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Understanding parents' conflicting beliefs about children's digital book reading

Natalia Kucirkova
University of Stavanger, Norway

Rosie Flewitt
Manchester Metropolitan University, UK

Abstract

In light of growing evidence that many parents are deeply concerned about their young children's increasing technology use, in this paper we report on aspects of a study funded by the UK Economic and Social Research Council, where we sought to understand parents' views on children's digital book reading. We introduced seven families to four award-winning digital books (story apps and e-books), observed how the mothers mediated their children's digital book reading over a period of several weeks and subsequently interviewed the mothers about their shared reading experiences with the digital books. Focusing on the interview data and drawing on the theoretical framework of socio-materiality, this paper reports on how parents' views about digital book features were entangled with their social perceptions of the value of digital reading. Analysis of parents' accounts show three conflicted themes of trust/mistrust, agency/dependency and nostalgia/realism in parental attitudes towards their children's reading on screens. The paper concludes with a discussion of how these findings regarding the unresolved dichotomies inherent in parental views about their children's digital reading are highly relevant for future research on parental mediation of their children's learning with digital media.

Keywords

Digital book reading, conflicting beliefs, early literacy, personalisation, e-books, story apps, parental mediation

Corresponding author:
Natalia Kucirkova, Early Childhood and Development, Norwegian Centre for Learning Environment and Behavioural Research, University of Stavanger, NO-4036 Stavanger, Norway.
Email: natalia.kucirkova@uis.no

Introduction

Parent–child shared book reading is arguably the most researched and most highly regarded parent–child activity in Western culture. It is widely considered one of the richest activities that parents can engage in with their children to support early language and literacy learning (Pellegrini, 1991). Shared book reading is known to promote children's early awareness of print, vocabulary and literary conventions, such as genres, character and plot development (Nikolajeva, 1996), to support children's socio-emotional learning (Doyle and Bramwell, 2006) language and literacy development (Bus et al., 1995), and to enhance bonding (Bus, 2003) and language interaction between parents and young children (Gilkerson et al., 2017). It is also often characterised by reading for pleasure and reading enjoyment, which in turn are strongly associated with reading achievement and reading across one's lifespan (Greaney and Hegarty, 1987; Murphy, 2013).

Yet the increased availability of digital reading resources for children has begun to disrupt and expand traditional reading activities at home, with a steadily increasing number of ever-younger children regularly reading in digital formats (Common Sense Media, 2017; Ofcom, 2013, 2014, 2015, 2016, 2017). This trend has prompted researchers to consider how the benefits of book reading are realised during parent–child reading with and on screens. International research has found that many parents have conflicting views on the pros and cons of their young children's exposure to technologies and digital media (Chaudron et al., 2018; Murphy and Headley, 2018), including their reading of digital books (Strouse and Ganea, 2017). Parents' preference for print books influences their reading behaviours with digital books and their mediation strategies, which have been found to be of lower quality than with print books (Munzer et al., 2019).

In the study reported in this paper, we sought to understand parents' attitudes towards and beliefs about children's reading on screens with portable touchscreen technologies, such as tablets and iPads. These devices offer stories in the format of *e-books*, also known as *story apps*, *picturebook apps* or, as we refer to them, *digital books*. Although we recognise the multiplicity of texts that are available for children's reading on screens, we focus in this paper only on digital books that contain a narrative and support children's *reading for pleasure and enjoyment*, characterised by delight, desire and diversity (Cremin et al., 2014).

We begin by reviewing literature on parents' preference for print books and the tendency for parents to offer lower quality reading strategies when sharing digital books with their children. We reflect on two hypotheses implied by

existing research that could explain parents' inferior reading strategies with digital books (Lareau, 2012). We then outline the socio-material theoretical framing that enabled us to explore the viability of these hypotheses in our empirical data. We present details of our analytic strategy, and we discuss our findings in relation to their significance for children's reading with digital books at home. We also consider the new insights that socio-material theoretical framing offers and the implications of our findings for future survey/interview studies on parents' views about young children's digital book reading.

Parents' views on children's digital book reading

Converging evidence from interview and survey studies shows that parents report a strong preference for print books and tend to hold negative views about children's reading on screens. These views have been expressed in national and international surveys investigating parents' attitudes towards digital media and children's reading on screens, including, for example, the US Common Sense Media Survey (2013, 2017), Michael Cohen Survey (2014), annual Ofcom surveys of children and parents' media use and attitudes (Ofcom, 2013–2019) and a Europe-wide study of 0–8-year-old children and their parents' media use and attitudes (Chaudron et al., 2018). These large-scale data sets report that parents prefer to read print books with their children at home, and that most parents and teachers actively choose print rather than digital books when making texts available to young children. Given that parents and primary caregivers are the main mediators of young children's access to resources, these surveys have unsurprisingly found that a low proportion of young children engage with digital story books at home.

In a national survey of parents' beliefs and practices in relation to children's reading for pleasure with print and digital books, Kucirkova and Littleton (2016) asked 886 mothers and 625 fathers of UK children (825 boys and 685 girls) aged between 0 and 8 years 38 closed questions and 5 open-ended questions about the possible reasons for their concerns about digital books. Only 8% of parents reported that they had no concerns, with the top four reasons for parental concerns being that reading on screen would increase children's screen time (45% of surveyed parents), lead to children losing interest in print books (35%), expose their children to inappropriate content (31%) and expose them to too much advertising (27%). Even though the vast majority of surveyed parents (92%) described themselves as confident users of technology, only 25% reported using digital books to read with their children

and 57% reported never having used a digital book despite having one in the home.

Interviews with 12 Australian mothers echoed these results, outlining how parents preferred using printed storybooks when reading with their two-year-olds (Nicholas and Paatsch, 2018). Similarly, Strouse and Ganea (2017) surveyed parents of one- to four-year-old children about their views and practices with digital books at home and found parents reported that their children read, enjoyed and paid more attention to print than digital books. In a more recent study, Strouse et al. (2019) explored the views of three- to five-year olds and their parents on print and digital books and found that parents favoured print books, which they perceived as more educational, entertaining and more conducive to parent–child bonding. The parents also self-identified as having less supportive mediation strategies with digital as opposed to print books. Nonetheless, the children in this study reported a stronger preference for digital than print books and, when given the opportunity, they chose digital books.

