



The
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Young children's engagement with television and related media in the digital age

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

The University of Sheffield

Faculty of Social Sciences

School of Education

November 2018

Abstract

This thesis is one output of a White Rose Doctoral Training Partnership (WRDTP) Economic and Social Research Council (ESRC) studentship, devised by The Universities of Sheffield and Leeds in partnership with *CBeebies*. Taking a sociomaterial approach (Barad, 2003) to digital literacies in early childhood, this thesis focuses on United Kingdom (UK) preschool children's intra-actions and social practices (Wohlwend, 2009) with television and related media (TV&RM) at home. It examines how both well-established and new verbal and non-verbal intra-actions constitute children's unique social practices. Drawing on Bourdieu's notion of habitus (1977), this thesis asks how social class is implicated in these practices. These inquiries are addressed empirically using a mixed-methods approach. The results of a UK-wide survey of 1,200 parents of preschool children and ethnographic case studies with 6 families in Sheffield, UK are presented.

Several original contributions to empirical, theoretical and methodological knowledge are made in this thesis. Firstly, in their everyday engagements with TV&RM, preschool children amalgamate fragments of media texts with other material and/or immaterial things to constitute synthesised texts ('synthesised practices'). Secondly, preschool children and their families share habitus in relation to TV&RM ('family media habitus'). Thirdly, preschool children have relationships with narrative media texts without ever having engaged directly with them, via proxies including physical artifacts and social contact ('proxy media engagement'). Fourthly, family members engage with preschool children's TV&RM interests in ways which extend their learning in relation to literacies. Middle-class families use their children's TV&RM interests as the basis for engaging children in school-like literacies learning ('media practice schoolification'). Working-class families tend to extend their children's TV&RM interests in terms of operational, critical and cultural digital literacies and embodied literacies. Methodologically, the thesis develops a framework for 'Sociomaterial Nexus Analysis' and 'nexus mapping'.

Dedication

To my parents, Robert and Catherine.

Acknowledgements

I would like to thank my parents, both of whom read to me (mostly *Postman Pat* in silly accents) and encouraged my lifelong love of reading and learning. I would also like to thank Bertie, who has been my constant companion and emotional support in this process, and Richard, who arrived a little later, but hasn't stopped supporting me since.

I can hardly begin to describe my gratitude for my inspirational and unrelentingly kind supervisors, Jackie Marsh and Becky Parry. I could not be more aware of the jackpot I hit in having them as my PhD team. Jackie is one of the most admirable and selfless people I have come across. Becky has been hugely encouraging from day one, bigging me up to anyone who would listen and supporting me far beyond the call of duty. I consider both role models and hope to one day support others with something like the compassion and wisdom they have shown me.

I would like to thank the children, siblings and parents whose case studies are the heart of this thesis. Knowing you all has been a reward in itself and has changed who I am today.

I'm not sure that I would be here had it not been for Chris Jones and Thomas Webb taking me on as a Research Assistant in the Psychology Department at The University of Sheffield seven years ago. At a time when my professional confidence was at its lowest ebb, they were the ones to tell me I could and should be thinking about a PhD, an idea that seemed so far beyond the realms of possibility at the time, I hardly dared to entertain it. Thank you, too, to the exemplary scholars in my field who have pushed my thinking during the PhD: Associate Professor Karen Wohlwend, Professor Susan Edwards and Professor Susan Danby.

Thank you to my 'everyday family': Abby, Andrew, Gerard, Miko and Sarah. You have persevered throughout my anxieties and epic panics, making me laugh and laughing at me in equal measure. This round will most definitely be on me. Thank you to my PhD writing support team, Ellie, Suhaili, Gísli, Skúlína, Svava and Christina. Thank you, finally, to Chris Powell, who made me watch *The Princess Bride* and helped me to work out 'what to do with the rest of my life'.

November 2018.

Table of Contents

TABLE OF CONTENTS	6
LIST OF TABLES	9
LIST OF FIGURES	10
CHAPTER 1. INTRODUCTION	12
1.1. CONTEXT	12
1.2. EVOLUTION OF THE PRESENT THESIS	15
1.3. RESEARCH QUESTIONS, CONTRIBUTION AND STRUCTURE	18
CHAPTER 2. LITERATURE REVIEW	21
2.1. INTRODUCTION	21
2.2. PSYCHOLOGICAL APPROACHES	23
2.3. CULTURAL AND MEDIA STUDIES	28
2.4. SOCIOLOGICAL APPROACHES	32
2.5. EARLY CHILDHOOD LITERACIES	34
2.3. CROSS-CUTTING THEMES AND DISCUSSION	40
CHAPTER 3. METHODOLOGY	47
3.1. METHODOLOGICAL APPROACH	48
3.1.1. <i>Drivers of the approach</i>	48
3.1.2. <i>The unit of analysis</i>	48
3.1.3. <i>Multi-method approach</i>	51
3.1.4. <i>Social class in the thesis</i>	54
3.2. QUANTITATIVE SURVEY OF PARENTS	58
3.2.1. <i>Instrument design and 'Think Aloud' pilot study</i>	58
3.2.2. <i>Sample</i>	62
3.2.3. <i>Recruitment and distribution</i>	65
3.2.4. <i>Quantitative fieldwork</i>	65
3.2.5. <i>Analysing the quantitative survey data</i>	66
3.2.6. <i>Validity and reliability</i>	66
3.3. QUALITATIVE CASE STUDIES WITH FAMILIES	66
3.3.1. <i>Design</i>	66
3.3.2. <i>Sample</i>	68
3.3.3. <i>Recruitment</i>	68
3.3.4. <i>Analysing the qualitative case study data: a Sociomaterial Nexus Analysis</i>	71
3.3.5. <i>Reliability, validity and cross-case interpretation</i>	81
3.4. ETHICAL DIMENSIONS	84
3.5. IDENTITY WORK	88
3.5.1. <i>Special friend Fiona</i>	91
3.5.2. <i>Not-quite-child Fiona</i>	93
3.5.3. <i>Posh friend Fiona</i>	94
3.6. DISSEMINATION	96
CHAPTER 4. QUANTITATIVE ANALYSIS, FINDINGS AND INTERPRETATION	97
4.1. QUANTITATIVE ANALYSIS OVERVIEW	97

4.2. DESCRIPTIVE STATISTICS	99
4.2.1. <i>About the sample</i>	99
4.2.2. <i>About the respondents</i>	101
4.2.3. <i>About the children represented in the survey</i>	103
4.3. PRESCHOOL CHILDREN’S MEDIA USE	103
4.3.1. <i>Levels of media use</i>	104
4.3.2. <i>Age patterns in the use of media</i>	106
4.3.3. <i>Social class patterns in the use of media</i>	107
4.3.4. <i>Gender patterns in the use of media</i>	108
4.4. PRESCHOOL CHILDREN’S TELEVISION ENGAGEMENT AND CHOICES	111
4.4.1. <i>Television engagement and viewing type</i>	111
4.4.2. <i>Favourite programmes and channels</i>	111
4.5. CHILDREN’S ACTIVITIES WHILST WATCHING LIVE TELEVISION.....	114
4.5.1. <i>Preschool children’s activities whilst watching live television</i>	114
4.5.2. <i>Age patterns in children’s activities whilst watching television</i>	117
4.5.3. <i>Social class patterns in children’s activities whilst watching television</i>	121
4.5.4. <i>Gender patterns in children’s activities whilst watching television</i>	125
4.6. CHILDREN’S POST-TELEVISION VIEWING ACTIVITIES.....	127
4.6.1. <i>Preschool children’s activities after engaging with television</i>	127
4.6.2. <i>Age patterns in children’s activities after watching television</i>	130
4.6.3. <i>Social class patterns in children’s activities after watching television</i>	132
4.6.4. <i>Gender patterns in children’s activities after watching television</i>	134
4.7. THE SOCIAL CONTEXTS OF CHILDREN’S ENGAGEMENT WITH TV&RM	136
4.7.1. <i>Co-viewing contexts of engagement by platform</i>	136
4.7.2. <i>Parental co-viewing time: children’s TV</i>	138
4.7.3. <i>Parental co-viewing time: non-children’s TV</i>	140
4.7.4. <i>Parental co-viewing content: non-children’s TV</i>	143
4.7.5. <i>Background television</i>	144
4.8. PARENT PERCEPTIONS AND ATTITUDES TO TV&RM	146
CHAPTER 5. QUALITATIVE ANALYSIS, FINDINGS AND INTERPRETATION	148
5.1. ARCHIE.....	150
5.1.1. <i>A pen portrait of Archie and his family</i>	150
5.1.2. <i>Members’ generalizations and researcher observations about TV&RM</i>	155
5.1.3. <i>Key child and family practices with TV&RM in Archie’s life</i>	161
5.1.4. <i>ARCHIE MAKES THE ROBOT GO LITTLE DIDDY</i>	162
5.1.5. <i>ARCHIE PLAYS THE POWERPUFF GIRLS</i>	170
5.2. NIYAT	176
5.2.1. <i>A pen portrait of Niyat and her family</i>	176
5.2.2. <i>Members’ generalizations and researcher observations about TV&RM</i>	181
5.2.3. <i>Key child and family practices with TV&RM in Niyat’s life</i>	187
5.2.4. <i>NIYAT EXPLORES CBEEBIES STORYTIME</i>	188
5.2.5. <i>NIYAT DANCES TO SINGLE LADIES</i>	196
5.3. OLIVIA	206
5.3.1. <i>A pen portrait of Olivia and her family</i>	206
5.3.2. <i>Members’ generalizations and researcher observations about TV&RM</i>	210
5.3.3. <i>Key child and family practices with TV&RM in Olivia’s life</i>	213

5.3.4. OLIVIA PLAYS DOCTOR.....	214
5.3.5. OLIVIA MAKES A PHOTO STICKER.....	222
5.4. ROSIE.....	230
5.4.1. A pen portrait of Rosie and her family.....	230
5.4.2. Members' generalizations and researcher observations about TV&RM.....	235
5.4.3. Key child and family practices with TV&RM in Rosie's life.....	239
5.4.4. ROSIE PLAYS AN ASTRONAUT.....	240
5.4.5. ROSIE EXPLORES ALPHABLOCKS.....	246
5.5. EMMA.....	251
5.5.1. A pen portrait of Emma and her family.....	251
5.5.2. Members' generalizations and researcher observations about TV&RM.....	256
5.5.3. Key child and family practices with TV&RM in Emma's life.....	263
5.5.4. EMMA PLAYS ZOMBIES VS. PLANTS.....	264
5.5.5. EMMA PERFORMS THE MONEYSUPERMARKET.COM ADVERT.....	275
5.6. JOHN.....	283
5.6.1. A pen portrait of John and his family.....	283
5.6.2. Members' generalizations and researcher observations about TV&RM.....	288
5.6.3. Key child and family practices with TV&RM in John's life.....	293
5.6.4. JOHN PLAYS CASTLE CRASHERS.....	294
5.6.5. JOHN EXPLORES CBEEBIES STORYTIME.....	305
CHAPTER 6. DISCUSSION.....	313
6.1. SYNTHESISED PRACTICES AND SYNTHESISED TEXTS.....	313
6.2. FAMILY MEDIA HABITUS.....	316
6.3. PROXY MEDIA ENGAGEMENT.....	319
6.4. THE SOCIAL CONTEXTS OF PRESCHOOL CHILDREN'S ENGAGEMENTS WITH TV&RM.....	324
6.5. SOCIALLY CLASSED MEDIA PRACTICES.....	326
6.6. ETHNICITY AND NATIONALITY.....	335
6.7. GENDER.....	337
CHAPTER 7. CONCLUSIONS AND RECOMMENDATIONS.....	339
8. BIBLIOGRAPHY.....	347
9. APPENDICES.....	373
APPENDIX A: ORIGINAL PROJECT PROPOSAL.....	373
APPENDIX B: CHANGES TO THE SURVEY FOLLOWING PILOT TESTING.....	374
APPENDIX C: QUANTITATIVE QUESTIONNAIRE AFTER PILOT TESTING.....	375
APPENDIX D: SURVEY DISTRIBUTION METHODS AND RESPONSES.....	385
APPENDIX E: ORIGINAL VISITS FRAMEWORK.....	387
APPENDIX F: DETAILED SUMMARY OF QUALITATIVE DATA.....	388
APPENDIX G: THE EIGHT FAMILIES.....	391
APPENDIX H: EXCERPT OF FULL MULTIMODAL TRANSCRIPTION.....	392
APPENDIX I: HIGHEST STATUS WORK OF PARENT OR CARER IN HOUSEHOLD.....	393
APPENDIX J: RESPONDENT EDUCATIONAL ATTAINMENT.....	393
APPENDIX K: CHILD'S AGE.....	394
APPENDIX L: CHILD'S HOURS SPENT IN NURSERY OR SCHOOL PER WEEK BY AGE.....	394
APPENDIX M: CHILD'S GENDER BY SAMPLE SOURCE.....	395
APPENDIX N: CHILD'S ETHNICITY BY SAMPLE SOURCE.....	395

APPENDIX O: FAVOURITE PROGRAMMES, BY GENDER.....	396
APPENDIX P: FAVOURITE PROGRAMMES, BY AGE.....	397
APPENDIX Q: FAVOURITE PROGRAMMES, BY SOCIAL CLASS.....	398
APPENDIX R: FAVOURITE CHANNELS, BY GENDER.....	398
APPENDIX S: FAVOURITE CHANNELS, BY AGE.....	399
APPENDIX T: FAVOURITE CHANNELS, BY SOCIAL CLASS.....	399
APPENDIX U: TOP 5 NON-CHILDREN’S PROGRAMMES, BY SOCIAL CLASS.....	400
APPENDIX V: ROSIE ROLE-PLAYS AS AN ASTRONAUT (V2) DESCRIPTION OF PHOTOS.....	400

List of Tables

TABLE 1: MODIFICATION OF THE HOPE-GOLDTHORPE SCALE (GOLDTHORPE, 1981; HOPE, 1981; SEYD, 2002).....	57
TABLE 2: QUESTIONS ADDED TO THE QUESTIONNAIRE.....	58
TABLE 3: THINK ALOUD PARTICIPANTS.....	60
TABLE 4: THINK ALOUD THEMES.....	62
TABLE 5: CHILD’S ENGAGEMENT WITH CBEEBIES BY SAMPLE SOURCE.....	63
TABLE 6: SAMPLE SOURCE BY PARENT (WHO COMPLETED THE SURVEY) OCCUPATION.....	64
TABLE 7: SAMPLE SOURCE BY PARENT (WHO COMPLETED THE SURVEY) COLLAPSED OCCUPATION.....	64
TABLE 8: CODING THE QUALITATIVE DATA I.....	78
TABLE 9: CODING THE QUALITATIVE DATA II.....	79
TABLE 10: SURVEY RESPONSE FORMAT AND SOURCE.....	100
TABLE 11: HIGHEST STATUS WORK OF PARENT OR CARER, BY RESPONSE SOURCE.....	101
TABLE 12: FULL-TIME PARENTS BY HOUSEHOLD.....	102
TABLE 13: TOP 20 FAVOURITE TELEVISION PROGRAMMES.....	111
TABLE 14: TOP 10 FAVOURITE CHANNELS.....	113
TABLE 15: TOP 10 NON-CHILDREN’S PROGRAMMES WATCHED BY CHILDREN.....	143
TABLE 16: OVERARCHING PRACTICES.....	149
TABLE 17: THINGS THAT ‘MATTERED’ IN ARCHIE’S CASE STUDY.....	153
TABLE 18: ARCHIE MAKES THE ROBOT GO ‘LITTLE DIDDY’ WITH MUM (VISIT 3) MULTIMODAL TRANSCRIPTION.....	164
TABLE 19: ARCHIE ROLEPLAYS THE POWERPUFF GIRLS WITH KYLE AND ROBBIE (VISIT 4) MULTIMODAL TRANSCRIPTION.....	172
TABLE 20: THINGS THAT ‘MATTERED’ IN NIYAT’S CASE STUDY.....	179
TABLE 21: NIYAT EXPLORES THE CBEEBIES STORYTIME APP (VISIT 3) MULTIMODAL TRANSCRIPTION.....	190
TABLE 22: NIYAT DANCES TO ‘SINGLE LADIES’ (VISIT 5) MULTIMODAL TRANSCRIPTION.....	198
TABLE 23: THINGS THAT ‘MATTERED’ IN OLIVIA’S CASE STUDY.....	208
TABLE 24: OLIVIA’S DOCTOR ROLE-PLAY (VISIT 2) MULTIMODAL TRANSCRIPTION.....	216
TABLE 25: OLIVIA MAKES A PHOTO STICKER ON THE TABLET WITH MUM (VISIT 3) MULTIMODAL TRANSCRIPTION.....	224
TABLE 26: THINGS THAT ‘MATTERED’ IN ROSIE’S CASE STUDY.....	233
TABLE 27: ROSIE ROLEPLAYS AS AN ASTRONAUT (VISIT 2) AUDIO TRANSCRIPTION.....	242
TABLE 28: ROSIE AND MARY EXPLORE THE ALPHABLOCKS GAME ON FIONA’S TABLET (VISIT 3) MULTIMODAL TRANSCRIPTION.....	248
TABLE 29: THINGS THAT ‘MATTERED’ IN EMMA’S CASE STUDY.....	254
TABLE 30: EMMA PLAYS PLANTS VS. ZOMBIES (VISIT 4) MULTIMODAL TRANSCRIPTION.....	266
TABLE 31: EMMA PERFORMS THE MONEY SUPERMARKET ADVERT (VISIT 2) MULTIMODAL TRANSCRIPTION.....	277
TABLE 32: THINGS THAT ‘MATTERED’ IN JOHN’S CASE STUDY.....	286
TABLE 33: JOHN AND JAMES’ CASTLE CRASHERS PLAY (VISIT 5) MULTIMODAL TRANSCRIPTION.....	296
TABLE 34: JOHN AND DAD EXPLORE THE CBEEBIES STORYTIME APP (VISIT 3) MULTIMODAL TRANSCRIPTION.....	307
TABLE 35: EXAMPLE SYNTHESISED PRACTICES AND TEXTS.....	314
TABLE 36: EXAMPLES OF FAMILY MEDIA HABITUS.....	317
TABLE 37: EXAMPLES OF PROXY MEDIA ENGAGEMENT.....	321
TABLE 38: EXAMPLES OF MEDIA PRACTICE SCHOOLIFICATION.....	327
TABLE 39: EXAMPLES OF MEDIA PRACTICES BEING EXTENDED IN WORKING-CLASS FAMILIES.....	330

List of Figures

FIGURE 1: DRIVERS OF THE THESIS APPROACH	16
FIGURE 2: METHODS OVERVIEW	47
FIGURE 3: METHODS OVERVIEW	48
FIGURE 4: CONCEPTUAL MODEL OF CHILDREN'S HOME PRACTICES WITH TELEVISION AND RELATED MEDIA AS PART OF AN ASSEMBLAGE	51
FIGURE 5: VISUALISATION OF THE CONCURRENT CRYSTALLIZATION MODEL, ADAPTED FROM CRESWELL ET AL. (2003).....	53
FIGURE 6: THE FAMILIES	70
FIGURE 7: LOCATING A NEXUS OF PRACTICE (SCOLLON AND SCOLLON, 2004)	73
FIGURE 8: INTERSECTIONS AT THE NEXUS OF PRACTICE, SUMMARISED FROM WOHLWEND (2012)	74
FIGURE 9: AN ACTIVITY MODEL OF EARLY LITERACY APPRENTICESHIP (WOHLWEND, 2009).....	75
FIGURE 10: WOHLWEND'S (2009) ANALYTIC FILTERS	76
FIGURE 11: THE NEXUS OF PRACTICE (A WORKING MODEL FOR SOCIOMATERIAL NEXUS ANALYSIS).....	77
FIGURE 12: THE ANALYTIC FILTERS, ADAPTED FROM WOHLWEND (2009).....	78
FIGURE 13: CROSS-CASE COMPARISON BY SOCIAL CLASS	82
FIGURE 14: CHILDREN'S ACTIVITIES ON A TYPICAL DAY (N = 1194)	106
FIGURE 15: TIME SPENT WATCHING LIVE TV ON THE TV SET BY AGE (N=1187).....	109
FIGURE 16: TIME SPENT PLAYING VIDEO GAMES LIKE PLAYSTATION OR X-BOX BY AGE (N=1171).....	109
FIGURE 17: TIME SPENT PLAYING OUTSIDE BY AGE (N=1179).....	109
FIGURE 18: TIME SPENT BEING READ TO BY AGE (N=1184)	109
FIGURE 19: TIME SPENT WATCHING A VIDEO OR DVD BY SOCIAL CLASS (N=1169)	110
FIGURE 20: TIME SPENT PLAYING DIGITAL GAMES BY SOCIAL CLASS (N=1166)	110
FIGURE 21: TIME SPENT PLAYING VIDEO GAMES BY SOCIAL CLASS (N=1167).....	110
FIGURE 22: CHILDREN'S CONCURRENT ACTIVITIES WHILST WATCHING TELEVISION (N=1190).....	116
FIGURE 23: MULTI-TASKING WITH MORE THAN ONE TYPE OF MEDIA AT THE SAME TIME (N=1190).....	117
FIGURE 24: SINGING WHILST WATCHING TV, BY AGE (N=1190)	119
FIGURE 25: DANCING WHILST WATCHING TV, BY AGE (N=1190)	119
FIGURE 26: WRITING OR DRAWING WHILST WATCHING TV, BY AGE (N=1190)	119
FIGURE 27: TALKING TO ON-SCREEN CHARACTERS WHILST WATCHING, BY AGE (N=1190)	119
FIGURE 28: ACTING OUT THE STORY WHILST WATCHING TV, BY AGE (N=1190)	120
FIGURE 29: PLAYING WITH TOYS WHILST WATCHING TV, BY AGE (N=1190)	120
FIGURE 30: SINGING WHILST WATCHING AND SOCIAL CLASS (N=1186)	123
FIGURE 31: READING WHILST WATCHING AND SOCIAL CLASS (N=1186).....	123
FIGURE 32: TALKING ABOUT THE PROGRAMME AND SOCIAL CLASS (N=1186).....	123
FIGURE 33: SITTING QUIETLY AND CONCENTRATING AND SOCIAL CLASS (N=1186).....	123
FIGURE 34: USING ANOTHER DEVICE TO PLAY GAMES AND SOCIAL CLASS (N=1186)	124
FIGURE 35: USING ANOTHER DEVICE TO WATCH CLIPS/VIDEOS AND SOCIAL CLASS (N=1186).....	124
FIGURE 36: SINGING WHILST WATCHING AND GENDER (N=1186)	126
FIGURE 37: DANCING WHILST WATCHING AND GENDER (N=1186).....	126
FIGURE 38: WRITING AND DRAWING WHILST WATCHING AND GENDER (N=1186).....	126
FIGURE 39: CHILDREN'S POST TELEVISION WATCHING ACTIVITIES (N=1194)	129
FIGURE 40: TALKING ABOUT THE PROGRAMME/FILM AFTER WATCHING TV, BY AGE (N=1190).....	131
FIGURE 41: USING CATCHPHRASES OR DIALOGUE FROM THE PROGRAMME/FILM AFTER WATCHING TV, BY AGE (N=1190).....	131
FIGURE 42: ROLE-PLAYING A CHARACTER AFTER WATCHING TV, BY AGE (N=1190)	131
FIGURE 43: PLAYING WITH RELATED TOYS AFTER WATCHING TV, BY AGE (N=1190).....	131
FIGURE 44: USING CATCHPHRASES OR DIALOGUE FROM THE PROGRAMME AFTER WATCHING, BY SOCIAL CLASS (N=1186)	133
FIGURE 45: ROLE-PLAYS A CHARACTER AFTER WATCHING, BY SOCIAL CLASS (N=1186)	133
FIGURE 46: DRESSES UP AS A CHARACTER AFTER WATCHING, BY GENDER (N=1186)	135
FIGURE 47: SINGS SONGS FROM TELEVISION AFTER WATCHING, BY GENDER (N=1186).....	135

FIGURE 48: DO THE MEDIA IN FAMILY HOMES CAUSE FAMILIES TO SPEND MORE OR LESS TIME TOGETHER? (N=1190).....	136
FIGURE 49: CO-VIEWING CONTEXTS BY DEVICE/PLATFORM (RANGE OF N'S FROM 1168 TO 1179)	137
FIGURE 50: TIME ADULTS IN HOUSEHOLD SPEND WATCHING CHILDREN'S TV WITH CHILD (N=1188)	138
FIGURE 51: AGE AND TIME ADULTS IN HOUSEHOLD SPEND WATCHING CHILDREN'S TV WITH CHILD (N=1188)	139
FIGURE 52: SOCIAL CLASS AND TIME ADULTS IN HOUSEHOLD SPEND WATCHING CHILDREN'S TV WITH CHILD (N=1184)	140
FIGURE 53: TIME ADULTS IN HOUSEHOLD SPEND WATCHING NON-CHILDREN'S TV WITH CHILD (N=1186).....	141
FIGURE 54: AGE AND TIME ADULTS IN HOUSEHOLD SPEND WATCHING NON-CHILDREN'S TV WITH CHILD (N=1186)	142
FIGURE 55: SOCIAL CLASS AND TIME ADULTS IN HOUSEHOLD SPEND WATCHING NON-CHILDREN'S TV WITH CHILD (N=1182).....	143
FIGURE 56: HOW OFTEN IS THE TV ON, EVEN IF NO ONE IS WATCHING? (N=1189)	144
FIGURE 57: BACKGROUND TELEVISION PREVALENCE, BY SOCIAL CLASS (N=1185)	145
FIGURE 58: PARENT PERCEPTIONS OF PLATFORM PURPOSE (N=1189).....	147
FIGURE 59: ARCHIE'S FAMILY TREE	152
FIGURE 60: THINGS THAT 'MATTERED' AND INTRA-ACTIONS IN ARCHIE'S CASE STUDY (MAPPED).....	154
FIGURE 61: ARCHIE AND HIS FAMILY'S KEY PRACTICES.....	161
FIGURE 62: LOCATING ARCHIE'S NINA AND THE NEURONS EXPLORATION WITHIN HIS CASE STUDY MAP.....	163
FIGURE 63: LOCATING ARCHIE'S POWERPUFF GIRLS ROLEPLAY WITHIN HIS CASE STUDY MAP	171
FIGURE 64: NIYAT'S FAMILY TREE	178
FIGURE 65: THINGS THAT 'MATTERED' AND INTRA-ACTIONS IN NIYAT'S CASE STUDY (MAPPED)	180
FIGURE 66: NIYAT AND HER FAMILY'S KEY PRACTICES	187
FIGURE 67: LOCATING NIYAT'S CBEEBIES STORYTIME EXPLORATION WITHIN HER CASE STUDY MAP	189
FIGURE 68: LOCATING NIYAT'S SINGLE LADIES DANCE WITHIN HER CASE STUDY MAP	197
FIGURE 69: OLIVIA'S FAMILY TREE	207
FIGURE 70: THINGS THAT 'MATTERED' AND INTRA-ACTIONS IN OLIVIA'S CASE STUDY (MAPPED)	209
FIGURE 71: OLIVIA AND HER FAMILY'S KEY PRACTICES	213
FIGURE 72: LOCATING OLIVIA'S DOCTOR'S ROLE-PLAY WITHIN HER CASE STUDY MAP.....	215
FIGURE 73: LOCATING OLIVIA'S STICKER MAKING WITHIN HER CASE STUDY MAP	223
FIGURE 74: ROSIE'S FAMILY TREE	232
FIGURE 75: THINGS THAT 'MATTERED' AND INTRA-ACTIONS IN ROSIE'S CASE STUDY (MAPPED).....	234
FIGURE 76: ROSIE AND HER FAMILY'S KEY PRACTICES.....	239
FIGURE 77: LOCATING ROSIE'S ASTRONAUT ROLE-PLAY WITHIN HER CASE STUDY MAP	241
FIGURE 78: LOCATING ROSIE AND MARY'S ALPHABLOCKS EXPLORATION WITHIN HER CASE STUDY MAP.....	247
FIGURE 79: EMMA'S FAMILY TREE	253
FIGURE 80: THINGS THAT 'MATTERED' AND INTRA-ACTIONS IN EMMA'S CASE STUDY (MAPPED)	255
FIGURE 81: EMMA AND HER FAMILY'S KEY PRACTICES	263
FIGURE 82: LOCATING EMMA'S PLANTS VS. ZOMBIES PLAY WITHIN HER CASE STUDY MAP	265
FIGURE 83: LOCATING EMMA'S MONEYSUPERMARKET PERFORMANCE WITHIN HER CASE STUDY MAP.....	276
FIGURE 84: JOHN'S FAMILY TREE.....	285
FIGURE 85: THINGS THAT 'MATTERED' AND INTRA-ACTIONS IN JOHN'S CASE STUDY (MAPPED)	287
FIGURE 86: JOHN AND HIS FAMILY'S KEY PRACTICES	293
FIGURE 87: JOHN AND JAMES' CASTLE CRASHERS PLAY WITHIN JOHN'S CASE STUDY MAP.....	295
FIGURE 88: JOHN'S DEADPOOL DRAWINGS (LEFT) AND JAMES' DEADPOOL DRAWING (RIGHT) (VISIT 5).....	300
FIGURE 89: JAMES' FOXY THE PIRATE TOY DRESS-UP (LEFT) AND DRAWING (RIGHT) (VISIT 3).....	300
FIGURE 90: JOHN'S CARDBOARD 'BEAR' FIGURE (LEFT) (VISIT 5); JOHN AND JAMES' CASTLE CRASHERS MASKS (RIGHT) (VISIT 5)	300
FIGURE 91: LOCATING JOHN AND DAD'S CBEEBIES STORYTIME EXPLORATION WITHIN JOHN'S CASE STUDY MAP	306

CHAPTER 1. INTRODUCTION

In this chapter, I will introduce the reader to the overall purpose and approach of the thesis. I begin by providing some broad contextual information about children's engagement with TV&RM and how it has been researched. I endeavour to orient the reader by explaining how the research project presented in this thesis originally came into being, as well as how it developed over time. The project's research questions are described in section 1.3. I then briefly outline the major contributions to knowledge made by the thesis. Finally, I explain the structure the remainder of the thesis will take.

1.1. Context

There is little doubt that television and a range of other media play a role in the lives of almost all UK children. Watching television on a TV set is still the dominant media activity for UK children aged from 3-11 (Ofcom, 2017). According to parents, most preschool children aged 3-4 years (96%) watch television on a TV set. They estimate that their 3-4 year olds watch television on a TV set for an average of 15 hours a week. In line with trends in older children's media use, preschool children are also engaging with media differently now than they were even ten or twenty years ago. Access to multiple devices and platforms means that children are now engaging with media texts across multiple sources (Kinder, 1991). Although few preschool children have their own smartphone (1% of 3-4 year olds and 5% of 5-7 year olds, Ofcom, 2017), many have their own tablet device (21% of 3-4 year olds and 35% of 5-7 year olds, Ofcom, 2017). Parents in a UK study (Marsh et al., 2015) reported that their children aged five and below used tablets for a mean average of 1 hour and 19 minutes on a typical weekday and 1 hour and 23 minutes on a typical weekend day. Given the prevalence of television and related media (TV&RM) in the lives of preschool children, it is important that high-quality academic research is produced in relation to preschool children and their engagements with TV&RM. Parents express a desire for support and advice in navigating how digital devices should fit into a broader picture of good parenting (Livingstone et al., 2018). Many early years practitioners still express anxieties about children's digital engagement, both at home and in early years settings. They also acknowledge gaps in their own understanding of how to embed technology in professional practice (Marsh et al., 2017). Indeed, disparities in how children under five engage with digital technologies for play and learning at home versus early years settings have led some to suggest there is a need to re-conceptualise young children's learning in early years pedagogy (Palaiologou, 2016). The topic is also of commercial interest to the children's media industry. Public service broadcasters such as the BBC have a remit to provide engaging and interactive content that stimulates, supports and reflects diverse

childhoods (BBC Trust, 2016), making deeper insight into young children's engagement with media content important.

Although large-scale UK studies offer detailed and essential insights into these trends, there is also a need for research that helps us to understand precisely *how* preschool children engage with TV&RM day to day as part of their everyday lives. Children's engagements with TV&RM have been studied very differently by different researchers. The historical legacy of separate academic disciplines has played a role in creating multiple, fractured accounts of the relationship between children and TV&RM. Researchers have studied children's engagement with television ever since the mainstream use of television at home began to grow in the 1950s and 1960s. Since this time, a good deal of research has been undertaken by paediatricians and developmental psychologists, who have focused on the possible effects television might have on children (American Academy of Pediatrics, 2016; Dennison, Erb and Jenkins, 2012; Hancox, Milne and Poulton, 2005). Although this type of enquiry, which has been termed 'media effects research' (Bickham et al., 2016), offers some evidence of more positive 'effects', it has predominantly focused on the risks to children posed by of a range of media. Other academic disciplines offer work that conceptualises children's engagements with media very differently. Historically, media studies scholars tended to raise concerns in relation to children's exposure to mass media (Althusser, 1971; Kornhauser, 1960). Since then, some work in the field has offered nuanced accounts of children actively and playfully exploring identity and emotion in relation to digital contexts (Nava, 1992; Potter & McDougall, 2017; Seiter, 1998), including detailed ethnographic work with children as young as 2 years (Bazalgette, 2018). Sociologists have contributed new theorisations of children and childhood that have implications for our understanding of both the topic and of appropriate and ethical ways to research with children (Prout, 2005). Literacies scholars have used different approaches to investigate the skills and competencies children develop when they engage with TV&RM at home (Burnett et al., 2014; Marsh et al., 2016).

As the literature review (Chapter 2) identifies, gaps in our understanding and knowledge remain. At present, there are recognised knowledge gaps with regards to the digital literacies of the very youngest children in our societies (Sefton-Green, Marsh, Erstad, & Flewitt, 2016). Until very recently, most research into the digital habits of preschoolers was undertaken with children towards the older end of the bracket. Over the next few years, it will be important to continue recent moves towards researching the digital lives of under-threes (Bazalgette, 2018; Gillen et al., 2018). Various gaps exist in relation to the social contexts of digital engagement at home, especially contexts outside of parent-child interactions (Scott and Marsh, 2018). In recent years, more examples of studies considering the social and cultural contexts of digital literacies in early childhood can be found. Notably, Dezuanni, Beavis, and O'Mara (2015) harness Butler's (1990, 2004) theories of performativity and recognition to explore identity work within affinity groups across the home/school divide. Davidson (2009) provides a carefully observed example of a social literacy

learning experience in which two young children researching lizards at home use both the internet and a traditional book about lizards in collaboration with their father. Given et al. (2016) use observational video recordings to document young children's use of technology in their homes, highlighting the rich interaction of parents. It is, however, still hard to find examples relating specifically to home contexts and to television, arguably because engaging with television is still broadly perceived as something preschoolers do alone. What is more, it is now well established that researchers *in general* routinely publish broad claims about human psychology and behavior based on samples drawn entirely from Western, Educated, Industrialized, Rich, and Democratic (WEIRD) societies (Henrich, et al., 2010). Whilst large-scale studies (Chaudron et al., 2015; Marsh et al., 2018) offer insight into social class difference in children's digital habits, there are few recent, fine-grained studies that consider the role social class plays in terms of the digital practices of preschool children and their families. Recent, very detailed research considering the digital engagement of very young children at home can be found, but either children from lower socioeconomic status (SES) communities are not represented or social class is not an explicit focus. Studies exploring parental mediation of children's media use (e.g. Vandewater et al., 2005) have paid some attention to social class, but provide little insight into how children's media practices (or whole family media practices) might be considered socially classed. Plowman et al. (2012) found differences in parental attitudes based on SES, but concluded that such attitudinal differences did not have a bearing on their children's activities.

Finally, a variety of theoretical developments have offered social scientists new frameworks that provide scope for them to begin investigating human relationships with digital devices and texts differently. Some examples include Deleuze and Guattari's (1987) poststructuralist ontology, new material approaches such as Miller's (2008) discussion of material culture and various accounts of posthumanism (e.g. Braidotti, 2013; Prout, 2005). They also include the sociomaterial, as discussed in Barad's influential (2003) account of how material objects 'matter'. Scholars interested in children's engagements with the digital have begun to work within these frameworks, bringing new light to the topic. Potter and McDougall (2017) refer to the sociomaterial turn in their theorisation of third space literacies. Dezuanni (2015) works with Actor Network Theory to investigate student and teacher interactions with digital technologies, media concepts and materials in a preschool 'makerspace' (a space where people with shared interests come together to make, sometimes with digital materials and devices). Some have used these frameworks to consider preschool children's engagements with technology. Marsh (2017a) employs post-human theory to help explain some of the complexity of play that transverses physical and virtual domains. Wohlwend et al. (2017) move towards using agential realism to track intra-actions among bodies, materials and spaces. Scholarly work using such theoretical frameworks to deepen understanding of children's engagements with digital platforms and texts is, however, still in its infancy. Recent work suggests the potential of sociomaterial perspectives to generate new understandings of the use of technology (Burnett, Merchant,

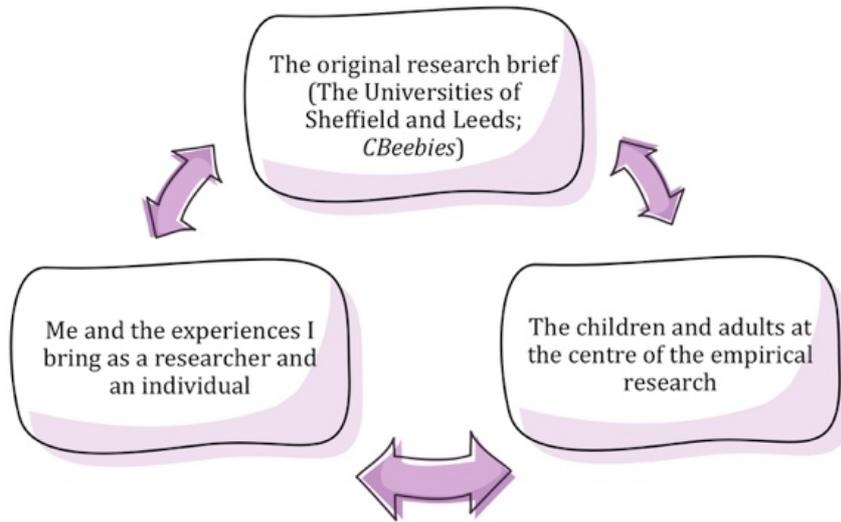
Parry & Storey, 2018). Given the promise of such work, there is a need for continued scholarly efforts in originating both theory and tools in this area, particularly in terms of early childhood.

