

Talk in activity during young children's use of digital technologies at home

Susan Danby, Christina Davidson, Maryanne Theobald, Brooke Scriven, Charlotte Cobb-Moore, Sandra Houen, Sandra Grant, Lisa M. Given, and Karen Thorpe

ABSTRACT: *Internet-connected tablets and smart phones are being used increasingly by young children. Little is known, however, about their social interactions with family members when engaged with these technologies. This article examines video recorded interactions between a father and his two young children, one aged 18 months using an iPhone, and one aged three years accessing an iPad. Drawing on Ethnomethodology and Conversation Analysis, this analysis establishes ways the family members engage and disengage in talk to manage their individual activity with mobile devices and accomplish interaction with each other. Findings are relevant for understanding children's everyday practices with mobile technologies.*

Introduction

Young children and their parents are embracing the use of mobile technologies, including Internet-connected tablets and smart phones. Over 10 years ago, Livingstone (2002) pointed out that 'the home is being transformed into the site of a multimedia culture' (p. 1) and, since then, multimedia usage has rapidly grown, with Australian families using computers and the Internet in 79% of homes (Australian Bureau of Statistics, 2009–2011). In 2009, 60% of Australian children aged five to eight years accessed the Internet, up from 37.7% in 2006 (ABS, 2009). In Australia, 60% of children aged 9 to 16 years access the Internet through mobile phones (Green, Brady, Ólafsson, Hartley, & Lumby, 2011). In the UK, there is even greater uptake, with Ofcom (2011) reporting that 91%

Susan Danby, Maryanne Theobald, Charlotte Cobb-Moore, Sandra Houen, Sandra Grant, School of Early Childhood, Karen Thorpe, School of Psychology and Counselling, Queensland University of Technology, Brisbane, Australia.

Christina Davidson, Brooke Scriven, School of Education, Lisa M. Given, School of Information Studies, Charles Sturt University, Australia.

of children aged 5–15 years access the Internet at home. These studies investigating how much time children spend accessing the Internet often use questionnaires to gather data, and do not show what children actually do when they engage with technologies.

Existing studies of young children's use of digital technology in the home establish that parents take for granted their role in supporting their children's use of digital devices, with many attributing their children with natural facilities with technology (Plowman, McPake, & Stephen, 2008; Stephen, McPake, & Plowman, 2010). Plowman et al. (2008) suggest that 'parents tend to consider that their children are mainly self-taught and underestimate their own role in supporting learning and the extent to which learning with technology is culturally transmitted within the family' (p. 303). This being the case, it may also be that parents take for granted talk about the content that children encounter during use of digital technology in the home. We do not know enough about how parents and young children interact with digital technology in the home. In order to understand everyday family practices with mobile technologies, this paper investigates a single case of a video recorded episode of family interactions, where a father interacts with his two young children, one aged 18 months using an iPhone, and the other aged three years using an iPad.

Accounting for how the father and children talk and engage with each other while using mobile devices necessitates a consideration of what it means to participate in, and understand, the social structures in which they are operating (Cicourel, 1970; Goodwin, 1990). While the process of socialisation traditionally has been addressed by theories of development, or described as a passive-cultural transmission from one generation to the next (see Cromdal, 2006), we work from the theoretical position that 'an investigation of the concrete features of competent interaction is nothing more nor less than a study of what children normally and routinely do in their everyday activities' (Speier, 1982, p. 182). Taking up Speier's earlier ethnomethodological work, Hutchby and Moran-Ellis (1998) describe children's competence as they manipulate the culturally available resources that they have 'to engage in meaningful social action within given interactional contexts' (p. 16). Danby (2009) points out that 'it is not sufficient to claim competency, but rather the focus is on explicating communicative practices in the here-and-now' (p. 1597). An increasing number of ethnomethodological studies are investigating young children's communication and their *in situ* competences evidenced in everyday practices (for recent collections, see Cromdal, 2009; Danby & Theobald, 2012; Goodwin & Kyratzis, 2007).

Talk in activity

Adults and children access and use digital technology through a number of strategies, including the activities of browsing, scrolling, and searching for information (Spink, Danby, Mallan, & Butler, 2010). In particular, multitasking is an activity often promoted as afforded by new technologies that enables tasks to be undertaken simultaneously (Thomas, 2006). Recent empirical work using fine-grained conversation analysis, however, shows that simultaneous multitasking happens only rarely. In Levy and Gardner's (2012) study, routine tasks at the computer undertaken by children in a homework club were accomplished with talk between participants continuing, but undertaking more complex tasks meant a disruption to the talk, with silences, repairs, or minimal recipient actions occurring while they were accomplishing the action. In an examination of young children's web searching, Spink et al. (2010) found that young children switched from searching for information onscreen, to initiating talk about it, or answering questions posed by others. They recommended further detailed investigation of children's methods for switching between digital activities.