We suggest that parents' reports of their negative views about children's digital books need further investigation for three key principal reasons. First, the difference in parents' and children's preferences for print versus digital books might constitute a barrier to joint parent–child engagement with digital books. This is highly significant as it is the co-use of media (digital books and digital technology more broadly) that is widely considered to to be the most beneficial use of media at home (Connell et al., 2015). Second, parents' negative views on children's digital books might influence publishers' priorities for commissioning and innovating children's digital books and thus be contributing to the inferior position of e-books in the children's publishing market (DigiLitEY WG3 Report, 2018). Third, parents' negative views on children's digital books risk having direct consequences for their lower-level mediation strategies with digital books at home. This third possibility is related to a considerable body of experimental psychology research that has examined adult–child interaction with digital versus print books (e.g. Krcmar and Cingel, 2014; Munzer et al., 2019; O'Toole and Kannass, 2018; Richter and Courage, 2017), which we consider in the next section.

In experimental studies, parents' mediation strategies during joint reading have been predominantly analysed in terms of (a) number and diversity of words spoken by the parent, (b) the number of conversational turns between the parent and child and (c) dialogic reading techniques, including linguistic stimulation, such as distancing prompts that connect the book's content to the child's life, prompts and questions about the book or clarifying questions

about who and what happens on the page. Munzer et al. (2019) compared parent–child reading of enhanced e-books with basic e-books and print books in relation to parents' use of dialogic strategies, as well as parents' focus on the books' format features or actual content. They found that high-quality reading practices were less common with electronic books than with print books. The findings suggest that parents' reading strategies with digital books hold less potential for the child's language development than print books. In another study comparing parents' talk when reading print and digital books, Krcmar and Cingel (2014) found that when reading digital books, parents mostly focused on behavioural aspects (e.g. instructing the child how to hold the tablet) and technical aspects (e.g. instructing the child on how to swipe). When reading print books, parents commented more on the story plot and story characters, which are known to be language-stimulating techniques. Studying three- to five-year olds' e-book and print book reading with adults in a childcare centre, Richter and Courage (2017) found that e-books took twice as long to complete and children were more attentive to e-books, but they communicated more about the device during e-book reading and more about the story during print reading. By contrast, O'Toole and Kannass (2018) found that four-year-old children learned more words from an e-book than a print book and learned more words from an audio narrator than a 'live' adult reader. However, the experimental nature of this study meant that adults read the stories exactly as they were read by the audio narrator, which excluded the more natural 'give and take of information' (p. 113) during adult–child book reading.

Hypotheses for parents' lower mediating strategies with digital books

Reviewing the literature on parent–child reading of digital books as compared to print books, we identified two key hypotheses: the medium hypothesis and the sociocultural hypothesis. The medium hypothesis proposes that the features and content of digital books shape parental mediation strategies, whilst studies adhering to a sociocultural hypothesis focus on parental mediation and parents' experience, knowledge and skills of digital book reading. These hypotheses map onto two distinct yet not incompatible theoretical perspectives concerning parent–child interaction: medium theory and sociocultural theory.

The medium hypothesis can be traced back to McLuhan's (1964) extension theory of technology, and his initial assertion that the 'medium is the message'

(p. 7), referring to how individuals are incorporated into an electronically mediated world through the messages they transmit via different technologies. Yet, McLuhan was not advocating technological determinism and equally recognised 'that it was not the machine but what one did with the machine, that was its meaning or message' (1964, p. 7). A hypothesis aligned with the medium perspective suggests that parents adopt lower reading mediation strategies when reading digital books because either their content or their format is of lower quality than print books.

Literature that evaluates the quality of the *content features* of children's digital books is unanimous in stating that most are of very low quality. Best-selling educational apps available in the English language have been judged as promoting low-level (drill-and-practice-style) learning and as lacking in developmentally appropriate standards (Papadakis et al., 2018; Richards and Calvert, 2017). Digital books available in Hebrew (Korat and Falk, 2019) and Hungarian, Turkish, Greek and Dutch have been judged as being of poor quality and lacking appropriate cultural content (Sari et al, 2019). The quality criteria used by researchers in these studies centred on the complexity of language, appeal of illustrations and use of multimedia and interactive features that had previously been found in experimental studies to impede children's reading and language learning (Takacs et al., 2015).

Skills-oriented experimental and quasi-experimental studies focusing on the *format* of digital books have identified how multimedia elements (such as the sensory enhancement of story content with music, hotspots and/or film-like animations) can be distracting if they are not aligned with story content or plot (Takacs et al., 2015; Zucker et al., 2009) and can have negatively impact on children's comprehension (Parish-Morris et al., 2013). The assumption embedded in the medium hypothesis is that the design and content of digital books directly affect parent–child shared reading practices. By extension, the design and content are therefore often considered the main explanatory factors of the performance differences between parent–child reading with print and digital books.

By contrast, the assumption embedded in sociocultural theories of interaction (Vygotsky, 1978; Wertsch, 2007) is that during adult–child interaction, adults mediate the child's learning with objects and resources. This perspective takes account of parents' active role during digital and print reading with their children, such as expanding on story content, directing the child's attention to specific story features and/or eliciting the child's active participation through prompts and questions. From this perspective, the book forms part of a complex flow of influences in the ongoing dialogue between parents and children,

reflecting and challenging the sociocultural values of the reading participants. Sociocultural theorisation, therefore, assumes a triangle of influences between the parent–child-reading medium, and it is the interrelationship of these three variables that explains outcomes.

In relation to parents' negative views on digital books, an assumption embedded in the sociocultural hypothesis is that parents' previous experience with digital books, their own reading preferences and beliefs about reading shape their digital reading mediation strategies. This assumption is instantiated in a body of studies exploring the relationship between parents' views on digital media and the strategies they adopt (or not) to support their children's digital reading. For example, in their qualitative study, Nikken and Jansz (2014) documented how parents who hold negative views about children using digital media tend to employ fewer scaffolding and learning-promoting strategies when interacting with their young children and digital media. Palaigeorgiou et al. (2017) interviewed 54 Greek parents about their views on children's use of tablets, including reading digital books. They found that parents were misinformed or elected to remain 'uninformed' about the educational opportunities offered by digital technologies, and this in turn affected their readiness to support their children's interaction with digital screens at home. Quantitative studies in this area typically divide parents' and children's attributes into demographic correlates (e.g. gender, age, ethnicity, parent's education and economic status), environment correlates (e.g. technology access at home) and behavioural correlates (e.g. time spent with individual devices) (Paudel et al., 2016). The latest studies show, however, that parenting style (controlling or permissive) is a more nuanced predictor of how parents mediate their children's use of digital gaming than parents' educational level or gender (Van Petegem et al., 2019).

