched, the sociocultural perspective was less helpful. Embodied cognition approaches, with their emphases on the complexities of perception and on instinctive, evolved behaviour, offered me ways of analyzing the physical details of what initially appeared merely as "being attentive". Recognising the role of emotion in driving action and cognition illuminates two-year-old behaviour and enabled me to identify more signs of the children's efforts to make sense of what they were seeing and hearing. I began to see their viewing experiences not merely as a route to recognizing and interpreting the formal features of movies, but also as a way of expanding their opportunities for thought and reflection on human behaviour, imaginative possibilities, causal chains and the modal status of representations. The concept of embodied simulation, based on the discovery of mirror neurons (Gallese and Sinigaglia 2011), modifies the somewhat individualistic approach of embodied cognition, and opened up key dimensions of this project, not only in considering the social context of viewing, but also, I argue, in recognizing the role of movie-watching in modern human ontogeny. From this point of view, emotions are

the drivers, and embodied simulations the mechanisms, by which very young children can start to follow and enjoy movie stories well before they can understand the words in their songs and picture-books, demanding repeated re-viewings until they have "used up" a movie and seek further pleasurable challenges elsewhere. I see the early learning enabled by children's intensive – and often self-directed – viewing and re-viewing of movies as closely integrated with their learning about the medium and its role in their family life.

6.3 Findings

The fact that Connie and Alfie were selective, and increasingly so, both about what movies they each chose to watch and on what movies – or parts of movies – they each decided to focus their attention, was an important early finding. It generated questions about what aspects of those movies attracted them and, in many cases, led to numerous repeat viewings. While it is extremely difficult, and perhaps impossible, to find out with any certainty what drives a child's movie preferences before she has developed intelligible speech, it was noticeable that the twins invested their most intense attentiveness, and sustained re-viewing, in material that seemed to be offering them hermeneutic challenges, such as movies they had never seen before, and movies that were stylistically distinctive. This includes mainstream children's television (e.g. *Tree Fu Tom*) just as much as non-mainstream movies (e.g. *Animatou*). I therefore do not see re-viewing merely as a search for re-living the enjoyment of the previous viewing: it can plausibly be regarded as a search for further meaning (which is clearly also enjoyable). This would then imply that in the initial viewing they understood some things, but were aware that there was more to discover, and did not find this frustrating or baffling: when this did happen, as for example with *Babar the Elephant* (see Sections 2.3.1 and 5.6.1) , they would reject a movie after a few minutes.

The studies I reviewed in Section 1.1.3 were concerned first and foremost with cognitive engagement and comprehension, assuming that if children do not understand what they are watching, then they will lose interest. There is little acknowledgment of the possibility that partial understanding could drive re-viewing. By accepting the importance of emotion in generating attentiveness, by adopting a wide view of what emotions are and how they function, by using the concept of diakresis to help envisage what may attract attention, and by recognizing the importance of embodied simulation as a "way in" to understanding characters' motivations and actions, I have to conclude that immensely complex and idiosyncratic processes can be at work in a two-year-old's initial encounter with a movie they haven't seen before.

There are endless possibilities for what salient features a child might select, and what might spark their initial commitment to see, hear and find out more. Lancaster's phrase "an expectation of significance about the symbolic systems they encounter" helpfully characterizes much of what goes on in these initial viewings (Lancaster 2001, p136).

6.4 Learning

This research was never going to answer, in any literal sense, Branigan's question about "when and how … children understand eyeline match, screen direction, cross-cutting, an unusual angle, off-screen space, or non-diegetic sound" (Branigan 1992, p225, and see Section 1.1.2). As I point out in Section 1.2.3, two-year-olds' learning about the formal features of movies has to be inferred from other evidence: only very rarely can it be directly identified. I provide here a brief review of what I see as significant features of the children's responses to movies, that I noted from their second to fourth years:

RESPONSE FEATURES CHRONOLOGY

AGE PHASE	APPEARANCE OF FEATURES THAT CONTINUED BEYOND THIS PHASE	e.g., see Section...	SPECIFIC FEATURES NOTED IN THIS PHASE	e.g., see Section...
1;10-2;2	Selective re-viewing of items. Naming characters and things (at this stage mainly by signing). Joy at achieving communication with adults. Focus on favourite characters.	3.2.3 3.2.2 4.4 4.4	Proximity to the screen and touching. Anxiety/distress about displaced or broken objects (Moustache and Og Pog). "Therapeutic" re-viewing (C watching *Peppa Pig* in the tent).	3.2.1 4.2 4.2.3
2;2-2;4	Verbal anticipation, repetition and naming. Rivalry over preferred movies. A's fear of endings (until age 3). Imitating characters.	3.3.1 3.3.2 4.3.4 5.5.1	Modality judgment (C and *Animatou*). Naming phenomena (e.g. changes to cat). Recall of adult comment (bellybutton). Laughing at a comic event (*Teletubbies*). Identifying key trope in story ("almost").	3.4.3 3.4.3 5.5.4 5.6.2 5.6.2
2;4-2;6	Recognising "sadness"	4.3.2	Following a character across the screen. Exploring modality levels.	5.2.5 5.5.3
2;6-3	Following character interaction and story over 28-minute episode (*Tree Fu Tom*). Viewing from the sofa.	5.6.3 3.4.3	Identifying with characters. Following a feature film. Discussion of modality. Construction of alternative narrative enigma (C and *Finding Nemo*).	5.6.3 5.6.1 5.5.5 5.6.1
3;5			Anticipating action not shown on screen (A and *My Neighbour Totoro*).	5.6.3

Of course, many of these developments were not uniquely linked to movie-viewing: some of them also occur in relation to picture-book reading with two-year-olds. The key differences between movie-viewing and picture-book reading are:

a) that a substantial amount of viewing is done by children on their own or with siblings: this is different from a child re-examining a picture book on their own, in that the movie experience is repeated fully in each viewing; thus the process of familiarization with the formal features of movies may often be more intense;

b) that children quickly learn to identify and call attention to features that interest them, not necessarily mediated by older co-viewers, and derive enormous pleasure from successfully sharing this with others: they may similarly call attention to something in a picture-book, but the co-reader role of the adult in that context usually constitutes a stronger mediating presence;

c) that if they have unrestricted access to the technology, children quickly learn how to find, view and re-view movies that they are interested in: this was not evident in my study, given the access rules established in this family, but is common in anecdotal accounts on social media and was evident in my older grandson's engagement with VCR technologies in 2002/3 (see Section iii);

d) the complex multimodal nature of movies (see Section 1.1.2).

6.5 Summary and Implications

This research opens up the extraordinary processes of movie-watching in very young children: their complexity, rapid development, and salience in children's social and cultural development. It has shown how important these experiences can be for children and the amount of energy and commitment they may invest in movie-watching.

I began, both in my introduction and literature review, with an account of the dominant tendencies, both past and present, of research on children and movies, which also drive public discourse on this topic. Where educators and psychologists have looked at infants' and toddlers' relationships with movies, it is usually with an eye to their later performance as learners or as social actors. Those few who have attempted to investigate how children cope with the formal features of movies have usually been constrained by limited accounts of what those features are, and of what that learning might entail. Where researchers present a positive account of children's engagements with movies, citing phenomena such as "active viewing" and the rich possibilities of popular culture, I argue that there is a defensive subtext to much of this work, seeking to assert benefits in the face of the dominant "risks" agenda. I find it strange that, even a century after the invention of movies, the many scholars who have provided detailed and

inspirational analyses of children's early learning and their social, cultural and imaginative development, refer to family activities, to books, toys and games, to siblings and friends, but almost never to movies (e.g. Bruner 1990, Edmiston 2008, Lancaster 2003, Nelson 1998, Prout 2005, Trevarthen 1995).

Those who have studied children and movies have noted some of the same phenomena that I have observed: intense attention, emotional responses, co-viewing with family members, decided preferences, dedicated re-viewing. But because I have studied these as potential indicators of the processes of learning how to watch, and could do so as a close family member, while using extensive video evidence, my interpretations are different from those who have had other research questions and used other methods. I see intense attention and demands to re-view as evidence of children's serious investment in trying to understand movies more fully. Wanting to reach the levels of understanding evinced by their co-viewers is a key element of this commitment. Seeing their "expectations of significance" as driven by innate emotions such as seeking, fear and joy indicates that initial limitations on understanding do not necessarily block the urge to find out more. The concepts of diakresis and embodied simulation usefully account for children's interim and sometimes wayward interpretations of movies, but also explain how they can happily continue to watch something they only partially understand. Children's imaginative capacities are exercised by movies and encourage them to address the concept of alternative realities. Their growing ability to make modality judgments links closely to their and their co-viewers' playful relationship to the screen and the playful scenarios offered by many movies. The ability to follow and understand narrative is developed by re-viewing, by the talk of co-viewers, the development of memory and, we must assume, a growing familiarity with formal features such as those mentioned by Branigan (1992).