Alongside studies that question the notion of multitasking, Goodwin's (1981) earlier examination of ways in which engagement and disengagement occur shows how the move from talk to disengagement is accompanied with the integration of the 'activities of the participants' bodies into the organization of their conversation' (p.10). When looking at moment-by-moment sequences of talk, the concept of 'talk in activity' (Szymanski, 1999) can encompass activities other than conversational actions and may be contrasted with 'talk as action':

In talk in activity, the initiation and termination of turn-by-turn talk do not coincide with the beginning and end of the encounter. After a lapse in talk in copresent activity, participants are not engaging initial conversational interaction but rather are producing subsequent turn-by-turn talk. After initial engagement, talk between the participants is incipient and has the ongoing possibility of occurring at any moment. (Szymanski, 1999, p. 1)

Initial conversational activity establishes a 'continuing state of incipient talk' (Szymanski, Vinkhuyzen, Aoki, & Woodruff, 2006, p. 393) that makes the resumption (and lapsing of talk) an ongoing possibility, yet requires methods that are different from those employed in a single conversational encounter. Szymanski (1999) examined small-group talk among young children during a classroom literacy task to establish

how questions, noticings, and announcements were used to re-engage in talk, and how both 'going on' with the task and talking aloud were used to indicate that talk with others was completed and to re-establish an orientation to their individual activity. In academic presentations, Rendle-Short (2006) showed how presenters oriented to participants in the audience by facing and looking (or not looking) at them. In an early childhood classroom, Davidson (2007) showed how 'walking away' was a method used by children to disengage from talk with a teacher or other children during a writing lesson. These studies are relevant for analysing how family members re-engage and disengage in talk while using mobile technologies.

The study

The paper draws on a corpus of data from an Australian Research Council project *Interacting with knowledge, interacting with people: Web searching in early childhood* (Danby, Thorpe, & Davidson) that explores how teachers and children in kindergarten classrooms, and families in home settings, engage in web searching and other uses of digital technologies. The project involves three phases: (1) a survey of teachers across 400 early childhood programs in Queensland; (2) in-depth ethnographic video recordings of the practices of teachers and children accessing and using digital technologies in nine kindergarten centres in South-East Queensland, and video recordings of everyday home practices with digital technologies of two children per centre, and (3) a survey of families reporting their everyday practices with technologies. Data for this article are drawn from Phase 2 video recordings of interactions with digital technologies in homes. As Speier (1971) points out, the family is an 'ecological containment of members' (p. 193) and the family's video recordings afford understandings of their everyday practices not otherwise easily accessible. In this study, each family was invited to video record their children's use of digital technologies over one week.

Analysis is informed by ethnomethodological perspectives and employs the analytic methods of conversation analysis. Accordingly, we sought to examine the everyday, *in situ* accomplishment of family practices with digital technologies. Detailed descriptions of members' methods resulted from the sequential analysis of actions. Methods developed out of witnessable and orderly actions, and gave insight into 'culture as the knowledge and skills observable and retrievable in ordinary daily activities' (Lee, 1991, p. 225). The examination of young children's social worlds is an important area of ethnomethodological work,

encompassing a range of early childhood settings and family practices including family mealtimes (Busch, 2012), preschool settings (Danby, 2002), school playgrounds (Theobald & Danby, 2012), and literacy lessons (Davidson, 2007, 2013). The application of conversation analysis to children's interactions during use of digital technologies is an emerging area (Danby, Butler, & Emmison, 2009; Davidson, 2012). Studying new forms of practices associated with technology use helps understand participation in social interaction (Hutchby, 2001).

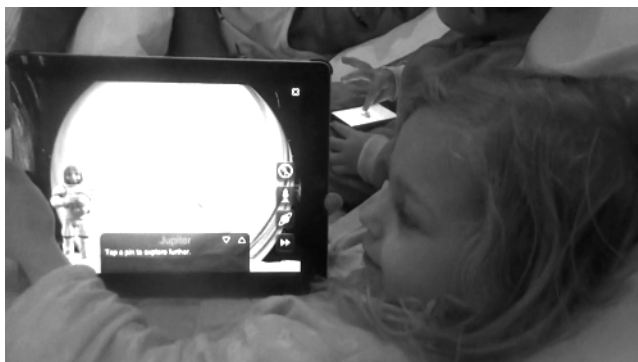
Data analysis

Data were transcribed using Jeffersonian notation (2004) (see this issue's Transcription Key on page 119). All transcript descriptions of onscreen activity (e.g., taps the iPh with right index finger) are from the perspective of the user of the particular technology. Family members have pseudonyms, and the digital devices are treated as parties to the talk. The key is:

- D: Dad
- M: Mum
- Ti: Tina (girl aged 3 years)
- Tr: Trae (boy aged 18 months)
- iPd: iPad
- iPh: iPhone

The interaction shows Dad at home with his two children, Trae and Tina (Figure 1). Tina is using a planets app on the iPad, and Trae an app that makes transport noises on the iPhone. Evident in this transcript is the parents' orientation to the video camera and recording, with the mother reminding the father that the recording is to focus on what the children are doing (line 173).