Recent studies comparing adults' reading with e-books versus paper books (without the presence of children) suggest that adults' lower performance when reading on screens is more fully explained by metacognitive rather than technology-related factors (Sidi et al., 2017). Metacognition is an overarching term for higher-order cognitive processes, including communication, problem solving, effort regulation, depth of processing and decision-making. Experimental studies comparing adults' metacognitive processes with print versus digital media show that adults' preference for studying with printed texts and their lower study performance with screens is due to subjective rather than objective differences between the media (Ackerman and Goldsmith, 2011). These findings are relatable to sociocultural theory, suggesting that parents' negative views about children's digital books may be

partly attributable to parents' perceptions about the digital medium, for their children's reading as well as their own.

Aim of this paper

Our review of the relevant literature suggests that, to date, whilst research has identified that many parents are concerned about their children reading on screens, less is known about the precise or changing nature of these concerns or how they connect with parents' mediation strategies when sharing digital books with their children. We identified two main hypotheses in the literature: the medium hypothesis and the sociocultural hypothesis. Our aim in this paper is to report in depth on the nature of parental concerns about their children's reading on screens, and how these might connect to extant empirical work on parents' inferior mediation strategies with digital books. We offer further new insights by examining this through the lens of socio-materialism, which provides a framework to conceptualise the interdependency of both social and material influences on human interaction and learning.

Johri (2011) proposed that the theoretical tenets of socio-materiality could advance knowledge about learning technologies by abandoning the social and material dichotomies that have characterised the field in past decades. According to Johri's (2011) interpretation of socio-materiality, the *social* aspects are the social practices (and the psychological processes linked to social practices) of the key actors involved in an interaction, whilst the *material* aspects relate to the physical, technological and design-related properties of resources used in the interaction. Socio-materiality combines the material and the social from a posthumanism perspective (Barad, 2003; Kuby, 2017), thereby potentially offering novel insights into the interaction between social and material actors, and the ways in which 'humans, nonhumans and more-than-humans are already always entangled in producing truths, realities, knowledges and relationships' (Kuby and Rowsell, 2017: 285).

Kucirkova (2019) applied Johri's framework of socio-materiality to a systematic review of studies on children's digital book reading published between 2016 and 2017. Studies in the social strand focused on parent–child or teacher–child interaction, whilst studies in the material strand focused on the books' features, format or content. Only the theoretical papers included a balanced and unified perspective on both material and social aspects of children's digital books. Reflecting on these findings, Kucirkova (2019) recommended a socio-material approach for future *empirical* studies of parent–child-reading of digital books. The suggested socio-material theoretical framework includes socio-

material entanglements and time–space shifts (such as reading the same book at different times and in different locations). In this study, we aimed to establish the usefulness of socio-materialism in unravelling parents' views on children's digital book reading and to address the following research questions:

1. What are parents' beliefs and attitudes concerning children's digital book reading?
2. How can socio-material theory inform empirical research into parent–child reading of digital books?

Study design

Inspired by Heydon et al. (2015), this investigation followed a multiple case studies design to 'illuminate the complexity and interrelatedness of factors' and to paint a 'wide contextual picture' (Cresswell et al., 2011: 325). The qualitative 'tools' of participant observation, interviews with parents and short, open-ended questionnaires complemented by parents' reflective notes and researcher field notes led to the generation of a rich data set. The study reported here is part of a larger analysis, and in this paper, we focus only on the data obtained from interviews, questionnaires and field notes.

Study participants

Seven mothers and their nine children living in North and Central England, UK, took part in the study and were contacted through a snowball sampling procedure. This involved contacting one parent by email, through personal contacts in each region, and asking her to recommend other parents who might be interested in the study. Seven key focus children (five boys and two girls aged 3 years 2 months to 5 years 10 months) took part in the study, and two younger siblings of one child (twin sisters, aged 1 year 10 months) joined the study as they were part of one family's shared reading practices during research observations. Selection criteria included English as children's first language and parents' and children's familiarity with, or interest in, digital technologies. The snowballing sample selection reduced the diversity of the study cohort, and all the participating families were in relatively secure socio-economic circumstances: four reported annual earnings between 20 and 40k and three over £40k. All the parent participants identified as female, six were aged 31–40 years and one aged 40–50 years. Seven child participants were White-British and two were of other White background. None of the children had special educational needs.

Descriptive information about parents' confidence levels with technology use and access and ownership of digital devices at home was collected during each initial home visit via paper-based questionnaires, completed by the mothers in the researcher's presence. The levels of low, moderate and high were determined by the mothers themselves; our focus was not on frequency of device use but on how the mothers perceived their own and their children's confidence with digital media. Five mothers described their confidence in using technologies as 'high', and two opted for 'moderate'. One mother indicated her child's confidence with technology was high, and six mothers described their children's confidence as moderate. Six families had a TV at home and one did not. No children had access to games consoles, video players or e-readers, but all children had access to a smartphone and tablet. One family had an educational game device that the child used (LeapFrog™), and three children used their parents' laptop for educational purposes. All parents perceived apps and digital books as part of the entertainment that smartphones and tablets offered their children and mentioned other uses, such as finding information, communicating with friends and creative activities (e.g. making digital drawings and photos).

Selection of digital books

We carefully selected high-quality digital *personalised* books for parents to share with their children, because personalised digital reading materials have been found to promote mutually enjoyable and sustained parent–child interaction (Aliagas and Margallo, 2017; Kucirkova et al., 2013). Personalisation is also one of several design recommendations that can augment the quality of digital resources (DigiLitEY WG3 Report, 2018). We chose four award-winning digital books purporting to support children's reading motivation and reading enjoyment: Nosy Crow Cinderella app, Nosy Crow Little Red Riding Hood app, Nosy Crow Fairytale Play Theatre app and Our Story app. These apps offer varying scope for personalisation and child agency in constructing story content. Cinderella and Little Red Riding Hood allow for minimal changes to the story narrative and appearance (visuals to feature the reader's face in Cinderella; certain storyplot changes in Little Red Riding Hood). In both Fairytale Play Theatre and Our Story, children can author and change the story narrative and story appearance. Fairytale Play Theatre is template based, with pre-existing story elements, from which children can select their preferred option and make their own story audio-recording. Our Story is open ended, with no pre-existing story structure, so children can add

original content in writing, audio-recording, sounds, music and images (e.g. their own photographs).