1.2. Evolution of the present thesis

The work of a thesis is influenced by multiple factors, many of which are common to all research (interest, ethics, time and funding available, access to participants). Whilst many factors play a part, three core drivers contributed to the development of the present document as a substantial thesis based on empirical research. The reality of funding and conducting social research in the current climate frequently calls for complex multi-partner working in addition to engagement with participant communities to create new ways of understanding the questions and problems that can be researched. The PhD project on which this thesis is based was initially co-constructed by academics at The University of Sheffield (Professor Jackie Marsh) and Leeds (Dr. Becky Parry) in association with an industry partner (*CBeebies*). In 2012, the project was advertised as an Economic and Social Research Council (ESRC) funded PhD studentship and, following an application and interview process, awarded to me.

The basic premise of the research was devised before I entered the arena as its researcher. Its design was driven in the first instance by the experiences and reflections of at least three different parties. Professor Marsh and Dr. Parry had already contributed an extensive body of research to the field and had identified a need for further research to understand how children's television viewing is undertaken in the complex, contemporaneous, intertextual landscape. Meanwhile, *CBeebies* had a wealth of market research available to them, but were particularly keen to understand more about the preschool audience in relation to social class. I was attracted to the proposal on multiple grounds relating to my own experiences (discussed further in Chapter 3). The proposal carried with it certain commitments that shaped the research as it developed. However, the thesis has two other important drivers. I, and the experiences I bring with me as a researcher and individual, have, of course, had an impact. Finally, the children and adults at the centre of the empirical research have had a profound impact. The resulting thesis is thus something of a polyphonic (Bakhtin, 1992) production between senior and junior academics (my supervisors and myself), my industry collaborator (*CBeebies*) and an engaged community of research participants (child and adult). As visualised in Figure 1, these drivers inter-relate. At some points during the process, these drivers worked together, contributing symbiotically to shared goals. At others, tensions emerged between the drivers of the approach. These tensions are explored in section 3.2.

Figure 1: Drivers of the thesis approach



As the initial project proposal highlights, the research was mapped out only in brief, but had clear aims and objectives, as well as stipulating that a survey and qualitative case studies should be used. The stated objectives of the original research brief were to:

- i. Identify television-viewing patterns of 3-6 year-olds;
- ii. Examine the relationship between children's television viewing and their engagement with other media, digital technologies and related texts and artifacts;
- iii. Analyse the transitions in children's programme and channel choices and related activities over time and at key points e.g. the move from nursery to primary school;
- iv. Identify the implications of the findings for *CBeebies* programme development, the children's media industry, parents and early years educators.

The initial project proposal carried within it the obligation of the specific descriptor 'television and related media'. This detail relates to the role *CBeebies* played in its original design. There is a risk that the prominence of 'television' within the project's title might suggest that 'related media' are conceived of as a subset of television within the project overall. The project's originators shared an understanding of children's television consumption as 'firmly embedded in an intertextual, multimedia network in which programmes can be watched on demand across a range of media platforms, some transportable, and children can engage in play with products/artifact/sites related to the programmes in offline and online contexts' (Appendix A). The scope of the study was therefore already broad from the outset. However, as the qualitative fieldwork progressed, my working definition of what the research should cover became even more flexible and non-specific. Spending time with families and reflecting on their media practices left me

with a strong sense that it was unhelpful to limit either my lens to any media platform or text specifically, or to spend too much time defining and distinguishing between media platforms and texts. Instead, I began to note and map out the entirety of the children's engagements with media platforms, media and related texts and artifacts, alongside many other aspects of their everyday lives. Television, then, is not expressly the central focus of the work, nor are other media conceptualised as a subset of television within the study. Rather, the project pays attention to a broad range of texts and platforms, with television serving as a 'way in'. Though 'television and related media' might not be my first-choice descriptor should I re-title the project as it currently exists, it has nonetheless served as a helpful starting point. Given the good deal of attention paid in recent years to tablets and smartphones in both the media's coverage of children's media lives and academic scholarship, the term at least attends to the continued importance of television as a dominant media activity in the lives of children aged 4 and under. In this sense, 'television and related media' has been useful to the evolution of the study and is not an unhelpful component of its title today.

The original brief highlighted an intention to focus on families 'from economically and socially disadvantaged communities, given the lack of research in this area' (Appendix A). Indeed, there is a lack of in-depth research which reflects the digital lives of children living in working-class families in the UK's more deprived communities. As such, the thesis was intended from the outset to have an explicit focus on social class and its relationship to children's engagements with TV&RM. The thesis also began as an interdisciplinary project. The literature review (Chapter 2) aims to trace the contributions made by different academic disciplines, although disciplinary boundaries are, of course, blurry. The project was housed within the School of Education at The University of Sheffield. Education is itself an interdisciplinary academic field and I had worked in non-academic social research and social psychology before moving into an Education department. I thus felt that multiple disciplines had something to offer. This thesis is, however, primarily aligned with digital literacies in early childhood: an emerging field that is currently in the process of being defined and theorised (Scott and Marsh, 2018). As Scott (2018) outlines, the origins of early childhood literacy studies lie within the evolving modern discipline of psychology (Gillen & Hall, 2013), although two core developments have distanced the field from mainstream psychological study. Indeed, these two core developments are the reasons I ultimately decided to align this study within the disciplinary niche of literacies. Firstly, literacies scholars have paid close attention to wider social contexts of children's literacy learning (families, homes, and communities). Past research within the tradition offers rich examples of the role parents and families play in children's lives and developing communicative practices, as well as how social factors such as gender, ethnicity and social class make a difference. Secondly, literacies scholars have become increasingly interested in children's multimodal literacy practices, including those outside specifically print-based texts. Literacies frameworks such as Green and Beavis (2012) discuss dimensions of literacy in a digital age: operational, cultural, and critical. Research within this field is now theorising and investigating how young children's engagement with digital devices and texts fosters the development of

literacy and digital literacy. These studies consider a broader range of social contexts and pay attention to diverse communicative practices. It is important to recognize that children's digital play might encompass both play directly (with a wide range of digital devices and texts) and play that is tangentially entangled with digital texts or devices (play on screen and off). In addition to the literacies frameworks detailed above, the thesis is informed by, and contextualised through, critical engagement with a variety of other theories. Developmental theories such as the Vygotskian notion of the Zone of Proximal Development (1978) have played a role in understanding family interactions in relation to digital texts and devices. Because meaning lies within a variety of communicative modes (Gee, 2001), the thesis employs a multimodal approach to analysis, drawing on Scollon and Scollon's (2004) Nexus Analysis approach. In light of the field's turn away from structuralist theories and towards new materialisms, sociomaterial theory is drawn upon to attempt to flatten the ontology between the human and the material. People are grouped in my model with other 'things'. Attention is paid not only to how technologies are produced by the social world, but also how they act upon it. The notion of mediated actions (Wohlwend, 2009) is replaced by the notion of intra-actions, following Barad (2003). Bourdieu's notion of habitus (1977) has been particularly important in developing new theories about preschool children's TV&RM practices in relation to social class. Moll et al.'s (1992) notion of Funds of Knowledge has also guided my thinking and theorisation throughout.

1.3. Research questions, contribution and structure

This thesis aims to understand more about how preschool children engage with television and other forms of digital media in their homes in their everyday lives and in the social context of their families and communities. Taking a sociomaterial approach (Barad, 2003) to digital literacies in early childhood, the thesis focuses on UK preschool children's intra-actions (Barad, 2003) and social practices (Wohlwend, 2009) with TV&RM at home. Firstly, the thesis examines how both well-established and new verbal and non-verbal intra-actions constitute children's unique social practices: practices that transform the meanings of materials (Wohlwend, 2009) at home and shape children's very early experiences. Secondly, drawing on Bourdieu's notion of habitus (1977), and as I have articulated in previous work (Scott, 2016), the thesis asks the question: how is social class implicated in these practices? The revised focus of the study is thus represented in the following research questions:

- i. What are the television-viewing patterns of 3-6 year-olds, including transitions in choices and activities?
- ii. What are the intra-actions between preschool children, their families and television and related media and how can they be represented and analysed within a broader assemblage?
- iii. How do intra-actions between preschool children, their families, television and related media constitute children's unique social practices?

- iv. How is social class implicated in intra-actions between preschool children, their families, television and related media?
- v. What are the implications of the findings for *CBeebies* programme development, the children's media industry, parents and early years educators?

This thesis makes multiple original contributions to knowledge. The reader's attention is drawn to certain methodological contributions in Chapter 3 and to empirical contributions throughout the quantitative and qualitative data chapters (Chapters 4 and 5, respectively). The most important contributions to empirical, theoretical and methodological knowledge have been explored in greater depth in Chapter 6. These contributions have been identified as important based on their relevance to the revised research questions. They have also been identified as important due to their originality and potential to progress the field in relation to the noted gaps. This thesis contributes to research at the lower end of the preschool bracket, considering the digital practices of children aged 3-6 years. It additionally considers preschool children's engagements with TV&RM in the context of whole families and relevant broader communities (including parents, siblings, cousins, grandparents, friends and friends of the family, where pertinent). It addresses gaps in current knowledge about preschool children's digital engagements regarding social class. Finally, it progresses work in this field drawing on sociomaterial theory, including proposing a new analytic framework.

The thesis begins with a review of past and current literature relevant to preschool children's engagement with TV&RM in a digital age (Chapter 2). The literature review consists of brief reviews of works originating from four disciplines: psychology; cultural and media studies; sociology; and early childhood literacies. In section 2.3, cross-cutting themes are summarised and gaps identified. A comprehensive account of the methodology follows (Chapter 3). This includes a detailed explanation of the overall methodological approach, followed by individual descriptions of three sub-studies, beginning with the Think Aloud pilot study, its results and an explanation of its contribution to the development of the methodology. The methodology for the main quantitative study (survey of 1,198 parents) and main qualitative study (6 case studies, each centring on one preschool child) follow. The quantitative data are presented, analysed and interpreted in Chapter 4. The qualitative data are presented, analysed and interpreted in Chapter 5. There follows a combined interpretation and discussion of the overall findings (Chapter 6), before a conclusion and recommendations section (Chapter 7). Section 8 comprises a full bibliography and Section 9 contains the appendices.

Summary

In this chapter, I have outlined the purpose and context of the present thesis. A good deal of existing literature can already be found. However, gaps in knowledge still exist, particularly in relation to very young

children's engagement with TV&M and social class. It is for this reason that the present PhD research project was co-constructed by the universities of Sheffield and Leeds, in collaboration with *CBeebies*. Since its inception, certain aspects of the thesis have evolved. As its researcher, I have had an impact on the project, including slightly revising the project's aims and objectives into a set of research questions, in line with the findings of the literature review. The following chapter presents this review in full, exploring and critically evaluating a wide range of issues raised by scholarly literature.

CHAPTER 2. LITERATURE REVIEW

2.1. Introduction

This thesis investigates young children's engagement with television and related media in the digital age. It was originally designed to address the original stated objectives of the study detailed in the introduction (section 1.2). However, the project's research questions, literature review, methodology and early stages of fieldwork developed iteratively, in relation to one another. Reviewing the literature and beginning the fieldwork contributed to the eventual readjustment of the project's objectives into the research questions listed in section 1.3. Material was therefore selected for inclusion in this final version of the literature review in relation to these revised research questions. In simple terms, literature was prioritised for inclusion if it contributed something to knowledge in terms of:

1. Young children's interactions with (a) television and (b) any other digital devices and texts at home;
2. The social contexts of those interactions;
3. Social class in relation to children's digital engagement at home.

For the purposes of this literature review, I am defining 'young children' as per Farrell et al.'s (2015) definition of 'early childhood' as children aged between 0-8 years. The thesis title uses the specific descriptor 'television and related media'. As mentioned in the introduction, this descriptor was already intended to be broad and has broadened further as the research has progressed. This literature review pays attention to research specifically addressing children's engagements with television, but also encompasses research related to a wide range of digital texts and devices.

The literature review was designed to be both interdisciplinary and critical, analytically examining literature from a range of disciplinary fields. Disciplinary boundaries are, of course, fluid and difficult to pin down. However, the literature review attempts to trace some of the relevant discourses and debates prevalent in each of four broad disciplinary fields: psychology; cultural and media studies; sociology; and early childhood literacies. Articles published between 1950 and 2016 were screened and articles relevant to the research questions were read in full and included in the review. The review thus highlights some key, relevant studies within each of the disciplines discussed. To understand how certain prevailing ideas about children's relationships with television have arisen and become dominant discourses within scholarly literature, the review is temporally broad. As such, it touches on some very early studies and debates around television as the medium emerged, as well as incorporating some of the most recent research published at the time of writing. In section 2.3, cross-cutting themes in the reviewed literature are summarised and gaps in knowledge identified. The conceptual and methodological approaches employed in previous work are also discussed.

Some recent trends in young children's media engagement and related policy

It is frequently reported that watching television on a TV set is a dying practice amongst the UK's children and young people (e.g. Sweney, 2017). This perception may well stem from trends in older children's engagement with live broadcast television. According to the most recent statistics at the time of writing, however, preschool children in the UK still spend more time watching television than using any other form of media. In fact, Ofcom's 2017 report evidences a rise in the amount of time younger children spend watching TV on the TV set (Ofcom, 2017). Undeniably, however, children's relationships with TV&RM are now complex. In tandem with technological changes that have brought different digital devices, some with new affordances, into young children's lives, the way that children physically engage with television and other related media has changed dramatically over the past sixty years or so. Large scale surveys such as those touched upon in the introduction (Ofcom, 2017; Marsh et al., 2015) are valuable sources for an overview of the recent trends in this field. Until recently, many sources failed to consider the practices of younger preschool children and many larger scale sources were purely quantitative in their focus. Ofcom's 2012 report included a specific focus on the 3-4-year-old category for the first time and its annual updates provide valuable year-on-year analysis. It is much harder to historically trace the TV&RM practices of children under 3 years old, although this research area is emerging. Gillen et al. (2018) recently published a report comparing the digital lives of 0-3 year olds across six countries. This study, like some other recent large-scale reports (e.g. Chaudron et al., 2015), includes qualitative data in its approach. Although tracking fluctuations in already-understood facets of children's media engagement through quantitative means is helpful in tracing change over time, qualitative inquiry is perhaps particularly well-suited to picking up on new phenomena.

Some have pointed to a relationship between technological changes and an increase in children's agency. Marsh (2014) observed that the relative reduction in the cost of televisions allowed children more choice over what they watched, as families moved towards ownership of multiple sets. When technology changes, then, so too does the relationship between play and technology. Though evidence suggests that the earlier trend towards children having their own TV set in their bedroom is now beginning to slow down (Ofcom, 2012), the same lesson is arguably true. Multi-device households mean new possibilities in terms of children's choices and intertextual engagements with media. There is also evidence that the dual player/spectator role Kinder (1991) identified in the early 90s is now closer to player/spectator/creator, as increasingly young children are enabled to create their own media texts, 'blurring the boundaries between amateur and professional filmmakers' (Marsh, 2014, p. 65). Whilst such trends in young children's viewing have been identified through detailed qualitative work, they are harder to quantify and there is still little empirical evidence of how widespread they are. Researchers are working in a continually evolving field and the very latest micro-trends in young children's viewing change daily. Parry and Scott

(Forthcoming) caution against losing sight of the continuities in children's play (digital and non-digital), whilst others offer important insights into the specific affordances of the very newest technology. Yamada-Rice et al. (2017) discuss some of the very latest emerging possibilities, as well as pitfalls, associated with children's use of Virtual Reality headsets, noting exciting opportunities in terms of children's storytelling. There is a need to pay attention to the affordances of new technological developments. At the same time, it is prudent to remember the continuities. Woodfall and Zezulkova (2016) point out that many children seem to address media in a 'platform agnostic' manner. There is a tendency, in research that focuses very specifically on a new digital phenomenon, to ignore something more fundamental: how children's practices with digital media and texts transcend platforms and connect with other dimensions of their experiences.

A good deal of policy continues to caution *against* excessive media engagement for children at home, particularly at the youngest end of the spectrum. Although existing work emphasises the need to move away from discourses of risk and harm and a misleading focus on 'screen time' (Blum-Ross and Livingstone, 2016), much official guidance still tends to concentrate on these aspects. Whilst the American Academy of Paediatrics (2016) acknowledge that digital media has both positive and negative effects, their most recent guidance advises parents against any screen-time (except video-chatting) for children under 18 months, and to limit 2-5 year olds to just one hour a day of screen-time (preferably high quality programmes, preferably co-viewed). Despite calls for more 'personally relevant dynamic school experiences that embed film and media production in the curriculum as standard' (Cannon, 2018, p. 1), UK Educational policy shows little signs of embracing digital technology, foregrounding media education or promoting multi-literacies, especially in the early years. The trend towards an emphasis on acquisition and testing of decontextualised skills such as phonics in the early years (Flewitt, 2013) has made it difficult for early years practitioners and teachers in many parts of the world to promote multi-literacies in formal education (Sahlberg, 2001). However, examples of the curriculum from some countries, including Finland (Kumpulainen, Forthcoming) offer more promise for the introduction of multi-literacies into the curriculum in the early years and beyond. Meanwhile, literacies scholars (e.g. Burnett, 2014; Thorpe et al., 2015) have cautioned that there is still a general lack of progress with regard to early years' practitioners' use of technology in the curriculum. Concerns have recently been raised over the seeming removal of reference to technology in the draft revised Early Years Foundation Stage (EYFS) Statutory Framework, which proposed the removal of 'Shape, Space and Measure and Technology' not only from the Early Learning Goals, but also from the Areas of Learning (Early Education, 2018).

2.2. Psychological approaches

It is hard to imagine scholarly and public discourses about children and media today without the foundational contributions of developmental psychologists. Although diverse disciplinary approaches to

the study of children and media are now flourishing, certain epistemological perspectives still dominate (Gurevitch et al. 1988). Indeed, Drotner & Livingstone (2008) argue that only psychologists, alongside paediatricians, have captured public interest in research concerning children and the media, pointing to the enduring influence of the AAP's guidance. Because the developmental psychological and paediatric approaches to the topic have been so influential, some of the earliest studies and debates are summarised here, alongside some more recent studies indebted to this tradition.

Historically, a good deal of psychological research about children, TV&RM can be characterised as what has come to be known as *media effects research* (Bickham et al., 2016). This can be defined as research that tries to measure the direct impact TV&RM have on children, historically tending to conceptualise children's engagement with TV&RM as being both passive and solitary. As the mainstream use of television at home began to grow in the 50s and 60s, social learning theory (Bandura & Huston, 1961) started to become influential in Western psychology. Studies that suggested that children learn social behaviours like aggression through a process of observing, encoding, and repeating the behaviour of others therefore contributed to seminal theories for understanding children's relationships with media. From the outset, the assumed passive nature of children's viewing practices indicated that children were 'at risk'. Such conceptualisations also served to distance digital engagement from traditional notions of what it meant to play. Indeed, as I have argued previously (Scott, 2018), some developmental psychologists still contest the notion that children's engagement with digital devices can constitute a form of play, or at least play of any value. Some of the 'risk research' themes to emerge from this characterisation include the risk of media directly inducing violence (e.g. Cowden et al., 1969), risks to educational attainment through displacement of more 'intellectually stimulating activities' (Williams et al., 1982, p. 36) and children's increased vulnerability to advertising. Anxieties around media advertising interrelate in early psychological literature with the idea that young children cannot distinguish between reality and non-reality on TV (Scheibe, 2007). Despite Fitch et al. (1993) establishing the possibility that children as young as 3 or 4 can make factuality judgements, much contemporary research, particularly around advertising, still relies on developmentally-informed suggestions that they cannot (Samuels and Taylor, 1994; Kunkel et al., 2004; Blades et al., 2013).

Some researchers still employ arguably experimental methodologies to test concepts like children's understanding of the persuasive intent of advertising. None of the 6 year olds in Oates, Blades and Gunter's (2002) study could understand the persuasive intent of advertising. Even some of the 10 year olds could not. However, the researchers employed 'focus groups' lasting as little as 8.8 minutes. It is perhaps unsurprising that the children did not enunciate their understanding in such short and formal focus groups. The authors' suggestion that children could be taught about advertising is, however, helpful. However, as the work of Banaji (2010) and Parry (2016) makes clear, a focus purely on age can serve to obscure the complex cultural specificity of children's responses to advertising. Banaji (2010) notes that the children in

her study (aged 8-10) intermittently displayed sophisticated critical understanding of persuasive intent of adverts, whilst Parry (2016) observes Year 4 students describing a 'complex view' of commercial institutions in their lessons. Many of the same media effects debates that emerged in the 1950s can be traced into contemporary developmental psychological studies, which can still be critiqued for the same weaknesses. Multiple researchers still conceptualise television (or other digital media) as a cause of negative outcomes for children (e.g. Hancox, Milne and Poulton, 2005; Dennison, Erb and Jenkins, 2012) rather than considering that increased media use may be the result, rather than the cause, of problems in childhood. The debate about children's understanding of reality and fantasy (e.g. Hawkins, 1977) is closely linked with notions of harm.

As Piagetian notions of assimilation and accommodation began to gain traction (Flavell, 1963), psychological research began to conceptualize the child television audience as more active, although children's engagement with television was still considered to be more or less active depending on the content of the program (Fowles & Voyat, 1974). One thread of psychological research imparts the idea that children's engagements with TV&RM can be beneficial, with certain caveats. The text itself and format, must be 'educational'. However, many researchers conceptualise 'education' in very narrow terms. Piagetian theory stresses the importance of a child's developmental level (Crain, 1985). Correspondingly, some psychological literature suggests that media can be educational if it is tailored to a child's developmental stage. However, attempts to link developmental stages to 'age-appropriate' content are undermined by the complexity of categorising content. Friedlander et al. (1974) aim to establish a procedure for evaluating the age-appropriateness of the visual and verbal elements in television programmes. Calvert et al. (1982) found that attention and inattention to certain formal features of television predicted comprehension. Singer and Singer (1983) conclude that age-specific formats 'yield gains in cognitive and affective areas' (p. 827). The preoccupation with age-appropriate viewing continues into the twenty-first century with studies such as Barr et al (2010), which suggests that exposure to programs designed for adults during both infancy and at age 4 may lead to poorer executive functioning and poorer cognitive outcomes at age 4. Sociological theorisations of childhood as a social construct (Davies et al., 2000) problematize attempts to define adult- and child-oriented texts, whilst critical psychologists have more recently troubled the discourse of the 'developmentally normal' child (Burman, 2008; Goodley and Runswick-Cole, 2010).

Bronfenbrenner's ecological model of human development (1979) drew attention to the system of interdependent environments that influence children's lived experiences. Contemporaneously, Vygotsky's sociocultural-cognitive theory (1978) conceptualized children's developmental processes in a way that acknowledged the importance of social and cultural factors. The foundational work of both theorists has been usefully employed beyond the boundaries of developmental psychology. Marsh (2017b) draws on Bronfenbrenner's theory of human development to consider how the dynamics of the everyday contexts in

which tablet use takes place are shaped by multiple factors, including family histories, parental expertise and children's interests. McPake et al. (2013) employ sociocultural theory to explain how children's digital play at home is enhanced through guided interaction with an adult. Plowman (2016) revisits the ecological model to explore the role played by digital technologies in children's everyday lives, reflecting on the need for Bronfenbrenner's model to evolve in response to recent moves towards a sociomaterial understanding of digital technologies (Ruppert, Law and Savage, 2013). Influenced by Vygotskian (1978) social development theory, meanwhile, multiple studies regarding television as an avenue of socialization emerged in the late 70s and 80s. Atkin & Gantz (1978) studied news television as a means of political socialization. Others studied portrayals of women as a means of sex-role socialization (e.g. Eccles, 1987; Hess and Grant, 1983) or representations of black characters as a means of race socialization (Atkin et al., 1983). Some argue that Vygotsky's theory has still not been widely applied to the study of children and the media, despite the concepts of scaffolding and the zone of proximal development holding potential (Scheibe, 2007). However, many more recent works have drawn on Vygotskian sociocultural theory. Bird and Edwards (2015) demonstrate how young children learn to use technologies as cultural tools, firstly by exploring the functionality of technologies through epistemic activity, and secondly by generating new content through ludic activity.

Wartella et al.'s (2016) review suggests that psychological research has continued to focus on the immediate impact of media use on children's development in areas such as cognition, executive functioning, social-emotional learning, and behaviour. As Stephen and Plowman (2014) point out, much psychological work continues to attend to the issue of how technology may foster or inhibit child development in rather narrow terms, instead of considering what kind of play digital platforms or texts themselves afford or how they are used socially within the context of the family. This is exemplified in work such as that of Zack et al. (2009). The authors observe that infants are more likely to imitate button-pressing from watching an adult pressing a button on a cardboard fire truck than from observing an adult 'pressing a button' (touching the screen where the button is seen) on a photo of the cardboard fire truck displayed on a touchscreen tablet. The authors describe the phenomenon as the 'video-deficit effect' (p. 14) and surmise that infants 'learn less from a televised demonstration than from a live demonstration' (p. 13). The likelihood of children imitating an action is being conflated with their 'learning'. Moreover, the touchscreen device is being employed to display a static image – an artificial proposition quite unlike any media text infants and preschoolers are likely to encounter on a tablet device in their everyday lives. It is perhaps unsurprising, then, that a later psychological study concluded quite differently, demonstrating that slightly older children (including those aged 4 and 5) can learn new facts equally well from interactive media versus face to face instruction (Kwok et al., 2016).

A substantial body of research within the field of developmental psychology has already explored parental (especially maternal) responsiveness in relation to cognitive outcomes for young children (Ainsworth & Bell, 1974; Bornstein et al., 1992; Tamis-LeMonda & Bornstein, 2002). Recent evidence, for example, suggests that contingent talk may be an important factor (McGillon et al., 2013) in children's cognitive development. Such work could usefully be applied to family engagement with TV&RM (for example by looking at family contingent talk around TV&RM). Some developmental studies acknowledge the social contexts of children's engagement with TV&RM, although such studies tend to align with the conceptualisations typically present in what Warren (2003) terms 'mediation research' (p. 394). This work typically limits social contexts to parents (often neglecting the roles peers, siblings or grandparents play). Meanwhile, the roles parents play in such work generally fall into the categories of preventing harm through control or fostering 'educational' outcomes (using a very narrow definition of the term 'educational'). Singer and Singer's (1983) work, for example, drew on Piagetian (1962) models to argue that greater gains are made when children are exposed to television with an adult mediator present. The way social contexts are conceptualised is not much different in Buijzen's much later (2009) study, which demonstrates how parent-child discussion about advertising can be effective in alleviating the theorised impact of advertising on children's food consumption. Although this is arguably a step forward, and consideration of the roles played by parents in children's media engagement is now (thankfully) commonplace in developmental literature, many are still limiting the social contexts of children's media engagement to parents and limiting a parent's role to interventionist or mediator (e.g. Nevski & Siibal, 2016). Updated parental mediation frameworks (e.g. Nikken and Jansz, 2014; Zaman et al., 2016) offer more variety in terms of the roles parents are considered to play, including 'active mediation' (e.g. Gentile et al., 2012); co-use (Nikken & Jansz, 2006); technical safety guidance and supervision (Nikken and Jansz, 2014); distant mediation and participatory learning (Zaman et al., 2016). However, these continue to focus primarily on the parent-child dyad.

Wartella et al. (2016) offer something of a break with this tradition, drawing on Vygotskian sociocultural theory to suggest that digital media texts or platforms can serve as proxies for (traditionally human) social others, providing children with the affordances necessary to extend their learning beyond their theoretical developmental stages. There is a tension here with developmental work that characterises media as distracting. Kirkorian et al. (2009) suggested that 'background television' impairs the quality of parent-child interactions, whilst Schmidt et al. (2008) suggested that it impairs the quality of concurrent toy play. Such tensions highlight the need for ethnographic studies alongside experimental psychological work. It may be true that young children perform a given task less well when their attention is divided. It may also be true that digital texts and platforms can serve as more knowledgeable others (Vygotsky, 1978) to extend children's abilities. Understanding how preschool children's abilities develop in relation to a combination of human and digital contexts in real life requires that we study children's practices as they unfold at home.

Importantly, there is still a casual assumption in much paediatric scholarship that touchscreens are interactive but more 'traditional' forms of media, especially television, are not (e.g. Christakis, 2014).

Developmental psychology seems to offer little empirical work on how social class relates to preschool children and their engagements with TV&RM. Historically, social class (alongside other variables including race) has tended to be inserted as a variable into existing developmental debates about the more negative aspects of TV&RM (Scott, 2016). Dominick and Greenberg (1970) question how social class interacts with TV exposure and attitudes towards violence, whilst Tangney & Feshbach (1988) try to locate various demographic factors that mediate the frequency of children's television viewing. Maccoby (1954) reports that the relationship between frustration and viewing habits varies depending on social class (with upper-middle-class children more likely than lower-middle-class children to watch television out of frustration). Walkerdine's (1986) critical psychological study of one working-class family's television viewing offers a more naturalistic account of the TV&RM practices of a working-class family. Her feminist, psychoanalytic theorisation of the family's dynamic and conversation has been much critiqued (Squire, 2010). Although Walkerdine's paper was original in addressing popular media as an important aspect of family life (and, indeed, in representing 'low' culture as textually complex), her characterisation of working-class masculinity arguably lacks nuance. More importantly, Walkerdine attends primarily to her own anxieties regarding how growing up in a working-class household is likely to impact on the family's six year old daughter, Joanne, rather than exploring Joanne's own engagement with media texts.

2.3. Cultural and media studies

Livingstone (2002) contends that there is a profound difference between research about children and the media which is child-centred and that which is media-centred. Broadly speaking, cultural and media studies have been historically concerned with the latter; 'the chain of influence from diffusion through both commercial and public domains to access to the home, then to actual use and, eventually, to impacts on children and young people' (Livingstone, 2002, p. 14). There are multiple alternative accounts of the development of media theory, many drawing out the conflict within the media theories associated with Marxist and Liberal Pluralist perspectives (Bennett, 1982; Hall, 1982; Gitlin, 1978).

A diverse range of theorists are credited with involvement in the development of mass society theory and the tradition by no means constitutes a unified body of theory (Bennett, 1982). Conservative accounts from theorists such as Arnold (1869) lamented the decline of 'high culture' in mass society, defending elite values against the rise of mass participation, whilst other (Marxist and neo-Marxist) accounts were concerned with defending democratic values against the rise of elites 'bent on total domination' (Kornhauser, 1960, p. 21). In both cases, mass society theorists attributed a powerful and largely unmediated set of effects directly to the media. Scholars associated with the Frankfurt School (e.g. Marcuse, 1968) took a particularly pessimistic

view, characterising the media as an irrepressible force, 'duping' the masses into conformity with prescribed opinions at the cost of original thought. Althusser (1971) proposed interpellation as a mechanism of this process, suggesting that individuals internalize media constructions of their values and identities as their own. Seiter's (1993) critique of such Marxist approaches is useful to bear in mind. The notion of the media's unmediated effects arguably works to stigmatise as problematic the consumption practices of others, particularly women and the working-classes. Contrary to the pessimism of earlier Marxist approaches, Williams (1967) envisioned new media as contributing positively to something he termed 'permanent education'; 'the educational force of our whole social and cultural experience' (p. 15). Williams felt that permanent education, a concept closely related to what Giroux (2004) would later term 'public pedagogy', provided an alternative to the established education systems of Williams' time, which he felt perpetuated an elitist approach to culture. Some liberal pluralists regarded mass media as essential to the development of democracy, helping to secure rights by disseminating information and a pluralism of view. Mead (1934) contended that, since the individual mind and 'self' arise only out of the social process of communication, mass communication is a prerequisite for 'the ideal human society' (p. 327). Lazarfeld & Kendall (1948) pointed out that media effects are mediated by other social processes, such as an individual reacting as a member of various social groups.

Arguably, children were little represented in the foundational work of media scholars. This work has, however, provided the theoretical foundations for a generation of media scholars concerned with children's engagements with media. Contemporary media and cultural studies scholars concerned with children's lives tend to focus on the relationships between cultural practices and broader processes of social power (Buckingham, 2008), whilst also acknowledging the social nature of children's media uses and interpretations and young people's unique cultures as forms of opposition to dominant discourses and ideologies (Bryant & Miron, 2004). Media scholars have also illustrated that the media do not simply reflect reality, but also serve to construct it (Hall, 1997; Gurevitch et al., 1988). Media scholars such as Nava (1992) counter earlier characterisations of children as easily manipulated by advertising (e.g. Packard, 1957) by pointing out how media-literate a generation of young people now are, distinguishing 'the meanings produced by quick edits, long shots, zooms, by particular lighting codes and combinations of sound' (p. 173). Although (as with much of the research emerging from media and cultural studies) Nava's work concerns older children and young people, the same argument may be true of an increasingly media-literate generation of much younger children. Hodge and Tripp (1986) and Messenger-Davies (1997) provide similar challenges to developmental studies around children's understanding of TV reality and fantasy. Hodge & Tripp (1986) describe how a boy aged only six can cogently differentiate the relative reality of Yogi Bear and his friend Shaun. Messenger-Davies (1997) highlights the absurdity of decontextualized studies.

Debates in cultural and media studies have moved back and forth between constructions of the young child as agential and sophisticated and in need of protection from harmful media texts. A variety of genres of media texts have been characterised as inappropriate or even potentially harmful to young children. Many developmental studies have focused on advertising. Media scholars Buckingham & Tingstad (2010) point out that marketers have become increasingly sophisticated in their targeting of children, employing techniques such as 'anti-adultism' designed to target children's sense of agency. As Lester (2016) highlights, children are generally considered to need protection from horrific media. Some studies have suggested negative effects of viewing horror, tying children's pleasure in horror into the media violence debate (Barker & Petley, 2002 critically review this literature). More recently, Potter (2018) noted that we must consider teaching children datafication in the wake of revelations around the practices of *Cambridge Analytica*, *Facebook* and others.

Although it may be true that even young children are capable of deciphering complex visual cues to understand far more than they have previously been given credit for, there is a risk that the discourse of the 'digital native' (Prensky, 2006) may perpetuate the idea that young children are somehow born with the implicit knowledge or ability to use digital devices, as well as to critically interpret and decode their aesthetics. There is, then, a need for more research examining how young children process seemingly 'inappropriate' texts. Traditional media theories may show how messages are encoded in media texts (Hall, 1973), but they do not examine how diverse audiences decode these messages in unique and individualised ways. Buckingham's (1996) empirical study on children's emotional responses to horror revealed a far more nuanced range of possibilities for children's pleasure in (and emotional relationships with) horror, pointing out that engagement with the genre allows children to demonstrate maturity and confront difficult emotions, but could also be purely pleasurable. A relatively old study from Noble (1983) demonstrated that children with more mature and less selfish attitudes were more likely to enjoy programmes featuring selfish and unpleasant characters, such as *Dallas's* J.R. Noble suggested that the character provided children with a model of how not to behave. There is, further, a need to examine the extent to which young children become critically media-literate through exposure to media versus through the support of adults or other family members. Parry (2016) notes that children need 'appropriate pedagogic and conceptual tools' (p. 325) to enable them to develop as critical, cultural and collaborative readers of 'words, images, sounds and texts and thereby of the world'. Banaji (2010) contributes an interesting observation on the role social class may play in this broader debate. In her comparative study of families in India, she observes that the discourses of 'protection' and 'vulnerability' associated with childhood served to increase adult control over the leisure time of children from middle-class families in India, whilst the lower-middle-class urban children whose parents could not always be present to 'protect' them displayed greater autonomy. In this sense, Banaji points out that the greater exposure of working-class children to a range of media may provide greater opportunity for the development of media criticality.