Figure 1. Dad, Trae, and Tina



In Extract 1, Tina's individual activity with the iPad consists of scrolling through images of planets and then enlarging and looking at an image of the sun. During this activity, her father engages her in talk. Their talk forms three sequences: a request for information, the provision of information by Tina, and an assessment of Tina's turn by her father.

Extract 1

146. ((Ti scrolls across planets from right to left
 147. with finger))
 148. ((sun appears on iPad screen))
 149. ((jet plane sound fades out on iPh))
 150. Ti: [hhhar hh
 151. ((Ti taps sun with right index finger))
 152. iPd: [sun]
 153. ((Tr taps iPh with right index finger))
 154. D: what's [that Tina?]
 155. ((Ti enlarges sun using her fingers))
 156. iPad [is one of t]he many me-
 157. ((Ti taps pin icon to mute sound))
 158. ((click sound on iPad))
 159. ((Ti turns head to face Dad))
 160. Ti: [the sun=
 161. ((Tr taps iPh))
 162. ((iPh makes biplane sound))
 163. D: =the s↑un↓
 164. (0.5)
 165. D: >is the sun< hot or ↓cold?
 166. Ti: u:m
 167. M: [o:: awr just put the camera
 168. ((M hands camera to Dad))
 169. Ti: [hot
 170. ((Ti leans forward and looks at Dad))
 171. D: hot
 172. (1.0)
 173. D: goo↑d job↓=
 174. M: =°we don't want (1.0) us in it (0.1) cause it's them
 175. they want to see°
 176. (1.0)
 177. ((Ti gazing at spinning sun on iPad screen))
 178. D: [u:m (1.0) tch! and why's it all:↑ (0.5) [red a]nd
 179. [yell]ow like that Tina?
 180. Tr: [hhh] [.hhh]
 181. (1.0)
 182. Ti: b- becau:se i:t (0.1) [>has fire!<
 183. ((Ti turns towards Dad))
 184. D: [.hhh! (.) very:↑ well done↑]

The first sequence begins in line 153, with Dad asking 'what's that, Tina'? This question follows closely on from the iPad program naming the image of the sun. In overlap with Dad's question and the iPad audio information about the sun, Tina manipulates the screen, and

next presses an icon to mute the sound (157). Only then does Tina indicate that her father has her attention by turning her head to face him (159) and answering his question (160). Dad endorses this answer by repeating the word 'sun' (163), but with exaggerated intonation.

The father initiates a second sequence by asking another question (165), this time about whether the sun is hot or cold. Tina marks time using the thinking token 'um' (166), and then provides the answer 'hot' (169), which is assessed by her father as correct with 'good job' (173). Again, his assessment is marked through the use of exaggerated intonation (indicated by ↑ and ↓ in the transcript). During this second sequence, the mother has initiated talk with the father about the camera and handed it to him (167–168), informing him that it isn't for recording 'us' (174) because the recording is for seeing what the children do (with the technology). Tina takes advantage of this talk to return to her own previous activity of examining the image of the sun. Thus, her father's next question seeks to re-engage Tina in talk about the image on the iPad.

Dad's question (178) begins a third sequence, and there is a 1.0 second interval before Tina provides her answer (181). Tina responds with her explanation for the red and yellow colour of the sun. Her utterance suggests some uncertainty through the breaking off of the first word (b- because), the elongation of the word 'it', and the short gap before she gives her information. Dad's next turn is an assessment that is an upgrade on his previous assessment (from 'good job' to 'very well done'). The final assessment is a high-grade assessment sequence (Antaki, Houtkoop-Steenstra, & Rapley, 2000) working as a marker that the task at hand has been successfully completed.

In these sequences, Dad's talk re-engages Tina (sequences one and three) or maintains a re-engagement (second sequence). This requires gaining and keeping Tina's attention from her own activity in order to complete talk about the onscreen image that Tina's use of the iPad has produced. His talk also requires that Tina produce information that is known to him already, observed through the absence of change-of-state tokens (that is, 'oh') and in his assessments of Tina's answers to his questions that arbitrates the correctness of the answer.