Study procedure

To gain authentic insights into the digital story-reading practices of each family, four 2-hour visits were planned to each family. Dates and times of visits were agreed to suit each family, including weekends and evenings where these were preferred. We responded flexibly and sensitively to participants' busy and sometimes unpredictable lives – ultimately the number of visits per family ranged from two to six, with the length of visits ranging from four and half hours to half an hour. Preliminary visits were made to each family to discuss the study aims, agree suitable parameters for consent, introduce each family to the four selected e-books on an iPad, and encourage parents to read one of them with their child(ren). No specific guidance or protocol was suggested by the researchers about how parents might engage with the digital books. Some mothers decided to read the e-books with their child, whilst others chose to let their child read them on his or her own. Some mothers and children read several e-books within a session, and others preferred to read one book per visit. Kucirkova led interviews with the parents during one of the home visits to each family, based on a semi-structured interview protocol developed by the research team to explore participants' attitudes and perceptions (see Appendix 1 with all interview prompts). The interviews were audio-recorded, transcribed and scrutinised using thematic analysis.

This study was conducted in line with the Economic and Social Research Council (2015) framework for research ethics and received ethics approval from University College London, Institute of Education. We informed parents and children about the broad study aims, sought all participants' ongoing consent (Flewitt, 2005) and emphasised their right to withdraw at any time. In the event, no participants opted to withdraw. The researchers had full Disclosure and Barring Service (DBS) clearance, and all data were stored using password-protected and encrypted storage devices. Pseudonyms are used throughout in the research reporting.

Thematic analysis of interview data

We used thematic analysis to organise the qualitative data into inductive (data-driven) and deductive (theory-driven) codes (Fereday and Muir-Cochrane, 2006). Thematic analysis involves repeated readings of data, with the aim of finding a pattern that becomes a series of themes that are categorised and

illustrated with examples of data (in this case, by quotes from the participants). Our development of themes involved 'examining, identifying, developing and reporting categories and themes within data in depth' (Glasper and Rees, 2016: 101). We followed four analytic steps: first, we categorised the interview accounts in broad themes. These themes were based on a codebook that included themes derived from the literature as well as preliminary categories based on Kucirkova's involvement in the face-to-face interviews and scanned reading of the transcripts. These themes were: close monitoring, timing and parent–child 'contracts' about media usage and perceptions of childhood. Second, we developed these codes through discussion and further scrutiny of all interviews and identified new themes and cross-case similarities. Third, we refined the categories and merged similar themes into higher-order categories. Fourth, we compared and contrasted data coded for specific categories and consequently developed more nuanced themes that better described the data. In the Findings section, we present only the final themes that emerged from our scrutiny of the interview data.

Findings

Through recursive processes of inductive and deductive thematic analysis of the parent interviews, we identified three key themes that reflected unresolved dichotomies in the mothers' views about their children's use of technologies and on-screen reading. These themes were trust/mistrust, dependence/agency and nostalgia/realism.

Trust/mistrust

The mothers reported using different strategies when selecting print and digital books for their children, which resulted in differing levels of trust in the resources they had. For print books, they made their own choices or followed school recommendations, and six of the seven children had been given print books by relatives. For digital books, the mothers' choices were influenced primarily by their children's interests in popular children's television programmes and by recommendations made by their friends and other parents – some of whom they encountered by chance.

> M6: Yeah, so there are, um, so there's like a kind of finite number of programmes and you select them and they might highlight some, kind of saying popular on Netflix or something like that. Um, I think originally they were programmes that we knew about from friends recommending them, so thinking

> of Ben and Holly's Little Kingdom or Blaze and the Monster Machines, a dad in the park I was speaking to once who had boys who were slightly older [. . .] recommended it and said it has you know Physics in and I think parents are always looking for programmes that both appeal to the child and aren't too offensive to their own sensibilities and values and so word of mouth helps narrow down things.

Some mothers trusted particular children's digital book publishers, such as Nosy Crow, and preferred to buy from these trusted sources. Mothers' trust was enhanced by this publisher's stable position in the market, the high quality of the app content, the minimal advertising used by the company and the absence of in-app purchases.

> M1: I've always liked The Nosy Crow ones [. . .] as soon as we used a couple of those I thought this is obviously a really nice quality, so you know [. . .] like when you buy anything, you get to know a brand and you like it [. . .] they've always got a lot of interactivity in them . . . and I know I can happily leave the children to play with them and I don't have to worry about I don't know, not that there would be anything inappropriate, but . . . I feel like I can trust them.

Although the mothers had trust in specific titles/brands, they had reservations about the digital industry per se. This was evident in their monitoring and supervising strategies when their children used tablets/smartphones, where the mothers attempted to establish practices that would begin to nurture their children's self-regulated use of digital media. Some families had developed verbal 'contracts' and agreements with their children, with defined rules and strategies to manage digital books as part of children's media consumption. The extent to which these rules were negotiated or imposed on children varied from family to family, reflecting broader family dynamics. When asked how they imposed time limitations, the mothers responded variously, for example:

> M2: By learning that you have to do it at the start. Enter into a contract at the start, make it clearly . . . or if you haven't done that, say how long it's going to be until you turn it off again, so you just give them the time that they need to deal with the fact that their precious little thing is going to be taken away from them.

> M7: Um, yeah and I suppose the main sort of concern I probably have is the time that he would like to spend on it, so I think he's quite, he seems to always want to spend time and would quite happily spend more time on it than I let him, so I do put time restraint, constrictions on it. Um, we don't have a particular, I don't say like half an hour. I just kind of judge it and then I say I'll give

> you like a warning, I'll say only 10 minutes or when you've finished that film or when you've finished that, then that's it.

Children's dependence/agency

With regard to digital books, some mothers viewed their children's dependency on adult help as related to the technical skills and knowledge needed to negotiate digital screens, such as accessing password-protected content, using hyperlinks and uploading pictures, as well as reading written text. For example, when asked how her children access the Internet, one mother stated:

> M1: Well I'm always there, so I . . . yeah, they're playing with it while I'm around and I don't think they, you know I always know what they're . . . doing
>
> R: And with the TV you select the programme for them?
>
> M1: I would, with [child] I do. We talk about what he might want to watch and we talk about the different options, but I suppose I control their choice quite closely.