Various media scholars have contributed to our understandings of children's engagement with media in relation to dimensions of emotion and identity. Parry (2009) demonstrates the complexity of children's films such as *Shrek*, which offer children a space for emotional response. At the youngest end of the spectrum, Bazalgette (2018) has demonstrated how children as young as 2 years old can follow, enjoy and reflect upon movies. Nava (1992) contended that children negotiate their own path through an increasingly complex world of cultural influences, establishing their identities through the cultural resources media make available to them. Seiter (1998) noted that children make meanings out of toys that are entirely 'unanticipated by – perhaps indecipherable to – their adult designers' (p. 299). Tobin's (2000) critique of Althusserian interpellation drew on empirical examples to counter the notion that children necessarily internalize the values the media offer them. In one example, eight-year-old research participant, Lacey, who is part Asian-American, identifies 'Chinese eyes' as a signifier that the characters in a film are 'bad guys'. Tobin simultaneously points out that Lacey does not believe that Chinese people are 'bad' in 'real life' (p. 77). More recently, Skaar (2010) explores how branding and marketing materials are used in children's enactments of their own identities, in this case on a website which allows children to create their own 'profiles'. Similarly, Buckingham (2008) discusses the ways in which children define and construct their own (social) identities through conversation about television and other media. Potter's (2009) notion of 'curating the self' describes a literacy practice through which children assemble cultural resources from their everyday lives and from popular culture to represent both 'anchored' and 'transient' forms of identity. The model, drawing on Merchant (2006), considers culture, religion and upbringing as 'anchored' aspects of the self, whilst 'transient' forms of identity are influenced over time (e.g. by peer group affiliations) and are defined by, amongst other things, 'media narratives, ideologies [and] popular culture' (Merchant, 2006, p. 239).

Media scholars have offered detailed discussions of socially-classed judgements around taste in relation to television (e.g. Brunson, 1990). However, less can be found in relation to the relationship between social class, preschool children and their engagements with TV&RM. Seiter (1998) drew on Bourdieu's notion of cultural capital to explore conflicts between parents and children over toys. Some conflicts relate to classed value judgements, she argued, since many middle-class want their children to like things that are 'better to like'.

Her comments reflect one aspect of parental motivation for intervening in children's media engagements beyond a seemingly value-neutral notion of 'education'. Parents and children both encounter television, toys and games as texts or cultural artifacts invested with shared meaning. Children may, of course, have different motivations, perhaps desiring to share culture instead with friends. Similarly, Collins & Janning (2010) describe how media devices may constitute a powerful form of capital between two feuding parents following a divorce. Though useful for understanding the classed nature of media texts and artifacts, this

work tends to consider social class as experienced at the level of parents, rather than considering children's experiences. Lealand and Zanker (2008) more recently drew on Bourdieu to discuss 'family media habitus' (p. 49). However, Lealand and Zanker (2008) are again drawing on habitus in terms of taste. As Thompson (1992) highlights, the original Bourdieusian (1977) notion of habitus is in fact more complex than notions of taste alone, representing 'a set of dispositions' (Thompson, 1992, p. 12).

2.4. Sociological approaches

Many sociological studies have considered children's engagements with digital texts and devices in terms of socialisation, e.g. tracking how television influences children's political (Atkin & Gantz, 1978) or gender role (Signorielli, 1990) socialisation. In 2008, Oppliger suggested that popular culture trends were only serving to worsen the sexual exploitation of women and girls, and at younger ages. Levin & Kilbourne's (2008) book made a similar case. Such approaches, largely behavioural in their methods, owe much to psychological work such as Bandura et al.'s iconic (1961) Bobo doll study, which suggested that children could acquire social behaviours (e.g. aggression) through imitation. Such theories have also enabled sociologists to consider some positive societal impacts, perhaps most commonly discussed in relation to *Sesame Street's* ongoing programme of formative research and prosocial content production (Morrow & Morrow, 2006). The media socialisation paradigm can be critiqued for its construction of children's engagement with media texts as more passive than playful. Many have criticized the lack of agency afforded to children in their engagement with media texts (Cook, 2010). Additionally, research concerning the digital world and socialization tends to focus on children's ability to become socialized to the world of adult social norms, rather than considering how inter-child cultures work (Corsaro, 1979). Some work broadly in this field considers social contexts of media engagement outside parental mediation literature. Drawing on Corsaro's (1997) notion of interpretive reproduction, for example, Willett (2011) shows how children adapt media texts in their playground play with other children.

Influenced and enabled by social constructionism (James & Prout, 1997; Gergen, 1985), the so-called new sociology of childhood (Jenks, 1990; James and Prout, 1997) emerged largely as a reaction to the dominance of Piagetian developmental psychological theory. James et al. (1998) were critical not just of Piagetian frameworks, but also of the socialisation model. The acknowledgement that childhood is a societal construct reminds us that dominant discourses about childhood are contingent on context and are, predominantly, created by adults (Hendrick & Harry, 1997). As Plowman et al. (2010) point out, Romantic notions of childhood, which associate a child's natural disposition with playful engagements with the outdoor environment, continue to exert an influence on perceptions of children's play. As I have argued in previous work (Scott, 2018), this legacy contributes to the continued construction of digital texts and devices as oppositional to 'natural' play. An understanding of childhood as socially constructed has similarly enabled

the critique of more contemporary constructions of children as vulnerable and in need of protection (e.g. Banaji, 2010). Proponents of the new sociology of childhood have argued that children's social worlds merit study in their own right (James & Prout, 1997; Corsaro, 1979). Others have noted that the idea of age-appropriate texts is as societally constructed as the idea of childhood itself (Buckingham, 1995). Others (e.g. Messenger-Davies, 1997) have struck a note of caution in relation to the latter, pointing to the biological reality of lifespan change. Buckingham's (2008) notion of 'childhoods' (plural) strikes a balance, acknowledging the heterogeneity of human experience within biological age bands, without entirely rejecting the notion of difference between them.

In recent years, scholars have begun to point out some tensions with the new sociology of childhood's analyses of childhood and play, including the fact that such accounts centre explicitly around children, thus privileging human entities over other things (Rautio & Jokinen, 2016). As noted in the introduction, emergent post-structural, post-human, new material and sociomaterial approaches provide alternative frameworks that can be used to understand children instead as part of broader assemblages, within which they are but one constituent part, alongside other bodies and material objects (digital and non-digital). As Carrington and Dowdall (2013) point out, other (non-human) things also have agency and bring with them unique social histories. Some also suggest it is inappropriate to attempt to study children at play as clearly defined entities, since they are always interconnected and defined by this intra-activity (Rautio, 2013). Prout's more recent work moved towards the post-human, considering the role material artifacts and technologies play in the construction of contemporary childhood (Prout, 2005). Prout (2005) drew on Deleuze and Guattari's (1987) notion of assemblages attesting that, through their associations with media and communications technologies, children extended their reach. New 'socio-technical assemblages' (p. 33) extend this reach 'into worlds of ideas and information previously unavailable to them, giving them the potential power to multiply these beyond those contained within the physical and temporal boundaries of their everyday lives' (p. 33). Giugni (2011) similarly drew on Deleuze and Guattari's (1987) notion of assemblages of human and more-than-human things in her reflection on the Early Years Learning Framework in Australia.

Several sociologists link social class to preschool children's engagements with TV&RM. Bourdieu's (1977) notion of habitus may be useful in analysing the classed nature of child and family practices in relation to digital texts and devices. As noted previously, Thompson's (1992) account characterises Bourdieusian habitus as 'a set of dispositions' (p. 12). The theory of habitus suggests that the world's structural constraints contribute to the formation of permanent dispositions of perception and thought, as well as embodied 'postures and stances, ways of standing, sitting, looking, speaking, or walking' (Bourdieu 1977, p.15). Although Bourdieu's theories have been critically characterized as deterministic, Thompson's (1992) account of Bourdieusian habitus as generative, transposable and embodied counters such interpretations.

Some writers researching children's digital engagements have already begun to discuss 'media habitus'. Friedrichs et al. (2015), for example, discuss parental media-related habitus as shaping parental 'media educational habitus' (p. 58), suggesting a link between parental media habitus and parental mediation of their children's media use.

A variety of other sociologists have offered alternative theoretical frameworks that could be employed to analyse the classed nature of children's digital engagements at home. Bernstein's (1971) theory of restricted and elaborated codes is a case in point, although it has been widely-critiqued as constitutive of a 'deficit position' (Jones, 2013). Lareau has made a significant contribution to our understanding of social class in the context of families (2011) and family-school relationships (1989). Lareau concluded that middle-class parents tended to have more information about the educational process and thus 'reinforced' the curriculum at home more frequently. Later, Lareau (2011) suggested that middle-class parents concerted develop their children through organized leisure activities. Although this work does not speak specifically to a family's digital engagements, Lareau's findings may be applicable to digital practices. Gillies (2006), meanwhile, drew on the notion of emotional capital to show how middle-class and working-class parents tend to engage with their children's education on a different emotional level. Gillies suggests that middle-class parents experience school in terms of academic success, whilst working-class parents and their children experience school in terms of conflict and stress, requiring them to develop and draw on a different set of 'emotional resources' (p. 285).

2.5. Early childhood literacies

Although young children's knowledge and learning in relation to written language has been studied academically for more than a century (Gillen & Hall, 2013), their communicative practices are more complex and diverse in scope now than ever before. Young children's communication encompasses both 'traditional' reading and writing and a growing range of 'new' communicative competencies across multiple digital media contexts (Scott & Marsh, 2018). Literacy scholars have debated whether literacy is truly singular or plural 'literacies' (e.g. Kress, 2003; Cope & Kalantzis, 2000). Others have questioned what literacy fundamentally is. Kress (2003) argued that literacy specifically refers to lettered representation and, as such, we must find another way to talk about the encoding and decoding practices used in relation to other media. Street (1997) offered the term 'communicative practices' to cover those literacies excluded by Kress's definition. Marsh (2005) distinguished between 'literacy practices which are related to digital technologies' and 'the wider range of communicative practices which are mediated through new technologies and acknowledge the multimodal nature of young children's meaning-making' (Marsh, 2005, p. 4). Potter and McDougall have more recently proposed the term 'dynamic literacies' as an umbrella term, 'inclusive enough to encompass the changing nature of meaning-making in the context of digital media and

culture' (Potter & McDougall, 2017, p. 8). In this thesis, I am drawing on Pahl and Rowsell's (2012) account of texts as 'artifacts' (p. 43) and comprised of modes; literacy events as moments; and literacy practices as 'regular, iterative' (p. 20) events.

Kress and Street (2006) delineated two distinct (but related) areas of investigation emerging from this 'literacies' debate. The first they termed 'multimodality' and the second 'new literacy studies'. The authors argued that multimodality aimed to 'redress the emphasis on writing and speech as the central, salient modes of representation', whilst new literacy studies aimed to 'provide a language of description for viewing literacy as a social practice in its social environments' (Kress & Street, 2006, p. vii). Indeed, scholars are increasingly interested in children's literacy practices outside traditional print-based texts, and the notion of multimodality helps them to understand children's communicative practices in relation to a range of modes, including (but not limited to) those exclusively present in digital technology. At the same time, the boundaries between what constitutes 'digital' and 'traditional' literacies are themselves blurred. Multiple academic disciplines have contributed to our understanding of children's digital literacy practices. Numerous definitions for digital literacy or literacies exist, whilst theorists have proposed a range of frameworks for classifying aspects of digital literacies. Green's '3D model' of literacy (1988) provided a useful starting point for understanding the different dimensions of children's literacy: operational, cultural, and critical. Green and Beavis (2012) adapted the model to include an emphasis on communication in a digital age, whilst Colvert (2015) further developed the model to identify the way in which the processes involved in meaning-making could be inflected by all three dimensions of digital literacy.

Pahl and Rowsell (2012) suggest that research from the New Literacies Studies 'examines literacy practices, and literacy events, and many researchers have used its perspective to look at what people do with literacy' (p. 7). Indeed, diverse studies characterising literacy as a social practice exist. A key theme in the study of literacy as a social practice has been literacy learning in the home versus literacy learning in more formal educative contexts. Literacy learning in the home has been traditionally characterised by its divergence from traditional school literacy. Spencer et al. (2013) identified two primary positions adopted by those researching the literacies that are not school-based. The first includes 'any literacy practice – including school-like or school-centric literacies – occurring in contexts outside formal school settings' (p. 133). This stance was particularly evident in the work of writers in the '80s and '90s, such as Cairney & Ruge (1998), who noted that, although literacy practices in the home were more diverse than in school, such practices were inevitably heavily influenced by 'school literacy' (p. 36). The second position suggests that 'out-of-school' literacy is explicitly that which is outside the scope of literacy as accepted within the institution: 'literacies that are not – or up until recently have not been – permitted or tolerated (and are not necessarily even practiced as 'literacies') in school' (p. 133). Studies which take the latter position often describe literacies that are 'everyday' (Prinsloo & Breier, 1996), 'vernacular' (Camitta, 1993) or 'alternative' (Cook-

Gumperz & Keller-Coen, 1993). Spencer et al. (2013) point out that school-based literacies typically privilege particular and normative language and literacy uses. It is perhaps unsurprising, then, that this field of research has produced so many interesting studies focusing on the literacy practices of marginalised groups, e.g. minority ethnic groups (Fisher, 2003) or white working-class families (Campano & Carpenter, 2005; Heath, 2012). The disparity between home and school literacies has produced several interesting debates. Proponents of new literacy studies have suggested that teachers should acknowledge the literacy learning that takes place at home (Heath, 1983). More recently, there has been a suggestion that teachers might not simply acknowledge but also actively use the learning that takes place at home within the classroom (Marsh & Millard, 2000). An inability to do so may result in a disconnect between children's already well-established literacy practices and those which they are required to conform to in the classroom. Studies such as Campano & Carpenter (2005) and Heath (2012) highlight the notion that such exclusion may impact on marginalized and disadvantaged groups disproportionately (Gee, 2011; Heath, 1983).

Many of the studies mentioned discuss the 'non-school' literacy practices of children who are nevertheless already a part of the school system. It is rarer to find this genre of work with regards to preschool children. Chesworth (2016) found that teachers' understandings of children's imaginative play tended to focus directly on what children were doing with play materials, rather than how children were drawing on their home interests in combination with classroom resources, ascribing new meanings to objects in their play. Chesworth (2016) suggests that English educational policy tends to construct play 'as a vehicle for delivering national learning goals' (p. 305), thus undermining teachers' ability to understand or capitalise on play in relation to diverse sociocultural practices. Potter and McDougall (2017) expand on the discussion of home and school literacies with their notion of 'third space' literacies. The third space is described as 'a space which is a negotiated and contested area in which meanings are made and shared, some of which may relate to encountering new knowledge, learning or developing new skills and dispositions' (Potter & McDougall, 2017, p. 7). Spaces between home and school are places in which conditions can be said to constitute a third space. Physical examples such as an after-school club, museum or lunchtime activity may provide the necessary conditions to constitute a third space, although the authors point out that metaphorical spaces may act similarly (e.g. when learning is negotiated through agentive activity in a formal setting).

A growing field of research is explicitly concerned with the unique skills developed at home, as children learn to produce and interpret a range of digital and multimodal texts. The field of literacy studies has a strong tradition of considering the role parents play in supporting their children's literacy development. Cairney & Ruge (1998) observe parents engaging with children in a style imitative of a school teaching approach:

Mrs Haynes did not 'read' the text of the story, but questioned the children about specific objects in the illustrations, and attributes of these objects. Like the homework sessions in many other families in this study, the interaction between Mrs Haynes and her children closely resembled typical classroom interactions.

(Cairney & Ruge, 1998, p. 35).

Weinberger (1993) similarly stresses the important role played by parents. Her study replicates the findings of others (e.g. Wells, 1985, 1987), suggesting that parents sharing books with their children predicts their literacy achievements in later life. Meanwhile, despite the negative correlation between literacy and low socioeconomic status (Payne et al., 1994, Duncan & Seymour, 2000), Dorsey-Gaines & Taylor (1988) observe that some children growing up in situations of extreme economic hardship still grow up literate. Again, interaction with parents emerges as important as the writers conclude that the family's personal biographies and individual educative styles can make a difference to the literacy of children, regardless of social class. What constitutes 'growing up literate' is, of course, a contentious question. Where Dorsey-Gaines & Taylor (1988) suggest that *some* children in such contexts grow up literate, others would argue that most or all accomplish the feat, but that dominant models of literacy fail to value everyday literacy practices, such as those specific to the lives of families living in a white working-class council estate (Jones, 2014).

Some writers concerned with children's literacy have characterised media as a form of digital babysitter (Palmer, 2006). The public discourse of the digital babysitter has continued to construct digital engagement as antithetical to 'real' social engagement, as exemplified in a 2011 interview with Palmer: 'they need real-life interaction with people, not to be staring at a screen' (Mitchell, 2011). Many argue, however, that digital play is not inherently dissimilar to more traditional forms of play and can therefore be considered equally social. Marsh et al.'s adaptation of Hughes's (2002) play taxonomy illustrates how young children's play with digital devices maps onto the full range of traditional play types (symbolic play, sociodramatic play, social play). Marsh et al. (2016) suggest that new digital contexts may have changed the nature of play, but not the types of play that children engage in: 'contemporary play draws on both the digital and non-digital properties of things and in doing so moves fluidly across boundaries of space and time in ways that were not possible in the pre-digital era' (p. 250). As I have previously noted (Scott, 2018), children have drawn on aspects of popular culture in their play and, in turn, engaged playfully with texts, throughout modern history. Contemporary forms of digital play, then, represent both continuity and discontinuity in relation to the broader history of children's play. Similarly, what we call children's 'digital play' might involve play directly with a wide range of digital devices and texts (e.g. playing *Subway Surfer* on a smartphone) and play that is indirectly entangled with digital texts or devices (e.g. playing *Subway Surfer* in the playground).

Robinson (1997) points out that the boundaries constructed between print and televisual texts are also not as solid as they seem. Lewis (2011) reflects on a mother and son making meaning together through the

latter's interest in comics. Building on an interest in existing texts, Gerard makes his own comics both by hand and using his computer. The study highlights the significance that semiotic modes play in his communication and interactions. Lewis contends that Gerard and his mother communicate with one another through 'gestures and interactions beyond language' (p. 86). Davidson (2009) provides another example of a social literacy learning experience that is related to digital technology. Her article focuses on the literacy practices of two young children (2 and 6) researching lizards at home using both the internet and a book about lizards. Davidson's conversation analysis reveals how social interaction with each other and their father helps the young children accomplish digital practices:

During this interaction, the father has used his talk to gain an answer to the young child's question, without directly answering it himself. In this way, he draws on his knowledge of what the older child knows and uses his talk to occasion interaction between the three of them.

(Davidson, 2009, p. 42).

In line with the earlier studies on the social contexts of text-based literacy practices, Davidson is describing how, 'through interaction, children and adults bring about meaningful content and they accomplish participation in discourses in competent ways (Davidson, 2009, p. 50). Both examples are relevant, but not directly related to television. There are fewer studies where such a rich social interaction is examined in relation to television. Perry and Moses (2011) give one example featuring Sudanese refugee families living in the United States. In their case study, television viewing is associated with a diverse range of social practices within the family – discussing shows, drawing characters and researching the shows further using library books and websites. The children in the study make connections with their families and wider culture through this shared interest in television and engage in language learning. Marsh, Hannon, Lewis and Ritchie (2017) discuss how young children become initiated into family digital literacy practices, pointing out that sometimes parents scaffold digital literacies intentionally, employing 'didactic pedagogies to teach specific skills' (p. 54).

Other work within the field of early childhood digital literacies moves the discussion beyond the human contexts of children's learning. Early literacy studies discussed children's emergent literacy in relation to the notion of environmental texts. Hiebert (1978) suggested that, rather than recognising specific words, children often recognise and make sense of print from its environmental context. Meanwhile, Harste, Woodward and Burke (1984) noted that pre-literate preschool children could make accurate deductions about what an item was used for based on the packaging alone. Goodman (1986) noted that such print awareness was present for children, regardless of differences in their socioeconomic, racial or linguistic backgrounds. Young children, then, make meaning from the print around them without (intentional) adult intervention. Payton (1984) noted that her own daughter recognised 'Co-op' on a receipt when they were out shopping together, despite the fact that her daughter had never asked about the word, nor been explicitly told about it. In a digital age, children develop an understanding not only in relation to print texts,

but in relation to diverse modalities. More recently, a variety of literacies scholars have considered the sociomateriality of some media texts (e.g. Carrington, 2012). Marsh (2004) suggests that a 'narrative web' based on a 'narrativised semiotic system' (p. 37) is constructed when children engage with texts and artifacts related to their media and popular cultural interests. Drawing on new material studies, Carrington & Dowdall (2013) point out that material artifacts such as Lego play a key role in children's constructions of their 'lifeworlds and dispositions' (p. 97). Marsh (2005), meanwhile, has framed poststructuralist ideas in terms of children's identity, drawing on Holland et al.'s (2001) notion of the 'self-in-practice'. Children's behaviour, she suggests, should be viewed as an external indicator not of a constant self, but rather of a self in the process of constructing identities, within particular sociohistorical contexts. Sociomaterial accounts of children's media engagement have begun to conceptualise the relationship between bodies and objects differently, contributing to a something of a paradigmatic boundary collapse (Dibley, 2012). Various scholars draw on sociomaterial theories to conceptualise children's bodily expressions of knowledge as forms of embodied literacies (Thiel, 2015; Wohlwend, 2013; Wargo, 2017). Taylor (2014) discusses children's bodily 'intertextual referencing' (p. 402) in classrooms, concluding that knowledge and interpersonal relationships are realised through gesture and posture in addition to language.

Rautio (2013) contends that things (including both children and the physical materials of their play) do not exist as clearly defined, separate entities but are in fact constantly in flux. She employs the sociomaterial notion of 'intra-actions' (p. 397) to explain how things are constantly constituted in connection with, and dependent on, their relationships with other things. Wohlwend (2009) makes a comparable case. Rooney (2016) also talks in a similar way about children's relations with the world, describing how children are mutually implicated in constituting the world they exist in, alongside complex arrays of other (human and non-human) things. Ash's (2010) work, meanwhile, introduced the notion of 'teleplasticity'. 'Teleplastic technologies' (such as videogames) can be seen to pre-shape the 'potentials and possibilities for human action, movement and sense' (Ash, 2010, p. 414).

Although literacies scholars have developed theories to consider the role that social class plays in children's literacy learning at home, there is little evidence to suggest that these theories have been extended to examine the relationship between social class and children's digital literacies. However, digital literacies scholars have begun to conceptualise the social aspects of children's engagements with digital texts and devices in new ways, particularly in relation to sociomaterial and post-human theories. Such work thus offers potential for considering the relationship between social class and children's digital literacies. The work of 'traditional' literacies scholars, then, serves a useful starting point for thinking about the relationship between social class and children's digital literacy practices at home. McCarthey (1997) described literacy practices and values in middle-class and working-class families in the US. Middle-class parents in her study talked about reading for pleasure and information, whilst working-class parents

tended to talk about reading in terms of its necessity to their paid work and as a way of 'getting ahead'. Middle-class parents in her study also showed greater knowledge of school and of classroom activities than working-class parents, who McCarthy notes tended to have less contact with school. González, Moll and Amanti (2005) attested that they address social class only indirectly in their influential theory of 'funds of knowledge', however their work is deeply relevant to understanding how the literacy practices of working-class children may fail to be privileged in formal educative settings. Originated through their research in working-class Latino households, their thesis suggested that individuals acquire a range of knowledge, skills and experiences as members of families, homes and communities in everyday life. Such skills are specific to families, homes and communities and, indeed, essential for an individual's everyday functioning in, and wellbeing as part of, those institutions. Importantly, the authors stressed that this approach intended to challenge, rather than reinforce, a deficit interpretation of the literacy practices of working-class families. Finally, Barton and Hamilton's (1998) work drew on Rockhill (1987; 1993) and Horsman (1990; 1994) to consider a social rather than functional view of literacy. At the heart of their thesis was the notion that societal inequalities (including social class and gender) structure people's participation in literacy events. The authors explored individual literacies at the micro level by focusing on the 'ruling passions' (p. 18) of their participants, asserting that it is through such ruling passions that people find a way to talk about literacy:

In order to talk about literacy people tell us about their ruling passions, and this has become an important organising concept in analysing people's interviews.

(Barton & Hamilton, 1998, p. 18).

The authors contended that their participants would be regarded as 'working-class' (p. 64), whilst noting the lack of precision involved in such labels. Despite contending that societal inequalities structure people's participation in literacy events, they avoided specific theorisations of how literacy practices were classed in their conclusions, choosing instead to present detailed accounts of the unique ruling passions and associated vernacular literacy practices of each of their unique participants. Jones (2014) provided a more recent account of literacy practices in a predominantly white, working-class Midlands council estate. She concluded that, in the contemporaneous policy context, literacy was a powerful force in both constricting and constructing lives, literacy being central to working-class families' negotiation of economic challenge. Jones gives the example of a widowed single father, Colin, who combined his limited language and literacy resources with those of his daughter, Katie (13), to access his son's disability allowance.

2.3. Cross-cutting themes and discussion

A review of all academic literature relevant to the topic of preschool children's engagements with TV&RM is impossible within the scope of a PhD thesis. For this reason, the review is clustered around themes

pertinent to the research questions of the present study. Literature was prioritised for inclusion if it contributed something to knowledge in terms of: young children's interactions with (a) television and (b) any other digital devices and texts at home; the social contexts of those interactions; and social class in relation to children's digital engagement at home. A focus on these themes reveals gaps in knowledge, despite the wealth of material available for consideration. Some of these gaps and absences are highlighted below. Attempting to divide the available scholarly work into sections has reconfirmed the impossibility of definitively distinguishing disciplinary boundaries in such cases, with many scholars traversing multiple disciplines. The approach has, however, facilitated a kind of tracing process in relation to certain traditions of thought, revealing the origins of certain notions about children's media engagement that are still prevalent today. This attempt at tracing has allowed me to draw my own conclusions about the past usefulness and future potential of different theories in relation my topic. These conclusions have, in turn, informed my decision to locate the thesis broadly within the field of digital literacies. The review's interdisciplinary approach simultaneously emphasised the value of drawing on multiple academic traditions. As such, the analysis and discussion of the empirical data do not exclude potentially useful ideas and information based on their field of origin, but continue to draw on academic studies across a range of disciplinary trajectories, referring to theories and studies wherever they serve to elucidate and enrich understanding of the data.

Young children's interactions with television and any other digital devices and texts at home: threats, benefits and beyond

Historically, young children's engagements with TV&RM have been a subject of concern for scholars across multiple academic disciplines. The concern has perhaps been most pronounced in the field of developmental psychology, wherein engagement with digital devices has often been characterised as harmful to young children both intrinsically and through the displacement of other, more educative pursuits. Media texts, in particular those considered inappropriate (either in terms of target age or genre), have been considered potentially harmful. This notion of harm can also be found historically within media and cultural studies, particularly in the foundational work of some media scholars who considered that individuals were prone to internalising media constructions of values and identity. It is not true to say that other academic disciplines have been historically immune to characterisations of media as harmful. Disciplinary boundaries are blurred and many sociologists have, for example, been influenced by largely behavioural psychological theories, suggesting that children might acquire social behaviours such as aggression through their imitation of media texts. Literacies scholars such as Heath (2012) have also raised concerns about children's increased engagement with digital technologies at home. On the other hand, some psychological literature supports the idea that TV&RM can be beneficial to young children, although work

often carries heavy caveats. Children's engagements with TV&RM can be beneficial on the grounds of being educational. However, 'learning' in such cases is often limited to a narrow range of school-like experiences. In these accounts, parents are constructed as mediators, negotiating with their preschoolers in terms of risk-management, particularly around content and screen-time. Play theorists (e.g. LaFreniere, 2011) have advocated for the benefits of child-led, free play, noting that play serves a diverse variety of functions for young children that may or may not fall within the confines of the term 'learning'. Play scholars such as Sutton-Smith (1994) include diverse functions for play within their frameworks. However, when the benefits of TV&RM are considered in psychological studies, they tend to be assessed against more formal criteria. Perhaps, as I have argued in previous work (Scott, 2018), this trend towards narrow assessments of the benefits of digital devices relates to the fact that psychological studies are still refusing to conceptualise children's engagements with digital technologies as explicitly playful. Wartella et al.'s (2016) thought piece typifies this continued construction of children's engagement with digital devices and texts as somehow the opposite of playful, social and 'real-world':

Research has yet to determine how the use of media should be balanced with real-world experiences for young children. The potential benefits reaped from engaging with educational, developmentally appropriate media at very early ages may be outweighed by the loss of time that could have been spent engaging in imaginative play with real-world manipulatives or bonding with and learning from family.

(Wartella et al., 2016, p. 16).

Media scholars have contributed to our understanding of the beneficial aspects of children's engagement with media in relation to broader dimensions, such as emotion and identity. Literacies scholars, meanwhile, have offered broader conceptualisations of the skills and dispositions developed through engagement with TV&RM.

Beyond the discourses of media threats and educational benefits, however, there lies a reality that TV&RM are a part of preschool children's lives, something that is unlikely to change soon. Young children's engagements with TV&RM at home are, therefore, worthy of study as important dimensions of their early experiences. Research must, of course, continue to investigate possible risks to children. As technologies such as Virtual Reality grow in popularity for younger users, for example, research must continue to consider pressures on children's binocular systems and balance (Yamada-Rice et al., 2017). As with any research concerning young children, however, this research must consider how children's practices with TV&RM function as part of broader assemblages, including families and communities (Parry and Scott, Forthcoming). Rather than considering whether it is good or bad for young children to engage with technology, then, there is a need to closely consider what children's practices with TV&RM involve. I have chosen to align this study primarily within the discipline of digital literacies in early childhood on the basis that this field offers frameworks which enable researchers to consider multiple dimensions of children's

engagement with digital texts and devices, not just in terms of the functional skills that they may develop, but also in terms of the broader significance of such engagements – socially, culturally and emotionally. A gap in the literature also remains in terms of in-depth studies considering very young children’s engagements with TV&RM. The qualitative case studies focus on the practices of children aged 3 or 4 years old at the beginning of the study. Until recently, very little could be found in relation to the media experiences of children under 3, Gillen et al. (2018) and Bazalgette (2018) offering some notable exceptions.

The social contexts of preschool children’s engagements with TV&RM

The academic disciplines explored conceptualise the social contexts of children’s media consumption in very different ways. There is still a tendency in some developmental work to construct children’s engagements with digital texts and devices as solitary. Some developmental studies offer potentially fruitful models to consider social contexts. A substantial body of developmental research has explored parental (often maternal) responsiveness alongside cognitive outcomes (Ainsworth & Bell, 1974; Bornstein et al., 1992; Tamis-LeMonda & Bornstein, 2002). Developmental psychologists are concerned with exploring which types of parental interaction are most cognitively significant, with some research suggesting that contingent talk may be important (McGillon et al., 2013). Arguably, such work could be usefully extended to studying parental interactions in relation to children’s media engagement. However, at present, parental engagement with children’s media use still tends to be conceptualised in terms of mediation. In line with Scheibe’s (2007) assertion that the full potential of Vygotskian theory has still not been widely explored in this context, the thesis draws on both Vygotsky and Bronfenbrenner in considering the social contexts of children’s media engagement. Meanwhile, there is still a casual assumption that touchscreens are interactive but more ‘traditional’ forms of media, especially television, are not. Literacies scholars have historically paid close attention to the wider social contexts of children’s literacy learning (families, homes, and communities). Research within this tradition offers rich examples of the roles played by parents and families in children’s developing communicative practices. A growing field of research is concerned with young children producing and consuming a range of digital texts in the social context of the home, facilitated in part by frameworks such as Marsh et al.’s (2016) digital play classification, which begins to contest the boundary between ‘traditional’ and ‘digital’ play. Given the recent popularity of studies focused on very young children’s use of tablets and smartphones, it is worth restating the earlier assertion that there are still few studies that consider rich social interaction in relation to television, even within the field of early childhood literacies.

The literature review identified scholars in both sociological and literacies traditions drawing on sociomaterial theories to think about the social contexts of children’s media engagements. Researchers have shown that non-human things have agency and bring with them unique social histories (Carrington &

Dowdall, 2013). They have also pointed to limits of attempting to study children at play as clearly defined entities, since they are always interconnected and defined by their 'intra-activity' (Rautio, 2013, p. 398) with the material world. In response to such arguments, and as the fieldwork began, it became increasingly clear that a sociomaterial frame would be useful for exploring and understanding of children's home practices with TV&RM in present study. There are still gaps in this work, particularly in terms of detailed methodological accounts of how to account for these sociomaterial contexts holistically. Barad's notion of matter as an 'active participant' (Barad, 2003, p. 803) and Wohlwend's (2009) account of children's non-verbal interactions as social practice have both been influential in developing new theory within the thesis. The sociomaterial approach is explored in greater depth in the methodology.

Social class in relation to children's digital engagement at home

In recent years, surprisingly little has been published regarding social class and preschool children's engagements with TV&RM. Quantitative investigations into children's media engagement have sometimes included a socioeconomic measure as a variable (Dominick & Greenberg, 1970; Tangney & Feshbach, 1988). Some media and sociological studies have used qualitative methods to investigate social class, notably Seiter (1998) and Lareau (1989). Arguably, social class has become a difficult topic to approach within academic research. Social class is difficult to define and it is problematic to attempt to order individuals into social class categories. Social class is also perceived by many as an outdated system for classifying society, with Beck influentially describing it as a 'zombie category' (Beck & Willms, 2014). Indeed, some explorations of classed media engagement (e.g. Walkerdine, 1986) have been famously critiqued. At the same time, inequalities in the UK not only persist but are, in fact, growing. As Diamond & Giddens (2005) pointed out, the UK 'suffers from high levels of relative poverty and the poor in Britain are substantially poorer than the worst off in more equal industrialised societies' (p. 102). More recently, Hood and Waters (2017) projected an increase in income inequalities over coming years, alongside a rise in 'after housing costs' child poverty. Socioeconomic differences in children's experiences are thus as important a topic of study as they have ever been, however there is a gap in the literature with regards to preschool children's engagements with TV&RM and social class. Whilst the study of social class might be considered problematic for multiple reasons, I personally feel that the continued exclusion of non-WEIRD (Henrich, et al., 2010) samples from academic research is equally, if not more, problematic, especially given the persistent inequalities present in the lives of UK children.

It is for these reasons, alongside those discussed in the introduction and methodology, that social class is foregrounded in this study. However, rather than isolating social class as a variable to plot correlations, I am studying children's practices with TV&RM as part of broader assemblages of factors. Literacies scholars have developed theories to consider the role that social class plays in children's literacy learning at home,

however, there is little evidence to suggest that these theories have been extended to examine the relationship between social class and children's digital literacies. My theoretical approach to social class therefore draws on Bourdieu's notions of habitus (1977). As in my previous work (Scott, 2016), I also draw on Moll et al.'s (1992) Funds of Knowledge approach to develop understanding of the relationship between routine practices at home and school. Whilst Moll et al.'s (1992) original thesis focused on non-digital Funds of Knowledge, the approach creates a space within which to consider and value a much wider range of home practices (including digital practices). Finally, Barton and Hamilton's (1998) notion of ruling passions has been influential in exploring individual literacy practices at the micro level.

Summary

This chapter has reviewed existing literature relevant to the project's research questions. This review has highlighted where gaps in knowledge remain. It has particularly established the need for a focus on TV&RM and social class, both within the present thesis and in future research. It has made clear which theories will be useful in conceptualising children's engagements with TV&RM. The present thesis therefore aims to understand more about how preschool children engage with television and other forms of digital media in their homes in their everyday lives and in the social context of their families and communities. It explores digital literacies in early childhood through a sociomaterial lens, following the work of Wohlwend (2009). It focuses on UK preschool children's intra-actions and social practices with TV&RM at home. Drawing on Bourdieu's notion of habitus (1977), it also aims to understand how social class might be implicated in these practices. In line with both the identified gaps in knowledge and useful theoretical resources identified in this chapter, the research questions for the present study are:

- i. What are the television-viewing patterns of 3-6 year-olds, including transitions in choices and activities?
- ii. What are the intra-actions between preschool children, their families and television and related media and how can they be represented and analysed within a broader assemblage?
- iii. How do intra-actions between preschool children, their families, television and related media constitute children's unique social practices?
- iv. How is social class implicated in intra-actions between preschool children, their families, television and related media?
- v. What are the implications of the findings for CBeebies programme development, the children's media industry, parents and early years educators?