Having established the use of questioning as a method for re-engaging, we next consider ways that Tina avoids re-engaging in talk with her father, or resumes talk at some points to gain her father's attention. Extract 2 shows Tina positioning her body and gaze to display engagement (Schegloff, 1998; Lerner, 2003) with her father and with the iPad. In this extract Tina first maintains her focus on the iPad

activity, and then signals her change of activity when she turns to gaze at her father, showing him the image on the iPad.

Extract 2

198. D: .hhh can you have a look at [some more planets?]
199. [((Ti swivels iPad to face her))]
200. Ti: uh↑uh (1.0) I ca↑::n↓
201. (4.0) ((taps iPad with right index finger))
202. [((home screen of planets appears on iPad)]
203. [((Tr gazes at video camera))]
204. Ti: [°ta° (1.0) °po° (1.0) °dere°
205. [((Ti scrolls to the moon using right index finger))]
206. [((sun reduces in size, and moon moves to centre and
207. enlarges))]
208. ((Ti takes her finger off the screen by moving it to
209. the right))
210. ((sun returns to centre and enlarges as moon shrinks))
211. Ti: [°ta° (0.5) °do°
212. [((Ti scrolls to moon))]
213. [((sun reduces in size as moon comes to centre and
214. enlarges))]
215. ((Ti taps on moon))
216. iPd: [*the moon*
217. [((enlarged image of a spinning moon appears))]
218. ((Ti enlarges the moon thrice using her right thumb
219. and index finger))
220. iPd: [*is planet↑ ↓earth's*
221. Tr: [.hhh hhh .hhh hhh
222. [((Tr turns head around to watch Tina's actions on iPad))]
223. iPd: *satel[lite]*
224. D: [wha]t's [that one Tina?]
225. [((Ti reduces and enlarges moon twice))]
226. iPd: [*it spins around planet[↑earth=*
227. [((Ti enlarges moon twice))]
228. iPd: [=it is the brightest
229. D: [Tina (.) >[what's=
230. [((Ti continuing to enlarge and shrink moon))]
231. iPd: *object in the night*
232. D: =that one< dar:lin:g?
233. Tr: hhh
234. iPd: *sky*
235. ((Ti holds right side of iPad))
236. (1.0)
237. Ti: [h(hhh)slar!
238. [((Ti swivels iPad screen around to show Dad and Tr))]
239. [((Tr turns his head to look at iPad screen))]
240. [((screen shows enlarged moon, an astronaut and a
241. description))]
242. (0.2)
243. [((Ti turns head to face Dad as she lifts up the iPad))]
244. iPd: [*the light prod[uced ()]*
245. D: [what is it?]
246. Ti: [it's a big mo [o:n].hhh[(hh)]

247. D: [m:]oo:n [wel]l do[ne]
248. Ti: [sky]:::
249. ((Ti sits up and rests iPad on her legs))

In Extract 2, Tina continues her use of the app and its images and provides spoken information about the planets. Her father initiates a change of focus away from the sun's image by redirecting Tina to look for 'some more planets' (198). Tina's assurance, that she can look at more planets is followed by an absence of further talk. The mutual production of silence indicates a shared understanding that talk has lapsed, or that speakers are disengaged (Szymanski, 1999).

Tina resumes her use of the iPad and her actions reduce and enlarge, alternatively, the sun and then the moon (206–214), producing utterances that accompany her actions of altering the images (204 and 210). These turns may be heard as talk that accompanies her individual activity, and marks it as 'talk while doing something on the iPad'. In other words, she is unavailable for further conversation with her father. Her actions, however, enable the app to produce information talk about the moon (216 and 223) while Trae looks on (Figure 2).

Figure 2. Tina manipulates images on the iPad as Trae looks on (line 218)



From line 224 to line 246, Dad attempts to re-engage Tina in talk about the on-screen image of the moon that she has accessed on the iPad. He employs a 'wh-' question that makes relevant naming the planet (224). The use of Tina's name in tagged position seeks her attention, but Tina continues to manipulate the on-screen image and, consequently, to produce information on the iPad in the form of programmed speech e.g., *'it spins around planet earth'*. Tina's continued activity on the iPad and her silence are ways to indicate that she is busy and thus avoids resuming conversation with her father.

Dad follows this with another question; this time he summons Tina's attention with the use of her name (229), and follows with a repeat of his previous question. The question is tagged with an endearment, 'Darling', a more affective summons term (232). After a brief gap, Tina responds with an utterance and turns the iPad screen towards her brother and father. Dad then asks a third question (a reformulation of his previous questions). Tina answers 'it's a big moo:n' and then attempts a repair by naming the word 'sky' as her father provides an assessment of her talk. Tina physically adjusts her seating position, and thus indicates the beginning of a shift in her attention away from the conversation with her father to resuming her activity on the iPad.