In contrast, when sharing print books four mothers emphasised children's dependency as related to reading for meaning. The mothers recognised their role as mediators who extend print book content by discussing illustrations and new words with their children and by sharing information through mutually enjoyable dialogue when reading books. With digital books, mothers felt supplanted in this role by digital story narration, by the fast pace with which digital books move from one page to the next, creating a relentless tempo that means 'you can't like stop and look at stuff and talk about what you're looking at, because you had to be quiet, because the story would go onto the next bit of speech'. One mother suggested digital books should enable children and parents to 'control the speed a little bit more, I think that would've been better . . . to kind of make sure that he's really engaged with it.' For others, the digital books were useful for children to use occasionally on their own whilst the mothers were busy, for example:

> M3: She's very much, she . . . she uses it like once a month, but on a journey or something. We have it out in the car if we do like a long journey, but she doesn't use it kind of regularly, but she does like using it and when she uses it on a journey [. . .]

The hardware itself offered control features available to the parents, although as this mother pointed out, these features were only a temporary measure whilst the child was young, and she had concerns about how her child would self-regulate access in the future:

> M5: At the moment it's still she's very much beholden to us, so I think it will change when she can read, so she can kind of find stuff for herself a bit more and also you know at the moment she doesn't know the password to our iPad, but I think pretty much all my friends who have older kids they've worked out what the password is and they do that quite quickly, so whilst we can still manage it I haven't got any concerns.

Nostalgia versus realism

A further tension we noted during the parent interviews related to their mentioning the importance of digital technologies in young children's lives versus their own preference for print books, which they often acknowledged when reflecting on their own childhood experiences. These episodes were characterised by nostalgia and distant memories, such as playing with wood and paper rather than digital devices, and of growing up with no TV. One mother spoke of her concern about how technology has become normalised in contemporary social life:

> M: . . .the accessibility to cameras and the Internet is something that has happened in my, you know the last 20 years of my life, well 30 years, 25 years of my life, so whereas [child] he's just you know oh camera on phone. He's known that and we're taking pictures all the time, so I think it's about a social norm that sits uneasy with me, but I think that's just because of my generation. To [child] it means nothing.

For all seven mothers, participating in this study introduced content they had not previously been familiar with and/or they were keen to learn more about children's digital books. Whereas some mothers mentioned their children tended not to want to talk when they watched TV, they felt that iPads offered greater potential for interaction between the child, the parent and the app/iPad. For example, one mother went so far as to anthropomorphise the iPad:

> M3: I guess there's more scope, because it's much more interactive than the telly, for her to think through things a bit more critically and stuff with the iPad, so I think there must be room for the iPad, but always with learning I just think if it's just you, it should be really you, maybe the technology and then

> somebody else, so maybe the three people, so because I think that just helps learning and makes it more enjoyable rather than just you and what you're looking at you know, so. . .

Furthermore, the interviews highlighted the need for the content of digital books to be aligned with 21st-century values and topics. In this mother's view, the lack of alignment between the storyline of a traditional tale and contemporary life was a key factor in her and her child's lack of engagement with one of the apps.

> M2: Er, I really didn't enjoy Cinderella. Um, I just didn't see the benefit of it, um, and I think [child] got bored of it as well. It was very long and the story just wasn't very captivating for many reasons, um, and it's quite old fashioned I think, kind of definitely bring it into the 21st century with the story choices.

Discussion

Parent practices and views, as well as cultural meanings associated with touchscreen technologies (e.g. understanding technology as innately 'risk filled' yet also potentially educational), influence the ways young children use and think about technology. The aim in our study was to explore parents' conflicting views on their young children's digital book reading, in light of differing hypotheses reported in previous research. In this section, we discuss how socio-material theorisation and its building blocks of entanglement and time–space shifts helped us to interpret the complexity we found in parents' views and attitudes towards their children's digital book reading.

The three themes we identified in mothers' accounts in this study relate to the explanatory hypotheses proposed by previous research concerning either sociocultural influences or the affordances of the digital book medium. However, when viewed through the theoretical lens of socio-materiality, the themes point to an entanglement of social and medium-related influences on parents' views. Uniquely, this study identified the dichotomies and ambivalences expressed in all three themes, which captured parents' conflicted attitudes towards their children's digital books and digital book reading – neither entirely negative nor entirely positive but oscillating uncomfortably between opposing views.

In terms of the trust/mistrust theme, parent attitudes aligned with international survey findings that report parents' distrust of digital books due to their format or content. In terms of content, the mothers all tended to select digital

books that reflected their children's interest in popular media. However, their purchasing and download choices were also strongly influenced by the reputation of individual digital book publishers, and by the recommendations of their friends and casual acquaintances. Thus, parents' views on the material-design aspects of digital books were coloured by their social and personal relationships with their children and wider social networks, primarily other parents.

The dependence/agency theme extends the argument made in Kucirkova (2018), in which we established that mothers resist what Travis (1998) termed 'compliant' reader identities and welcome digital books that position children as 'constitutive' readers, who extend the books' content through active engagement and their own multimedia composing. However, in this study, there was a tension in mothers' willingness to nurture children's agency with digital books and, at the same time, to guide and scaffold their children's learning experience. Literature suggests that parents who identify as high technology users have positive attitudes towards their children's technology use and follow more permissive parenting styles towards their children's use of technologies (Brito et al., 2017). We contend that in addition to the parenting style and general interaction style between parents and children, it is important to consider the time-space shift in children's digital book reading, as influential factors that shape parents' beliefs and attitudes.

