Research Forum

Embodied movie-watching:Two-year-olds and big warm silky screens

Cary Bazalgette, University College London, UK

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Abstract

This paper draws upon my PhD thesis, which investigates how children learn to make sense of moving-image media, through a case study of dizygotic (non-identical) twins' encounters with short films and television between the ages of 22 and 38 months. The children were observed in home settings by their grandmother (me), using video as the primary method of data collection. Referring to my analysis of focused attention in the children's viewing behaviour, which draws on embodied cognition theory, I discuss possible interpretations of their interest in getting close to, and touching the screen, particularly in relation to modality judgments.

My recently-completed PhD thesis deliberately breaks with several currently dominant traditions. It is about two-year-olds: an age-group neglected by most media educators, almost all film scholars and, perhaps more surprisingly, by many early years researchers. I focus only on the moving image: films and television programmes, which for my purposes here constitute a single cultural form and which, for want of a better generalising term, I designate as 'film'. So I was not concerned with the specificities of platforms that can deliver films, such as DVD, broadcast TV or video streaming, or of the numerous devices that can carry them, or on the 'digital literacy' involved in accessing them. I did not consider the alleged risks or benefits of film-watching, or on what children may usefully be learning from movie content, such as spoken language or cultural norms.

My research questions were generated by my long experience as a media educator, during which I frequently saw primary school teachers' excited amazement at the increased confidence, articulacy and skill that many children display once they get the chance to watch and discuss movies in class. The teachers would tend to see this simply as evidence that films are magically efficacious in stimulating children's learning. I saw it differently: to me, it indicated that there had been prior learning which the schools had so far failed to recognise or seek to develop. I wanted to consider what sort of learning this was and when it would have

happened. Having worked with teachers in nursery schools who described three-year-olds' apparently sophisticated responses to movies, and having observed my own children's early encounters with television, I became convinced that children must start learning to make sense of movies well before the age of three. Given that many children aged around 18 – 26 months may find it difficult to follow a substantial film narrative, but a year or so later can follow quite a lot of a full-length feature, a great deal of learning about story-telling in other modes, must happen during the intervening period. I set out to look for evidence of this process. My research follows in the footsteps of Darwin, Piaget, Britton, Weir, Halliday and others who have studied children they knew well, in familiar home settings (Britton 1970, Darwin 1877, Halliday 1975, Piaget 1928). In my case the subjects were my twin grandchildren, a girl and a boy, aged 22 months when the fieldwork began in late 2011. After the fieldwork was completed in 2013, there was a two-year hiatus due to family circumstances, which meant that I did not commence systematic data analysis until late 2015.

My primary method was to capture as much of the children's everyday film-watching as I could, using an iPhone as a familiar, unobtrusive and easily-handle-able device in a situation that was inevitably unstructured and unpredictable. This could not be a regular, systematic and planned process. It happened mostly at my house when the children had their weekly sleepover. There were regular times each day when they watched films, mainly broadcast TV and DVD collections of children's' TV series and short films: before their afternoon nap and before bedtime. There would usually be at least one other adult in the room besides me (my husband, and/or my daughter – the twins' mother). At first I tried using a flexible tripod to hold the iPhone in a fixed position, but this missed too much of the children's behaviour as one or other or both of them scampered around the room. Handholding the iPhone had its drawbacks too, but it enabled me to make choices about framing and to capture more detail. The resulting collection of over 12 hours of video, forms the core of my data, supplemented by observation (most of which could only be noted down subsequently), interviews with the children's parents, and a few opportunistic audio recordings.

Analysing videos of children that one knows well requires intensive re-viewing and reflexivity, to get past one's initial pleasure and amusement. Transcribing video is all very well when one is examining verbal language or specific behaviour, but I was looking at an enormous range of often very subtle movements, postures, gestures and gazes, which could change within seconds and were different for each child. I did eventually transcribe all 65 viewing events, using Transana software, initially in chunks of prose that broadly captured a series of short sections of each viewing event, and later in more detail for selected moments. This was a classic Grounded Theory approach (Glaser 1967) in that the theory really did emerge gradually from the data as I viewed and re-viewed, coded and re-coded, considered and reconsidered. But

the main breakthrough was prompted by my encountering work in embodied cognition and the neuroscience on which much of it draws. Some scholars are resistant to these approaches, assuming that they constitute a challenge to the sociocultural tradition. I have found them to be complementary to this tradition, particularly in the case of research on two-year-olds, whose social and cultural experiences and knowledge are in relatively early development.