In this extract, the father uses 'known answer questions' (Schegloff, 2007) in his interactions with Tina. Also described as 'test questions' (Schegloff, 2007, p. 223) or 'display questions' (Long & Sato, 1983, p. 271), this form of question is one where the questioner already knows the answer. While the prevalence of the known-answer sequence in classroom talk is overwhelmingly substantiated, known-answer questions are found also in ordinary conversation. For example, parents use known-answer questions followed by assessments (in third position) with children to prompt displays of knowledge (Davidson, 2009), just as the father did with Tina.

We now direct our focus towards the younger child, Trae, aged 18 months, and his father, to show the methods used by Trae to engage his father in providing information, and the ways that his father responds to these. Following a gaze request by Trae, rather than questioning or prompting Trae to display his knowledge about the image/sound as he did with Tina, the father instead provides a label that identifies the type of transport matching the image/sound on the iPhone.

Extract 3

63. ((Tr taps iPh twice))
64. ((Ti taps pin icon))
65. iPd: ((sound)) (.) [tap a pin=
66. [((biplane sound on iPh))
67. [((Tr taps iPh, looking at Dad))
68. iPd: [=to explore further
69. Ti: [l::
70. [((iPh makes sound))
71. Ti: [loo::k
72. (0.2)
73. [((Tr gazes at iPh screen))
74. D: [oh!]
75. [((D directs gaze to Tr))]

76. ((Tr gazes at Dad and points at iPh screen))
 77. D: that's a pla::ne Trae:↑
 78. ((Tr looks at iPh screen))
 79. D: that's [a əpla:neə]

Initially, Tina attempts to re-engage with her father by using the word 'look' (69 and 71), which acts as an attention-seeking device. Her father responds with the change-of-state token 'oh' (74), acknowledging the new image on the iPad screen. At the same time, Trae looks at the screen of the iPhone following an app noise of a plane. His father looks at Trae who returns the gaze. Trae then points at the iPhone screen, which works to bring Dad's attention to the image. Pointing can display the topicality and relevance of objects within the interaction (Mondada, 2007). In this Extract, the father's response displays his orientation to the iPhone and his understanding that Trae's gesture is a non-verbal request for information (Lerner, 2003; Tarplee, 2010). The father names the plane and Trae returns his attention to the iPhone screen, whereupon the father repeats his previous naming. The repetition is an attempt to gain a response from Trae when none is forthcoming, as his gaze is towards the screen.

During this sequence, the father has provided the label for the onscreen image. He has not required Trae to produce the label in answer to a question, although his questioning of Tina did require that she produce the label of the onscreen image. In the final Extract, we again see how the father labels various images for Trae, producing information and linguistic resources (Tarplee, 2010).

Extract 4

294. iPh: ho::nk (.) h[o:::nk
 295. D: [o↑]::h↓ (0.5) tha:t's a tr↑uck
 296. Tr: ((taps iPh with right index finger))
 297. ((truck engine sound from iPh))
 298. Ti: [hhh
 299. [((Ti taps iPad twice with right index finger))
 300. ((truck engine sound on iPh))
 301. D: [that's a b↑ig r↑ig
 302. [((Ti moves finger from right to left on iPad screen))
 303. ((truck engine sound continues on iPh))
 304. ((Ti moves right index finger from left to right twice
 305. and taps iPad in centre))
 306. ((truck engine sound fades))
 307. iPd: rotation↓ (1.0) [pl↑anets spin] ()
 308. iPh: [reow (.) reow] (.) reow (.) reow (.)
 309. reow (.)reow (.) reow (.) [reow (.) reow (.)reow (.)
 310. reow (.) reow] (.)reow (.) reow((siren sounds))
 311. D: [that's a police car Trae::↑

312. D: [((looks at Tr)) .hhh! that's a pla:ne (0.1) that's a bla-
313. plane
314. [((biplane sound fades out)]

In extract 4, Dad continues labeling the images/sounds on the iPhone. Here, we see his calibration of talk with Trae, engaging in a labelling of the different images. The father's turns follow the same structural pattern in the turn design 'that's a Y', 'that's a Z', so an image is named 'tha:t's a tr↑uck', sometimes with a description 'that's a big rig' (line 301). The father's use of Trae's name (311) indicates that his information is for Trae, and follows the sequence of sounds and labelling that has not resulted in Trae's acknowledgement of his father's actions to this point.