The realism/nostalgia theme highlights how time and space were interrelated in the mothers' accounts. To probe this further, we turned to Leyton Gray's (2017) discussion of 'fixed time' (hours, days and weeks), 'biological time' (a child's chronological age) and 'social time' (how time is organised in society – for example, whilst the passage of a day is determined by cosmology, the concept of a week is a social construct). Given that parents associated their supportive role as related primarily to operational skills (such as accessing software and navigating through digital books), the more fixed time children spent with digital books, the more they became familiar with their use, and consequently parents felt less need to support them. The passage of fixed time therefore made a difference both to how much agency each mother granted their child in using the digital books and how redundant the mothers felt as supporters of their children's learning. However, the mothers also had concerns related to 'biological time', and whether it was wholly appropriate for such young children to be exposed to digital screens. Whilst fearful of their children spending too much time with digital devices, the mothers in this study recognised and appreciated that repeated reading of individual

digital books increased their children's ability and confidence to access and enjoy them independently. Fixed time, biological time and space intersected in mothers' accounts of how their children often passed time using digital books on their own whilst on the move. The portability of digital devices such as the iPad was repeatedly mentioned by mothers in our study as a factor that made their use convenient for child behaviour management in different locations – such as during car journeys. The realism/nostalgia theme further highlights the intersection of time and space in the mothers' accounts, in terms of 'social time' (Leaton Gray, 2017) and the comparatively short time that digital books have been available in society. Empirical studies show that the newer technologies are, the less parents perceive them as suitable for sharing with their children: joint media engagement occurs more with older digital devices, such as TV, than personal computers (Connell et al., 2015).

The insights gained through our socio-material analysis of the interview data led us to conclude that the medium and sociocultural hypotheses previously adopted in research to explain parents' inferior reading strategies with digital books offer only partial explanations of why parents tend to have such conflicting opinions about their young children's digital book reading. Parents' beliefs and attitudes concerning children's digital books are indeed influenced by the content and format of digital books, as well as their own experiences, confidence and skills in using them. Although the parents in our study described themselves as moderately or highly confident users of technology, they remained unsure of the nature of their role when supporting their children's learning and tended to associate their role primarily with offering technical/operational assistance. This contrasts with how they perceived their role when reading print books with their children. Mediation of screen/media use has become an integral yet often deeply uncertain and conflicted aspect of 21st-century parenting, where parents' attitudes towards digital books are nested within their personal beliefs about parenting and their own use and consumption of digital media (Zhao and Flewitt, 2020). Indeed, parents' personal experience with digital reading might help them find a more settled place on the dichotomous sliding scale of their attitude towards children's reading with screens. The socio-material theoretical framework helped us understand the social, material and time–space fabric that influences parents' views. We posit that a detailed understanding of the underlying reasons for parents' positive and negative views necessitates remapping the time–space dimensions offered by the socio-material turn.

Study limitations

The study findings are limited by the size and nature of the study cohort. Although efforts were made to reach a more diverse participant sample, the snowballing procedures and primary criteria for inclusion (English as child's first language; families' familiarity and interest in digital technologies), led to all parents being female and self-identifying as White, with moderate to high income. These factors are likely to have influenced their perspectives. Future studies could expand our findings with a more diverse group of participants and focus specifically on the role of social and cultural values in parents' attitudes towards children's reading of digital books. Furthermore, our sample size was small and did not yield saturation of themes. Davidson et al. (2020) used a conversation analytic approach with an ethnomethodological perspective to study parent–child sequences when reading on screen, such as a parent reading the instructions for an online game and the child's questions about it. The authors emphasise that in the instances they studied, reading formed part of many activities happening with technology at home, where reading was by no means the main or only goal. Future studies could examine the ways in which digital books interplay with other activities involving shared parent–child use of digital technology at home, in a diverse range of households that ideally would include hard-to-reach home environments.

Study implications

The research questions addressed in this paper were theoretically oriented, but we were very interested in extrapolating our findings to understand parents' conflicting views on children's media use. To date, parents' views have been gauged through surveys using Likert scale items, or they have been inferred from parental reports of their children's digital book use at home (e.g. Ofcom, 2019). We recommend that researchers interested in a more nuanced understanding of parents' views on children's digital book reading explore the socio-material entanglement and time–space dynamics of digital book usage. In light of the themes identified by parents' accounts in our study, we recommend that researchers prompt parents' reflection on the various places where digital books have been or could be read, and the changes that have happened over time in the children's and parents' digital book reading practices. Survey and interview questions that probe parents' thinking about their own use of digital reading and personal reading histories could further illuminate the issues we noted under the nostalgia/realism category. Survey or interview schedules could also explore parents' familiarity with and confidence

in different digital book publishers, their child's popular media interests, what recommendations parents have received for specific book titles, from whom and how they view their own role in supporting their children's digital book reading.

In conclusion, this is one of the first studies to apply the socio-material framework to empirical data concerned with children's digital book reading and to consider parents' views on children's digital books in light of hypotheses that have emerged from past research. It thus represents a foundational work that could enrich future theory-oriented and empirical investigations in children's reading of digital books.

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ORCID iDs

Natalia Kucirkova https://orcid.org/0000-0002-2805-1745
Rosie Flewitt https://orcid.org/0000-0003-1986-0644

References

Ackerman R and Goldsmith M (2011) Metacognitive regulation of text learning: On screen versus on paper. *Journal of Experimental Psychology: Applied* 17(1): 18–32.

Aliagas C and Margallo AM (2017) Children's responses to the interactivity of storybook apps in family shared reading events involving the iPad. *Literacy* 51(1): 44–52.

Barad K (2003) Posthumanist performativity: Toward an understanding of how matter comes to matter. *Signs: Journal of Women in Culture and Society* 28(3): 801–831.

Brito R, Francisco R, Dias P, et al. (2017) Family dynamics in digital homes: The role played by parental mediation in young children's digital practices around 14 European countries. *Contemporary Family Therapy* 39(4): 271–280.

Bus AG (2003) Social-emotional requisites for learning to read. In: Van Kleeck A, Stahl SA and Bauer EB (eds) *On Reading Books to Children*. London/New York: Routledge, pp.17–28.

Bus AG, Van Ijzendoorn MH and Pellegrini AD (1995) Joint book reading makes for success in learning to read: A meta-analysis on intergenerational transmission of literacy. *Review of Educational Research* 65(1): 1–21.

Chaudron S, Di Gioia R and Gemo M (2018). Young Children (0–8) and Digital Technology – A Qualitative Study across Europe. European Commission, JRC. Luxembourg: Publication Office. Available at: http://publications.jrc.ec.europa.eu/repository/bitstream/JRC110359/jrc110359_young_children_online.pdf (accessed 11 September 2018).

Common Sense Media (2013) Zero to eight children's media use in America 2013, a common sense media research study. Available at: https://www.commonsensemedia.org/research/zero-to-eight-childrens-media-use-in-america-2013# (accessed 1 June 2020).

Common Sense Media (2017) The common sense census: Media use by kids age zero to eight 2017. Available at: https://www.commonsensemedia.org/research/the-common-sense-census-media-use-by-kids-age-zero-to-eight-2017 (accessed 1 June 2020).