Most teachers in nurseries and primary schools think about children and movies within the terms of the risk-benefit paradigm, if only in terms of likely parental attitudes. As I explained in Section ii, these concerns evaporate when teachers permit themselves to watch and discuss movies with children. They recognize the significance of this medium in children's lives and the learning that has been involved in their viewing practices at home. It transforms their assumptions about what children know and can do, and thus changes their expectations (Parry 2013). The notion of teaching about movies in primary schools is currently out of political favour, even as an adjunct to traditional literacy, let alone as a significant area of learning in its own right. But as Pinder reminds us, educational priorities go in and out of fashion on a regular

basis (Pinder 1987), so future curricula might take on board the implications of this early learning.

Although some movies offer children extraordinarily rich and fascinating experiences, it is noticeable that an enormous amount of movie production for very young children stays within a relatively narrow set of conventions. There is a belief – not borne out in my research – that to appeal to this age-group, movies should always be cheerful, colourful, and animated – using simplified figures with exaggerated features. I was interested to see that the interest in formal innovation that teachers had reported to me was also evident in the twins' viewing practices; the most remarkable example being their extended interest in *Animatou*. There is a case for industry investment in online channels or DVD anthologies of a more stylistically and modally diverse range of short movies for very young children.

Movies have been an important part of human culture for more than a century. They are now made and shared in ways that, only twenty years ago, most of us could not imagine. For two-year-olds in industrialised countries, learning to understand movies is an integral part of their personal, cultural and social development. Although this learning of what Woolf (1926) wondered might be "some secret language" is different from the more complex and difficult acquisition of verbal language, I have used Woolf's phrase as my title because I see the symbolic systems of movies as "secret" in two ways. Firstly, their very existence is rarely discussed or even considered in everyday discourse. Secondly, two-year-olds' efforts to understand these systems are rarely recognized or respected. My argument is that learning how to understand movies is a real and significant achievement in the lives of any two-year-olds that have access to them. I have sought to provide a better understanding of cultural experiences that have been relatively neglected, despite their important implications for human development and learning.

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APPENDIX 1: SUMMARY OF VIEWING EVENTS

The 65 viewing events are listed in date order, divided into five phases, whose stop and start points correspond to two- or three-week breaks in the project necessitated by holidays: the start of each phase is therefore a moment when the children had made some noticeable developmental advances, for example in fluency of talk. Viewing events relating to each of the three sequences described in Chapter 3 are highlighted, and those titles available on Vimeo are in bold. Some movie titles are abbreviated, especially in multiple screenings, where they are linked by + (see Appendix 2 for full titles of all movies viewed).

Column Headings Key

R/T = running time of event video, in minutes

SETTING

- Their LR = living room at the children's house (see plan in Appendix 2)
- J Lewis = shoe department at John Lewis, where the four short events on 26/09/2011 took place
- Our LR1 = upstairs living room at our house
- Their office = home office at the children's house
- Our office = home office at our house
- Their LR+kitchen = event when the video followed Alfie out of their living room and into the kitchen

CAM

- H = hand-held camera
- F = fixed camera
- H/F = event when I switched from fixed to hand-held camera

TIME

- Evening = before bedtime ie between 6.00 and 7.00pm
- Morning = after sleepover at our house: any time from 8.00am onwards
- Afternoon = usually early afternoon, after lunch and before their nap

ADULTS = adults present in the room: C = myself; P = Phoebe; T = Terry; D = Dickon

PROXIMITY = standing close to the screen; may include touching the screen; // indicates more than one period of proximity

ATTENTION = watching attentively; // = as above
NAMING/POINTING = any mode of showing recognition of character or action on screen, including signing

EMOTION = visible signs of sadness or distress, eg tears, screaming, anguished expression

MOBILITY = moving around the room; changing viewing position
+ and ++ = heightened levels of attention or emotion