Discussion

The analysis shows the family members' methods of re-engaging and disengaging with each other, and with the mobile technologies they are using; copresence requires resources for re-engaging and disengaging. We showed participants re-engaging in talk (through questions and gaze requests) and disengaging from conversation (through resuming use of the iPad or iPhone). Szymanski (1999) uses the term 'multiple interactional states' (p. 18) to encompass the ways that children showed understanding that talk was completed and they were disengaged, and the ways that they orientated to their individual activity.

Multitasking is the term used to refer to the practices of savvy users of digital technology (Lankshear & Knobel, 2006). Thomas (2006) considers multitasking in relation to the convergence of children's offline and online activity, encompassing both simultaneous activities and varying identities associated with those. She argues that use of digital technologies provides 'interactionally dynamic discourses, cultures and spaces' and 'serves to fashion complex multilayered worlds' for children (p. 129). We have shown here ways that family members shifted between conversations and their individual use of mobile technologies (Trae with an iPhone, Tina with the iPad, and the mother and father with the digital camera). To re-engage, the children used non-verbal summons and pointed the device in the direction of another. Methods used to disengage included stopping talk, and resuming use of the technology. To show that they were unavailable to 'take the call' (i.e., answer a summons), they kept their gaze directed at the particular technology, talking aloud as they used it, or they continued using the technology accompanied by silence rather than an answering a summons. In this way, Tina, in particular, was able to

delay responding to her father's questions, despite their very close proximity.

In the father's interactions with his children, Sacks's (1995) maxim that 'a speaker should, on producing the talk he [sic] does, orient to his recipient' (Vol. 2, p. 438) is evident. In taking Sacks's point that participants design whatever they are going to say by reference to what they are being told (Sacks, 1995 Vol. 2, p. 389), the data show the father 'talking at the child's level' by calibrating his talk according to the displayed level of the child. The idea of calibration is taken from Baker, Emmison, and Firth (2005), where they discuss how call takers on a software technical support helpline 'talk at the client's level' (p. 40). In the helpline data, the call takers calibrated for competence through the first receipts of the caller's description of the problem, and conveyed their fine tuning as the interaction progressed. Baker et al. (2005) refer to this orientation as not just recipient design, but as 'redesigning the recipient' (p. 43). In the analysis of the family interactions, there is evidence that the father oriented to his children's differing levels of competence or 'know-how' (Baker et al, 2005) with technology and in social interaction. The father designs his turns to take account of his children as users of technology and as social interactants. These actions by the children clearly illustrate the *in situ* competence that Hutchby and Moran-Ellis (1998) argue for in relation to children; the children manipulate 'culturally available resources' (p. 16) to manage their individual activity and their interactions with other family members, for example, resuming talk when information was needed (in the case of Trae's interactions with his father), or maintaining own activity when summoned (as Tina persistently did when questioned by her father). Throughout, the visibility of the activity with technology was the source for the resumption of talk and interaction, and copresence resulted in the absence of sequences that might be expected to occur in the initial and final stages of talk in ordinary conversation.

The father did not spend time commenting on the technoliteracies of browsing and multitasking (Spink et al., 2010). The recording and its transcription confirm that the young children's use of mobile devices was entirely taken for granted (Plowman, McPake, & Stephen, 2008) by the father and by the children themselves on this occasion; both used the technology constantly throughout, and their facility did not occasion comment from the father. The father, instead, oriented to specific images and made these the focus of his talk through the provision of information or through questions that produced information. There was constant physical activity such as finger movements, orienting the devices, and muting sounds, but these actions were treated as

these actions were treated as commonplace and unremarkable. For example, the children were not asked questions about how to do particular actions, or to do certain tasks with the mobile technology. Rather, the father's talk was about the screen images produced and manipulated. He responded to on-screen activity differently, designing his talk in ways that showed his orientation to his child's level of displayed competence, and orienting to each individual child's interests. Children similarly drew their father's attention to images, marking these as notable.

Conclusion

The children's use of digital technologies resulted in a plethora of information provided by tablet and smart phone applications. More importantly, their engagement with the technology in the home presented an interactional space for 'talk in activity' (Szymanski, 1999), where they were clearly adept at taking account of the technology and also managing the interactional matters at hand. Specifically, very young children do use technology for their own purposes and deal with adult interests in what they are doing, or harness information from adults when necessary. Copresence (Goffman, 1963) meant that talk could lapse and be resumed, and did, as members engaged with the digital technology. Actions, onscreen and off, were always potentially visible and available as resources for interaction. Managing talk and talk in activities during use of digital devices in the home is an aspect of young children's interactional competence.