Connell SL, Lauricella AR and Wartella E (2015) Parental co-use of media technology with their young children in the USA. *Journal of Children and Media* 9(1): 5–21.

Cremin T, Mottram M, Collins F M, et al. (2014) *Building Communities of Engaged Readers: Reading for Pleasure*. London/New York: Routledge.

Cresswell K, Worth A, & Sheikh A (2011) Implementing and adopting electronic health record systems. Clinical Governance: *An International Journal* 16: 320–336. 10.1108/14777271111175369.

Davidson C, Danby S, Ekberg S, et al. (2020) The interactional achievement of reading aloud by young children and parents during digital technology use. *Journal of Early Childhood Literacy*. First Published 16 January 2020. DOI: 10.1177/1468798419896040.

DigiLitEY WG3 Report (2018) Young children's reading on screen: A report for the industry. Available at: http://digilitey.eu/working-groups/wg3-reading-and-writing-on-screen/ (accessed 1 June 2020).

Doyle BG and Bramwell W (2006) Promoting emergent literacy and social–emotional learning through dialogic reading. *The Reading Teacher* 59(6): 554–564.

Fereday J and Muir-Cochrane E (2006) Demonstrating rigor using thematic analysis: A hybrid approach of inductive and deductive coding and theme development. *International Journal of Qualitative Methods* 5(1): 80–92.

Flewitt R (2005) Conducting research with young children: Some ethical considerations. *Early Child Development and Care* 175(6): 553–565.

Gilkerson J, Richards JA and Topping KJ (2017) The impact of book reading in the early years on parent–child language interaction. *Journal of Early Childhood Literacy* 17(1): 92–110.

Glasper A and Rees C (Eds.). (2016). *Nursing and healthcare research at a glance. John Wiley & Sons.*

Greaney V and Hegarty M (1987) Correlates of leisure-time reading. *Journal of Research in Reading* 10(1): 3–20.

Heydon R, Moffatt L and Iannacci L (2015) 'Every day he has a dream to tell': classroom literacy curriculum in a full-day kindergarten. *Journal of Curriculum Studies* 47(2): 171–202.

Johri A (2011) The socio-materiality of learning practices and implications for the field of learning technology. *Research in Learning Technology* 19(3): 207–217.

Korat O and Falk Y (2019) Ten years after: Revisiting the question of e-book quality as early language and literacy support. *Journal of Early Childhood Literacy* 19(2): 206–223.

Krcmar M and Cingel DP (2014) Parent–child joint reading in traditional and electronic formats. *Media Psychology* 17(3): 262–281.

Kuby CR (2017) Why a paradigm shift of 'more than human ontologies' is needed: Putting to work poststructural and posthuman theories in writers' studio. *International Journal of Qualitative Studies in Education* 30(9): 877–896.

Kuby CR and Rowsell J (2017) Early literacy and the posthuman: Pedagogies and methodologies. *Journal of Early Childhood Literacy* 17(3): 285–296.

Kucirkova N (2018) Children's agency and reading with story-apps: Considerations of design, behavioural and social dimensions. *Qualitative Research in Psychology* 1–25.

Kucirkova N (2019) Socio-material directions for developing empirical research on children's e-reading: A systematic review and thematic synthesis of the literature across disciplines. *Journal of Early Childhood Literacy* 146879841882436.

Kucirkova N and Littleton K (2016) *The digital reading habits of children. A national survey of parents' perceptions of and practices in relation to children's reading for pleasure with print and digital books*. London: BookTrust.

Kucirkova N, Messer D, Sheehy K, et al. (2013) Sharing personalised stories on iPads: A close look at one parent–child interaction. *Literacy* 47(3): 115–122.

Lareau A (2012) Using the terms "hypothesis" and "variable" for qualitative work: A critical reflection. *Journal of Marriage and Family* 74(4): 671–677.

Leaton Gray S (2017) The social construction of time in contemporary education: Implications for technology, equality and Bernstein's 'conditions for democracy. *British Journal of Sociology of Education* 38(1): 60–71.

McLuhan M (1964) *Understanding Media: The Extensions of Man*. New York, NY: McGraw-Hill.

Michael Cohen Group (2014) Young children, apps & iPad. Report. Available at: http://mcgroup.wpengine.com/wp-content/uploads/2015/03/ipad-study-cover-page-report-mcg-info_new-online.pdf (accessed 1 June 2020).

Munzer TG, Miller AL, Weeks HM, et al. (2019) Differences in parent–toddler interactions with electronic versus print books. *Pediatrics* 143(4): e20182012.

Murphy SM (2013) *On Sustaining and Encouraging Reading in Canadian Society*. Toronto: National Reading Campaign.

Murphy S and Headley M (2018) The role of digital technology in teen mothers' and their children's literacy. *Journal of Early Childhood Literacy*, 1468798418783326.

Nicholas M and Paatsch L (2018) Mothers' views on shared reading with their two-year olds using printed and electronic texts: Purpose, confidence and practice. *Journal of Early Childhood Literacy* 146879841879261.

Nikken P and Jansz J (2014) Developing scales to measure parental mediation of young children's internet use. *Learning, Media and Technology* 39(2): 250–266.

Nikolajeva M (1996) *Introduction to the Theory of Children's Literature*. Tallin: Tallin Pedagogical University.

Ofcom (2013) Children and parents: Media use and attitudes report. Available at: http://stakeholders.ofcom.org.uk/market-data-research/other/research-publications/childrens/children-parents-oct-2013/ (accessed 1 June 2020).

Ofcom (2014) Children and parents: Media use and attitudes report. Available at: http://stakeholders.ofcom.org.uk/market-data-research/other/research-publications/childrens/children-parents-oct-14/ (accessed 1 June 2020).

Ofcom (2015) Children and parents: Media use and attitudes report. Available at: https://www.ofcom.org.uk/research-and-data/media-literacy-research/childrens/children-parents-nov-15 (accessed 1 June 2020).

Ofcom (2016) Children and parents: Media use and attitudes report. Available at: https://www.ofcom.org.uk/research-and-data/media-literacy-research/childrens/children-parents-nov16 (accessed 1 June 2020).

Ofcom (2017) Children and Parents: Media Use and Attitudes Report, Published 29 November 2017. Available from: https://www.ofcom.org.uk/__data/assets/pdf_file/0020/108182/children-parents-media-use-attitudes-2017.pdf (accessed 1 June 2020).