	VIEWING EVENT	DATE	R/T	SETTING	CAM	TIME	ADULT(S)	PROXIMITY	ATTENTION	NAMING /POINTING	EMOTION	MOBILITY
Pre-project	ITNG Moustache	12/05/2011	28	their LR	H	evening	C, P		Both		Both++	
2011 Sept- Dec	**AMTV (Mr Bloom)**	15/09/2011	6.52	our LR1	H	morning	C, T	Connie	Connie	Connie		Alfie
	Alfie sees a TV	26/09/2011	0.51	J Lewis	H	morning	C, P			Alfie		Alfie
	Connie + Zingzillas	26/09/2011	0.39	J Lewis	H	morning	C, P		Connie			
	Twins + J Lewis TV	26/09/2011	0.26	J Lewis	H	morning	C, P		Both			Alfie
	Twins' new shoes	26/09/2011	0.27	J Lewis	H	morning	C, P		Both			
	ITNG 1	05/10/2011	27	our LR1	F	evening	C, P, T	Both//	Both//	Both		Both//
	ITNG 2	12/10/2011	31	our LR1	F	evening	C, P, T	Both//	Both//	Alfie		Both//
	ITNG 3	09/11/2011	27	our LR1	H/F	evening	C, P, T	Both//		Alfie		Both//
	Laughing Moon 1	10/11/2011	6	their LR	H	evening	C		Both++			
	ITNG 4	23/11/2011	14	our LR1	H	evening	C, P//	Both//	Connie	Alfie		Both//
	Monsters Inc 1	04/12/2011	7.02	their LR	H	evening	C, P//			Alfie		Alfie
	Monsters Inc 2	04/12/2011	7.56	their LR	H	evening	C, P		Both//	Both		Both//
	Monsters Inc 4	04/12/2011	2	their LR	H	evening	C, P		Both//	Both		Both//
	Monsters Inc 5	04/12/2011	14	their LR	H	evening	C, P					
	Monsters Inc 6	04/12/2011	5	their LR	H	evening	C, P		Both//	Both	Both	Both//
	Monsters Inc Opening: Viewing 2	06/12/2011	5.32	their LR	H	evening	C, T		Both++	Both		
	Laughing Moon 2 + Little Wolf	08/12/2011	8	our LR1	H	afternoon	C		Both//	Both		Alfie
	C + Peppa Pig Tug of war	24/12/2011	13	their LR	H	evening	C,D	Alfie	Both		Connie++	

2012 January - March												
	Baby Jake + A+C	19/01/2012	8	their LR	H	evening	C//P		Both			
	Baby Jake + Alfie	19/01/2012	10	their LR	H	evening	C	Alfie	Both	Connie		
	Baby Jake + 4 Kids	20/01/2012	24	our LR1	H	morning	SEVERAL		Both			
	Eric Carle Films	31/01/2012	14	our LR1	H	afternoon	C, P, T		Both	Connie		Both//
	Eric Carle 2	23/02/2012	14.5	our LR1	F	afternoon	C, T	Both	Both	Both		Both//
	Peppa Pig Skating+ Painting	24/02/2012	9	their LR	H	afternoon	C, P		Connie	Connie		Alfie
	Waybuloo + Yoga	27/02/2012	6	our LR1	H	morning	C					
	V Hungry Caterpillar	27/02/2012	11	our LR1	F	afternoon	C, P, T	Connie//	Both	Both		
	Eric Carle 3	05/03/2012	11.3	our LR1	H	afternoon	C, P, T	Alfie//	Both//	Both		Both
	Mr Maker on computer	22/03/2012	20	Their office	H	evening	C, P	Connie//	Both	Both		

2012 April - June	**Animatou 1**	09/04/2012	4.52	our LR1	H	afternoon	C, P, T	Both	Both++	Alfie		
	Animatou 2	09/04/2012	13	our LR1	H	afternoon	C, P, T		C++ A//	Connie		Alfie
	Mary Poppins	17/04/2012	13.55	their LR	H	afternoon	C, P, T	Both//	Both//			Both//
	Animatou 3+4 + 5 kids	22/04/2012	10.55	our LR1	H	morning	SEVERAL	Connie	C++ A//	Connie		Alfie
	Animatiou 5 + Caterpillar	03/05/2012	13.49	our LR1	H	afternoon	C, P	C then A	Both	Both		A then C
	Mike the Knight	14/05/2012	15	our office	H	afternoon	C, P, T	Both	Both			
	Animatou 6 + caterpillar	14/05/2012	14	our LR1	H	afternoon	C	C then A	C then both	Both		Alfie
	Numtums	21/05/2012	5.31	our LR1	H	afternoon	C, P, T		Both	Connie		
	Taps	21/05/2012	3.49	our LR1	H	afternoon	C, P, T	A then both	Both	Both		
	Little Wolf + Numtums	14/06/2012	14.12	our LR1	H	afternoon	C, T	Connie	Both	Connie		
	Dipdap + Baboon 1+Little Wolf	18/06/2012	23.31	our LR1	H	afternoon	C	C for Baboon	Both	Connie	Connie	
	Otherwise	21/06/2012	8.04	our LR1	H	afternoon	C, P, T		Both	Alfie		
	Baboon 2 Alfie	21/06/2012	11.16	our LR1	H	after nap	C		Alfie	Alfie	Alfie	
	Tiny Fish + Connie	28/06/2012	12.3	our LR1	H	after nap	C		Connie	Connie	Connie	
	Animatou 7 + Connie	12/07/2012	5.15	our LR1	H	afternoon	C		C then both	Connie		
	Tree Fu Tom 1	16/07/2012	23.39	our LR2	H	afternoon	C, P, T	A at end	Both			A at end
	Peppa Pig Pirates	19/07/2012	1.4	their LR	H	evening	C		Both			
	Tree Fu Tom Actions	26/07/2012	3.24	their LR	H	evening	C,D		Both	Both		Both++