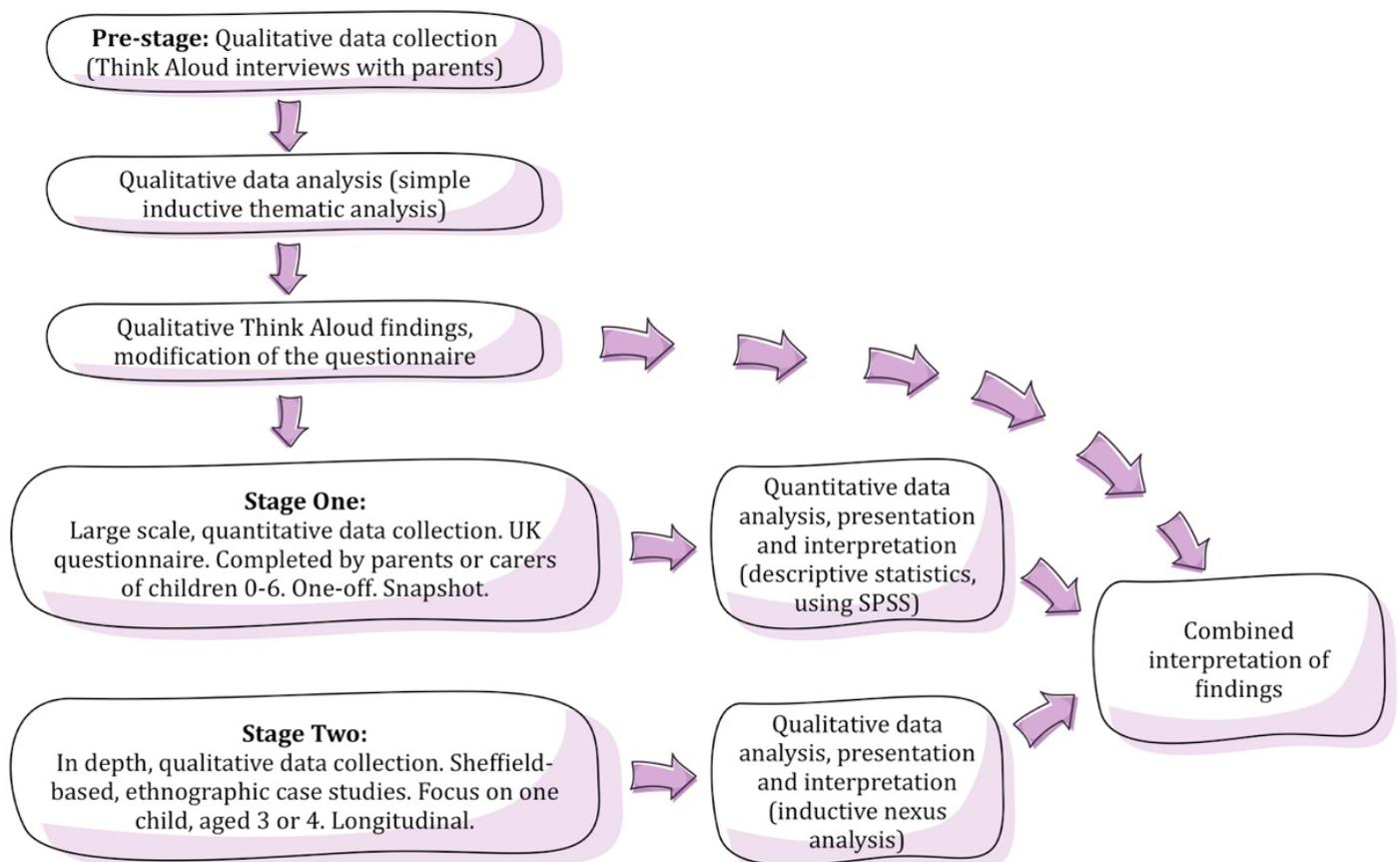
In comparing disciplinary approaches, the literature review has also begun to make some broad judgements about the direction the methodology will take. The next chapter will, however, explain and justify the

methodological approach of the thesis in much more detail, including thorough discussion of each of the methods employed.

CHAPTER 3. METHODOLOGY

This thesis aims to understand more about how preschool children engage with television and other forms of digital media in their homes, as part of their everyday lives and as members of families and broader communities. So far, I have explained the context of the study and explored some relevant literature. This chapter presents a detailed account of the way I have approached researching my topic. The study's research questions are stated in Section 1.3. This chapter begins with discussion of the approach taken. To orientate the reader, some necessary background about the evolution of the project is included. Section 3.1. serves to describe and justify the overall methodological approach, particularly in terms of precisely what is being studied, how quantitative and qualitative methods align within the project and how the contentious topic of social class will be approached methodologically. The design of the quantitative and qualitative phases of the research are then described in detail. Ethical considerations have informed the entire methodology, but some specific ethical issues are discussed in Section 3.4. Finally, the researcher offers some reflections on identity in relation to conducting fieldwork and some notes on how the research findings have and will be disseminated. The methods of the study are outlined in Figure 2.

Figure 2: Methods overview

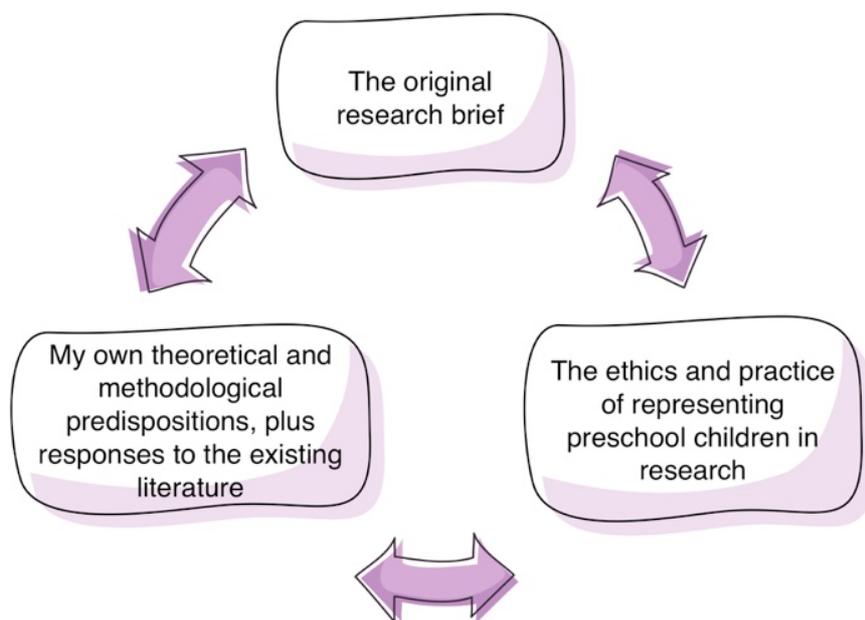


3.1. Methodological approach

3.1.1. Drivers of the approach

Three core drivers contributed to the development of the methodological approach. Firstly, the original research brief carried specific methodological obligations as well as epistemological commitments (Appendix A). Secondly, my own theoretical and methodological predispositions played a role, as did my personal responses to the material reviewed as part of the literature review (Chapter 1). When devising an approach to my fieldwork, I was also concerned with how I could work ethically and meaningfully with preschool children and their families. These drivers inter-relate (Figure 3):

Figure 3: Methods overview



3.1.2. The unit of analysis

As discussed in the introduction (1.2.), the research brief indicated a prerequisite for research focused on studying a phenomenon in the context of the home and within an intertextual, multimedia network. The content and language of the brief suggested an epistemological allegiance closer to the study of literacies in early childhood and ethnographic methods than to the scientific positivism of traditional developmental studies. I have explicitly avoided a traditional experimental procedure in my qualitative work. Prior to beginning the PhD, I worked in the field of social psychology. Whilst I had little understanding of the term ‘epistemology’, I knew I wanted to research differently to how I had been doing within a psychology department. Before starting my PhD, my research employed Ajzen’s (1991) Theory of Planned Behaviour to understand public attitudes and behaviours in relation to household energy efficiency interventions (Scott et al., 2014). The methodology focused on gathering ‘attitudes data’ via a large-scale survey. I assisted survey completion face-to-face with participants and noticed that the information that I gathered informally during these conversations was often more useful in

understanding social phenomena than the data collected using the scales in the questionnaire. Certain methodologies have historically shaped the study of preschool children's engagement with TV&RM. The broadly positivistic approaches employed by health, social and developmental psychologists have sustained a limiting and formulaic paradigm, characterised by Gitlin (1978) as the 'search for specific, measurable, short-term, individual, attitudinal and behavioural effects of media content' (p. 207). Observing children in laboratory-based experiments is an inadequate proxy for understanding children's relationships with TV&RM and the contexts in which they normally occur. The power relations inherent in the laboratory context also raise ethical concerns (Burman, 2008). Whilst the sub-discipline of social psychology emerged in the 50s and 60s as an attempt to address the social contexts of human experience (Breen & Darlaston-Jones, 2010), its dominant epistemology remained positivistic and critics have continued to highlight the absence of the social within social psychology (Greenwood, 2004). Studies in the field of literacies offer markedly different approaches to methodology. Ethnography forms the basis of many foundational literacy studies (e.g. Barton & Hamilton, 1992; Heath, 1983).

At the project's outset, I had planned to perform a simple, inductive thematic analysis of the qualitative case study data, based on a grounded theory approach (Glaser & Strauss, 1967). After data collection, it became clear that a basic thematic analysis was not adequate. Firstly, my data was rich, with a great deal expressed in the micro-level, multimodal aspects of communication present in the video data. Secondly, I was interested in what children do with TV&RM during their everyday lives at home. I had adopted a relatively deep level of participation in the eight family lives that constituted my research setting. Some of the children's most significant and embedded practices were things I became gradually aware of by immersing myself in these settings and building up a level of 'expertise' in each family's life and routine. I supported these discoveries by gathering multiple formal sources of data. In keeping with Van Maanen's (1995) notion of the ethnographic process as 'making the familiar strange' (p. 20), I found I was uncovering important practices that tended to run in the background, generally passing unnoticed as part of everyday life. For these reasons, I felt strongly that thematic analysis would miss a good deal of the richness present in the data. I felt that thematic analysis of written transcriptions would only yield a representation of what parents said and what the children in my study communicated verbally. If I only analysed written text or spoken word, I would understand very little of what was going on within each situation's social context, or what the different discourses 'meant' in place.

Whatever it is that people say in and about their social actions, these discourses are not likely ever to grasp the bases in habitus for these actions which are largely outside of the awareness of social actors.

(Scollon, 2001, p. 145)

I do not interpret Scollon's assertion to suggest that individuals are incapable of narrating their own lives or that I, as a researcher, hold some level of superior insight into them. Instead, what I take from Scollon is the idea that a researcher becomes somewhat inducted into the routine practices of family

lives when they research ethnographically. Thus, analysing the spoken elements of interaction alone is insufficient and not representative of the communications that transpired in the social setting in its totality. If we accept that meaning also lies within a variety of communicative modes, including action, as in Gee's (2001) capitalised notion of 'Discourse', a different approach to analysis is necessary. I resolved to use an element of detailed, multimodal analysis of child and family intra-actions in context, following a similar framework to Flewitt (2011). However, it was not possible to multimodally analyse the entirety of such a large qualitative dataset in detail within the confines of this PhD study. It is therefore necessary to choose an appropriate method for selecting cases for analysis. Past work had described the idea of selecting critical cases, i.e. those cases most likely to generate useful information and contribute to the development of knowledge (Patton, 1987). More recently, post-qualitative methodologists such as MacClure (2013) have described moving past the debate about how moments are methodically selected altogether, and instead suggest that we consider the notion of the 'wonder' inherent inside data (data that catch our attention, data that 'choose us' and data that lie at the boundaries of knowledge). However, I was dissatisfied with the idea of 'cherry-picking' moments in the data for analysis, particularly as I wanted to be able to draw broad comparisons across cases. I wanted to find a way to combine analysis of each child's core practices and habitus on a macro level with detailed multimodal analysis to examine what was happening at the micro level.

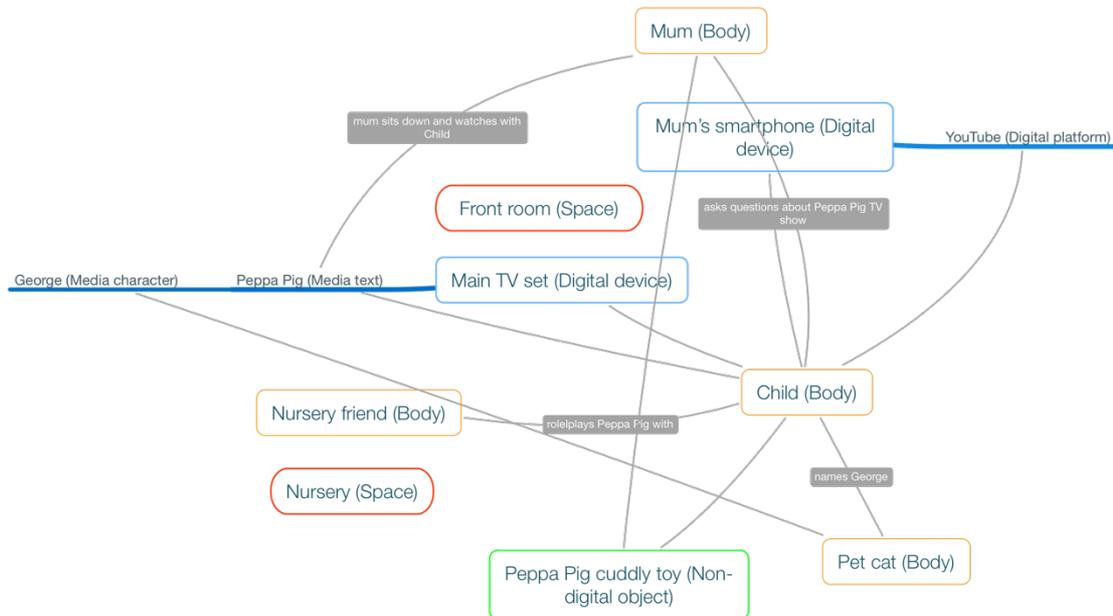
For these reasons, I elected to draw on Scollon and Scollon's (2004) Nexus Analysis (NA) approach and to make children's intra-actions (Barad, 2003) and social practices (Wohlwend, 2009) with TV&RM at home the primary units of my analysis. I employed a four-step filtering design adapted from Wohlwend (2009) to reveal how well-established and new verbal and non-verbal intra-actions constituted children's unique social practices: practices that transformed the meanings of materials (Wohlwend, 2009) at home and shaped children's very early experiences. The outputs of the qualitative analysis are thus both macro and micro level insights. The full process is detailed in Section 3.3.4.

My research has been designed to acknowledge semiotic modes other than language, drawing on theories of multimodality. A variety of semiotic systems (sound, image, speech, movement, gesture) contribute to the meaning in any form of communication, and semiotic systems are constantly shaped and reshaped by society (Kress, 2003). Media scholars (Hodge & Tripp, 1986; Messenger-Davies, 1997) have highlighted the inadequacy of frameworks that ignore the multimodal features of television itself. Theories of multimodality have been less extensively applied to the off-screen communication that takes place in relation to TV&RM. In the present study, close attention is paid to the totality of children's multimodal intra-actions with digital devices and texts at home. As I have previously noted (Scott, 2016), the application of multimodal theory is complicated within the present study, because very young children switch almost interchangeably between on and off-screen cues to make sense in everyday life. Flewitt (2011) highlights the possibility of combining theories of multimodality with an ethnographic investigation of young children and literacy in a digital age. Although she contends that there is a risk that such close attention and microanalyses of children's communications may obscure the more 'distal

layers of influence', ethnographic perspectives simultaneously 'familiarize and sensitize researchers to the local, allowing deep, if fragmentary, insights into participants' lives' (Flewitt, 2011, p. 296).

Drawing on the literature review, my methodology looks to the sociomaterial as a way of reconceptualising preschool children's engagements with TV&RM at home within a web or assemblage of multiple complex, multimodal interactions that consider the biological, social, cultural and the material. My conceptual model of an example assemblage is depicted in Figure 5:

Figure 4: Conceptual model of children's home practices with television and related media as part of an assemblage



Within this web or assemblage are multiple, complex, multimodal practices relating to TV&RM. These practices are the unit of analysis for my study. This conceptualisation has informed my choice of NA (Scollon & Scollon, 2004) as the method of analysis for the qualitative case study data. Several recent studies have begun to explore how non-school texts and accordant social practices present new meaning-making opportunities for children, and how this new meaning-making occurs (Lewis, 2011; Davidson, 2009). Such studies help to understand the knowledge and skills children acquire by participating in practices relating to TV&RM. However, there is still a need for studies considering and reconceptualising the socioeconomic in children's engagement with TV&RM. My thesis thus asks the question, 'how is social class implicated in these (multimodal, communicative) practices?'

3.1.3. Multi-method approach

The original research brief proposed a multi-method approach. This connected with my own epistemological trajectory, since I had worked primarily as a multi-method researcher before starting the PhD. Methodological debates in the social sciences have often returned to the perceived divide between quantitative and qualitative methods (Bryman, 1984; Sale et al., 2002; Salomon, 1991).

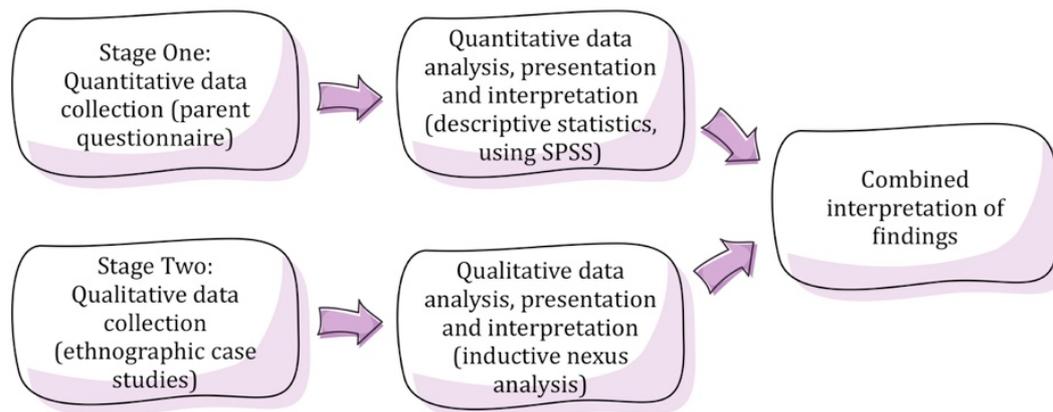
Quantitative methods are frequently simplified as being positivist and objectivist in nature whilst their qualitative counterparts are aligned with a constructivist and interpretivist stance (Bryman, 2008). Although some quantitative studies are arguably problematically positivistic, I share Philip's (1997) contention that over-simplification has obscured 'the opportunities and utility of quantitative methods to nonpositivist researchers' (p.265). By characterizing it as positivistic, we construct quantitative inquiry as incompatible with interpretive, constructivist, feminist, critical or postmodern thought (Lincoln et al., 2011; Wolgemuth et al., 2014). The conflation of paradigms with approaches has rendered problematic the use of multi-method research (Creswell, 2011), with certain commentators even going so far as to say that multi-method research is the preserve of confused students, incapable of committing to a single method (Silverman, 2015). On the contrary, I will demonstrate that a multi-method is highly appropriate for my approach.

In practice, multi-method approaches are still widely used in the social sciences. Research practice is driven not only by researchers' concerns with ontology, epistemology and theory but also by the research environment. Externally, there is increased demand for research to inform policy, and for practical rather than scientific research (Brannen, 2005) - a trend that may well work in favour of methodological convergence rather than divergence. The pragmatism of choosing the approach that best serves your research question(s) provides one justification for integrating quantitative and qualitative methods (Onwuegbuzie & Leech, 2005; Schatzman & Strauss, 1973). Pragmatically speaking, quantitative questions are appropriate to some of my research questions (e.g. how many households have a Freeview television). They cannot, however, truly ascertain how a person feels about Freeview television or why they choose a Freeview subscription. Quantitative and qualitative methods can therefore be combined to answer different facets of the same overarching research questions. Greene et al. (1989) identify five contexts in which multi-methods have often been accepted to serve certain purposes, triangulation being one such context. In line with Richardson (1998), however, I have chosen to replace the term 'triangulation' with the postmodern notion of 'crystallization' to describe the process of combining multiple sources of data in the present study. Richardson has contrasted crystallization with past notions of triangulation (e.g. Denzin, 1978), noting that triangulation employs multiple methods to validate findings, whilst crystallization instead acknowledges complexity. Richardson's crystallization metaphor alludes to a coming together of diverse views, dimensions, patterns and arrays of the phenomenon we study.

Since quantitative and qualitative methods do not research the same phenomena, many see the attempt to combine the two for cross-validation or triangulation purposes as inherently problematic (Sale et al., 2002). More recently, however, numerous researchers have articulated an attempt to move beyond the paradigm wars (Bryman, 2008), testing the limitations of a paradigm-driven approach (Hammersley, 2011; Onwuegbuzie & Leech, 2005; Wolgemuth et al., 2014). My own thinking falls in line with the latter camp and has influenced several of my methodological choices, including my decision to 'Think Aloud' test my quantitative questionnaire. The quantitative and qualitative methods relate to one another in

what can be described as a concurrent crystallization model (see Figure 4). Quantitative and qualitative data have been collected concurrently. They have been analysed separately using analytic designs appropriate to their epistemologies. Once completed, these separate analyses and findings have been interpreted alongside one another. The methodology can, therefore, be considered both ‘multi-method’ and ‘multi-paradigmatic’.

Figure 5: Visualisation of the concurrent crystallization model, adapted from Creswell et al. (2003)



A large-scale quantitative survey was chosen to identify the television-viewing patterns of 3-6 year olds and identify transitions in choices and activities (in line with research question i). Various large-scale quantitative studies have already attempted to do this (Marsh et al., 2005; Ofcom, 2016; Rideout et al., 2011). However, the fast pace of change within the children’s television sector necessitates regular benchmarking. Certain conditions and questions are also missing from existing large-scale quantitative work. Despite the inclusion of 3 and 4 year olds for the first time in the 2012 Ofcom report, there is still little detailed work addressing the habits of this age group and of this group as part of a diverse socioeconomic population. Research questions ii-iv are addressed by both the survey and the qualitative case studies. The survey data provides some larger-scale information about the relationship between children’s television viewing and their engagement with other media, digital technologies and related texts and artifacts, as well as the social contexts of that engagement. The qualitative work has taken as its unit of analysis preschool children’s home practices with TV&RM. The interpretation of these combined approaches addresses research question v, which is concerned with the implications of the findings for *CBeebies* programme development, the children’s media industry, parents and early years educators.

It is important to note the greater page space dedicated to reporting the qualitative case studies in the thesis, in contrast to reporting of the quantitative data. Although both sets of data, and their intersections, have played a vital role in shaping the discussion, conclusions and recommendations, it is true to say that the qualitative data have been the more influential in the theory-building work of the

thesis and thus, ultimately, in contributing to the field. Moments of intersection have been highlighted throughout the reporting of the quantitative and qualitative findings.

3.1.4. Social class in the thesis

Co-production with an industry partner (*CBeebies*) brought with it a commitment to investigate preschool children's engagement with TV&RM in the context of families from economically and socially disadvantaged communities. Through its Audience Councils, the BBC has a responsibility to meet the diverse needs of license fee payers through links with 'diverse communities, including geographically-based communities and other communities of interest, within the UK' (DCMS, 2006, p. 14). In other words, the BBC has a remit to meet the needs of license fee payers across the socioeconomic spectrum. Whilst *CBeebies* is very successful in engaging with a socioeconomically diverse audience, CBBC (its brand for older children) tends to attract a predominantly higher SES audience. *CBeebies* (and the BBC more broadly) are thus interested in the question of SES and how it might impact young children's engagement with television. This focus represents a moment of simultaneous convergence and divergence between the research brief as originally presented and my own theoretical and methodological reflections.

National and European organisations who required a focus on economically and socially disadvantaged communities (Yorkshire Forward, the Learning and Skills Council, Arts Council England, the European Regional Development Fund) funded almost all of my past research. I have always felt it important that the experiences of individuals from diverse socioeconomic contexts should be represented. At the same time, I was aware that researching social class or socioeconomic difference is contentious and that *CBeebies*, like my past funders, framed social class in a specific way. However, I had previously had much less opportunity to shape the methodology in the way that I would be able to in my own PhD project. My previous research (some psychological) was undertaken using methodologies that prioritized straightforward models of the social world over understanding the subjective experiences of participants (Scott et al., 2014). Having worked in the arts and cultural sector for some time, I was also worried about the basic premise of many funded arts audience studies relating to class difference. Before beginning an academic career, I had not encountered the notion of cultural capital (Bourdieu, 1977); however, I had worked with arts organizations that had approached audience 'diversity' in ways that I considered problematic. As a research consultant, I was frequently asked to research how arts organizations could appeal to 'lower SES', 'working-class' or 'deprived' communities and motivate these segments to engage with them as content producers, without significantly altering the artistic content provided. There was a noticeable absence of debate acknowledging the potential value of 'popular', 'low' 'sub-' or 'counter-culture'. Instead, arts organizations showed a preference for reframing and repackaging existing 'high-brow' content to appeal to what they categorized as 'harder-to-reach' audiences. Whilst maintaining a strong focus on social class in my work, I wanted to keep an open mind about the value of different types of content. It struck me as important that, despite my relationship with

CBeebies, I should try to avoid any preconceived assumptions about the inherent value of any particular text or producer. This awareness influenced various methodological choices - particularly my approach to discussing content with families and to analysing my participants' practices and content choices.

Social class and socioeconomics are explored theoretically in the literature review (2.3.3.). Methodologically, I have approached social class in this study by (a) examining how socioeconomic differences relate to other differences in the quantitative data and (b) exploring the lives of eight individual children and families as unique case studies. The families in my qualitative study were recruited based on their responses to a modified Hope-Goldthorpe (1981) scale (H-G scale, c.f. Goldthorpe, 1981; Hope, 1981; Seyd, 2002) included in the original quantitative survey. I am using a collapsed, 7-category class schema derived from the original 36 categories in the H-G scale, as employed in the 2002 Citizen Audit (Seyd, 2002). There are multiple problems implicit in the original scale. It was initially designed to account only for the work of men. It also conflates occupation and social class. Using the original scale would, then, risk grounding my study in some rather reductive definitions of social class. To address these problems to some extent, the questionnaire was modified to ask respondents about their own work and the work of their partners. The category 'full-time parent' was added. Updated examples of relevant jobs were added to the scale as presented in the questionnaire, to assist participants in making a judgment. The modified scale can be seen in Table 1. Occupation is considered a proxy measure for social class in the study and the use of a scale was also discussed critically with participants. Families were presented with the modified scale and asked to select which category they felt best represented their work ('Which of these best describes the sort of work you do?'). Five families self-identified their work as 'manual' according to the modified Hope-Goldthorpe (1981) scale (categories 5, 6 and 7), whilst three identified their work as 'professional' (categories 1 and 2).

Despite its flaws, the use of the modified scale enabled comparison with previous quantitative work. It also gave me a starting point for selecting participants for the qualitative study. However, in collecting and analysing the qualitative data, I am not conducting a search for universal laws regarding fixed social class groups. Instead, I have paid close attention to the specific practices of eight unique individuals and their families. My analysis has considered these practices at both the micro-level of multi-modal communication and in the broader context of specific communities. Having analysed the data relating to each unique child, I have then drawn broad comparisons between the practices of five children growing up in families characterising their work as 'manual' and the practices of three children growing up in families characterising their work as 'professional'. In using such an approach, I do not intend to imply that the general and classed differences in these practices are generalisable to all children, nor that the differences I observe are generalisable to society as a whole. However, my results can be considered generalisable as 'descriptions of the possibility of practice' (Danby et al., 2016, p. 145). In keeping with the inductive (theory-building) function of qualitative research and analysis, my findings evidence the differences present in the lives of my participants as a starting point for further

consideration and study. As Sacks (1992) observes in relation to such work, 'we can start with things that are not currently imaginable, by showing that they happened' (p. 25).

Table 1: Modification of the Hope-Goldthorpe Scale (Goldthorpe, 1981; Hope, 1981; Seyd, 2002)

Hope-Goldthorpe Scale (1981)	7-category scale used in this study (Seyd, 2002)	Collapsed 3-category scale used in this study (from Seyd, 2002)	Phrasing used in the questionnaire
I. Bourgeoisie	1. Professional or technical 2. Manager or administrator	Professional	<u>Professional or technical work</u> (e.g. doctor, accountant, schoolteacher, social worker, computer programmer) <u>Manager or administrator</u> (e.g. company director, manager, executive officer, local authority officer)
II. Service class	3. Clerical 4. Sales	Clerical	<u>Clerical</u> (e.g. clerk, secretary, telephone operator) <u>Sales</u> (e.g. commercial traveller, shop assistant)
III. Routine white-collar workers IV. Skilled manual workers V. Nonskilled manual workers	5. Foreman 6. Skilled manual 7. Unskilled manual	Manual	<u>Supervisor</u> (e.g. construction supervisor, plant foreman/woman) <u>Skilled manual work</u> (e.g. plumber, electrician, fitter, train driver, cook, hairdresser) <u>Semi-skilled or unskilled manual work</u> (e.g. machine operator, assembler, postman, waitress, cleaner, labourer)
		Other	Full time parent Never worked Other (please describe)

3.2. Quantitative survey of parents

3.2.1. Instrument design and ‘Think Aloud’ pilot study

The quantitative aspect of the project consisted of a large-scale survey of parents of 0-6 year olds. The questionnaire was designed to establish the television-viewing patterns of 3-6 year-olds and the social and class contexts of preschool children’s engagements with TV&RM. The questionnaire therefore asked for sociodemographic details in addition to a variety of questions about the availability of different digital devices within the home and the frequency children’s engagement with a list of activities. Parents were asked about the child’s favourite channels and programmes and the extent of their knowledge and engagement with *CBeebies* across a variety of platforms. To enable longitudinal benchmarking with previous studies, the survey included questions previously included in the questionnaire on which the *Digital Beginnings* report was based (Marsh et al., 2005). However, several alterations and additions were made. Since socioeconomic factors were important, the questions on paid employment and benefits were replaced with a socioeconomic measure based on a modified Hope-Goldthorpe (1981) scale. Some questions were removed to shorten the questionnaire. Additional questions were added to address the social contexts of preschool children’s engagement with TV&RM in more depth and specific to the interests of *CBeebies*:

Table 2: Questions added to the questionnaire

Questions added:	
... to address the social contexts of preschool children’s engagement with television and related media in more depth	<ul style="list-style-type: none"> - In general, do the media in your home cause your family to spend more time together, less time together, or don’t they make much difference? - How much time per day do you (or another parent or carer) watch children’s TV with your child? - When someone is at home, how often is any TV on, even if no one is actually watching it? - How often does your child watch TV not specifically targeted at children with you (or another parent or carer)?
... specific to the interests of <i>CBeebies</i>	<ul style="list-style-type: none"> - Which of these best describes your television subscription (Freeview or FreeSat; Satellite or Cable; On-demand streaming subscription) - How often does your child engage with <i>CBeebies</i>?

Before larger-scale roll out, the questionnaire was tested for its fitness for purpose in three ways:

- i. Consultation with, and input from, relevant academic and industry authorities (academic supervisors, The Children’s Media Foundation and *CBeebies*)
- ii. Online survey tested for sense and ‘flow’ by peers and supervisor
- iii. Think Aloud testing of questionnaire (paper and online - mini-study)

Each of these processes altered the final form and content of the survey (Appendix B).

A new approach to Think Aloud

The Think Aloud (TA) technique involves presenting a research participant with a stimulus and asking them to verbalize thoughts and reactions that would normally be silent. The approach emerged within psychological literature (Ericsson & Simon, 1984; Van Someren et al., 1994) as a means of understanding ‘in detail the mechanisms and internal structure of cognitive processes’ that produce a response to a stimulus (Ericsson & Simon, 1984, p. 1). TA has been widely used to test and validate quantitative instruments within psychological literature (French & Hevey, 2008; Gardner & Tang, 2014). Some social scientists have more recently used cognitive interview methods, including TA, to test survey instruments (Buers et al., 2014; Park et al., 2014; Priede & Farrall, 2011). These authors have, however, adopted the conventional TA model received from the discipline of psychology. In 2012, Koro-Ljungberg et al. proposed a ‘decentered form of TA for interrogating the problem-solving processes used by engineering students’ (p. 9). However, no qualitative TA method explicitly for improving the design and interpretation of quantitative tools in the social sciences has been developed or tested. Within this project, a revised TA has been developed to a) improve the design of a quantitative instrument; and b) understand how a quantitative instrument is comprehended and interpreted by a representative group of participants. This represents a broader remit for TA. Other problems inherent in the received model have also been addressed (e.g. the data is coded inductively, and the presence of the researcher acknowledged). The relationship between the TA testing and the rest of the multi-method model is illustrated above (3.2.). The qualitative TA mini-study and quantitative survey relate to one another as part of a sequential development model. The TA findings have played an additional role in informing the interpretation of the quantitative survey findings in the final interpretation of the data.

Think Aloud recruitment

The researcher recruited parents through existing peer networks, in person and via an online social network (*Facebook*). Parents were given information about the study and recruited on the basis that they had at least one child within the target age range of the survey (0-6 years). Ten parents participated in the study. Geographical location, gender, ethnicity and socioeconomic status are likely to impact on a participant’s interpretation of a survey, thus the researcher also attempted to recruit a diverse mix across these factors (Table 3). Since the planned questionnaire would be completed online and face-to-face in the full rollout, the sample was split between online and face-to-face testing. No remuneration was offered for participation in the study.

Table 3: Think Aloud participants

Elicitation method	Location	Gender	Ethnicity	Social class*	... 2nd parent
Think Aloud face to face elicitation	4 Sheffield 1 Barnsley	5 Female	3 White British 1 Arab 1 Asian - other	3 Professional 2 Clerical	3 Professional 1 Clerical 1 Manual
Think Aloud online survey and structured feedback	2 London 1 Stafford 1 Brackley 1 Shrewsbury	4 Female 1 Male	5 White British	4 Professional 1 Clerical	5 Professional
Total participants	5 Yorkshire 2 London 1 Northamptonshire 1 Staffordshire 1 Shropshire	9 Female 1 Male	8 White British 1 Arab 1 Asian - other	7 Professional 3 Clerical	8 Professional 1 Clerical 1 Manual

*SES based on scale modified from the Hope-Goldthorpe Scale (Goldthorpe, 1981; Hope, 1981; Seyd, 2002)

Think Aloud process

The TA study maintained a traditional ‘focus on verbalization and an interest in participants’ inner thoughts and thought processes’ (Koro-Ljungberg et al., 2012, p. 7). In line with the modifications discussed above, the researcher was consciously a part of the research process. Participants were invited to be co-players in the construction of the final survey. Detailed information on the task at hand was offered to the participants and they were invited to ask questions or interject in the process freely at any stage during the TA. Participants were given an information sheet detailing the nature and purpose of the research, contact information for the researcher and details of how the data would be used. Having been offered the opportunity to ask questions, participants signed consent forms. Following the TA task, participants were invited to participate in an informal interview, focused around: a) the participant’s experience of filling in the survey; and b) whether they felt their completed survey really painted an accurate picture of their family’s engagement with TV&RM. These topics were introduced and discussed in a conversational style: ‘If I were to read your survey response and not meet you, is there anything that I’d miss...?’ (Fiona, TA Interview 6).

As Koro-Ljungberg et al. (2012) suggest, this conversational style of interviewing, in which information was shared openly by the researcher and responses sought from the participant as ‘expert’, changed the dynamic, shifting the epistemological focus ‘to the participants who consequently created knowledge through verbalizations of their experiences and beliefs’ (p. 7).

Think Aloud analysis, findings and contribution to the methodology

After the TA testing was complete, the researcher coded the data inductively and thematically (Braun & Clarke, 2006) using a grounded theory approach (Glaser & Strauss, 1967). Unlike traditional TA analyses (e.g. Gardner & Tang, 2014), no attempt was made to weight responses using percentages. The analysis sought to achieve a broad understanding of the potential ways that the survey could be interpreted and understood by a range of participants. Some of the themes fell within the standard problem categorizations of a traditional TA analysis, in line with the findings of Gardner & Tang (2014). These themes informed the redesign of the quantitative instrument. However, inductive coding also revealed a host of additional themes that provided an insight into how the quantitative instrument might be comprehended and interpreted by a representative group of participants (point 2). Some of these findings have informed the redesign of the quantitative instrument and some have been carried through into the final interpretation of the full rollout quantitative survey data.

Due to length restrictions, full details of the TA mini-study have not been reported in this thesis. However, it is anticipated that the full mini-study will be published separately. One example of the value of using the amended TA process designed specifically for this study was the increased insight the TA

study gathered in terms of preschool children’s practices with TV&RM. An original question included in the questionnaire was: ‘Which of the following does your child do when they watch TV?’

Table 4: Think Aloud themes

<p>Themes consistent with standard TA problem categorizations:</p>	<ul style="list-style-type: none"> - Uncertainty about appropriate response (e.g. how many children do I have versus does my partner have, versus how many live with me/us); - Recall error; - Contextual qualification (e.g. how much television per day depends on time of year); - Difficulty comprehending the question (e.g. meaning of ‘TV not specifically targeted at children’); - Basic proofreading errors with the survey (e.g. missing box).
<p>Themes outside standard TA problem categorizations:</p>	<ul style="list-style-type: none"> - Inadequacy of standardized demographic categories (e.g. employment status, education level, race); - Desire to share further information; - Differences in the perception of providing ‘progressive’ gender categories; - Complexity of parental involvement in children’s media engagement; - Complexity of children’s daily routines; - Child intervention in adult survey completion.