The first viewing event that I filmed shows a startling example of a phenomenon that became increasingly significant as the study progressed: intense, close attention, which in the first few months of the research, was usually maintained at a short distance from the screen. This happened intermittently, for periods of up to seven minutes, and did not necessarily involve both children: in other words, they were both selective about what they decided to pay close attention to. Close analysis of my videos yielded fascinating detail: frowns, teeth-grinding, cheek-chewing, heavy breathing, and holding on to nearby objects in order to maintain a steady gaze on the screen. Toddlers do not invest this amount of effort for nothing: what they choose to pay attention to is important for them. This phenomenon is widespread: parents' social media sites are full of comments about toddlers' attentiveness to movies.

Periods of focused attention tended to correlate with what the twins later wanted to re-view. Again, it is social media that indicate the widespread nature of toddlers' interest in re-viewing; a phenomenon also recognized by Ragdoll Productions when they included repeat sections in *Teletubbies* episodes. 'Wanna watch it again' was a frequent utterance by one or other of the twins after anything new that had commanded their attention, and some movies were watched many times until, as their mother expressed it, 'they've sucked all they can out of it'. She and I agreed on the term 'used it up' to describe the completion of a cycle of re-viewings, rather than the commonplace expressions 'got bored with it' or 'don't like it any more'. The language of affect did not seem appropriate to describe the children's intense commitments to certain films, comprising in some cases more than 20 viewings. Like other toddler activities such as switching lights on and off or taking a toy to pieces, it seemed to make more sense to characterise close attention and repeat viewing as evidence of learning. But unlike adult-mediated learning at this age, such as how to put on shoes or clean teeth, this learning was self-driven – often leading to arguments about whose preferred movie would be watched first.

Another characteristic of the children's attentive viewing was their desire to get close to the screen. At their own house the screen was smaller and harder for them to reach than at ours, and my first few research videos at my house show them scrambling on to the coffee table that I had optimistically installed in front of our TV to deter them from fiddling with the cable box and the DVD player: this gave them a platform from which to examine the screen closely (see Figure 1).

Figure 1: winning the battle for proximity (age 23 months)

The folk memory of 405-line images on bulging glass screens, which were 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 some producers' view that wide shots may be over-complex for two-year-olds if they view from a distance (Steemers 2010, p127).

The children sometimes also wanted to touch the screen. For a 22-month-old, getting close to the screen may follow fundamental, evolved instincts, in which 'the main sensory modalities (e.g. 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 inability to distinguish between 'mere pictorial representations' and 'real, physically-present objects' (for example: Flavell, Flavell and Green 1990, Pierroutsakos and DeLoache 2003). But Damasio's invocation of evolved, instinctive behaviours offers another rationale for what the twins often seemed to be doing when they touched the screen: toddlers tend to want to touch whatever they see, and feeling the warm, silky smoothness of a flat-screen TV can be pleasurable. I should emphasise here that at this stage the children had no experience of smart phones or iPads, so their screen-touching was unrelated to practices such as 'swiping' a screen.

Touching the screen may also offer us a link between children's initial playful explorations and the later development of their capacity to make modality judgments. I take the concept of 'modality judgments' from Hodge and Tripp (1986). Drawing on linguistic theory, and on research with 9-year-olds, 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 & 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 (ibid) 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 (e.g. Hui, Boguszewski and Lillard 2015). Regarding 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 & van Leeuwen 2006).