Ofcom (2018) Children and parents: Media use and attitudes report, Published 29 January 2019. Available from: https://www.ofcom.org.uk/__data/assets/pdf_file/0024/134907/children-and-parents-media-use-and-attitudes-2018.pdf (accessed 1 June 2020).

Ofcom (2019) Children and parents: Media use and attitudes report, Published 4 February 2020. Available from: https://www.ofcom.org.uk/__data/assets/pdf_file/0023/190616/children-media-use-attitudes-2019-report.pdf (accessed 1 June 2020).

O'Toole KJ and Kannass KN (2018) Emergent literacy in print and electronic contexts: The influence of book type, narration source, and attention. *Journal of Experimental Child Psychology* 173: 100–115.

Palaigeorgiou G, Katerina K, Bratitsis T, et al. (2017) Parental mediation of tablet educational use at home and at school: Facilitators or preventers? In: Interactive Mobile Communication, Technologies and Learning. Cham: Springer, pp.924–935.

Papadakis S, Kalogiannakis M and Zaranis N (2018) Educational apps from the Android Google Play for Greek preschoolers: A systematic review. *Computers & Education* 116: 139–160.

Parish-Morris J, Mahajan N, Hirsh-Pasek K, et al. (2013) Once upon a time: Parent–child dialogue and storybook reading in the electronic era. *Mind, Brain, and Education* 7(3): 200–211.

Paudel S, Leavy J and Jancey J (2016) Correlates of mobile screen media use among children aged 0–8: Protocol for a systematic review. *Systematic Reviews* 5(1): 91.

Pellegrini AD (1991) A critique of the concept of at risk as applied to emergent literacy. *Language Arts* 68(5): 380–385.

Richards MN and Calvert SL (2017) Media characters, parasocial relationships, and the social aspects of children's learning across media platforms. In Barr R and Linebarger DN (eds) *Media Exposure during Infancy and Early Childhood*. Cham: Springer, pp.141–163.

Richter A and Courage ML (2017) Comparing electronic and paper storybooks for preschoolers: Attention, engagement, and recall. *Journal of Applied Developmental Psychology* 48: 92–102.

Sari B, Takacs ZK and Bus AG (2019) What are we downloading for our children? Best-selling children's apps in four European countries. *Journal of Early Childhood Literacy* 19(4): 515–532.

Sidi Y, Shpigelman M, Zalmanov H, et al. (2017) Understanding metacognitive inferiority on screen by exposing cues for depth of processing. *Learning and Instruction* 51: 61–73.

Strouse GA and Ganea PA (2017) A print book preference: Caregivers report higher child enjoyment and more adult–child interactions when reading print than electronic books. *International Journal of Child-Computer Interaction* 12: 8–15.

Strouse GA, Newland LA and Mourlam DJ (2019) Educational and fun? Parent versus preschooler perceptions and co-use of digital and print media. *AERA Open* 5(3): 2332858419861085.

Takacs ZK, Swart EK and Bus AG (2015) Benefits and pitfalls of multimedia and interactive features in technology-enhanced storybooks: A meta-analysis. *Review of Educational Research* 85(4): 698–739.

Travis MA (1998) *Reading Cultures: The Construction of Readers in the Twentieth Century*. New York: SIU Press.

Van Petegem S, de Ferrerre E, Soenens B, et al. (2019) Parents' degree and style of restrictive mediation of young children's digital gaming: Associations with parental attitudes and perceived child adjustment. *Journal of Child and Family Studies* 28(5): 1379–1391.

Vygotsky L (1978) Interaction between learning and development. *Readings on the Development of Children* 23(3): 34–41.

Wertsch JV (2007) Mediation. In: Daniels H, Cole M and Wertsch JV (eds) *The Cambridge Companion to Vygotsky*. New York: Cambridge University Press. pp.178–192.

Zhao S and Flewitt R (2020) Young Chinese immigrant children's language and literacy practices on social media: A translanguaging perspective. *Language and Education* 34(3): 267–285.

Zucker TA, Moody AK and McKenna MC (2009) The effects of electronic books on pre-kindergarten-to-grade 5 students' literacy and language outcomes: A research synthesis. *Journal of Educational Computing Research* 40(1): 47–87.

Appendix 1. Digital personalisation: home observations

About the use of digital media generally

1. How do you feel about the amount of time your child spends using digital media? (Prompts: It is far too much/It is just right/It is not quite enough/It is nowhere near enough?) Why?
2. Does your child usually use digital media alone or with other people? (Prompts: With other children, With you, With another adult?) How do you feel about this? If used with other adults – Why do you (or another adult) use digital media with your child?
3. Are there any challenges to balancing your child's engagement with digital media, print media and other activities?
4. What, if any, are your biggest concerns about digital media and e-book use?
5. What do you think are possible benefits? (Prompts: child as author, new content, importance of digital literacy)

About reading on screen

6. Does your child read books? What kinds of books and in what kinds of situations?
7. When reading for pleasure, does your child prefer print books or e-books? Or both? Why do you think that is?
8. Have you read digital books with your child before; why, why not? Do you think you are going to do so in the future?
9. Do you have any concerns/worries about your child reading digital screens? (If yes) What concerns do you have?

About personalised books

10. In your opinion, are there any ways in which digital personalised books could be improved? (Many parents worry about the bells and whistles in popular apps — is this interactivity your concern too? Are you worried about data security? Do you think the apps could be more educational – what do you understand by educational?)
11. Do you think it is important for the child to sometimes be able to co-author or author a story? Why?
12. Have you noticed if your child appreciates personalised books in a different way than traditional books? If yes, in what ways and why do you think that is?
14. Which elements do you think are important for children to like a story and engage with it? (Prompts: Do you think creativity is important, why? What about collaboration and children's own contributions, do you think these are important, why?)
14. Some parents are actively refusing to use Internet-connected toys, such as the FisherPrice Teddy. What do you think, what is the potential of these toys and what concerns do you have? (The researcher plays a short video demonstrating the latest Internet-connected toys enabling personalisation, e.g. Teddybear by Fisher Price.)
15. What do you think of the possibility of recording a child's voice to complement a digital story? Do you think there are any advantages or limitations?
16. What do you think of the possibility of adding children's photographs and selfies to complement the story? Do you think there are any advantages or limitations?