During TA testing, parents pointed out that their children are engaged in a broad range of activities *related* to TV&RM not only *during* but also some time *after* their engagement with TV&RM. This finding directly informed the redesign of the quantitative instrument, since a second question was added: ‘Which of the following does your child do AFTER they watch TV?’ By TA testing the questionnaire using an amended, constructivist approach (and by coding the data inductively), a core insight into the scope of preschool children’s home practices with TV&RM was gained. This insight has subsequently been influential in informing how preschool children’s home practices with TV&RM are conceptualized in the broader multi-method study.

3.2.2. Sample

The primary target participants for my survey were parents of children in Foundation stage 1 and 2 (ages ranging between 3 and 6 years), although responses from parents with children aged 0-6 were accepted. Two approaches were used to recruit parents for the study:

- Recruitment of parents in Sheffield, in person, via local schools
- Recruitment of parents UK wide via an online link advertised through multiple *CBeebies* social media channels (*CBeebies* website, *Twitter*, *Facebook*)

My relationship with *CBeebies* meant that the online survey would reach a sizeable sample of UK parents. However, I anticipated that the sample of parents recruited via *CBeebies* social media channels would be somewhat unrepresentative of UK parents. It was likely that parents recruited via these channels would have children who were more engaged with *CBeebies*. My initial discussions with *CBeebies* also suggested that the families in this sample were more likely to be from clerical or

professional families rather than those identifying as manual. The focus of the research called for the inclusion of families from diverse socioeconomic backgrounds. The study also called for parents whose children were at both ends of the *CBeebies* engagement spectrum. As such, I attempted to recruit a more diverse range of parents by working with schools in a variety of Sheffield communities.

Separate analyses of the two samples confirm my initial assumptions. A greater proportion of parents in the *CBeebies*-sourced sample suggested that their children engaged with *CBeebies* ‘always’ (18.5%) or ‘most of the time’ (36.1%). A greater proportion of parents in the Sheffield schools-sourced sample suggested that their children engaged with *CBeebies* ‘hardly ever’ (10.7%) or ‘never’ (7.4%). However, these differences were not dramatic. As predicted, the socioeconomic diversity of the Sheffield schools sample was greater than that of the *CBeebies* sample, thus supporting the assumption that parents already engaged with *CBeebies*’ media channels are, broadly speaking, more likely to be of higher SES (Table 3).

Table 5: Child’s engagement with *CBeebies* by sample source

Breakdown	CBeebies sample		Sheffield schools sample	
	#	% of total	#	% of total
Always	180	18.5	29	13.5
Most of the time	352	36.1	53	24.7
Some of the time	402	41.3	94	43.7
Hardly ever	33	3.4	23	10.7
Never	7	0.7	16	7.4
Total	974	100.0	215	100.0

Table 6: Sample source by parent (who completed the survey) occupation

Breakdown	2001 Citizen Audit (mail survey of UK adults)		CBeebies sample		Sheffield schools sample	
	#	% of total	#	% of total	#	% of total
1. Professional or technical work	1804	25.5	363	37.3	60	27.8
2. Manager or administrator	1243	17.6	167	17.1	23	10.6
3. Clerical	1004	14.2	84	8.6	22	10.2
4. Sales	615	8.7	42	4.3	22	10.2
5. Supervisor	137	1.9	8	0.8	2	0.9
6. Skilled manual work	920	13.0	16	1.6	10	4.6
7. Semi-skilled or unskilled manual work	1112	15.7	40	4.1	19	8.8
Full time parent	n/a	n/a	197	20.2	41	19.0
Never worked	n/a	n/a	2	0.2	5	2.3
Other	228	3.2	55	5.6	12	5.6
Total	7063	100.0	974	100.0	216	100.0

Table 7: Sample source by parent (who completed the survey) collapsed occupation

Breakdown	2001 Citizen Audit (mail survey of UK adults)		CBeebies sample		Sheffield schools sample	
	#	% of total	#	% of total	#	% of total
Professional	3407	43.1	530	54.4	83	38.4
Clerical	1619	22.9	126	12.9	44	20.4
Manual	2169	30.7	64	6.6	31	14.4
Other	228	3.2	254	26.1	58	26.9
Total	7063	100.0	974	100.0	216	100.0

3.2.3. Recruitment and distribution

I aimed to collect around 400 responses to my survey to enable meaningful conclusions to be drawn from the data. Estimating a response rate of around 50%, I planned to distribute at least 800 questionnaires. Whilst I knew 50% was rather optimistic, I aimed to boost the response rate by combining the two distribution methods. *CBeebies* made the link to the questionnaire available on the *CBeebies* website. Secondly, I established contact with several early years settings to explain the nature of my research and assure gatekeepers that the work was ethical, safe and required minimal input from staff. By way of a small incentive and to demonstrate my appreciation for their time, I offered staff some professional development materials on multimodality and film supplied by the United Kingdom Literacy Association (UKLA) and the British Film Institute (BFI). Having negotiated access to settings, I discussed and agreed a unique plan for distribution with each individual gatekeeper. Gatekeepers themselves often have the best idea of how to achieve a good response rate within their unique setting and it was helpful to work flexibly. In some settings, it was possible to attend parents' evenings or school plays to hand questionnaires out face-to-face with parents. In other settings, staff preferred that I leave surveys with them and provide a collection box for parents to return their responses. Nine settings agreed to take part. I encouraged parents themselves to take part using a small incentive. All parents who completed the questionnaire entered a prize draw to receive a 'goodie bag', including children's toys and DVDs.

3.2.4. Quantitative fieldwork

The quantitative fieldwork took place between November 2014 and March 2015 using a multi-method design (online, face-to-face and drop-off at schools and nurseries). Full details are given in Appendix D. The number of responses collected significantly exceeded my initial expectations, with 1195 received in total. This success was largely attributable to the high rate of interest generated by advertising a link to the survey through *CBeebies* media channels (including the *CBeebies* website, *Twitter* stream and *Facebook* page). In total, 974 survey responses to the online survey were attributable to the *CBeebies* advertising sources. The response rate in Sheffield settings was modest, with 221 responses collected across nine settings. The latter process was significantly more labour intensive, but these responses made an invaluable contribution to the dataset. The complexity of the recruitment process in early childhood settings made it impossible to calculate exact response rates. Whilst some settings provided estimates of the numbers of *children* in their classes, it was unclear how many unique *parents* were being targeted (many parents had several children in the setting). Whilst the staff in settings were very helpful, they were voluntarily contributing in a context that was already very demanding of their time. It was necessary to be flexible and find methods that were convenient for the settings. In some cases, this involved standing outside classrooms to catch parents before or after dropping their children off. Full details of these multiple methods can be found in Appendix D, alongside some illustrative detail relating to the target populations. Based on the settings where an estimate of the target number of children was

provided (6 of 9), a conservative estimate of the response rate is 24%. It is impossible to know how many parents viewed the adverts via *CBeebies* channels.

3.2.5. Analysing the quantitative survey data

Survey responses were inputted into SPSS in batches as they were collected. Once complete, the data were reviewed and the accuracy of data inputting spot-checked by the researcher. Some of the quantitative analysis was purely descriptive. Cross-tabulations were run between several variables. Full details of statistical testing can be found in the quantitative data chapter (Chapter 4).

3.2.6. Validity and reliability

Validity in quantitative research generally refers to credibility (i.e. whether a test measures what it says it does). For many social scientists, the question of validity represents something of an ontological minefield. For constructivists, 'reality' is relative – realities are local, specific and co-constructed (Lincoln et al., 2011). Several attempts were made to improve the validity of the questionnaire in keeping with this context. Firstly, the questionnaire was tested for content validity by relevant academic and industry authorities (academic supervisors, The Children's Media Foundation and *CBeebies*). The TA process was designed specifically as a tool to improve the construct validity of the questionnaire within a social science research context. Reliability in quantitative research generally refers to consistency, particularly the repeatability of findings. The internal reliability of items on the questionnaire has been tested using Cronbach's alpha (α) and the results are reported in the quantitative data section.

3.3. Qualitative case studies with families

3.3.1. Design

The qualitative study was based on a case study approach. I consider the approach both longitudinal and ethnographic. Both terms are frequently contested. I initially planned that the work should be longitudinal (Thomson et al., 2002) because an aim of the original brief was to observe the transitions that take place in early childhood and how they impact on and relate to children's choices in television and other media. The longitudinal nature of the study highlighted the small transitions in the lives of the individual children and was important in getting to know the families more closely. Transitions did not end up being a key focus of the qualitative data analysis. However, as Pahl (2007) suggests, the longitudinal timescale in this ethnographic work served to deepen my understanding of children's textual productions, especially in relation to macro level family narratives. Three factors define my personal understanding of ethnography. Firstly, ethnography takes the ordinary as a subject worthy of

dedicated study. To notice or reveal unspoken social norms of the everyday, ethnomethodologists study ordinary things and behaviour, treating everything they observe as potentially remarkable (Fontes & Piercy, 2000). Secondly, ethnography generally necessitates that a researcher abandon any illusion of being a detached observer. Instead, they embrace and acknowledge participation in the lives of their research participants and research community (Campbell & Lassiter, 2015). Finally, ethnographic study does not take place in a vacuum, but connects everyday social actions with broader social, historical and cultural contexts (Baszanger & Dodier, 2004).

My presence as a researcher means that the everyday I study is never entirely as it would have been without my presence. My repeated visits over time did, however, help me to build a more relaxed relationship with my participants. Studying home environments does not tell the whole story of three and four-year-old children's lives and, ideally, my study would have encompassed the preschoolers' forays into nursery, friends' houses and a variety of other settings. However, the home setting is particularly worthy of study in the case of preschool children. Whilst literacies scholars have long paid attention to the home literacy practices of children who are already a part of the school system (Campano & Carpenter, 2005; Heath, 2012), it is rarer to find this sort of work with regards to preschoolers, particularly in relation to their media engagement. In line with the expanded definition outlined in my literature review, my research pays attention to all aspects of experience that constitute the social. This includes interactions not only with mothers but with all parents and carers, wider family members and peers. Furthermore, it considers the social roles of physical phenomenon, objects and spaces in children's lives (Carrington & Dowdall, 2013).

The fieldwork took place between March 2015 and February 2016. My approach to working ethically with children and representing them in research is discussed below (3.4.). In line with Clark's (2004) mosaic approach, my methods mix was flexible. Some visits included a mixture of observation, filming and informal interviews with the children. I prepared a provisional framework (Appendix E) for research activities over the period of the fieldwork. It was intended that the framework would act as a guide only and that the research activities would change and evolve as I became more familiar with individual settings, families and children. The earlier planned tasks were more conventional in terms of research expectations. For example, one of my first visits to each family included a guided toy tour of the house during which the children were given a children's still camera to take photographs. I intended to progress from this to more naturalistic ethnographic work when families became used to me. In practice, the reality of the methods mix used was messier (Appendix F). Whilst it is generally true that the visits evolved from more to less structured, the details varied. Families introduced traditions of their own into my visits (for example, the sharing of food and drink in Niyat's family). It was also interesting to observe how some of my research activities were adopted by the children and redeployed as new traditions on future visits (e.g. the toy tour in John and James' family). Other methods were subverted by the children (e.g. the use of the Dictaphone and camcorder for recording in Archie's family). I had

initially intended to visit each family once a month for a few hours, over a period of 6-9 months. In practice, the timetable for my visits was less precise.

3.3.2. Sample

The target participants for my qualitative case studies were families with at least one child aged between 3 and 4 years. I aimed to recruit ten families, of which around 75% (7 or 8) would be classed as more conventionally working-class, whilst the remainder (2 or 3) would be middle or upper class to provide a smaller, contrasting group. As with the quantitative work, I anticipated that these families would represent a range of engagement with *CBeebies*, from highly engaged to little or no engagement. In the case of the qualitative case studies, the sample was sourced entirely from the Sheffield area. The final sample for the qualitative data collection comprised eight families (five with a parent identifying their work as 'manual' and three with a parent identifying their work as 'professional'). Six families have been included in the reporting within this thesis.

3.3.3. Recruitment

Families were recruited to take part in the ethnographic case studies via the initial quantitative survey. Several filters were used in recruitment. The final question on the questionnaire asked if parents would be interested in receiving information about some further planned research. Only families who had ticked yes were included in the possible pool. Since the research was planned to take place in Sheffield, only families who had given a Sheffield address were included in the possible pool. Families were recruited based on their responses to a modified Hope-Goldthorpe (1981) scale included in the original quantitative survey. It was intended that families should be recruited from a variety of working-class and middle-class families. Therefore, some who self-identified their work as 'manual' according to the modified Hope-Goldthorpe (1981) scale (categories 5, 6 and 7) were contacted, whilst some who identified their work as 'professional' (categories 1 and 2) were contacted. Based on these filters, two lists of possible families for inclusion in the study were compiled. The researcher contacted these families via email and/or telephone to discuss further participation.

These early stages included frank discussions about the level of engagement required. As is frequently the case in recruiting for qualitative research, many families felt that, on reflection, the in-depth qualitative study was not something they wanted to take part in. The original target for recruitment of families was 10. From the lists compiled, 14 families agreed to take part. Once 14 families had been recruited, I stopped recruiting. Some families chose to drop out of the study at various stages of the research. Eight families remained in the study until the end and consented for their data to be included. Five of these families self-identified their work as 'manual' according to the modified Hope-Goldthorpe (1981) scale (categories 5, 6 and 7), whilst three identified their work as 'professional' (categories 1 and 2). It is important to acknowledge that participants willing to take part in such in depth research are

still unlikely to be representative of the whole population, even when steps are taken to recruit a more diverse sample. Slonim et al. (2013) found that participants who opted in to research tended to have less income, work less, volunteer more, and have greater interest in lab tasks. I did not ask any of the families about their household income. It is true, however, that none of the mothers in the qualitative study worked full time, although they had busy lives, and all worked part-time or were engaged in formal learning in addition to being a mother of a young child. The mothers involved were interested in research and some, though not all, had taken part in other research projects previously. There was also evidence to suggest many were activity involved in their communities (e.g. knowing everyone on the road or volunteering at their child's school events).

The quantity of data collected varied between families, meaning there was asymmetry in the depth of the data. It was decided that only six of the eight families would be included in the analysis. Four of the five families who self-identified their work as 'manual' according to the modified Hope-Goldthorpe (1981) scale (categories 5, 6 and 7) were selected for inclusion in the thesis. Two of the three families who self-identified their work as 'professional' according to the modified Hope-Goldthorpe (1981) scale (categories 1 and 2) were selected for inclusion in the thesis. In both cases, families with more data were prioritised for inclusion. The two families not included in the thesis, therefore, were the working-class family with whom I had collected the least data and the middle-class family with whom I had collected the least data. This relative lack of data meant that meaningful comparisons with the other six families were difficult to make. It is anticipated that further findings relating to the two other families will be reported in future publications. Details of the six families included in the thesis can be found in Figure 6. Details of all eight families can be found in Appendix G.

Figure 6: The families

		Gender	Age (Visit 1)	Ethnicity	Parent(s) SES
Family A	Archie	Male	3 years, 8 months	White British	Full time parent (M) Skilled manual (D)
Family B	Niyat	Female	3 years, 3 months	Black / Black British	Full time parent (M) Other (D)
Family C	Olivia	Female	3 years, 5 months	Mixed - White & Asian	Unskilled manual (M)
Family D	Rosie	Female	4 years, 7 months	White British	Professional or technical (M) Professional or technical (D)
Family E	Emma	Female	4 years, 6 months	White British	Skilled manual (M) Unskilled manual (D)
Family F	John	Male	4 years, 7 months	White British	Professional or technical (M) Professional or technical (D)

3.3.4. Analysing the qualitative case study data: a Sociomaterial Nexus Analysis

Below, I give a detailed explanation of my analytic methodology, including specifics on the selection and transcription of data, the theory underlying my analysis and detail on the process itself. Lastly, I briefly discuss the notions of reliability and validity in relation to my analytic model.

Selecting the data

The project produced a wide range of material that could be considered qualitative data: audio recordings produced by the child participants and I; video recordings produced by the the child participants and I; photographs taken by the child participants and I; drawings produced by the child participants; field notes created by myself; and text and photo messages with parents. The use of different types of data is described in greater detail, below. In summary, the audio recordings were professionally transcribed and these transcripts acted as the first port of call in an iterative analysis process. The video data, alongside other forms of visual data, were frequently consulted during this first stage (filters 1-4). The video data was later interrogated in much greater detail, forming the basis of the multimodal analysis of specific moments.

Transcription

A full multimodal analysis of one research visit was attempted based on audio and video recordings (excerpted in Appendix H), adapting Flewitt (2011). Whilst this provided rich and valuable transcripts for use in the analysis, this process was unsustainable within the time constraints of the PhD project. Instead, I reverted to commissioning a professional transcriber to produce full (conventional) transcripts of the audio data only. These notes lacked multimodal detail, and served only as a backbone to the initial stage of analysis. The transcripts were uploaded into *NVivo* software for coding.

Analytic theory – from CHAT to Sociomaterial Nexus Analysis

Children's intra-actions (Barad, 2003) and social practices (Wohlwend, 2009) with TV&RM at home are the primary units of my analysis. The 'practice approach' emerges from a body of writing by multiple authors. Bourdieu's (1977) original account of habitus captures the 'the permanent internalisation of the social order in the human body' (Eriksen and Nielsen 2001, p.130). Bourdieu's definition simultaneously acknowledges an individual's practice, or 'his or her capacity for invention and improvisation' (Bourdieu, 1990, p. 13). For Bourdieu, the world's structural constraints contribute to the formation of permanent dispositions of perception and thought as well as embodied 'postures and stances, ways of standing, sitting, looking, speaking, or walking' (Bourdieu, 1977, p. 15). In our everyday intra-actions, then, we demonstrate our embodied habitus (memorized, bodily, ways of doing). By making the familiar strange (Van Maanen, 1995), such intra-actions can be studied through reflective, longer-term ethnographic research.

Paying attention to embodied aspects of social intra-action fits especially well with my evolving reliance on notions of sociomateriality to conceptualise children's engagements with TV&RM at home. Postill (2010) describes a second generation of practice theorists (Reckwitz, 2002; Schatzki, 2001) who also emphasised the centrality of the human body to practice, but developed new concepts and began applying practice theory in new areas (including media and the material culture of the home). Schatzki (2001) suggested that most contemporary practice theorists define practices as 'arrays of activity' in which the human body is the nexus (i.e. a centre, connection or connected group). The maintenance of practices over time depends on the successful instilling of 'shared embodied know-how' (p. 3), as well as on their continued performance (Schatzki, 1996). Importantly, the motivations, rewards or products of practices can be defined and measured in different ways (Warde, 2005). This approach to analysis thus gives me the flexibility to draw on broad and various definitions of development, including the social (e.g. Bourdieu's social recognition), psychological (Csíkszentmihályi, 1990) or even intrinsic (Rautio, 2013).

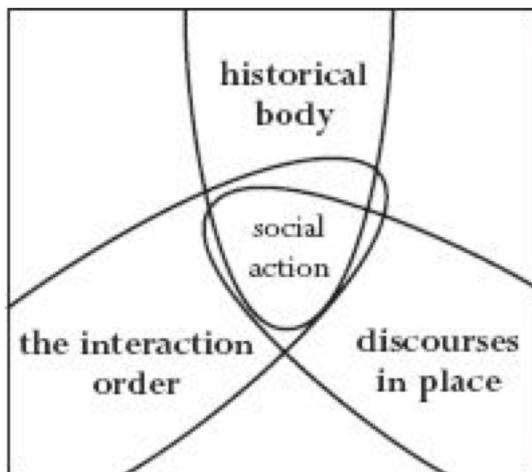
Since I was particularly interested in how multiple (multimodally-communicative) 'things' (including people, places and objects) assemble and intra-act (Barad, 2003), constituting children's social practices (Wohlwend, 2009) with TV&RM at home, I decided to base my analysis around the relatively recently established methodological practice of Nexus Analysis (NA). Originating in the writings of Scollon (2001) and Scollon and Scollon (2004), NA sits comfortably with an expanded view of habitus (Bourdieu, 1977). Scollon and Scollon draw on Wertsch's (1991) notion of mediational means to illustrate how things like language, literacy and play shape social and individual processes. Scollon and Scollon depart from Wertsch, however, taking social action, rather than mediational means, as the starting point for their analysis. NA is, then, very similar to Critical Discourse Analysis (CDA), but is focused not on large-scale social discourses but on the micro level: starting by analysing a specific social action performed by a social actor. NA is also Scollon and Scollon's name for their specific brand of ethnography, within which the researcher's goal is to

enter the 'nexus of practice' and, in doing so, to identify key social practices and social actions that are relevant to the participants within the nexus of practice. Scollon and Scollon (2004, p. 159) define a 'nexus of practice' (Figure 7) as a moment in which the 'historical trajectories of people, places, discourses, ideas, and objects come together to enable some action which in itself alters those historical trajectories in some way as those trajectories emanate from this moment of social action' (p. 159). Wohlwend, meanwhile, summarises the nexus of practice as such:

Nexus of practice explains how the simplest physical mediated actions interact to constitute valued social practices, how these social practices interact as nexus of valued ways of participating, and how these nexus create expectations for particular identities and meanings.

(Wohlwend, 2012, p. 187).

Figure 7: Locating a nexus of practice (Scollon and Scollon, 2004)



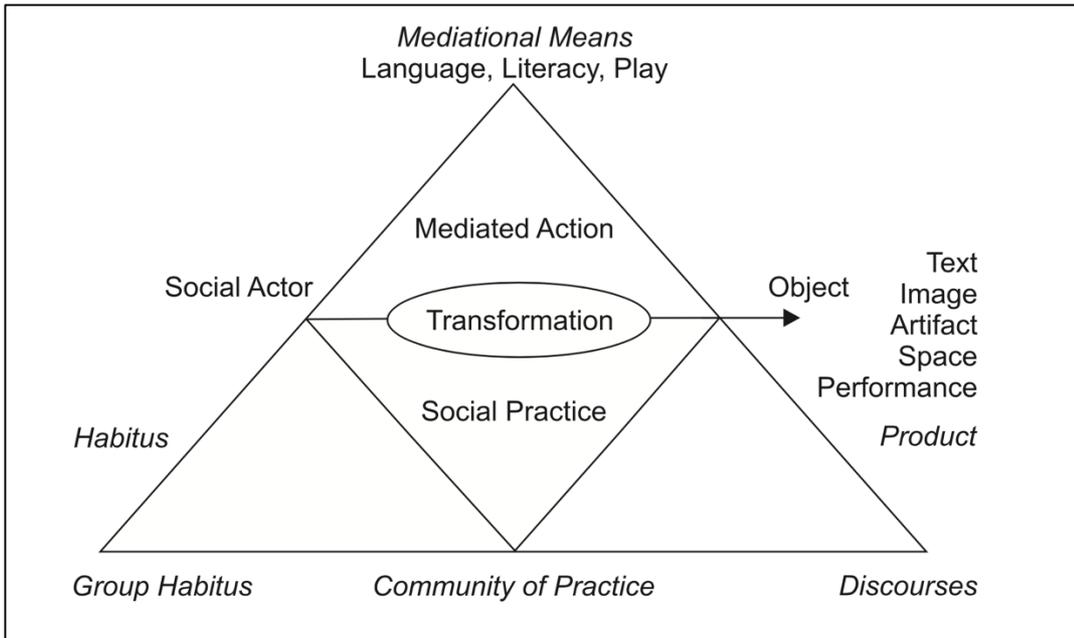
Once a nexus of practice is identified, NA 'maps' the 'cycles of the people, places, discourses, objects, and concepts' which circulate through the moment within which the social action takes place (2004, p. 159). Both Scollon and Scollon (2004) and Wohlwend (2012) speak specifically about the nexus of practice as being social action at the nexus of historical body, interaction order and discourse in place:

Figure 8: Intersections at the nexus of practice, summarised from Wohlwend (2012)

The interaction order:
refers to the social nature of interactions in the data. It considers what is happening, with whom and for what purpose. Traditional discourse analysis has tended to focus on groupings, e.g. child and parent; child and peer. Traditionally, the focus of such work might, for example, be what implicit and explicit teaching is occurring.
The historical body:
refers to 'ways of doing' between bodies and materials that matter in the context. For example, a child's ways of handling materials and tools and the specific practices that the child is beginning to embody or taking up. Drawing on Scollon (2001), Wohlwend (2012) talks about the things children learn that become 'automatic', i.e. that they seem to do without receiving much instruction. One such example can be found in Luke (1992), who describes how school children's bodies are inscribed with institutional control in traditional classroom settings.
Discourses in place:
refers to what discourse is doing in the context. For example, discourse may be raising questions, justifying something or contributing to the construction of identities. Wohlwend (2012) points out that the multiple, overlapping discourses we live in are all around us, circulating globally but taken up locally.

Scollon & Scollon's original text is dense and not very specific when it comes down to the intricacies of how to perform the analysis. The technique is still yet to be widely used, although it is increasingly present in literature on language and sociolinguistics (Pietikäinen et al., 2011) and in fields such as computer aided learning (Ryeberg & Larsen, 2008). Although they tend to mention the theoretical underpinning of Nexus Analysis, authors are consistently less precise in detailing *how* they carried out the task of their Nexus Analysis on a practical level. As such, I am proposing my own framework for a Sociomaterial Nexus Analysis, based on my theoretical reading and the needs of my data. I began by searching for any author who had previously employed Nexus Analysis or something similar in a field close to my own. The only significant body of work I found belonged to Associate Professor Karen Wohlwend, who makes several references to NA but tends to describe her analytic method more commonly as Mediated Discourse Analysis (MDA). Wohlwend's work has previously used cultural historical activity theory (CHAT) to explore how children use tools to mediate their engagements with the world (Leontiev, 1977; Vygotsky, 1978). Her (2009) model describes how social actors use mediational means to transform mediated actions into social practices. This process is summarized in Figure 9.

Figure 9: An activity model of early literacy apprenticeship (Wohlwend, 2009)



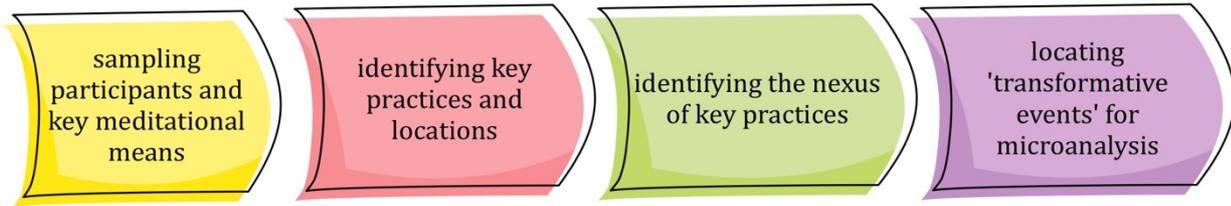
The mediational means in Wohlwend’s model may include language, play or literacy. Wohlwend contends that such mediational means attach meaning to action by connecting a ‘mediated action’ (p. 230) to the ‘universe of existing histories of social practices’ (p. 230) amongst a group of people. Wohlwend describes mediated actions as specific physical acts with material objects that result in a product, for example an artifact or performance. ‘Objects’ can be physical or digital, e.g. media texts. One example, then, could be a child playing with a media text (e.g. role-playing as a character). In such a case, Wohlwend might theorise that play (a mediational means) attaches meaning to action. It does so by connecting a specific physical interaction with a media text to existing histories of social practices within the family. Thus, it *transforms* the immediate physical action into a specific social practice. Importantly, Wohlwend points out that we are often only partially aware of the social actions that we take up and of the ‘nearly automatic’ (p. 230) practices that make up our habitus (Bourdieu, 1977). Finally, Wohlwend draws on Scollon (2001) and Gee (2001) to point out:

Dense intersections of valued and expected practices form nexus of practice (Scollon, 2001), producing the naturalized ways of ‘doing and being’ that signal our membership to certain groups or Discourses.

(Wohlwend, 2009, p. 231).

Wohlwend’s work is of practical use because the author speaks candidly about the process of selecting moments for micro-analysis, a detail that is arguably vague in Scollon and Scollon’s text. Wohlwend adapts Scollon and Scollon’s (2004) ‘funnel design’ to give detail on how key moments for microanalysis are located (Figure 10).

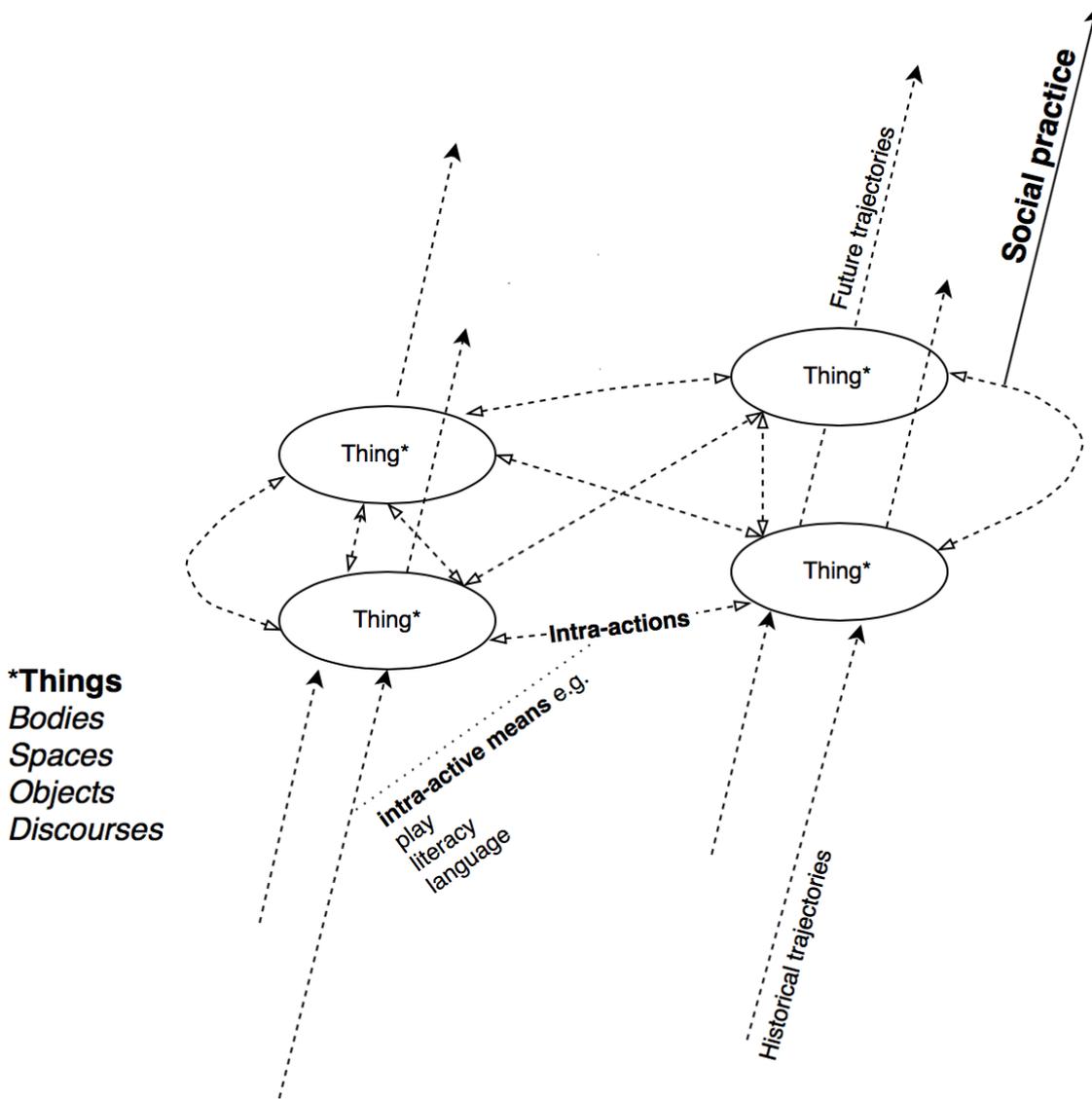
Figure 10: Wohlwend's (2009) analytic filters



Though this felt clear and practical, in my discussions with Associate Professor Wohlwend I realized I was struggling with a problem that she and many others in the field were also wrestling with at the time of writing: the intersection of materiality, meaning and action in light of the field's turn toward new materialisms and away from structuralist theories. Sociomaterial theory moves away from subject-object, as writers in the tradition attempt to flatten the ontology between human and material. People, then, are grouped in my model with other 'things'. The notion of mediated actions is replaced by the notion of intra-actions, following Barad (2003). Barad's notion of intra-action serves to disrupt the assumed agential centrality of the human, focusing instead on the interplay produced between entangled things, e.g. objects (e.g. digital/non-digital/media texts), bodies, spaces or discourses. Taking a new materialist lens, things are always in flux or transformation, becoming rather than being (Braidotti, 2003). As Latour (1987) might point out, if things are always in flux we must pay attention to the effort and resources that contribute to holding things in place. Wohlwend et al. (2017) begin to tackle these tensions in their recent work. However, for the purposes of this thesis, I have devised my own simplified analytic method of Sociomaterial Nexus Analysis (SNA), drawing on detailed reading of the Wohlwend's recent work, and personal dialogues with the author as an esteemed mentor.

My own model (Figure 11) attempts to flatten the binary between human and object to explain how 'things' (bodies, spaces, objects and discourses) come together in a moment, constituting a particular assemblage. Each of these 'things' is in a state of flux and carries within it a unique historical trajectory. As these 'things' come together in momentary intra-actions, the means of their intra-action (e.g. play, language or literacy) connects the intra-action to a 'universe of existing histories' (Wohlwend, 2009, p. 230) of social practices in a way that matters. Intra-actions are specific physical acts. Whilst the child is not the 'centre' of this assemblage, the case study research begins from a starting point of locations and participants. The child, therefore, can be seen as a starting point or 'way in' for analysing these assemblages. To take our previous example of a child playing with a media text (e.g. roleplaying as a character), this moment of play connects the child and the media text with the universe of existing histories of social practice within the family. The specific physical intra-action matters in relation to these histories, constituting a specific social practice in its own right.

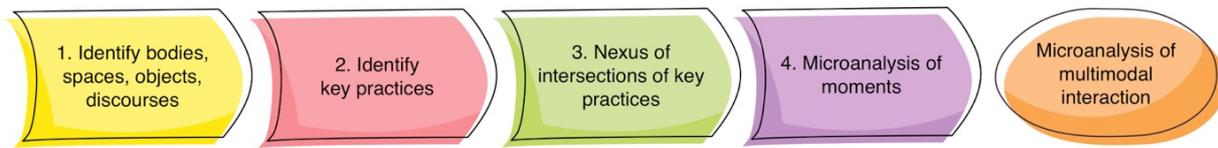
Figure 11: The nexus of practice (a working model for Sociomaterial Nexus Analysis)



Process: Sociomaterial Nexus Analysis

Each of the eight focus children (and families) has been treated as a unique (individual) case study. For each case study, analysis has been conducted at both a macro and micro level. My process is informed by, and adapted from, Wohlwend (2009). Wohlwend’s filtering process for mediated discourse analysis is, in turn, adapted from Scollon and Scollon (2004), the originators of the Nexus Analysis approach. Four filters have allowed me to organise my ethnographic data and locate the most significant practices in relation to the children represented in my study. As in Wohlwend’s (2009) model, each step is cross-compared with members’ views (identified in the coding), my own field notes and reflective ‘playback’ of all collected data (including audio and audiovisual data). Adapted from Wohlwend (2009), Figure 10 shows how methods of ethnographic data collection correspond to each filter in Scollon’s funnel design that located key moments for microanalysis of language and intra-action.

Figure 12: The analytic filters, adapted from Wohlwend (2009)



Filter 1: coding to identify ‘things’ (bodies, spaces, objects) and ‘members’ generalizations’

My first filter involved coding of the written transcripts augmented by careful reflection on, and crosschecking across, all of the collected ethnographic data (especially video-tape recordings, field notes and photographs). This filter identified the bodies, objects and spaces (coded as ‘things’) that mattered (Horton, 2010) in the context. At this stage, members’ generalizations were also coded. Members’ generalizations is the term Scollon and Scollon (2004) employ to connote what participants say they do. The term can be critiqued for appearing to devalue the statements made by research participants. In line with my comments on Discourse above, I have chosen to keep the term. It should be noted that Scollon and Scollon suggest that contradictions between what participants say they do and a researcher’s observations can be resolved through discussions with participants. This is a limitation of the present study and, in an ideal world, a final stage would have involved discussing working versions of nexus maps with the participants.

This coding was both inductive and deductive. It was organized using a broad deductive framework that sought to account for things and members’ generalizations. The sub-coding was, however, inductive. I simultaneously coded this data in *NVivo* and mapping to visually represent data about the ‘things’ that sociomaterially constituted each context in a ‘nexus map’.

Table 8: Coding the qualitative data I

Parent code	stands for...	explanation...	reported...
T(O) T(R)	things (observed) things (reported)	media texts and devices, important spatial, physical and biological entities reported by a family member or directly observed by the researcher	all TV&RM things (reported and observed) summarised in tables
MG(i)	members' generalizations (initial)	discourses, attitudes, opinions, explanations	pertinent themes extracted and reported in case studies with key quotations to illustrate

The ‘things that mattered’ (bodies, spaces and objects) are summarized in each case study. These are also represented in the nexus maps. Family discourses about TV&RM are summarized in each case study.