The widespread 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 films or still images, and real life. Studies of infants by Troseth and by Pierroutsakos and DeLoache suggest that attempts to touch objects represented in pictures demonstrate 'boundary confusion' about real/not real distinctions (Pierroutsakos and DeLoache 2003, Troseth 2010). Flavell et al's work in the 1980s on children's 'pretend-real' distinctions (Flavell, Flavell and Green 1987) offers a more 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.' But this does not take account of the social context of viewing, which was an immensely important aspect of my research, although I do not have space to address it fully here. Woolley points out that 'both children and adults entertain fantastical beliefs and also engage in magical thinking' (Woolley 1997, p 991) and urges that we should think in terms of 'a continuum of ontological commitment to what we think the world is really like' (p. 991). She points out that there is a dearth of research about this topic on children between the ages of 18 months and 3 years. A later paper (Sharon & 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 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. Having studied the ways in which the twins reached out to touch the television screen, I want to offer another perspective, which suggests that 'boundary experimentation' might be a more appropriate term.

Figure 2: touching the toucan's beak (age 23 months)

In the early stages of the research, one or other of the children would sometimes gently touch an object on the screen, such as the big beak of the toucan 'tittifer' in *In the Night Garden* (Ragdoll Productions for BBC CBeebies) (see Figure 2). There was never an attempt here to push, grasp or swipe the object on the screen: the touch was exploratory, even tentative – and in any case, the object they touched would soon move or even disappear. The children seemed 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 toucan's beak is '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.

A little later, they greatly enjoyed anticipating what was going to appear next when watching the short animated movies based on the Eric Carle stories *The Very Hungry Caterpillar* and *Papa Please get the Moon for Me*. They would shout out the name of what was coming next, pointing excitedly at the screen; but if they happened to be standing close to the screen, they might also touch the object in question (see Figure 3).

Figure 3: pointing out an object on the screen (age 26 months)

In one screen-touching moment there could have been a specific rationale: this involved the short animation *Animatou* (Luyet, Switzerland 2007), which illustrates the history of animation through a series of cat-chasing-mouse sequences, each in a different animation style. The second time we watched, my daughter and I had a brief conversation about whether cats have bellybuttons or not. During this third viewing, two weeks later, one child was standing close to the screen during the same scene: she laid her hand on the digital armature that represents the cat at this point, covering its bellybutton (see Figure 4).

Figure 4; covering the cat's bellybutton (age 30 months)

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, the twins quickly cottoned on to the game-like structure of predictable appearances and actions which characterised most of the movies they watched. But, especially when viewing close-up to a large screen, they sometimes found themselves confronted with images which did not seem to connect with the basic story elements that they already knew. When elements of an image started to move under their touching finger, they could be momentarily enthralled by the sight of an object passing beneath a finger without tactile evidence of its passing. One child did this with a sequence in *The Very Hungry Caterpillar* when large, semi-abstract representations of fruit and cakes drift past as the voice-over describes the caterpillar's Saturday eating binge; anothet did it with a CBeebies' *Bedtime*

Story whose set included toys and objects relating to the story but ignored by the story-teller. Sequences like these may seem both fascinating and disembodied to the less experienced viewer: they may not seem to belong anywhere.

To a two-year-old, these texts 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 the children, being able to identify and name things on the screen appeared to be their priority at this stage of movie-watching, and touching the screen was initially linked to this: pointing out was a social activity. But the later pointing events were not social: they both touched the screen – or held on to their touch – in moments of quiet contemplation.

As Hodge and Tripp (1986) point out, '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.

I believe that my research findings have significant implications for policy, custom and practice in several contexts. Academic research on children and media rarely deals with children under 3, and prioritises the skills associated with 'digital literacy': more attention could be given to children's engagements with the specific cultural forms that digital technologies make available, and to considering these across a broader developmental range rather than focusing on 'school-readiness'. Those opposing the narrowness of primary curricula would do well to acknowledge the importance of movies in children's lives and the value of building on their early learning by enabling them to study, discuss and make movies in school. And families

should feel able to resist the 'risks and benefits' paradigm that dominates public discourse on children and movies. Social media discussions indicate that many parents already enjoy sharing in their toddlers' growing competence as movie-viewers – they ought not to feel guilty about it!

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