Acknowledgements

The study was funded by the Australian Research Council (DP110104227), with ethical approval by Queensland University of Technology's University Human Research Ethics Committee (Reference No.: 1100001480) and Charles Sturt University's Research Ethics Office. We thank the teachers, children, and families of the Crèche and Kindergarten Association for their participation in this study.

References

- Antaki, C., Houtkoop-Steenstra, H., & Rapley, M. (2000). 'Brilliant. Next question ...': High-grade assessment sequences in the completion of interactional units. *Research on Language and Social Interaction*, 33, 235–262.
- Australian Bureau of Statistics. (2009). *Household use of information technology, 2008-09* (No. 8146.0). Retrieved November 27, 2011, from <http://abs.gov.au/AUSSTATS/abs@.nsf/Lookup/8146.0Main+Features12008-09>

- Australian Bureau of Statistics. (2011). *Household use of information technology, Australia, 2010-11*. Retrieved November 30, 2012, from <http://www.abs.gov.au/ausstats/abs@.nsf/mf/8146.0>
- Baker, C. D., Emmison, M., & Firth, A. (2005). Calibrating for competence in calls to technical support. In C. D. Baker, M. Emmison, & A. Firth (Eds.), *Calling for help: Language and social interaction in telephone helplines* (pp. 39–62). Amsterdam/Philadelphia: John Benjamins Publishing Company.
- Busch, G. (2012). 'Will, you've got to share': Disputes during family mealtime. In S. Danby & M. Theobald (Eds.), *Disputes in everyday life: Social and moral orders of children and young people* (pp. 27–56). New York, NY: American Sociological Association & Emerald.
- Cicourel, A. V. (1970). The acquisition of social structure: Toward a developmental sociology of language and meaning. In J. D. Douglas (Ed.), *Understanding everyday life: Toward the reconstruction of sociological knowledge* (pp. 136–168). London, England: Routledge & Kegan Paul.
- Cromdal, J. (2006). Socialization. *Encyclopedia of Language & Linguistics*, 11, 462–465. North, Holland: Elsevier.
- Cromdal, J. (2009). Childhood and social interaction in everyday life: Introduction to the special issue. *Journal of Pragmatics*, 41(8), 473–1476.
- Danby, S. J. (2002). The communicative competence of young children. *Australian Journal of Early Childhood*, 27(3), 25–30.
- Danby, S. (2009). Childhood and social interaction in everyday life: An epilogue. *Journal of Pragmatics*, 41, 1596–1599.
- Danby, S., Butler, C.W., & Emmison, M. (2009). When 'listeners can't talk': Comparing active listening in opening sequences of telephone and online counselling. *Australian Journal of Communication*, 36(3), 91–113.
- Danby, S., & Theobald, M. (Eds.). (2012). *Disputes in everyday life: Social and moral orders of children and young people* (pp. 221–241). New York, NY: American Sociological Association & Emerald.
- Danby, S., Thorpe, K., & Davidson, C. (2011–2013). *Interacting with knowledge, interacting with people: Web searching in early childhood*. Australian Research Council Discovery Project # 1100004180.
- Davidson, C. (2007). Routine encounters during independent writing: Explicating taken-for-granted interaction. *Language and Education*, 21(6), 473–486.
- Davidson, C. (2009). Young children's engagement with digital texts and literacies in the home: Pressing matters for the teaching of English in the early years of schooling. *English: Practice and Critique*, 8(3), 36–54.
- Davidson, C. (2012). When 'yes' turns to 'no': Young children's disputes during computer game playing in the home. In Danby, S. & Theobald, M. (Eds.) *Disputes in everyday life: Social and moral orders of children and young people* (pp. 355–376). New York, NY: American Sociological Association & Emerald.
- Davidson, C. (in press, 2013). 'Don't tell him just help him': Restricted interactional activity during a classroom writing lesson. In F. Chevalier (Ed.), *Constraints and interactional restrictions in institutional talk: Studies in conversation analysis*. Amsterdam: John Benjamins.
- Goffman, E. (1963). *Behavior in public places: Notes on the social organization of gatherings*. New York, NY: Free Press.