Filter 2: coding to identify intra-actions

My second filter also involved a coding of the written transcripts augmented by careful reflection on, and crosschecking across, all of the collected ethnographic data (especially video-tape recordings, field notes and photographs). I reviewed all data, paying attention to the scenes where participants were intra-acting with digital devices or media texts by any definition of these terms. I simultaneously coded this data in *NVivo* whilst adding children’s intra-actions onto my nexus maps.

Table 9: Coding the qualitative data II

Parent code	stands for...	explanation...	reported...
I (O) I (R)	intra-action (observed) intra-action (reported)	practices, reported by a family member or directly observed by the researcher	all practices (reported and observed) summarised in tables

This coding was both inductive and deductive. It was organized using a broad deductive framework which sought to account for intra-actions. The sub-coding was, however, inductive. Specific intra-actions were coded for all audio transcripts, making reference to the accompanying video data where necessary for clarity or greater detail. For successive visits, new intra-action connections added in new colours. These are reported as new intra-actions on the map only if they are new that visit.

Once all intra-actions had been initially coded, these codes were then reviewed and axial coding was used to sort them into broader ‘practices’ across all cases. I employed an emergent coding approach, following Merriam (1998), to create an axial coding scheme which evolved into a list of meaning-making practices (for example, watching, copying, re-playing, playing, creating and synthesising). The ‘practices’ identified are summarized in each case study.

Filter 3: coding to identify the nexus of key practices

Here, I paid close attention to my nexus maps, augmented by continued crosschecking of all the ethnographic data to track the intersections of practices. Nexus of practice were identified where particularly dense intersections of valued and expected practices were observed, wherein a child’s practices

with particular digital devices or media texts intersected or became complicated by the historical trajectories of other bodies, objects or discourses. The identified nexus of practices are summarized in each case study.

Filter 4: locating moments for microanalysis

My fourth filter located moments for microanalysis. In the past, researchers have spoken of selecting 'critical cases' in qualitative data, essentially those cases that are likely to 'yield the most information and have the greatest impact on the development of knowledge' (Patton, 1987, p. 55). More recently, post-qualitative methodologists such as MacClure (2013) have described moving past the debate about how moments are methodically selected altogether, and instead suggest that we consider the notion of the wonder inherent inside data. It may be true that the moments selected for deeper analysis are information-rich and potentially impactful, and true that they were often incidents that had struck me at the time as somehow important and continued to preoccupy my mind long after data collection had finished. However, following a Nexus Analysis approach, the moments selected for detailed analysis were indeed the result of a rational and specific coding process. 'Moments' were coded instances within which two or more social practices interacted as nexus of valued ways of participating, 'strengthening the effects of each' (Wohlwend, 2009, p. 235) and creating specific 'expectations for particular identities and meanings'. The moments are thus representative of practices which have been identified as typical of the child's everyday practices with TV&RM. Indeed, they are, by definition, moments where more than one of these practices are being displayed. As such, although these 'moments' are not intended to be in any way quantitatively representative of the whole dataset, they illustrate at least two of the child's identified everyday practices, i.e. things that have been observed multiple times in the data. The detailed analysis of these 'moments', combined with the top-level identification and listing of the child's full range of practice, offers a kind of dual (macro and micro level) perspective on the totality of the child's practices, as evident in the dataset. It is also true to say that other 'moments' could have been chosen for analysis and could be explored in more detail as cases for microanalysis in the future. However, the scope of the PhD thesis does not allow for a thorough examination of every moment. In this sense, MacLure's notion is helpful. Amongst the moments that could have been selected for inclusion in the thesis, these held a particular 'intensity' that seemed to 'emanate from data' or, indeed, a 'glow' (MacLure, 2013, p. 228). To examine key events within nexus in the each family multimodally, I used a framework similar to Flewitt (2011). These selected moments are presented in each case study.

Reporting

Drawing on a combination of the data, a pen portrait of each focus child and broader family has been compiled to use as an introduction to each case study. The analyses have been written up in the findings and results section as described. Finally, the case studies have been compared 'cross-case' to establish similarities and differences in: a) TV&RM platform, text and physical object choices; b) parent, child and family discourses about TV&RM (Wohlwend, 2012); and c) children's practices with TV&RM.

3.3.5. Reliability, validity and cross-case interpretation

Many post-paradigm-shift qualitative methodologists would question whether discussing validity and reliability is necessary in qualitative research (c.f. Lincoln & Guba, 1985), whilst many still argue the opposite (e.g. Mays & Pope, 1995; Leung, 2015). This section briefly considers these traditional measures of quality in research and explains my own response to them within the context of this study and, indeed, how I intend to defend the quality of my study and findings. Reliability is often taken to refer to the repeatability of findings. Peräkylä (1997) offers a useful account of reliability, pointing out that the analysis of tapes and transcripts can be replicable, if the analytic process is appropriate and enough detail is given about how it was done (of course, attention must also be paid to the nature of the tapes and transcripts themselves). As Attride-Stirling (2001) points out, the precise details of qualitative analysis are frequently under-reported. In the present study, I have aspired to ensure reliability primarily by showing my working - explaining the process of my analytic method in precise detail, showing excerpts from the data alongside my interpretation and explaining why I reached that interpretation. Quantitative data is typically presented in such a way that data is summarized (Charts/Tables), described (what is this telling us) and interpreted (what can we infer from this) in an analysis and interpretation section. The qualitative data in this thesis have been presented in a similar way.

Broadly speaking, validity is taken to refer to the credibility of research, with many positivists tending to frame this in terms of whether a test measures what it says it does, in terms of truth or reality (Kelley, 1927). Validity can also be broken down into internal and external contexts (internal validity referring to whether the research tool/design measures what it purports to and external validity referring to generalizability). For many social scientists, the question of validity represents something of an ontological minefield. Standard definitions of validity are troubled if we accept that 'reality' is relative (Lincoln et al., 2011). Given the sociomaterial direction the thesis has taken, and the proposal of SNA, there is a need to trouble notions of reliability and validity even further. Moving away from the association between tools and truth or reality, Peräkylä (2011) offers an alternative perspective on a more internal form of validity, associated with whether the inferences that the researcher makes are backed up by the data. A conversation analyst,

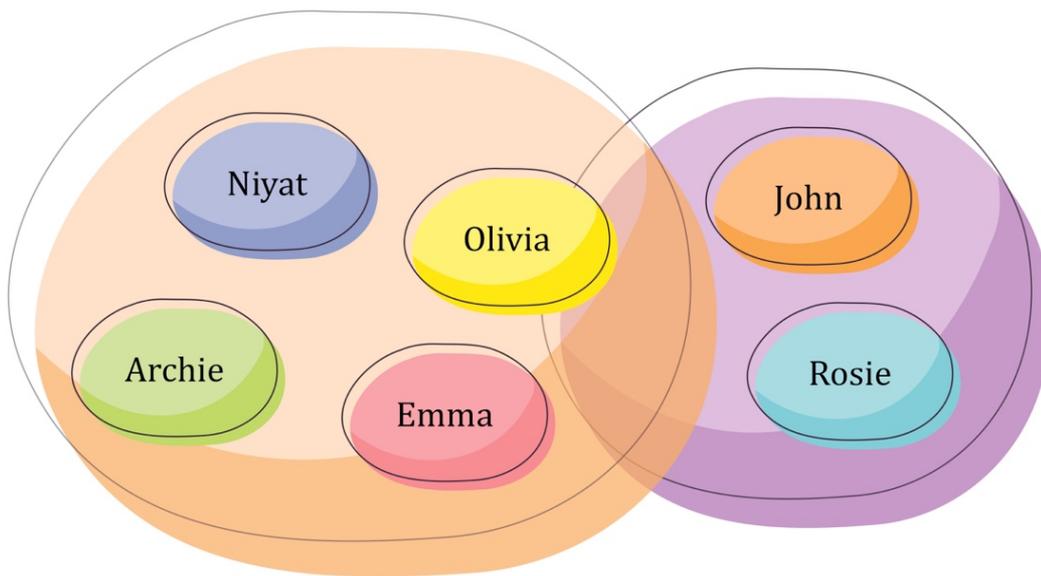
Peräkylä (2011) argues that qualitative findings can still be validated if appropriate processes (dependent on the nature of the qualitative design) are followed (and transparently reported). One example of such a process is triangulation. The current study has been designed so that the final data interpretation draws on quantitative and qualitative data. Considering its postmodern framing, however, it is more fitting to draw on Richardson (1998), who talks about crystallisation as a more pertinent metaphor for validity than triangulation. The crystalline represents multiple layers of meaning within data, offering a useful notion of validity for researchers moving into sociomaterial spaces. The often-associated question of generalizability is a similarly knotty and contested one. Qualitative paradigms vary, but many qualitative researchers choose not to claim that their research findings are generalizable and instead aim to offer a deep insight into a uniquely sited social phenomenon. Simons' (1996) comments on case study as revelatory of the particular and the universal are particularly valuable. Simons (1996) points out the fallacy of the assumed polarity between uniqueness and generalizability in case study research, noting the paradox of the case study:

By studying the uniqueness of the particular, we come to understand the universal.

(Simons, 1996, p. 231).

Firestone (1993), meanwhile, distinguishes between extrapolation from sample to population and analytic generalizability. The latter involves generalizing a particular set of results to a broader theory; 'to generalize to a theory is to provide evidence that supports (but does not definitively prove) that theory' (Firestone, 1993, p. 17). I do not claim to represent universal laws with regards to children generally or fixed social class groups. My analysis considers the specific practices of eight individuals at both the micro-level of multimodal communication and in the broader context of specific communities. Both the quantitative and qualitative data are analysed and interpreted in their corresponding chapters. In the final step of this process, both sets of data are discussed in the discussion chapter. At this stage, comparisons are drawn across the six cases, particularly between children whose families who defined their social class as manual (Olivia, Niyat, Emma and Archie) and those children whose families defined their social class as professional (John and Rosie). It is important to note that each child (and family) in the study was unique. However, since the research project was designed to focus on the issue of social class, it is both useful and, arguably, defensible to draw broad comparisons across the cases according to social class (Figure 11). These broad cross-case comparisons are also crystallized in line with the quantitative findings described in Chapter 4.

Figure 13: Cross-case comparison by social class



As discussed, I do not intend to imply that the general and classed differences in these practices are broadly generalizable to all children in the UK. The similarities and differences identified when drawing cross-case comparisons can be considered as ‘descriptions of the possibility of practice’ (Danby et al., 2016, p. 145). In keeping with the inductive, theory-building notion of qualitative research and analysis (Firestone, 1993), my findings evidence the specific differences present in the lives of my participants. These specific differences raise questions about universal differences in children’s lives in the UK with regards to their practices with TV&RM, as a starting point for further consideration and study. The findings presented and theories built within the thesis also resonate with other, previous, findings and theories (Gillies, 2006; Lareau, 2001; Marsh, 2003; McCarthey, 1997). They are thus embedded in a web of theories, ‘extending into common sense knowledge’ (Firestone, 1993, p. 17).

For the purposes of this study, then, the quality of my own data analyses and interpretation is grounded in the following principles:

- selection and defence of appropriate method and methodology;
- methodological transparency and detailed reporting, particularly with regards to the (often under-reported, c.f. Attride-Stirling, 2001) method of analysis;
- crystallization (Richardson, 1998), drawing on quantitative data and multiple qualitative sources (coding and Sociomaterial Nexus Analysis of audio transcripts, field notes, video and supplementary visual data; micro-analyses of moments identified through the Sociomaterial Nexus Analysis filtering process).

3.4. Ethical dimensions

Since it is difficult to separate the ethical dimensions of research from broader methodological debates, many ethical issues have already been discussed. This section has been included to outline the broad ethical approach of the thesis and to touch on some aspects that require further detail. In addition to undergoing a full ethical review consistent with The University of Sheffield's ethics procedure and submitting myself for a Disclosure and Barring Service (DBS) check, I have referred to the National Children's Bureau and Social Research Association's ethical guidelines to inform my engagement.

Consent and assent

All studies should inform their participants regarding what will be involved, what the work is about, how it will be ethical and safe and the level of commitment required from them. My own study required the involvement of multiple layers of gatekeepers and participants, all of who were informed and given the opportunity to opt in or out in different ways. There were gatekeepers in the form of early years staff. Parents were themselves both gatekeepers and participants within my study. The involvement of young children as participants requires both parental consent and personal assent. It was particularly important to explain the nature and terms of involvement in a way that firstly parents and secondly children could fully understand. I concur with the children as active agents rhetoric up to a point, agreeing that children are sophisticated thinkers and communicators (Harcourt & Conroy, 2011). However, I also believe that preschoolers are too young to truly understand the full implications of formal adult consent processes. I perceived my job in seeking consent with children as to 'clearly articulate specific aspects of their request in ways that a young child can understand' (Harcourt & Conroy, 2011, p. 573). I adopted a casual, but ongoing, model of consent in my research practice, trying to remember to ask children at appropriate moments ('if it OK if we'... 'would you like to tell me about...'). I have attempted to adopt a model of continued consent with children at the point of data collection, particularly with regards to introducing new activities into the methodological mix. Protecting the identities of both children and parents has also been important, and this has been achieved by adhering to data protection guidelines (password protecting documents etc.), anonymising names in all dissemination activities and avoiding reproducing images of participants faces in publications.

Research with very young children and their families

The topic of my study has necessitated detailed consideration of the ethics and practice of representing preschool children in research. The success of my research design relied on forming productive relationships with multiple participants, including parents, carers and other family members. I was

confident working qualitatively with young people and adults, but I had never researched with preschool children before. I also had very little experience with preschool children *generally*, either as a professional, parent nor family friend. I was particularly concerned with how an adult researcher could work with child participants in a way that was both *ethical* and *productive* in terms of research aims. I felt that using methods that empower children to express their experiences was both an ethical responsibility and a research prerogative. I felt that I should learn more about preschool children and seek methods that might facilitate children's participation in my research. Since the methodological movement associated with the 'new' sociological study of childhood (James and Prout, 1997; Jenks, 1990; Qvortrup et al., 1994), a good deal has been written about child-centred methods. Proponents of child-centred ethnographic work argue that socialization is not a process that is enacted upon children; rather, it is a complicated process of continuous interpretative reproduction in which children are themselves active agents (Corsaro, 1996). Within this child-centred tradition, many adult ethnographers have been concerned with their ability (or inability), to enter children's worlds at all (Corsaro & Molinari, 2008) or as equals (Mandell, 1988) and. Others consider how, if adults can access children's worlds, this access can be negotiated (Buchbinder, et al., 2006). Reading other researchers' accounts of their practice (e.g. Christensen, 2004) highlighted tensions in the adult-child dynamic. The methods authors suggested for overcoming power inequalities resonated with my previous research with adult participants; e.g. letting a research participant take the lead in conversation (Leavitt, 1991) and downplaying one's own knowledge and expertise (Curtin, 2001).

As I have discussed in previous work (Scott and Bird, 2019), some of this literature challenged my ideas about how to conduct research. I was well-versed in avoiding putting words into my participants mouths. The idea that preschool children should be given lots of possible answers (Curtin, 2001, Parker, 1984, Palmer, 1986), rather than having open-ended questions posed to them, surprised me. Various sources also discussed whether children were capable of engaging in (adult) conversation and at what age, a discussion based on developmental norms (Curtin, 2001). Although I found the developmental framing problematic, I also began to question whether I would be able to have any kind of 'conversation' with a child of 3 or 4 years old. It became clear to me that I would have to take a very non-directive approach, basing questions on the immediate situation (Deatrack & Faux, 1991; Tammivaara & Enright, 1986). I decided to try to let myself be led by the vocalizations and physical actions of the children in my study, rather than trying to ask pre-formulated research questions. I would participate in whatever they were doing. My desire to engage with very young children's communication, whatever form they took, also strengthened my resolve to use a methodology that incorporated multiple semiotic modes in its analysis.

As I have described in previous work (Scott and Bird, 2019), the research was designed to begin with more structured, formal research activities and to evolve into less formal, more truly ethnographic work over time. I also anticipated that my methods mix would evolve differently with different families, something

that was certainly the case in practice. In pre-planning methods, I drew on Clark (2004) 'mosaic' approach, intending to use multiple methods flexibly and in a participatory way. I also wanted my methods to provide my child participants with opportunities to communicate across a range of modes (Clark & Moss, 2001). For example, I intended to offer the children puppets to play with and drawing materials and a digital camera to create visual stimuli that would then act as the basis for further discussion. Levy and Thompson (2015) suggest such techniques situate discussions within a familiar context and soften the emphasis on adult and child interaction. I also planned to use Plowman and Stevenson's (2003) mobile phone diary method to keep in contact between research visits. The photographs generated were intended to serve as prompts in future discussions with parents.

In practice, specific techniques for eliciting the voices of children fell by the wayside. My aspiration to be led by children repeatedly came into conflict with the pre-planned methods recommended for use with children. Very quickly, the child-led approach won out. Certain techniques were important for getting to know my children and families and learning more about their worlds. The toy tour and photo taking activity was universally successful as an introduction to the children's play-worlds at home, although the children tended to repurpose the video camera (intended for recording only) for use in filming their spaces, themselves, each other and me. The video camera, arguably a rather unfamiliar device in the age of instant video-making on smartphones, held far greater allure than the child-friendly still camera I had intended for their use. Other techniques were also child-modified or child-initiated; children re-appropriated the artifacts of my research role – my voice recorder, personal belongings (glasses!) and various papers and forms – for their own playful use. One technique that I entirely abandoned was the mobile phone diaries. The additional commitment required felt unnecessary on top of the parent's generosity in allowing me to visit their homes. I now perceive the methods and techniques in my cache as no more than a means to an end and, to a certain extent, of less interest to me methodologically than those techniques which were modified or generated by the children themselves. It was also interesting to note how different parents responded differently to the methods. Most parents were comfortable with letting structured research slide very quickly into hanging out, play and friendship. However, a handful of parents seemed to prefer to favour the continued use of more structured techniques (perhaps more comfortable with a distinct boundary being drawn around what was research).

Whilst my approach to working with preschoolers has been influenced by the body of work that precedes me, I do not define my approach as categorically child-centred. My methods are participatory and I certainly consider children as worthy of study in their own right. Indeed, I want to foreground preschoolers in my research, accurately representing their verbalisations and actions. However, I am drawing on the post-human approach to conceptualise children as part of a broader assemblage of which they are only one constituent part. I am seeking to engage in preschool children's lives as a first step towards understanding

how their practices with TV&RM develop and function within the broad assemblage of bodily, physical, spatial and emotional factors that constitute their everyday experiences. I thus also want to foreground other things, including the physical objects and spaces that play a role in these assemblages. The child is not located at the centre of this messy assemblage, although they are an important actor within it and also the starting point for my inquiry. These reflections, which share some similarities with those of Chesworth (2018), are also explored in more depth in my recent book chapter (Scott & Bird, 2019).

Research about social class

Conducting research explicitly about social class and in lower SES communities presented further ethical dilemmas, not least in terms of the minefield of definitions and descriptors. I had previously worked on a range of research projects in turn openly describing their participants as working-class, lower SES and referring to deprived communities, whilst using a variety of classifications and measures to define inclusion within these groups. Seiter (1995) problematises the continued blasé use of terms such as working- and middle-class, attributing the 'salient bias of the middle-class academic' to the 'relative stability of their class membership' (p. 154). Seiter reports that her sheepishness about asking for socioeconomic data gave way to a retrospective follow-up questionnaire, which only served to provoke surprise and distrust in participants. I have adopted a standard framework (the Hope-Goldthorpe scale, 1981) as a starting point and proxy for identifying social class differences in my study. Whilst I am fully aware of the inadequacy of any quantitative social class measure, I have been clear with my participants about the basis on which they have been recruited. Social class and SES classifications have been open topics of debate with my participants.

Co-producing with an industry partner

Co-producing research with an external, non-academic partner comes in many forms and offers benefits to both parties (Martin, 2010). It also brings costs and ethical dilemmas. Some perceive industry collaboration as a threat to academic freedom (Tartari & Breschi, 2012). There is a need to consider how academic-industry co-production could affect the welfare and wellbeing of research participants (Blumenthal, 1996). Further complicating the issue, references to collaboration with external, non-academic partners in social science literature typically refer to co-production with practitioners (Martin, 2010) and communities (Crow, 2012), whilst references to industry collaboration tend to be the preserve of science and technology literature (e.g. Bruneel et al., 2010). There is little documented discussion of the unique challenges of collaborating with industry within the social sciences. Whilst the involvement of *CBeebies* could be considered a restrictive or problematic element, industry collaboration again links to my own theoretical

and methodological beliefs. My research career began in non-academic contexts. I was thus aware of, and somewhat versed in negotiating, some of the tensions present in the relationship between researcher and client or funding body. I was also aware of the positives associated with working for a client or funder, particularly seeing the outputs of my research in small but concrete changes in the ways my clients operated. Being party to, and participating in, the prevalent dialogues and constructions of children's engagement with the media in very different fields does not restrict my perspective, but makes it richer. *CBeebies* has not given many directives about the design nor the reporting of the research. Their original focus on social class emerged from a real-life issue that has synergies with the needs of the academic field. Furthermore, I hope that one outcome of the work can be a change in terms of national programming, leading it to engage more effectively with a broad socioeconomic spectrum of child viewers. Indeed, I have presented research findings to *CBeebies* staff at several points in the process. Industry engagement has not been limited to *CBeebies*, and other organisations including *The Children's Media Foundation* (UK), *ABC Kids* (Australia) and *The Australian Children's Television Foundation* have been part of advising the research as well as taking an interest in the dissemination.

Leaving the field

Finally, the ethics of 'leaving the field' are complex. I have maintained some contact with the families involved in my study, an issue which perhaps warrants its own reflection outside the work of this thesis.

3.5. Identity work

It is often assumed that ethnographers must reflect on their role and positionality in relation to the group that they are studying. A variety of sources recommend that this can be achieved by researchers defining where they stand in relation to their participants. They are often encouraged to identify factors (including their status, power and perspective) that might impact on their participants' responses and behaviours, but may also impact on how they conduct their analysis and form insights (LeCompte & Goetz, 1982). Despite this convention, defining a researcher's role and positionality is both complicated and, arguably, problematic. This thesis considers that reality is a social construction by human actors and the data we generate are thus 'our own constructions of other people's constructions of what they and their compatriots are up to' (Geertz, 1973, p. 9). In keeping with this belief, I accepted that my role was a co-construction by multiple social actors, including myself, the child participants and others. As described in my previous work (Scott and Bird, 2019), I became increasingly interested with emerging post-human discourses during the fieldwork, and began reflecting on how they might reconfigure understandings of researcher role. Post-human discourses spoke to my project particularly because of its focus on children's entanglements with

physical objects, some digital and some non-digital. I began to consider how my expeditions into children's play-worlds might create multiple new assemblages within the existing play repertoires of my child participants. Existing educational research paradigms began to feel insufficient for understanding how I as a researcher was mutually affecting, and affected by, encounters and relations with both the human and the more-than-human (Rautio & Jokinen, 2016). Further reflections in this vein on my role within the PhD study can be found in my book chapter (Scott and Bird, 2019).

Recent examples of ethnographic studies looking specifically and in depth at TV&RM in the context of families in working-class communities are rare. One prominent example is Walkerdine's (1986) much-critiqued (see Squire, 2010) reflections on researcher position and role in her feminist psycho-analysis of a working-class family watching *Rocky II*. My personal response to Walkerdine's reflections contributed to a desire to do identity work differently. Walkerdine deals with positionality in her study of a working-class family by focusing a good deal on her own class origins, especially reflecting on her classed responses to the film. Whilst I agree with her assertion that it is problematic to purport to offer objective knowledge of those you observe in research, I do not feel that the answer is to reflect on my own classed responses to media texts. As a researcher, acknowledging one's position and how it might affect your representation of others is important, but does not automatically alter the representation of others that you ultimately provide. Meanwhile, there is a risk of foregrounding one's own experiences and values, rather than the experiences and values of one's participants.

Of course, several facets of my own identity may have an impact on how I 'do' my research, how I perceive my research agenda and participants and how I represent my participants. Reflecting on my own data, it is abundantly clear that I am 'in' my research. Aspects of my identity have shaped the data, as has the setting and its multiple social actors. My research is about: preschool children; their wider families, their homes and communities; practices with TV&RM; and social class and its bearing on practices with TV&RM. I am not a preschool child and whilst I have *been* a child, I have very little adult experience in relation to preschool children (personally or professionally). This could be perceived as a risk factor in my research, since I might have struggled to engage with preschoolers or misunderstood them in a way that someone familiar with preschoolers would not have done. In practice, I found my inexperience with children was an unexpected methodological advantage of the work, since I had few preconceived notions of what preschool children were or how they should behave. I found that this made it far easier to engage with preschoolers on an equal level and that my ability to embody a 'least adult' role (Mandell, 1988) resulted in a very exciting, intimate insight into children's' play-worlds. I am not a parent, but I have parents and would very much like to be a parent. Perhaps there was a risk that my childlessness might make me more difficult for parents to relate to or vice versa. Likewise, I am also not a teacher or an expert on children, although I am a researcher with access to academic journals and the latest research about children and their relationships with TV&RM.

Whilst I certainly felt like an outsider to the world of parenting, my self-presentation as neither parent nor expert meant that I was not placing myself intellectually 'above' my participants in terms of my knowledge or experience. Although I cannot be sure, I suspect that many parents felt less judgment towards their parenting styles and skills as a direct result of being aware of my own lack of experience. I have mixed feelings and an element of uncertainty about my own social class. As a full-time student, the modified Hope-Goldthorpe (1981) scale I used in this study would have placed me in the 'other' category at the time of my fieldwork and in various other categories at different points in my career. It was possible that my accent (not local to Sheffield) could be a barrier to participants engaging with me. In practice, developing familiarity over time meant that it was possible to build trusting relationships with my participants. I have a personal (and, probably, classed) relationship with TV&RM. My research and thoughts are independent, but I am affiliated to *CBeebies* and I was particularly concerned that this association should not lead to certain assumptions about quality being embedded in the research (something which I have resisted). My own parents did not let me watch a lot of television as a child and certain texts were judged as more appropriate, high quality and worthy in my own household (e.g. books and 'high quality' children's television).

Whilst there was clearly a need to consider how the multiple facets of my own identity might have a bearing on my research role and position before the fieldwork began, I consider the question of how I have been co-constructed in my research far more interesting and relevant. Although careful reflection before and during research was important, I felt that much more of this identity work needed to be done after the data had been collected. I feel strongly that it was preferable to separate these reflections from my analysis and findings in the context of the thesis. In contrast to Walkerdine's (1986) work, I hope that this helps to foreground my participants in the qualitative data chapter. Rather than self-reflection, I have chosen to explore identity issues primarily through three vignettes from my data. These brief moments, drawn from an extensive ethnographic dataset that I have reflected on constantly, provide an insight into how I was co-constructed in my research in the moment, both by the thoughts and actions of my participants and by myself. These moments have been selected not through systematic coding, but by homing in on moments that stuck with me long after my fieldwork ended, moments that, as MacLure (2013) elucidates, glow. These are therefore not the only roles I played, but a handful of interesting and important examples. In adopting this approach, I am attempting to trouble the methodology-as-autobiography approach (Hammersley, 2011) and contesting the notion that a researcher's role and status can be straightforwardly identified in methodological reporting. Three co-constructions are shared below.

3.5.1. Special friend Fiona

The following vignette, which draws on the example of Niyat and her family, has also been discussed in my recent book chapter (Scott and Bird, 2019). The family have been living in the UK for around five years. Niyat is the youngest child in the family (3 years and 4 months old). Niyat's mother, Senait, suggests that Niyat is used to getting her own way, as the youngest in a family with much older siblings (Rowena, 14 and Joshua, 20). Senait also reports that Niyat takes on a rather adult role in her early years setting, telling the other children to 'sit down' and pretending to take the class register. On my second visit, Senait informs me that Niyat has been mentioning me a lot since her last visit, including asking when Fiona is going to come and visit next. On the morning of this second visit, Senait has also been waiting for her friend, Mona, to arrive at the apartment. I sense that Senait is trying to communicate something specific to me about Niyat, but is struggling to. She brings Niyat into the conversation:

Senait: *Mona. You know Mona, Niyat? Ah? Mona. Your friend or my friend? Whose friend?*

(Niyat smiles and points to Senait).

Senait: *My friend! Fiona, whose friend?*

(Niyat smiles and points to herself).

Senait: *Your friend.*

Fiona: *(laughs) Yeah?*

Senait: *I say Mona is my friend. Fiona? My friend.*

Fiona: *Yeah!*

Senait: *Fiona is my friend or your friend?*

Niyat: *My friend.*

(Transcript, Visit 2).

What I interpret from the above is that Niyat has not only been talking about me, but has accepted me as a kind of special friend. Where Mona's purpose in the apartment is to talk and drink coffee with Senait, my purpose is, first and foremost, to play with Niyat. When I visit the family for the fifth time, it is during the school summer holiday, so Niyat's older sister, Rowena (14), is home from school. This is unusual for our visits, which are most commonly limited to myself, Niyat and Senait. I spend a lot of the visit as I would normally do, but I also spend time talking about Niyat with Rowena, who has a detailed awareness of her sister's media interests. Inevitably, our conversations also venture into the territory of Rowena's schoolwork, as well as her own media interests, some of which overlap with my own (cosmetics tutorials on *YouTube* and hip-hop music). During one of my conversations with Rowena, Niyat begins to frown, drawing attention to herself with hand gestures and vocalization:

Rowena: *You're jealous.*

Niyat: *Who's jealous?*

Rowena: *You're jealous.*

Niyat: *Mama, I'm not jealous!*

Fiona: *You are jealous!*

Niyat: *Not jealous.*

Rowena: *You're not jealous?*

Niyat: *Rowena's jealous!*

Rowena: *Rowena's jealous?*

Senait: *For what?*

Niyat: *She's jealous. She's talking all the time.*

Rowena: *Who is talking all the time?*

Rowena: *Me? I'm talking? You're talking all the time!*

Niyat: *Aargh!*

Rowena: *What?*

Niyat: *(shakes her napkin at Rowena) Why are you talking?*

Rowena: *I'm not talking to you, I'm talking to Fiona.*

Niyat: *(shakes her napkin at Rowena) I was talking to Fiona!*

Rowena: *No you wasn't.*

(Transcript, Visit 5).

Fine & Sandström (1988) suggest that the key features defining the role of 'friend' in research with children are the presence of trust and the absence of clear authority. On reflection, it is perhaps not surprising that I fell quickly into the role of friend with Niyat, without consciously thinking about or intending it. I have never been in a position of responsibility with children, so I perhaps less likely than others to have been inducted into the many unnoticed ways that adults assert their authority over children, for example in early years settings. I believe that I fell into the role of friend with most of my child participants. In the specific case of my role in Niyat's life, I have been constructed by Niyat, but also in the context of a complex, broader family dynamic. In her daily life, Niyat socialises with siblings aged 14 and 20. Young adults often visit the house, but are ordinarily there to see Rowena or Joahua. I believe that my sustained interest in Niyat's play (asking questions, joining in) has strongly suggested to Niyat that I am a 'special' (or exclusive) friend. I suspect my friendly conversations with Rowena on this fifth visit have annoyed Niyat explicitly because they disrupt the established convention that I am there in my capacity as Niyat's special friend.

3.5.2. Not-quite-child Fiona

I am at home with Emma and her mum. Emma is an only child living in the UK with her mum and dad. Emma and I have been watching television, playing on the tablet, with toys and, most recently, making some character cupcakes from a kit. We are waiting for the cakes to cook so that they can be iced and Emma has jumped up to play outside, where I follow her with the video camera.

Emma: *Do you want to come on my trampoline?*

Fiona: *Erm... I... are adults allowed on the trampoline? (looks at mum).*

Mum: *If you're happy to!*

Fiona: *(laughs) OK. Oh my goodness (moving towards the entrance to the trampoline).*

Emma: *You've got to take your shoes off.*

Fiona: *OK, I've got to take my shoes off.*

(Transcript, Visit 4).

The interaction is reminiscent of Fine's (1987) comments on adults' physical inability to 'pass unnoticed in the society of children' (p. 222). Emma and I have spent a good deal of time together by this point and I have been judged an adequate and interesting play partner. Emma is thus extending the invitation to me based on a learnt expectation that I will accept. The invitation (and my acceptance) is arguably more of a surprise to Emma's mother than it is to Emma or me. Our bouncing and talking on the trampoline lasts for well over half an hour. Emma encourages me to bounce faster and more powerfully, shrieking in pleasure as my adult bodyweight causes the trampoline to rebound with greater magnitude than her own body can achieve, causing her to be jilted around in the wake as she repeatedly collapses into a pile. Later on, Emma (out of the blue) initiates one of the most interesting conversations in my research data:

Emma: *We're playing zombies vs. plants.*

Fiona: *Zombies vs. plants?*

Emma: *Yeah, and the zombie's outside.*

Fiona: *Are we playing it now?*

Emma: *Yeah. It's pretend, though...*

Fiona: *OK.*

Emma: *Pretend zombies.*

Fiona: *Pretend zombies.*

(Transcript, Visit 4).

As with her earlier statement, 'you've got to take your shoes off', Emma is taking the time to explain something to me that she perceives I need to know and yet will not simply know on my own. Unlike Emma's earlier statement, in which she explains pre-established family rules about use of the trampoline, she is

explaining to me the terms of our play. Both notions are incredibly intriguing. Firstly, Emma is confident that I will not know the adult rules of the house. Secondly, she perceives that I will not understand the implicit terms of children's pretend play. My question, 'are we playing it now?', belies my lack of understanding in this arena and Emma is forced to explain that it is, indeed, pretend. Emma embodies simultaneous acceptance and awareness of my difference. I am not 'passing' as a child, but neither do I exhibit the inherent common sense and authority of a parent. I am something 'other'. However, whatever 'other' I am has been accepted as authentic and eagerly welcomed into the game.

3.5.3. Posh friend Fiona

Beth and her family live on a council estate considered to be one of the most deprived in Sheffield (and the UK). Beth and I spend a good deal of time talking during my research visits (ostensibly to see her three year old son, Archie). In these conversations, I often feel Beth is trying to 'suss me out' personally. I have an accent that is different to the local one, and my working status is unclear. During my third visit, I remind Beth of my age (30) in passing, and she is really surprised. At one point, we are talking about going out drinking and she makes a comment about me being a 'poor student', pulling my change together to buy pints. Chatting, I realise she has assumed I am an undergraduate student, which I sense has served to enamour me to her. Increasingly, though, we talk a lot generally about topics that are not research-related, which has been important and useful in terms of building a relationship and establishing trust. I have begun to feel that Beth sees me as a friend rather than a stranger or a researcher, and she confides in me over a variety of personal topics, including her anxieties about her daughter's romantic relationships. I notice light-hearted jibes from the whole family in relation to the things I have said to them about my research. Nevertheless, these often show an informed awareness of what I am doing as well as some level of comfort with my presence. On my second visit, for example, Jenna accidentally swears in front of me while I am filming and Liam tells her off, to which she replies: 'it's just everyday, day-to-day life!' (Jenna, Visit 2). Although I cannot be sure, I sense Jenna is very softly jibing me by echoing how I have tended to describe ethnographic research to the family on several occasions. This moment connects with Walkerdine's (1986) account of a research participant (Mr. Cole) jibing her by echoing her own descriptions of what her research is about ('Joanne, here's your psychiatrist', p. 175). On the other hand, I am pleased to note that Jenna's description shows she accurately understands what my research intends to do.

During my fourth visit, Beth notes that I am 'welcome any time', but continues to make various comments that seem to be 'testing me out', seemingly to see what I make of her and her family: 'I bet you had no idea what Sarah (from nursery) was letting you in for when she sent you round here!' I feel that Beth alternates between pushing me away with teasing references to me 'hanging around', as well as self-deprecating

depictions of herself and her family and quite genuine expressions of affection. During my close interview with Beth (my sixth visit), this pattern continues:

Fiona: *Can I ask you generally what it's been like, I know it's a big question, what's it's been like taking part in the research?*

Beth: *Fine.*

Fiona: *Fine, yeah?*

Beth: *Interesting.*

Fiona: *Yeah.*

Beth: *You find out different things, don't you?*

Fiona: *Yeah. What did you expect when I first asked you?*

Beth: *I expected you to come once and now I can't get shot of you no more (both laugh). Joking. I just thought it would be like a one-off questionnaire thing and that were it...*

Fiona: *And how was it different?*

Beth: *Well, you're still coming now! And how long's that? (both laugh) nah, I'm only kidding.*

Fiona: *It's about six months.*

Beth: *It's weird how it weren't just something for me to do, it were mainly about babby, you know what I mean? You were more interested in him; do you know what I mean? People just come, do a questionnaire and go, but you were like right into it with him, you know what I mean? And you've got the patience of a saint! 'Cos I couldn't have coped with that day you were walking up and down street with them all...*

(Transcript, Visit 6).

Reflecting on the exchange, I feel more convinced of my earlier inclinations that Beth finds it hard to establish trust, but my continued presence has confirmed that I think positively about her and her family. I also feel confident that Beth sees me as a friend. When I return from my Overseas Institutional Visit in Australia, I am invited over to Beth and Archie's house for my tea (Visit 7). Beth's friend, who I have never met before, joins us halfway through and Beth introduces me:

This is my posh friend; she's got a degree and everything!

(Field notes, Visit 7).