2012 September-December	**Animatou 8 + Sunny Day bit**	25/08/2012	9.01	our LR2	H	afternoon	C		Both	Connie	Connie	
	Animatou 9	13/09/2012	5.4	our LR2	H	afternoon	C		Both	Both		
	Nightshift + Frog	13/09/2012	14.25	our LR2	H	after nap	C		Both	Both		
	Gruffalo's child	13/09/2012	5.52	their LR	H	evening	C,D		Both		Alfie	
	Connie + Tree Fu Tom	18/10/2012	22.22	our LR2	H	after nap	C		Connie//			Connie
	Interview 1	18/10/2012	2.52	our kitchen	H	evening	C, T					
	Frog+Lucia + Animatou 10	22/10/2012	25.43	our LR2	F	afternoon	C		Both		Connie	Alfie//
	Animatou 11+ Prop+witch+nightshift	19/11/2012	48.46	our LR2	F	afternoon	C		Both	Both		
	Animatou 12	22/11/2012	9.34	our LR2	F	afternoon	C, T	A at end	Both	Both		Alfie
	Cyber + Witch	22/11/2012	16.44	our LR2	H	evening	C		Both++	Both		
	Animatou 13	13/12/2012	5.43	our LR2	F	evening	C		Both	Both		
	Bagpuss	14/12/2012	15.21	our LR2	H	evening	C, T		Alfie			Connie
2013 Jan-May	Meg + Mog	11/01/2013	4.46	their LR	H	evening	C, P		Both	Both		
	Meg + Mog + Alfie re endings	11/01/2013	7.07	their LR+kitchen	H	evening	C, P	Alfie	Both		Alfie	A at end
	The Saveums	31/01/2013	6.45	their LR	H	evening	C, P		Connie//			A at end
	Mr Men	28/02/2013	10.41	their LR	H	evening	C, P		Both			
	JellyJamm + Thomas	15/04/2013	17.03	their LR	H	evening	C, P		Both	Both	Alfie	
	Totoro (Catbus>end and Mummy Bit)	17/05/2013	16.22	their LR	H	evening	C		Both		Both	
		DATE		**LOCATION**	**CAM**	**TIME**	**ADULTS**	**PROXIMITY**	**ATTENTION**	**NAMING /POINTING**	**EMOTION**	**MOBILITY**
	TOTAL MINUTES		**765.5**									

APPENDIX 2: MOVIE TITLES, AND NUMBERS OF VIEWINGS VIDEOED

CHILDREN'S TV	
Mr Bloom's Nursery	1
Zingzillas	1
In the Night Garden	4
Peppa Pig	4
Waybuloo	1
Baby Jake	3
Mr Maker	1
Mike the Knight	1
Numtums	1
Dipdap	1
Tree Fu Tom	3
Bagpuss	1
Meg and Mog	2
The Saveums	1
Mr Men	1
Jellyjamm	1
Thomas and Friends	1

SHORT FILMS	
The Very Hungry Caterpillar	3
Papa Please get the Moon for me	2
The Very Quiet Cricket	1
The Gruffalo's Child	1
Laughing Moon	2
Animatou	13
Little Wolf	2
Baboon on the Moon	2
Otherwise	1
The Tiny Fish	2
Sunny Day	1
Nightshift	2
A Slippery Tale	2
The Propellorbird	2
The Witch's Button	2
Cyber	2
Lucia	1