- Goodwin, C. (1981). *Conversational organization: Interaction between speakers and hearers*. New York, NY: Academic Press.
- Goodwin, M. H. (1990). *He-said-she-said: Talk as social organization among black children*. Bloomington: Indiana University Press.
- Goodwin, M. H., & Kyratzis, A. (2007). Children socializing children: Practices for negotiating the social order among peers. *Research on Language and Social Interaction*, 40(4), 279–289.
- Green, L., Brady, D., Ólafsson, K., Hartley, J., & Lumby, C. (2011). *Risks and safety for children on the Internet: Full findings from the AU Kids Online survey of 9–16 year olds and their parents*. Brisbane, Qld: ARC Centre of Excellence for Creative Industries and Innovation.
- Hutchby, I. (2001). *Conversation and technology: From the telephone to the Internet*. Malden, MA: Polity Press.
- Hutchby, I., & Moran-Ellis, J. (1998). Situating children's social competence. In I. Hutchby & J. Moran-Ellis (Eds.), *Children and social competence: Arenas of action*. London, England: Falmer Press.
- Jefferson, G. (2004). Glossary of transcript symbols with an introduction. In G. H. Lerner (Ed.), *Conversation analysis: Studies from the first generation* (pp. 13–31). Amsterdam: John Benjamins.
- Lankshear, C., & Knobel, M. (2006). *New literacies: Changing knowledge in the classroom*. New York, NY: Peter Lang.
- Lee, J. R. (1991). Language and culture: The linguistic analysis of culture. In G. Button (Ed.), *Ethnomethodology and the human sciences* (pp. 196–226). Cambridge; New York; Melbourne: Cambridge University Press.
- Lerner, G. (2003). Selecting next speaker: The context-sensitive operation of a context-free organization. *Language in Society*, 32, 177–201.
- Levy, M., & Gardner, R. (2012). Liminality in multitasking: Where talk and task collide in computer collaborations. *Language in Society*, 41, 557–587.
- Livingstone, S. (2002). *Young people and new media: Childhood and the changing media environment*. London, England: Sage.
- Long, M., & Sato, C. (1983). Classroom foreigner talk discourse; Forms and functions of teachers' questions. In H. Seliger & M. Long (Eds.), *Classroom oriented research in second language acquisition* (pp. 268–285). Rowley, MA: Newbury House.
- Mondada, L. (2007). Multimodal resources for turn-taking: Pointing and the emergence of next possible speakers. *Discourse Studies*, 9(2), 194–225.
- Ofcom. (2011). *The communications market report 2011*, United Kingdom. Retrieved November 14, 2011, from www.ofcom.org.uk/cm11
- Plowman, L., McPake, J., & Stephen, C. (2008). Just picking it up? Young children learning with technology at home. *Cambridge Journal of Education*, 38(3), 303–319.
- Rendle-Short, J. (2006). *The academic presentation: Situated talk in action*. Hampshire, England: Ashgate.
- Sacks, H. (1995). *Lectures on conversation* (G. Jefferson, Trans. Vols. 1 & 2). Oxford, England: Blackwell.
- Schegloff, E. A. (1998). Body Torque. *Social Research*, 65(3), 535–596.
- Schegloff, E. A. (2007). *Sequence organization in interaction: A primer in*

- conversation analysis: Vol. 1*. Cambridge, England: Cambridge University Press.
- Speier, M. (1971). The everyday world of the child. In J. D. Douglas (Ed.), *Understanding everyday life* (pp. 188–217). London, England: Routledge.
- Speier, M. (1982). The everyday world of the child. In C. Jenks (Ed.), *The sociology of childhood: Essential readings* (pp. 181–188). Aldershot, England: Gregg Revivals.
- Spink, A., Danby, S., Mallan, K., & Butler, C. (2010). Exploring young children's web searching and technoliteracy. *Journal of Documentation*, 66(2), 191–206.
- Stephen, C., McPake, J., & Plowman, S. (2010). Digital technologies at home: The experiences of 3- and 4-year-olds in Scotland. In M. M. Clark & S. Tucker (Eds.), *Early childhoods in a changing world* (pp. 45–54). Stoke on Trent, England: Trentham Books.
- Szymanski, M. (1999). Re-engaging and dis-engaging talk in activity. *Language in Society*, 28, 1–23.
- Szymanski, M., Vinkhuyzen, E., Aoki, P. M., & Woodruff, A. (2006). Organizing a remote state of incipient talk: Push-to-talk mobile radio-interaction. *Language in Society*, 35, 393–418.
- Tarplee, C. (2010). Next turn and intersubjectivity in children's language acquisition. In H. Gardner & M. Forrester (Eds.), *Analysing interactions in childhood: Insights from conversation analysis* (pp. 23–42). Chichester, England: Wiley-Blackwell.
- Theobald, M., & Danby, S. (2012). 'A problem of versions': Laying down the law in the school playground. In S. Danby & M. Theobald (Eds.), *Disputes in everyday life: Social and moral orders of children and young people* (pp. 221–241). New York, NY: American Sociological Association & Emerald.
- Thomas, A. (2006). 'MSN was the next big thing after Beanie Babies': Children's virtual experience as an interface to their identities and their everyday lives. *E-Learning*, 3(2), 126–142.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.