My ongoing confusion about how Beth perceives me (and my status within her group) is immediately made clearer. I am a friend and, although I am a 'posh' one, Beth's construction of my social status is presented as a matter of pride in my educational attainment, rather than derision.

3.6. Dissemination

In addition to producing the PhD thesis as a document, I plan to disseminate the original material of my research to a variety of audiences. The research has implications for a broad range of audiences, including academics from multiple disciplinary backgrounds (early childhood, education, psychology, literacies), the children's media industry, parents and carers and, in particular, early years settings and practitioners. I have already engaged with each of these audiences, including through academic and industry conference presentations (UK Literacy Association, Australian Association for Research in Education, The Children's Media Conference). I have published work for academic audiences, including book chapters and journal articles. I have presented findings to industry organisations including *CBeebies* and *ABC Kids*. I have presented my research to parents in spoken (e.g. Parents@TUOS Coffee Morning) and published forms (e.g. 'Tiny Talk', Kingston NCT). I have also engaged with early years settings and practitioners (e.g. visiting several kindergartens in Australia and discussing findings with them). Dissemination across each of these identified audiences is important, because the study challenges some accepted orthodoxies about preschool children and their relationships with TV&RM. For example, in recent years, it has not been uncommon within the children's media industry to hear reports that watching television on a TV set is a dying practice amongst the UK's children (e.g. Sweney, 2017). Certain fields of academic inquiry continue to portray children's media engagement as something other than playful, real-world and family-based (e.g. Wartella et al., 2016).

Summary

This chapter has attempted to describe the methodological approach of the research with an appropriate level of detail. The next chapter presents findings of the parent survey. The findings are discussed with reference to existing studies. Although the qualitative data are presented in full until Chapter 5, I will also begin to draw the reader's attention to some complementary aspects of the qualitative data in Chapter 4.

CHAPTER 4. QUANTITATIVE ANALYSIS, FINDINGS AND INTERPRETATION

In the last chapter, I described the empirical work of this thesis, including a parent survey and case studies with six families. This chapter presents analysis, findings and some interpretation of that parent survey data. We will return to the quantitative data in Chapter 6, where some headline quantitative findings are interpreted in combination with the qualitative data. As described in the methodology, combined interpretation is employed as part of a process of crystallization in this multi-method study. This chapter begins with an overview of some of the headline quantitative findings, discussed in simple terms and in relation to the qualitative data. The remainder of the chapter details the quantitative analysis and findings in much more depth. Specific findings are also interpreted in relation to some wider literature. Some of the headline findings of the quantitative analysis have previously been reported in brief in my own work (Scott, 2016).

4.1. Quantitative analysis overview

In total, 1,194 UK parents responded to the survey. Much of the dataset represents families nationally, with 82% of responses collected via a link on the *CBeebies* website. The rest of the data came from parents or carers filling in questionnaires at nine early years settings in Sheffield. The analysis suggests that most children spend time engaged in non-screen-based activities like playing out (76% an hour or more per day). Watching live television on the TV set was the most important digital activity for preschool children (63% of parents reported that their child spent an hour or more per day). The qualitative case studies support the quantitative finding that digital and non-digital activities play a balanced role in the lives of UK preschoolers. The quantitative data show that *Peppa Pig* was the most popular TV show at the time of the survey. *CBeebies* was the most popular favourite TV channel (60%), even in the Sheffield settings sample not recruited through *CBeebies* avenues (42%).

The quantitative data demonstrate that preschool children engage in a broad range of activities whilst watching television, e.g. talking about the programme or film whilst watching it (82%), dancing (76%) or singing (76%). Younger preschoolers were more likely to sing, dance, talk to the characters on screen, act out the story and play with toys while watching, whilst older preschoolers were more likely to write or draw. Female preschoolers were more likely than male preschoolers to sing, dance, write or draw whilst watching. Preschoolers from middle-class families were more likely than preschoolers from working-class families to talk about the programme whilst watching. Preschool children also engaged in a broad range of activities after watching television that are nonetheless related to it, e.g. singing songs from the programme or film (81%), talking about the programme or film (71%) or using catchphrases or dialogue from it (68%). Younger preschoolers were more likely to use catchphrases or dialogue from a programme, role-play a character or play with related toys after watching. Female preschoolers were more likely than male preschoolers to dress up as a character from the programme

or sing song from it after watching. Preschoolers from middle-class families were more likely than preschoolers from working-class families to use catchphrases and dialogue from a show after watching. The quantitative data, then, illustrate how common it is for preschoolers to engage in non-digital activities during and after engaging with TV&RM. The qualitative case studies add more nuanced detail to this. The theory of synthesised practices, discussed in Chapter 6, represents how preschool children amalgamate fragments of media texts with other material and/or immaterial 'things' to constitute 'synthesised texts'. Children do not just engage in other activities related to TV&RM during and after engagement; rather, they create something new. Furthermore, the qualitative data show how parents and other family members are implicated in these activities in different ways. The qualitative case studies suggest that the nature of parental and family engagement in such practices is socially classed, an idea that is discussed in more depth in Chapter 6.

Many parents spend a substantial period watching children's TV with their child, with 62.7% of respondents reporting spending an hour or more every day. Certain activities were more likely than others to be carried out with an adult. Books were the most likely to be used with an adult (70.3%), although watching a video or DVD was also likely to be done with an adult (49.2%). Using a tablet was the activity most likely to be carried out by a child on their own (16.7%), but many parents said their child would use a tablet with an adult (35.3%) or with occasional help from an adult (22.7%). Watching live TV was likely to be done with an adult (41.1%) or another child (32.4%). Parents of younger preschool children were likely to spend more time watching children's TV with their child. Manual parents were more likely to spend more time watching children's TV with their child than professional parents. Some parents spend some time watching non-children's TV with their child every day (only 18.6% spent an hour or more per day). Parents of older preschool children were more likely to spend time watching non-children's TV with their child. Clerical or manual parents were likely to spend more time watching non-children's TV with their child than professional parents. Of those professional parents who did sometimes watch non-children's TV with their child, *Strictly Come Dancing* was by far the most popular response. Soaps (*Emmerdale* and *EastEnders*) were the most popular choices for clerical and manual families. The quantitative data thus emphasise the social nature of children's engagement with TV&RM at home - something important that is often omitted in studies about children's digital engagement, especially with television. The qualitative case studies expand our understanding of this social dimension to media engagement. Firstly, the qualitative data support the finding that preschool children and their families mutually participate in what this thesis terms 'family media habitus'. Preschoolers and members of their families display significant and interesting shared dispositions in relation to media, such as humorous pleasure in ostensibly scary or 'odd' themes and texts. The finding that clerical or manual parents were likely to spend more time watching non-children's TV with their child than professional parents corresponds with a similar finding in the qualitative case studies. Several of the children of manual parents engaged with media texts not designed for children. As discussed in Chapter 6, however, exposure to such texts may present positive

as well as negative outcomes. As Banaji (2010) points out, the greater exposure of working-class children to a range of media may provide greater opportunity for the development of media criticality.

'Background' television is surprisingly prevalent in many households (i.e. parents report that the television might be on a lot of the time whilst no-one is actively watching). A higher proportion than expected of 'manual' and 'clerical' parents said that the TV was on 'always', even if no one was watching (17.4% and 21.9% respectively). Meanwhile, a higher proportion than expected of 'professional' parents said that the TV was on 'never' on if no-one was watching (8.9%). Whilst some critics condemn 'background television' (Kirkorian et al., 2009; Schmidt et al., 2008), the qualitative case studies reveal detail that challenges a straightforward interpretation of what 'background television' is. For example, in Archie's family, Kyle and Caleb frequently have *YouTube* tutorials of *Minecraft* playing on their *Kindles* while they play *Minecraft* on their *X-Boxes*. In doing so, they extend their activity beyond single platform explorations, pushing their own levels of competence by engaging with more competent others through the *YouTube* platform.

To garner understanding of parent perceptions and attitudes towards a range of different activities and devices, they were asked to identify what they encourage their child to use the activities or devices for. Books were the most likely to be perceived as for learning (70.5%). The digital device most commonly described as 'for learning' was the tablet (40.0%). By contrast, watching live TV was frequently described as 'for entertainment' (52.3%). The parent attitude data from the quantitative survey serves as a helpful compliment to the qualitative finding that many parents were unaware of the extent to which their children gained digital competencies by watching and learning from their parents' own interactions with digital devices.

4.2. Descriptive statistics

4.2.1. About the sample

Most of the survey responses were collected using the online questionnaire (83.6%). Most online responses came from parents or carers following the link on the *CBeebies* website (81.6% of all responses). A small number of online responses (2.0%) came from a link sent out to parents and carers at Setting 3. A smaller proportion of the total survey responses were collected using face-to-face assisted completion with parents or carers at a further eight early years settings across Sheffield (16.4%). Full details can be found in Table 10. There are significant differences between the samples collected via the *CBeebies* link and via Sheffield settings. Responses collected via the *CBeebies* link constitute 81.6% of the total dataset, whilst 18.4% of responses came from parents or carers at nine settings across Sheffield. Across these early years settings, a mean average of 24 responses were returned. In some descriptive statistics, the samples collected via the *CBeebies* link and the Sheffield settings have been analysed separately, to allow for comparison.

Table 10: Survey response format and source

Response format	# survey responses	% of total	Response source	# survey responses	% of total
Online	998	83.6	National (CBeebies online link)	974	81.6
			Sheffield (Setting 3 online link)	24	2.0
Manual completion	196	16.4	Sheffield (Setting 1)	31	2.6
			Sheffield (Setting 2)	33	2.8
			Sheffield (Setting 4)	17	1.4
			Sheffield (Setting 5)	25	2.1
			Sheffield (Setting 6)	28	2.3
			Sheffield (Setting 7)	32	2.7
			Sheffield (Setting 8)	25	2.1
			Sheffield (Setting 9)	5	0.4
Total	1198	100.0	Total	1194	100.0

It is impossible to calculate a response rate for the online survey. *CBeebies* circulated a link to the survey via multiple social media channels (e.g. *Facebook*, *Twitter*, the *CBeebies* website) and it is unclear how many people saw the advertisement. 1,000 copies of the paper survey were printed. Approximately 820 were distributed and 220 returned. An estimated response rate for the paper surveys is therefore 25%. This tallies with the estimated response rate calculated in the methodology (24%), based on the estimated target numbers of children provided by settings (24%). It is hard to evaluate the manual survey response rate, as the distribution methods varied. Cook et al.'s (2000) meta-analysis reported a mean response rate of 39.6% across 68 surveys. However, there are multiple variables to consider and no response rate meta-analysis exists for media research with parents of preschoolers. Marsh et al.'s (2005) *Digital Beginnings* parent survey used a similar methodology to the present study and reported a response rate of 27%. Given an acknowledged trend towards declining participation in research (Cook et al., 2000), the response rate therefore seems acceptable. It is important to acknowledge the probable effects of nonresponse. Although some studies suggest that the effects of nonresponse to online surveys are relatively small (af Wåhlberg & Poom, 2015), the reality probably varies depending on individual circumstances, including the topic of the research and methods of recruitment. The respondent analysis gives some insight into who might be less well represented in the sample. For example, the majority of respondents described their gender as female. This is, of course, not representative of the UK population, but female gender bias in survey response is well-established (Curtin et al., 2000; Moore & Tarnai, 2002).

4.2.2. About the respondents

Most of the parents or carers completing the survey described their gender as female (93.7%). Although the difference is not great, the sub-set of data from parents and carers who were recruited via settings in Sheffield shows a greater range of diversity in relation to gender (85.5% female; 14.5% male) than the *CBeebies* sub-set (95.6% female; 4.2% male). This difference can perhaps be attributed to the self-selecting nature of online survey participants versus the element of researcher selection involved in face-to-face completion. Consistent with this gender breakdown, most respondents described their relationship to the child as ‘mother’ (92.4%). A smaller percentage of the respondents were fathers (5.5%). A small percentage were carers (0.6%), grandmothers (0.5%) or other relatives (1.0%). Consistent with the slight gender-split differences between the samples, a greater proportion of fathers were represented in the early years setting responses (12.1%).

Survey respondents were asked to identify their own social class, and that of their partner if relevant, using the modified Hope-Goldthorpe (1981) scale. Just over half of respondents selected an occupation corresponding with ‘professional’ on the H-G scale (51.3%). A smaller percentage selected an occupation corresponding with ‘clerical’ (14.2%) or ‘manual’ (8.0%). Consistent with the finding that most survey respondents were female, a high proportion of respondents stated their work as ‘full-time parent’ (19.9%) when compared to the proportion of respondents who stated their partner’s work as ‘full-time parent’ (2.8%). Around half of respondents described their partner’s occupation as ‘professional’ (52.9%). A small percentage described their partner’s occupation as ‘clerical’ (5.9%). Almost a quarter (24.0%) described their partner’s occupation as ‘manual’. Since survey responses were so gender-biased in favour of female respondents, a new measure of social class categorisation was calculated in SPSS. The variables for respondent social class and partner’s social class were used to compute a new variable of ‘highest status work’, which represented the highest social class categorisation in the household (Appendix I). This variable has been used as a proxy measure for the social class of each household in subsequent analyses. When we look at the ‘highest status work’ by household, most households in the sample are ‘professional’ (70.1%). A smaller percentage are ‘clerical’ (10.7%) or ‘manual’ (12.5%). Table 11 shows the highest status work of parent or carer, broken down by response source. It is clear from this data that the Sheffield early years settings sample is more socioeconomically diverse than the National (*CBeebies*) sample.

Table 11: Highest status work of parent or carer, by response source

	Full dataset responses	% of total	CBeebies survey responses	% of total	Setting responses	% of total
Professional	837	70.3	733	75.3	104	48.1
Clerical	128	10.8	90	9.2	38	17.6
Manual	149	12.5	109	11.2	40	18.5

FT parent	47	3.9	24	2.5	23	10.6
Never worked	6	0.5	1	0.1	5	2.3
Other	23	1.9	17	1.7	6	2.8
Total	1190	100.0	974	100.0	216	100.0

A relatively high proportion of survey respondents (19.9%) described their work as ‘full-time parent’. To gain a more nuanced understanding of the social context of children’s engagement, a new variable was computed in SPSS. The new variable represents the total number of full-time parents by household. As may perhaps be expected, very few households consisted of two full-time parents (0.8%). A moderate percentage of households reported having one full-time parent (21.0%). The majority (78.1%) had no full-time parents, reflecting the increasing tendency for both parents to work outside the home (Lewis & Cooper, 1999).

Table 12: Full-time parents by household

	Number of survey responses	% of total
No full-time parents in household	933	78.1
One full-time parent in household	251	21.0
Two full-time parents in household	10	0.8
Total	1194	100.0

Most parents or carers described their educational attainment (Appendix J) at the level of Higher Education or Vocational Level 4 and above (61.5%). Parents and carers who were recruited via the link on the *CBeebies* website were more likely to describe their educational attainment at the level of Higher Education or Vocational Level 4 and above (65.6%). The data from parents and carers recruited via early years settings in Sheffield shows greater diversity in educational attainment. A smaller percentage described their educational attainment at the level of Higher Education or Vocational Level 4 and above (42.8%) or A Level or Vocational Level 3 (17.2%), whilst, a greater percentage described their educational attainment at other levels (32.5%) or said they had no qualifications (7.4%). The survey collected information about the respondent’s education only. Since we know that 93.7% of all survey respondents were female and 92.4% identified their relationship to the child as ‘mother’, this information is overwhelmingly representative of *maternal* education level.

4.2.3. About the children represented in the survey

The survey was a parent-report method. Therefore, everything we know about the children represented in the survey is based on their parents' descriptions. Parents and carers were asked to answer the survey in relation to one child. The paper questionnaire asked respondents to answer about the child who attended the nursery or early years setting where they received the questionnaire. The online survey asked respondents to answer about one child aged between 3 and 6.

Age responses were then recoded into six-month age bands (Appendix K). The mean age of the primary child parents answered about was 4 years and 5 months ($N=1194$, $SD = 30.524$). Consistent with the targeting of the survey, most respondents fell between the ages of 3 and 6 years old (88.3%). Some (11.7%) fell outside the target age range (i.e. the parent or carer answered about a child aged below 3 or above 6 years of age). These responses have been left out of subsequent analyses wherein other variables are being analysed in relation to age differences. Parents and carers who were recruited via the link on the *CBeebies* website were more likely than those recruited via settings to be filling in the survey in relation to children aged 3 to 3.5 years (23.0%).

The mean number of hours children spent in nursery or school per week (Appendix L) was 22.30 ($n=1172$, $SD = 10.497$). Around half of all parents answered the survey in relation to a girl (50.2%) and around half answered the survey in relation to a boy (49.7%). The gender breakdown by sample source (*CBeebies* versus Sheffield settings) demonstrates little difference (Appendix M). The ethnicity breakdown of the sample can be viewed in Appendix N. Overall, most children were 'White' (91.8%). Most the children in the (national) *CBeebies* sample were 'White' (92.5%). Other ethnicities accounted for just 7.8% of the sample, the largest group of which being 'Mixed White & Asian' (1.7% of the total sample). This ethnic breakdown is somewhat removed from the ethnicity breakdown detailed in the 2011 UK Census (ONS, 2012), wherein 86% of the UK population were described as 'White'. This deviation from the UK breakdown is perhaps unsurprising, given that various studies suggest that white people are more likely to participate in survey research than non-white people (Curtin et al 2000; Groves, Singer, & Corning, 2000; Voight, Koepsell & Daling, 2003). The Sheffield settings sample was more ethnically diverse (77.2% white to 21.9% non-white). After 'White', the largest ethnic group represented in the sample was 'Black/Black British-African' (7.9%). The 2011 UK Census data for Sheffield suggests an ethnic breakdown of 83.7% white to 16.3% non-white (the largest group of which being 'Pakistani' at 4.0%). Whilst the Sheffield early years settings sample was slightly removed from this breakdown, then, it is quite representative of Sheffield.

4.3. Preschool children's media use

In contrast with past studies, for example the *Digital Beginnings* survey (2005), the current study asked only about media use rather than access. Several additional questions were included and some were

removed to reduce the length of the survey. However, the data on levels of media use suggest that preschool children still have access to a wide range of media and devices.

4.3.1. Levels of media use

There is frequent concern expressed in academic writing and popular discourses about the amount of time children spend engaging with screens, often based on specific health fears (e.g. Aggio et al., 2012) or educational or developmental anxieties (e.g. Wiecha, 2001). The *Digital Beginnings* (2005) study found that children spent an equal time playing inside with toys on a typical day as they did in across all screen based activities combined, concluding that ‘children, on a typical day, enjoyed a well-balanced diet consisting of varied activities’ (p. 21). The present study reflects this notion of the well-balanced diet. However, as Buckingham (2004) suggests, parent-report survey data can only tell half of the story. Longitudinal, observational studies are needed to properly understand very young children’s media use. Parents in the TA testing of the present study identified inherent issues with the nature of questioning on this topic, including that it is hard to assign daily allocations of time to multiple, specific activities (as hours spent on different activities might vary day-to-day, and there is a risk of over-representing the total screen time). Thus, it is more useful to approach this topic as an indicative exercise only.

As Figure 14 indicates, parents reported that children spent the most time per day engaged in a non-screen-based activity: 76% of parents reported that their child spent an hour or more ‘playing out’ each day. Watching live TV on the TV set was also an important activity for preschool children (63% of parents said their child spent an hour or more watching live TV on the TV set each day). Other activities that attracted a significant time investment were: reading (44% of parents reported an hour or more); being read to (35% of parents reported an hour or more); and watching a video or DVD (34% of parents reported an hour or more). Though the survey options are not directly comparable, these findings are not dissimilar to the overall patterns highlighted in the *Digital Beginnings* survey (2005), which showed that children spent the most time each day either engaged in traditional play (‘playing inside with toys’, 126 minutes per day on average) or watching television (82 minutes per day on average). This represents an important finding. Ofcom’s 2016 media use and attitudes report highlighted a general growth in estimated hours spent online since 2015, stating that 5-15 year olds ‘now spend more time online than watching television on a TV set’ (p. 41). Whilst this finding may be true, it is also reported that children aged 3-4 and 5-7 spend more time watching television on a television set than they spend online or playing games. For preschoolers, then, it appears that watching live television on the TV set remains the most important media activity in terms of daily hours of engagement.

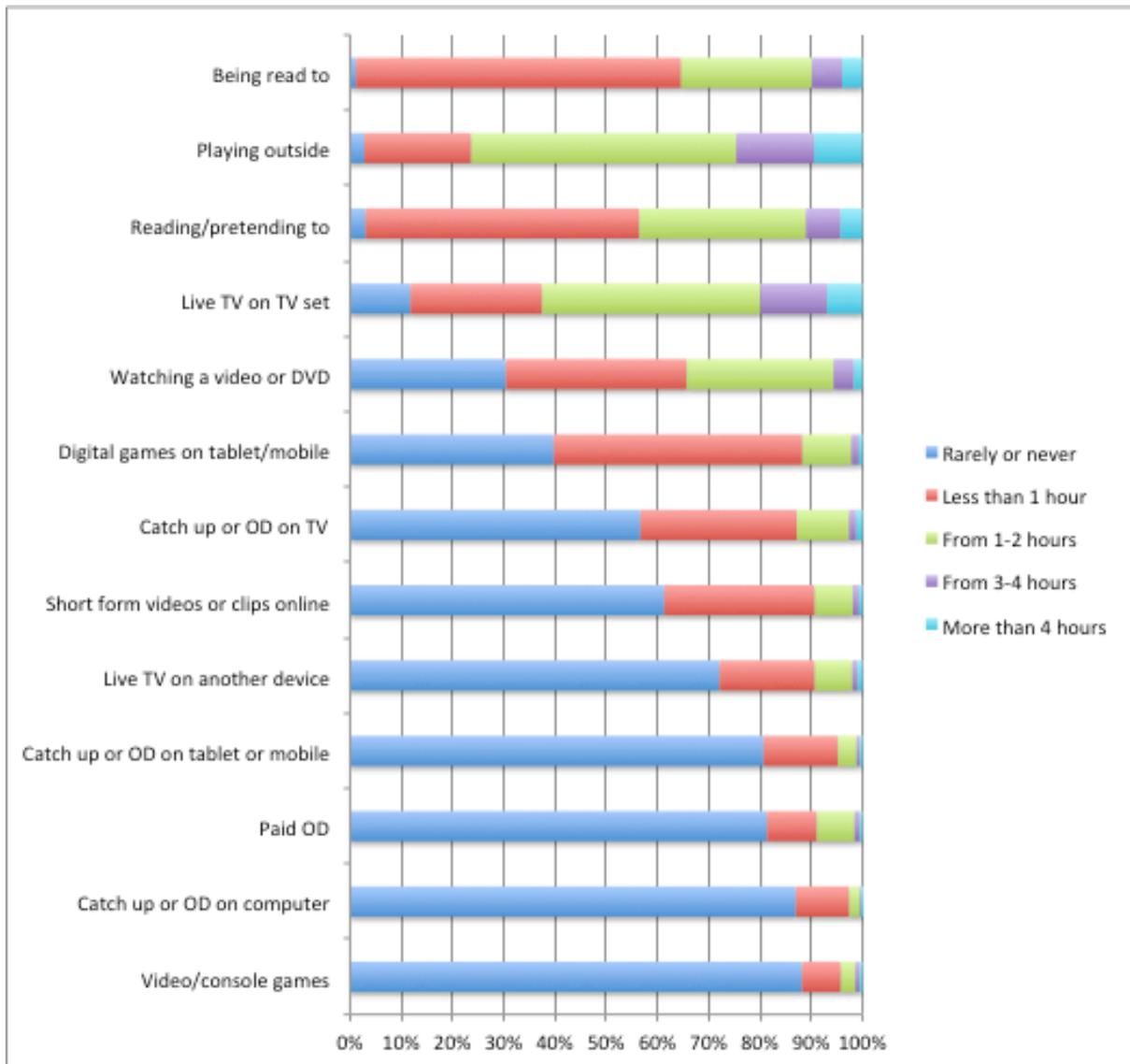
Within the present study, there were significant differences in media use in relation to age and social class. Statistical analyses of media use by age suggest that younger preschoolers in this study spent *more* time than expected watching live TV, playing outside and being read to by someone else, whilst older preschoolers spent *more* time than expected playing videogames (though still not a lot of time). The

Digital Beginnings study (2005) also established age based differences in level of media use. Younger preschoolers in the study spent more time playing inside with toys. Older preschoolers in the study spent more time watching TV, watching a video or DVD, playing out, reading or pretending to read, using a desktop computer or laptop, playing video games using consoles, playing handheld video games and writing or drawing. This comparison suggests some change in the ten years between the two surveys, including a slight shift in TV use towards younger preschoolers.

Preschoolers from professional families spent *less* time than expected watching videos or DVDs, playing digital games or playing video games, whilst preschoolers from clerical or manual families spent *more* time than expected on these activities. More detail on these factors can be found below. The *Digital Beginnings* study (2005) also established class based differences in level of media use. Preschoolers from ABC1 households (closer to our measure of middle-class) spent more time using a desktop computer or laptop. Preschoolers from C2DE households (closer to our measure of working-class) spent more time watching TV, watching a video or DVD, listening to music, playing outside, playing video games using consoles, playing handheld video games and writing or drawing. This comparison suggests some very similar class patterns in the use of digital games.

Interestingly, gender did not appear to have a significant impact on the amount of time a child spent engaged in various media activities. The *Digital Beginnings* study (2005) suggested that gender was less important than social class and age in predicting time spent doing certain activities, but statistically significant gender differences were established. Boys in the study spent more time watching a video or DVD and playing video games using consoles. Girls in the study spent more time reading or pretending to read and writing or drawing. This comparison suggests that these activities were less gendered in 2014/15 than ten years previously.

Figure 14: Children's activities on a typical day (n = 1194)



4.3.2. Age patterns in the use of media

Media use data were cross-tabulated by the age of the child (6-month age bands). Chi-squared tests were used to determine whether there was a significant difference between the expected frequencies and the observed frequencies in one or more categories. Where there was a significant difference, effect sizes have been calculated using Muijis (2010) as a guide for interpretation. Significant results have been reported where the effect size is modest or above (<0.3). This analysis suggested a significant relationship between a child's age and the time that a child spent engaged in several media activities:

- **Age and time spent watching live TV on the television** (Figure 15), chi-square (n=1187) = 90.168, p=0.001. Cramer's V suggests a modest effect size (0.138). A *lower* proportion than expected of younger children reportedly spent less than 1 hour watching live television (20.1% of 3-3.5 year olds; 21.7% of 3.5-4 year olds; 23.1% of 4-4.5 year olds). Instead, a *higher* proportion than expected of younger children spent more time watching live TV. For example, a

higher proportion than expected of children aged 3-3.5 years were reported to spend more than 4 hours a day watching live TV (9.6%). Meanwhile, a *higher* proportion than expected of older children reportedly spent less than 1 hour watching live television (34.0% of 4.5-5 year olds; 34.7% of 5.5 year olds and 27.4% of 5.5-6 year olds).

- ***Age and time spent playing video games like PlayStation or X-box*** (Figure 16), chi-square (n=1171) = 112.140, $p < 0.001$. Cramer's V suggests a modest effect size (0.155). A *higher* proportion than expected of the youngest children was reported to 'rarely or never' play video games (95.9% of 3-3.5 year olds; 90.7% of 3.5-4 year olds). Meanwhile, a *higher* proportion than expected of the older children was reported to play video games for a modest amount of time of up to one hour (12.1% of 5-5.5 year olds; 14.5% of 5.5-6 year olds). Playing video games like or *PlayStation X-box* was, however, generally a less popular pursuit than many of the other 'media activities' listed in the survey.
- ***Age and time spent playing outside*** (Figure 17), chi-square (n=1179) = 115.784, $p < 0.001$. Cramer's V suggests a modest effect size (0.157). A *higher* proportion than expected of the very youngest children was reported to spend a substantial time (3-4 hours) playing outside (18.6% of 3-3.5 year olds and 22.9% of 3.5-4 year olds). Meanwhile, a *higher* proportion than expected of the older children was reported to spend only a modest amount of time (less than one hour) playing outside (29% of 5-5.5 year olds and 25.0% of 5.5-6 year olds).
- ***Age and being read to by someone else*** (Figure 18), chi-square (n=1184) = 156.365, $p < 0.001$. Cramer's V suggests a modest effect size (0.182). A *higher* proportion than expected of the very youngest children was reported to spend a moderate amount of time (1-2 hours) being read to by someone else (29.6% of 3-3.5 year olds and 30.0% of 3.5-4 year olds).

4.3.3. Social class patterns in the use of media

Media use data were cross-tabulated by social class, using the proxy measure of the highest occupation parent in the responding household. Chi-squared tests were used to determine whether there was a significant difference between the expected frequencies and the observed frequencies in one or more categories. Where there was a significant difference, effect sizes have been calculated using Muijjs (2010) as a guide for interpretation. Significant results have been reported where the effect size is modest or above (< 0.3). This analysis suggested a significant relationship between the social class of a child's highest occupation parent and the time that a child spent engaged in several media activities:

- **Social class and time spent watching a video or DVD** (Figure 19), chi-square = 70.783, $p < 0.001$. Cramer's V suggests a modest effect size (0.123). A *higher* proportion than expected of children with 'professional' parents was reported to 'never or rarely' watch a video or DVD (34.8%). A higher proportion than expected of children with 'clerical' or 'manual' parents was reported to spend 1-2 hours a day watching a video or DVD (43.7% and 36.8% respectively).
- **Social class and time spent playing digital games** (Figure 20), chi-square = 91.214, $p < 0.001$. Cramer's V suggests a modest effect size (0.140). A *higher* proportion than expected of children with 'professional' parents was reported to 'never or rarely' play digital games (42.3%). A higher proportion than expected of children with 'clerical' or 'manual' parents was reported to spend 1-2 hours a day playing digital games (19.4% and 17.9% respectively).
- **Social class and time spent playing video games like PlayStation or X-box** (Figure 21), chi-square = 66.462, $p < 0.001$. Cramer's V suggests a modest effect size (0.119). A *higher* proportion than expected of children with 'professional' parents was reported to 'never or rarely' watch a video or DVD (90.4%). A higher proportion than expected of children with 'clerical' or 'manual' parents was reported to spend 1-2 hours a day watching a video or DVD (5.6% and 6.9% respectively).

4.3.4. Gender patterns in the use of media

Media use data were cross-tabulated by the gender of the child. This analysis suggested that gender had very little impact on the amount of time a child spent engaged in media activities. The data analysis suggests a significant relationship between a child's gender and time spent playing video games, chi-square = 21.893, $p = 0.005$. However, Cramer's V suggests only a weak effect size (0.097).

Figure 15: Time spent watching live TV on the TV set by age (n=1187)

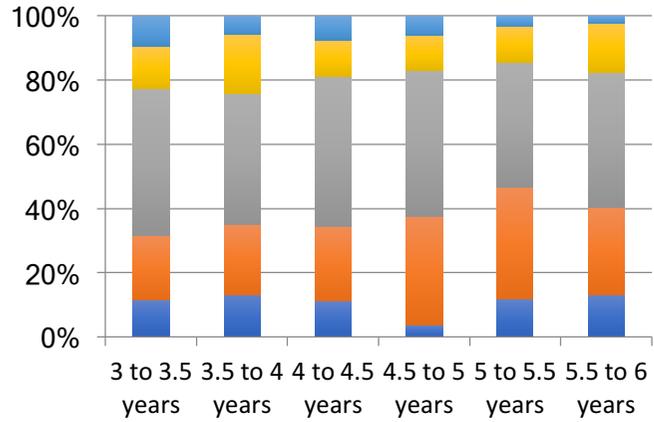


Figure 17: Time spent playing outside by age (n=1179)

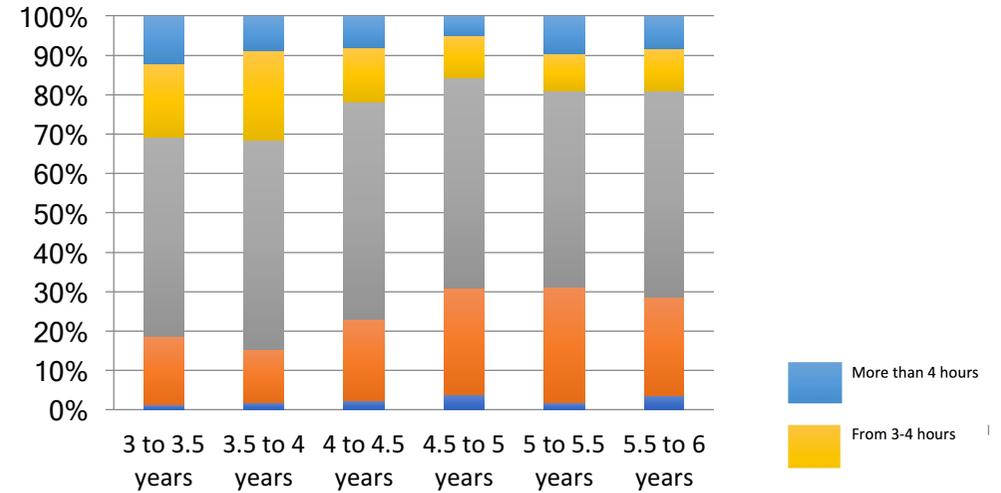


Figure 16: Time spent playing video games like PlayStation or X-box by age (n=1171)

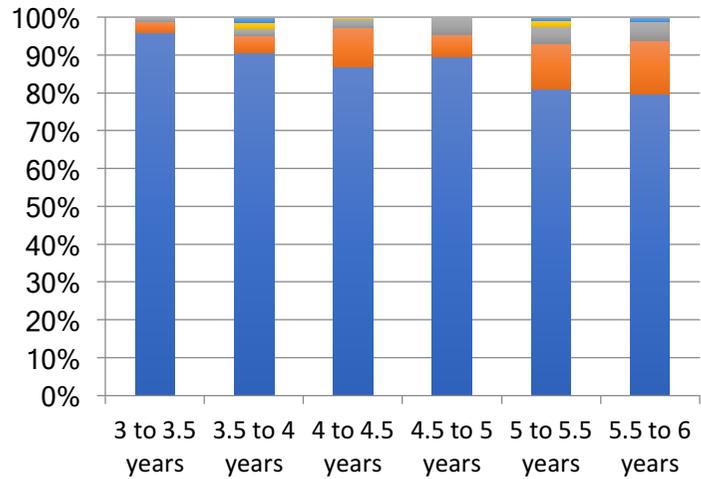


Figure 18: Time spent being read to by age (n=1184)

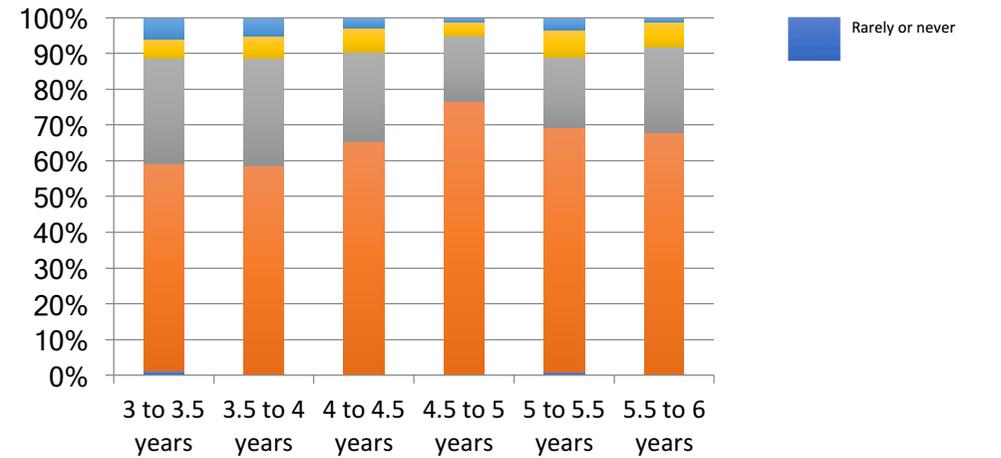


Figure 19: Time spent watching a video or DVD by social class (n=1169)

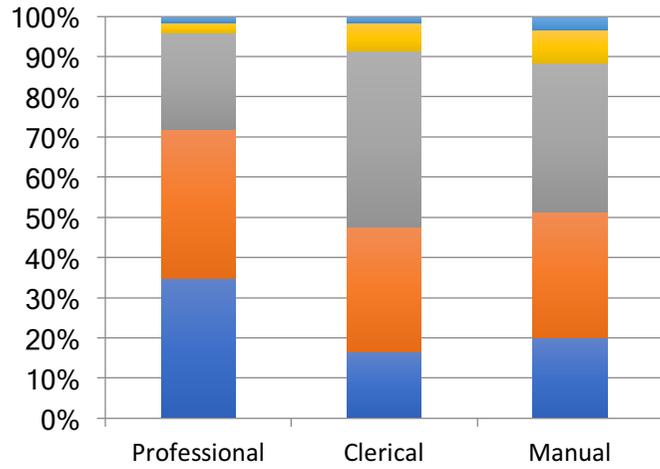


Figure 21: Time spent playing video games by social class (n=1167)

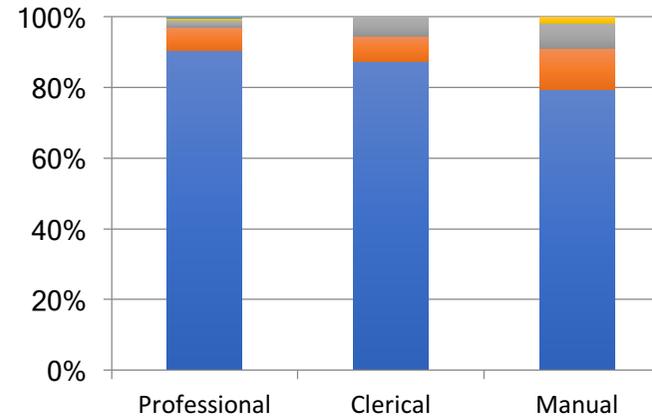
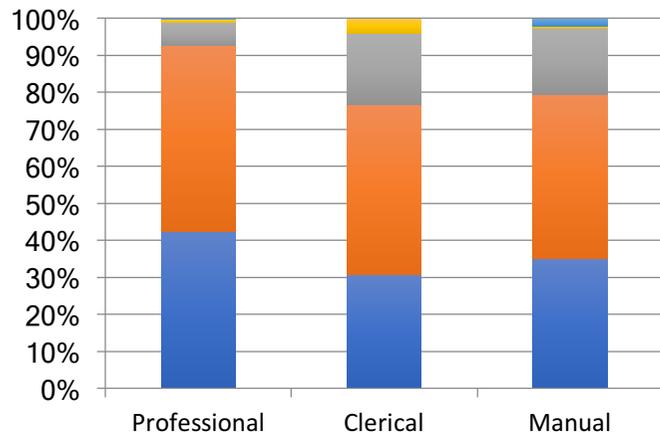


Figure 20: Time spent playing digital games by social class (n=1166)



4.4. Preschool children's television engagement and choices

4.4.1. Television engagement and viewing type

After 'playing out', parents reported that children spent the second most time watching live TV on the TV set (63% of parents reported that their child spent an hour or more). As the fieldwork took place between November 2014 and March 2015, it is possible that time spent indoors watching television was higher during the study period than in the summer months. The present study consolidates a key finding of the *Digital Beginnings* (2005) survey - children in both studies were reported to be highly active television viewers. A key finding of the TA study was that parents pointed out their children also engage in a range of activities related to TV&RM *after* engaging with them. More detailed findings about preschool children's concurrent and post-television-viewing activities are explored below.

4.4.2. Favourite programmes and channels

Parents were asked to name their children's favourite television programmes. 177 different programmes were named, but there were some clear favourites (Table 13).

Table 13: Top 20 favourite television programmes

Programme	Channel	Number of survey responses	% of total
1. Peppa Pig	Channel 5/ Nick Jr.	159	13.8
2. Octonauts	CBeebies	55	4.8
3. Topsy and Tim	CBeebies	54	4.7
4. Bing	CBeebies	45	3.9
5. Swashbuckle	CBeebies	34	3.0
6. Thomas & Friends	Channel 5	34	3.0
7. Sofia the First	Disney Jr.	32	2.8
8. Peter Rabbit	CBeebies	26	2.3
9. Ben and Holly	Nick Jr.	25	2.2
10. Paw Patrol	Nick Jr.	25	2.2
11. Fireman Sam	Channel 5	22	1.9
12. Andy's Dinosaur/Wild Adventures	CBeebies	21	1.8
13. Doc McStuffins	Disney Jr.	21	1.8

14. Tom and Jerry	Cartoon Network	21	1.8
15. Jake and the Neverland Pirates	Disney Jr. / Boomerang	21	1.8
16. Scooby Doo	Boomerang	20	1.7
17. My Little Pony	Tiny Pop	17	1.4
18. Mr Tumble	CBeebies	16	1.3
19. The Furchester Hotel	CBeebies	16	1.3
20. Numberjacks	CBeebies	14	1.2
<i>All others</i>	-	474	41.1
Total	-	1152	100.0

Consistent with the findings of the *Digital Beginnings* survey (2005), the most popular programmes were all conventionally age appropriate. A small minority of parents named adult programmes as their child's favourite (e.g. *You've Been Framed*, *Top Gear*).

Favourite programmes, by gender: In contrast with the findings of the *Digital Beginnings* survey (2005), the number one choice for both girls and boys (Appendix O) was the same television programme in 2015 (*Peppa Pig*). Other titles were also popular across genders, e.g. *Bing*, *Octonauts* and *Swashbuckle*. Others appeared on the boys' top ten only (e.g. *Thomas the Tank Engine* and *Fireman Sam*) or the girls' top ten only (e.g. *Topsy and Tim* and *Sofia the First*).

Favourite programmes, by age: Stratifying the sample by age reveals some differences (Appendix P). *Peppa Pig* dominates as the favourite programme from age 3 to 4.5. Children aged 4.5 to 5 were equally likely to list *Topsy and Tim* as their favourite. *Octonauts* emerged as the favourite for children aged 5 to 5.5, whilst 5.5 to 6 year olds selected a diverse range of favourites.

Favourite programmes, by social class: Stratifying the sample by social class reveals some differences (Appendix Q). Whilst *Peppa Pig* (Channel 5) is the favourite choice across the three broad social class groups, 'professional' parents tended to state *CBeebies* titles as their children's favourites (*Octonauts*, *Topsy and Tim*, *Bing* and *Swashbuckle*). In comparison, 'clerical' and 'manual' parents tended to state a mixture of *CBeebies* and non-*CBeebies* titles as their children's favourites.

Parents were asked to name their children's favourite television channels. 32 different channels were named, but there were some clear favourites (Table 14).

Table 14: Top 10 favourite channels

Channel	Number of survey responses	% of total
1. CBeebies	684	60.1
2. Nickelodeon Junior/Nickelodeon channels	135	11.9
3. Disney Junior/Disney channels	125	11.0
=4. CBBC/BBC channels	41	3.6
=4. Milkshake/Channel 5	41	3.6
6. Cartoon Network/Cartoonito/Boomerang	34	3.0
7. Pop/Tiny Pop	32	2.8
8. CITV/ITV	18	1.6
9. Netflix	14	1.2
10. YouTube	4	0.4
<i>All others</i>	<i>10</i>	<i>0.9</i>
Total	1138	100.0

Children's favourite channel was *CBeebies*, with parents more than five times more likely to name this channel as their children's favourite than any other. In contrast to the *Digital Beginnings* (2005) study, *Netflix* and *YouTube* have crept into the chart. This question was open-ended and although these are not traditional analogue TV channels, many parents perceived them as channels nonetheless.

Favourite channels, by gender: The number one channel choice for both girls and boys was *CBeebies* (Appendix R). Some of the other channels were popular with both genders (*Disney Junior/Disney* channels, *Nickelodeon Junior/Nickelodeon* channels and *CBBC/BBC* channels). One appeared on the boys' top five only (*Cartoon Network/Cartoonito/Boomerang*) and one in the girls' top five only (*Milkshake/Channel 5*).

Favourite channels, by age and social class: The *Digital Beginnings* (2005) survey did not cross-tabulate favourite programmes by age or social class. Whilst stratifying the sample by age reveals some differences by age (Appendix S) and social class (Appendix T), the sample sizes are not especially large, nor the differences marked.

4.5. Children's activities whilst watching live television

4.5.1. Preschool children's activities whilst watching live television

Consistent with the findings of previous studies (*Digital Beginnings*, 2005), the survey data suggests that preschool children engage in a broad range of activities whilst watching television. A large percentage of parents said that their child talks about the programme or film whilst watching it (82.1%). Many parents also said that their child dances (76.4%) or sings (75.5%) whilst watching. These percentages are even higher than those in the *Digital Beginnings* (2005) survey, suggesting that multi-tasking with social and physical activities is now more popular than ever for this preschool group.

Within the present study, there were significant differences in multi-tasking in relation to these three variables. Statistical analyses of multi-tasking use by age suggest that younger preschoolers in the sample were broadly speaking *more* likely to sing, dance, talk to the characters on-screen or act out the story, whilst watching television, whilst older preschoolers were broadly speaking *more* likely to write or draw whilst watching television. The *Digital Beginnings* (2005) also found that older preschoolers were more likely to write or draw whilst watching, alongside several other activities. Within the present study, preschoolers with 'manual' or 'clerical' parents were *more* likely to sing or play digital games on another device whilst watching. Preschoolers with 'professional' parents were *more* likely to talk about the programme whilst watching TV. The *Digital Beginnings* (2005) found that preschoolers from C2DE families were more likely read, write or draw, talk about other things and play with toys related to the programme whilst watching. In the present study, girls were *more* likely to sing, dance or write and draw whilst watching TV. These gender differences were also found in the *Digital Beginnings* (2005) survey. More detail on these factors can be found below.

The response options to this question in the current study were altered from the *Digital Beginnings* (2005) questionnaire in several ways. Three response options ('sits quietly and concentrates on TV all/a lot/some of the time') were collapsed into one ('sits quietly and concentrates on the TV'). Only 5% of parents in the 2005 study said their children sit quietly 'all of' the time; 30% 'a lot of' the time; and 60% 'some of' the time. In the present study, 72.1% of parents said their children sit quietly some of the time. These findings cannot be directly compared. Three additional activities were included in the present survey: 'uses another device to play games', 'uses another device to watch clips/videos' and 'uses another device for something else'. These activities were added to compare young children's cross-device multi-tasking against their social and physical multi-tasking.

Multi-tasking with other digital devices

There has been much discussion in recent years about young children multi-tasking with more than one screen or digital device at the same time, with some suggesting that this is now common behaviour (Jago

et al., 2011), or that there are potential cognitive implications of using more than one digital device or media source at a time (Lee et al., 2011). The survey data suggest that multi-tasking with other digital devices is present in the preschool population, but that it is much less common than other forms of physical and non-digital multi-tasking. The most commonly reported form of *digital* multi-tasking was watching live TV and playing digital games on another device, although only 17.1% of parents reported this. Just 6.4% of parents reported that their child 'uses another device to watch clips or videos' whilst watching television and 4.2% reporting that their child 'uses another device for something else' whilst watching TV (Figure 22). This finding is consolidated by parents' responses to the question: 'how often, if ever, does your child use more than one type of media at a time' (Figure 23). 71.2% of parents said their child 'never' or 'hardly ever' did this, with 24.6% saying that their child did this 'sometimes' and only 4.2% saying they multi-tasked 'always' or 'most of the time'. The analysis suggests no significant relationship between a child's age, gender or social class and their likelihood to multi-task using more than one form of media.

Social and physical multi-tasking

In contrast, parent's responses to the physical and social multi-tasking questions (Figure 22) show active and diverse activity whilst preschool children watch television. Talking about the programme, dancing and singing were the most popular. Whilst talking about the programme, dancing and singing were the most popular co-viewing activities, many parents also reported their children 'playing with toys' (64.4%), 'eating' (56.4%) and 'talking about other things' (55.5%). As in the case of the Digital Beginnings (2005) study, such findings directly contest the persistent notion that watching television is an inherently 'sedentary' behaviour for preschool children. Unfortunately, watching television is still widely assumed to be sedentary and is thus reported as such, or even used unquestioningly as the indicator of sedentary behaviour in many studies (e.g. Gortmaker et al., 1996; Jakes et al., 2003). Some of these concurrent activities were also social (e.g. talking about the programme or film or talking about other things), backing up the findings in section 4.7. to suggest that children's engagement with television is social. The nature of this physical and social multi-tasking requires further attention, which is addressed in the qualitative case studies.

Figure 22: Children's concurrent activities whilst watching television (n=1190)

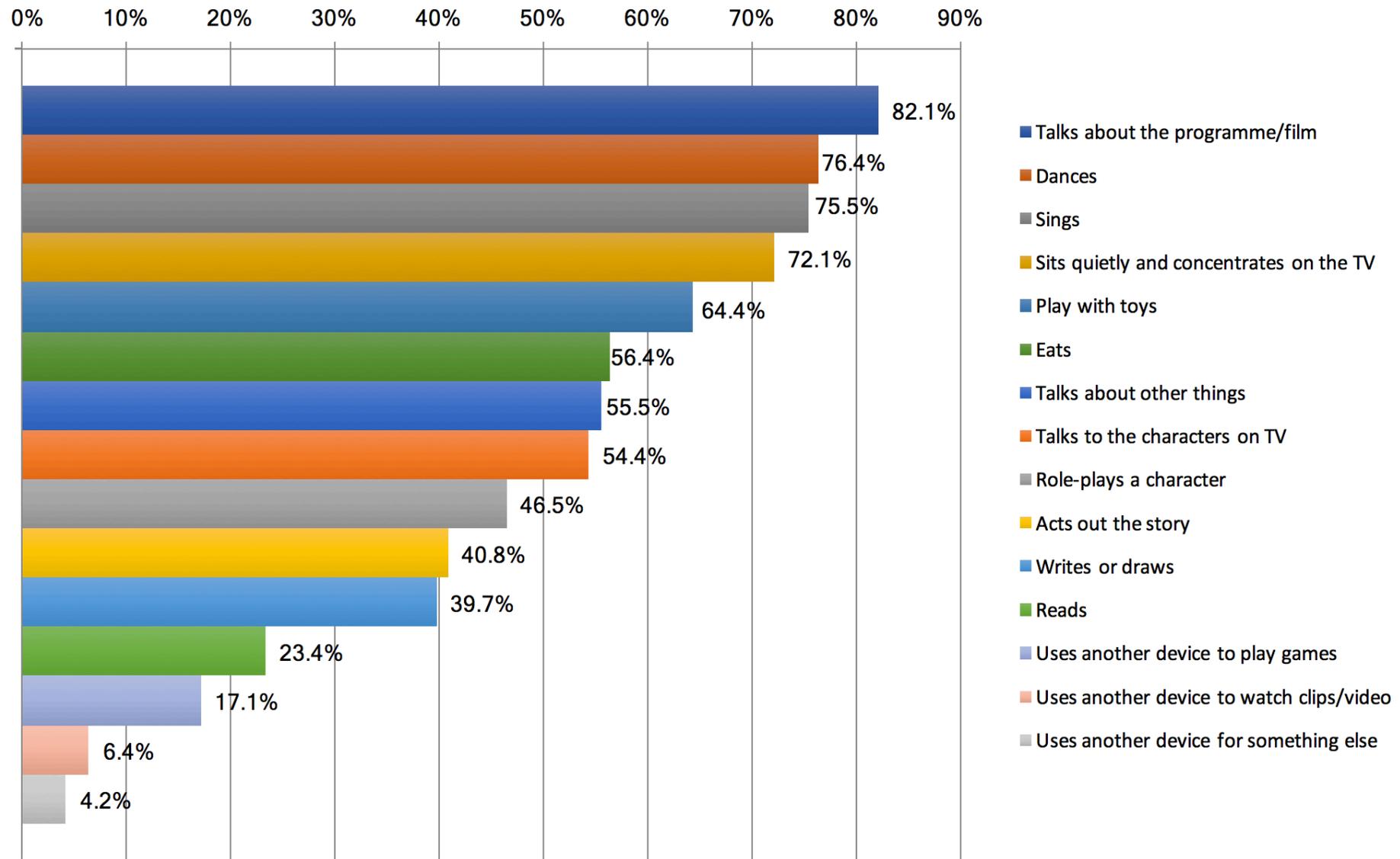
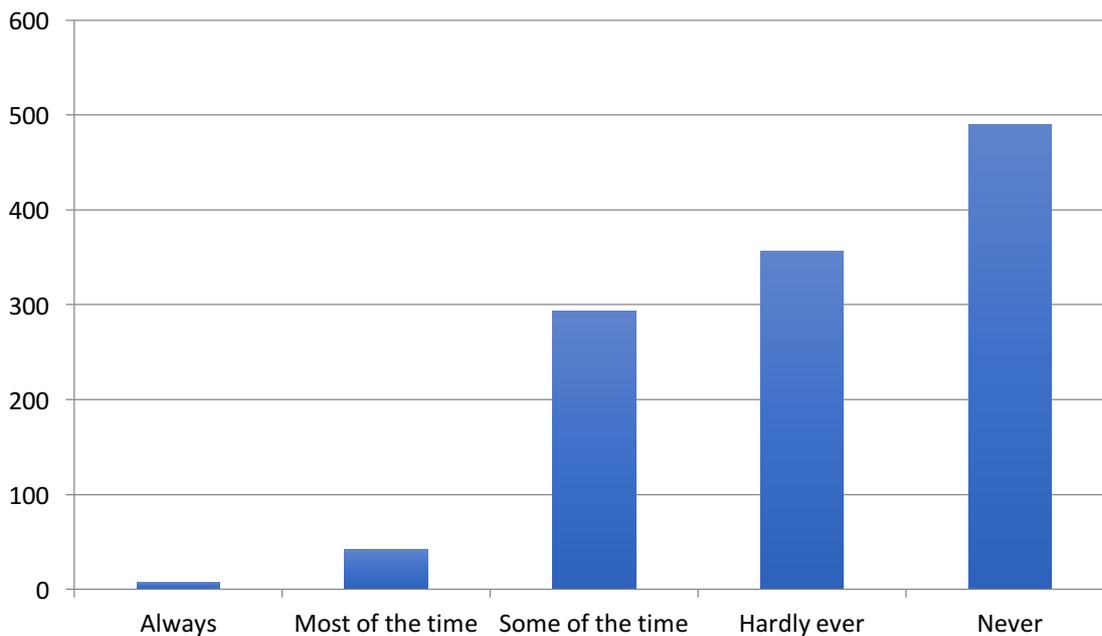


Figure 23: Multi-tasking with more than one type of media at the same time (n=1190)



4.5.2. Age patterns in children’s activities whilst watching television

Concurrent activities data were cross-tabulated by the age of the child (6-month age bands). Chi-squared tests were used to determine whether there was a significant difference between the expected frequencies and the observed frequencies in one or more categories. Where there was a significant difference, effect sizes have been calculated using Muijis (2010) as a guide for interpretation. Significant results have been reported where the effect size is modest or above (<0.3). This analysis suggested that there was a significant relationship between a child’s age and engaging in types of concurrent activity whilst watching television:

- **Age and singing whilst watching TV** (Figure 24), chi-square (n=1190) = 40.657, p=<0.001. Cramer’s V suggests a modest effect size (0.185). A *higher* proportion than expected of younger preschoolers was reported to sing whilst watching television (84.3% of 3-3.5 year olds and 78.3% of 3.5-4 year olds). Meanwhile, a *lower* proportion than expected of some older preschoolers was reported to sing whilst watching television (e.g. 61.0% of 5-5.5 year olds and 65.5% of 5.5-6 year olds).
- **Age and dancing whilst watching TV** (Figure 25), chi-square (n=1190) = 63.062, p=<0.001. Cramer’s V suggests a modest effect size (0.230). A *higher* proportion than expected of younger preschoolers was reported to dance whilst watching television (88.0% of 3-3.5 year olds and 79.1% of 3.5-4 year olds). Meanwhile, a *lower* proportion than expected of some older preschoolers was reported to dance whilst watching television (e.g. 61.0% of 5-5.5 year olds and 59.5% of 5.5-6 year olds).

- ***Age and writing or drawing whilst watching TV*** (Figure 26), chi-square (n=1190) = 32.030, $p < 0.005$. Cramer's V suggests a modest effect size (0.164). Broadly speaking, a *higher* proportion than expected of older preschoolers was reported to write or draw whilst watching television (52.9% of 4.5-5 year olds and 51.2% of 5.5-6 year olds). Meanwhile, a lower proportion than expected of younger preschoolers was reported to write or draw whilst watching television (e.g. 35.2% of 3.5-4 year olds and 34.4% of 4-4.5 year olds). This pattern is, however, not clear-cut. For example, a slightly higher than expected proportion of 3-3.5 year olds was reported to write or draw whilst watching television (41.0%).
- ***Age and talking to the characters on-screen whilst watching TV*** (Figure 27), chi-square (n=1190) = 29.790, $p = 0.005$. Cramer's V suggests a modest effect size (0.158). A *higher* proportion than expected of younger preschoolers was reported to talk to the characters on-screen whilst watching television (63.9% of 3-3.5 year olds and 58.3% of 3.5-4 year olds). Meanwhile, a lower proportion than expected of older preschoolers was reported to talk to the characters on-screen whilst watching television (48.4% of 4.5-5 year olds, 43.2% of 5-5.5 year olds and 48.8% of 5.5-6 year olds).
- ***Age and acting out the story whilst watching TV*** (Figure 28), chi-square (n=1190) = 36.594, $p < 0.001$. Cramer's V suggests a modest effect size (0.175). A *higher* proportion than expected of younger preschoolers was reported to act out the story whilst watching television (51.8% of 3-3.5 year olds and 43.9% of 3.5-4 year olds). Meanwhile, a lower proportion than expected of older preschoolers was reported to act out the story whilst watching television (35.0% of 4.5-5 year olds, 34.7% of 5-5.5 year olds and 23.8% of 5.5-6 year olds).
- ***Age and playing with toys whilst watching TV*** (Figure 29), chi-square (n=1190) = 32.225, $p < 0.005$. Cramer's V suggests a modest effect size (0.165). A *higher* proportion than expected of the youngest preschoolers (3-3.5 year olds) was reported to play with toys whilst watching television (77.1%). Meanwhile, a lower proportion than expected of the older preschoolers was reported to play with toys whilst watching television (e.g. 60.8% of 4.5-5 year olds and 56.0% of 5.5-6 year olds).

Figure 24: Singing whilst watching TV, by age (n=1190)

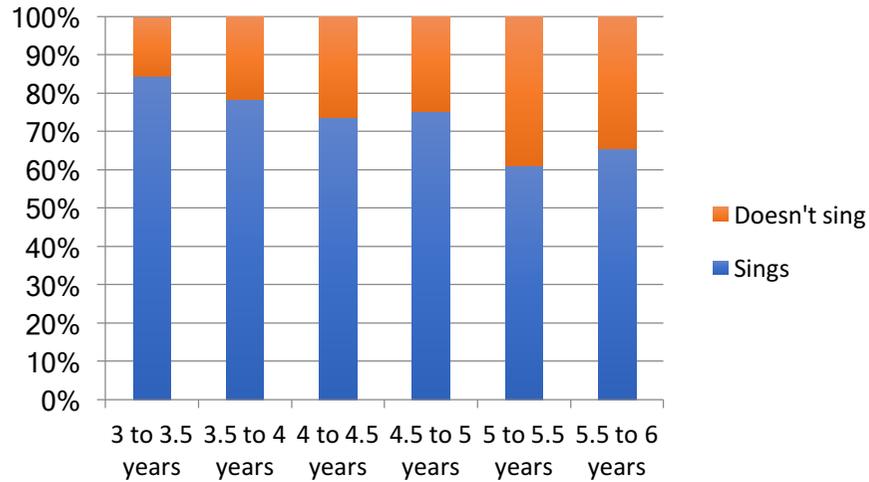


Figure 25: Dancing whilst watching TV, by age (n=1190)

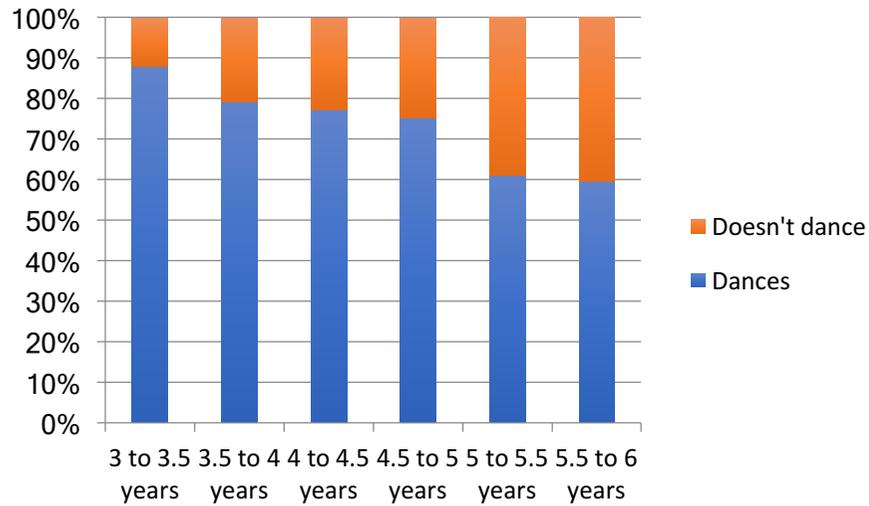


Figure 26: Writing or drawing whilst watching TV, by age (n=1190)

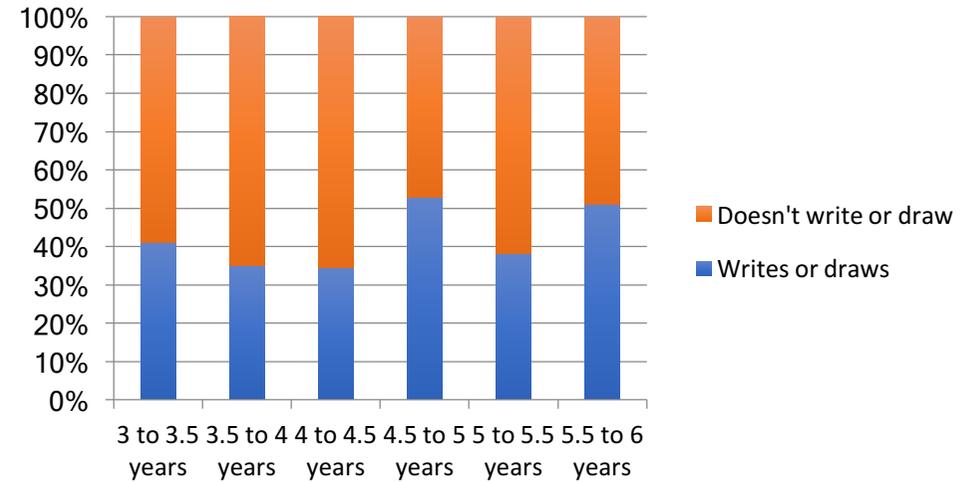


Figure 27: Talking to on-screen characters whilst watching, by age (n=1190)

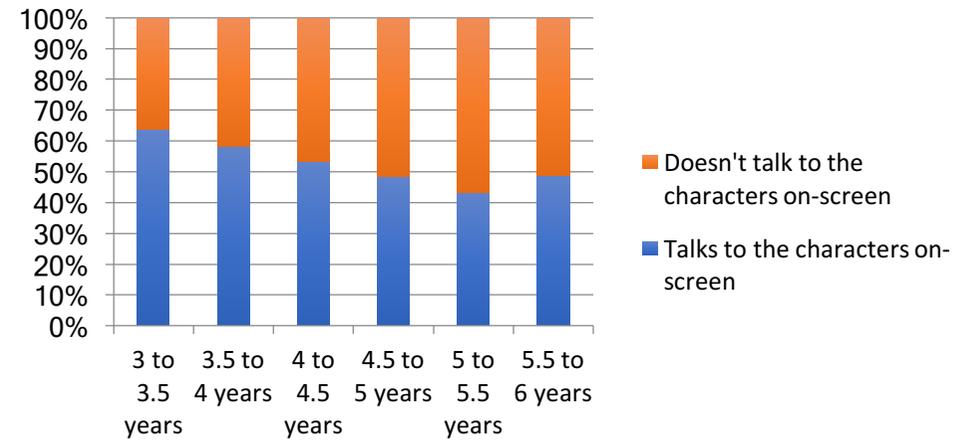


Figure 28: Acting out the story whilst watching TV, by age (n=1190)

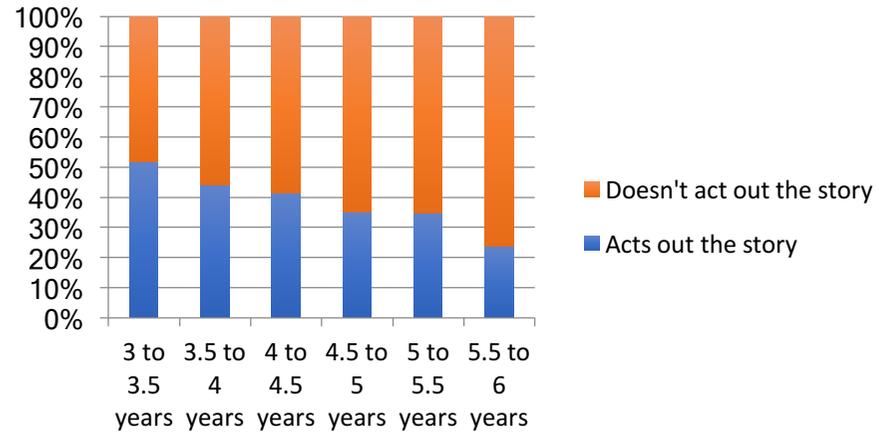
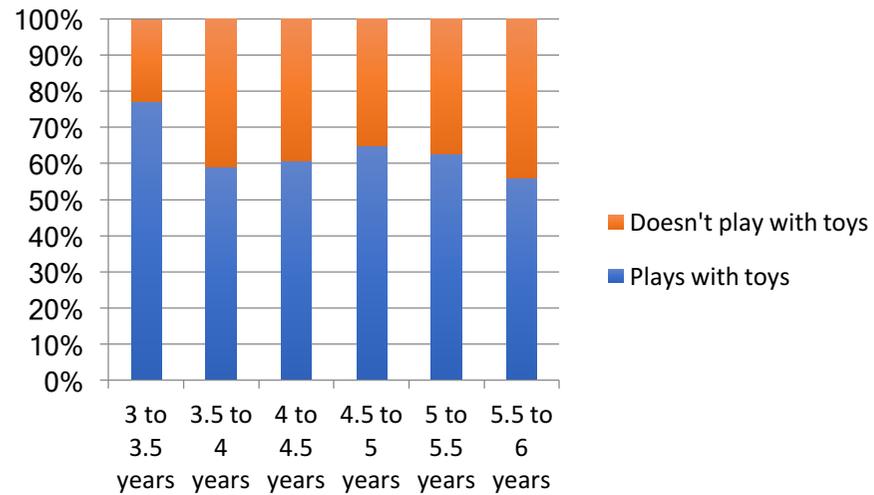


Figure 29: Playing with toys whilst watching TV, by age (n=1190)



4.5.3. Social class patterns in children's activities whilst watching television

Concurrent activities data were cross-tabulated by social class, using the proxy measure of the highest occupation parent in the responding household. Chi-squared tests were used to determine whether there was a significant difference between the expected frequencies and the observed frequencies in one or more categories. Where there was a significant difference, effect sizes have been calculated using Muijis (2010) as a guide for interpretation. Significant results have been reported where the effect size is modest or above (<0.3). This analysis suggested that there was a significant relationship between a child's social class and engaging in types of concurrent activity whilst watching television:

- **Social class and singing whilst watching television** (Figure 30), chi-square ($n=1186$) = 16.788, $p=0.005$. Cramer's V suggests a modest effect size (0.119). A *higher* proportion than expected of children from 'clerical' (81.3%) and 'manual' (86.6%) families were reported to sing when they watch TV. A *lower* proportion of children from 'professional' families than expected did so (72.8%).
- **Social class and reading whilst watching television** (Figure 31), chi-square ($n=1186$) = 12.297, $p<0.05$. Cramer's V suggests a modest effect size (0.102). A *higher* proportion than expected of children from 'clerical' families were reported to read when they watch TV (33.6%). A *lower* proportion of children from 'professional' families than expected did so (21.1%).
- **Social class and talking about the programme whilst watching television** (Figure 32), chi-square ($n=1186$) = 16.813, $p=0.005$. Cramer's V suggests a modest effect size (0.119). A *higher* proportion than expected of children from 'professional' families were reported to talk about the programme whilst watching TV (84.1%). A *lower* proportion of children from 'manual' families than expected did so (78.5%).
- **Social class and sitting quietly and concentrating whilst watching television** (Figure 33), chi-square ($n=1186$) = 34.46, $p<0.005$. Cramer's V suggests a modest effect size (0.170). A *lower* proportion than expected of children from 'manual' (63.1%) families were reported sitting quietly and concentrating whilst watching. A *higher* proportion of children from 'professional' families than expected did so (75.6%).
- **Social class and using another device to play games whilst watching television** (Figure 34), chi-square ($n=1186$) = 18.052, $p<0.005$. Cramer's V suggests a modest effect size (0.123). A *higher* proportion than expected of children from 'clerical' (26.6%) and 'manual' (22.1%)

families were reported to use another device to play games when they watch TV. A *lower* proportion of children from 'professional' families than expected did so (14.4%).

- ***Social class and using another device to watch clips or videos whilst watching television*** (Figure 35), chi-square (n=1186) = 17.079, $p < 0.005$. Cramer's V suggests a modest effect size (0.120). A *higher* proportion than expected of children from 'clerical' families were reported to use another device to watch videos or clips when they watch TV (8.6%). A *lower* proportion of children from 'professional' families than expected did so (5.3%).

Figure 30: Singing whilst watching and social class (n=1186)

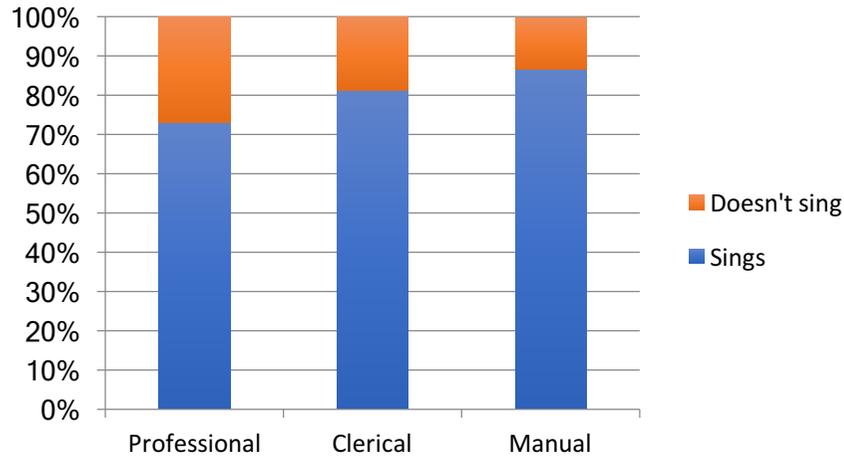


Figure 31: Reading whilst watching and social class (n=1186)

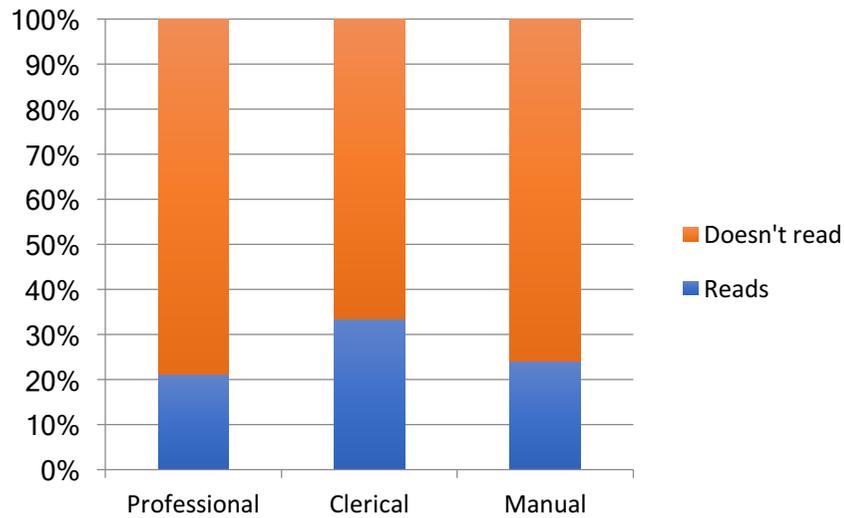


Figure 32: Talking about the programme and social class (n=1186)

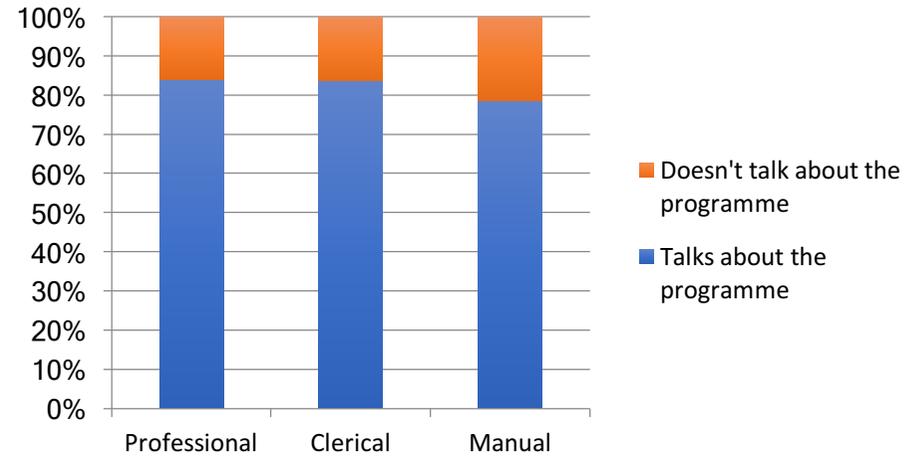


Figure 33: Sitting quietly and concentrating and social class (n=1186)

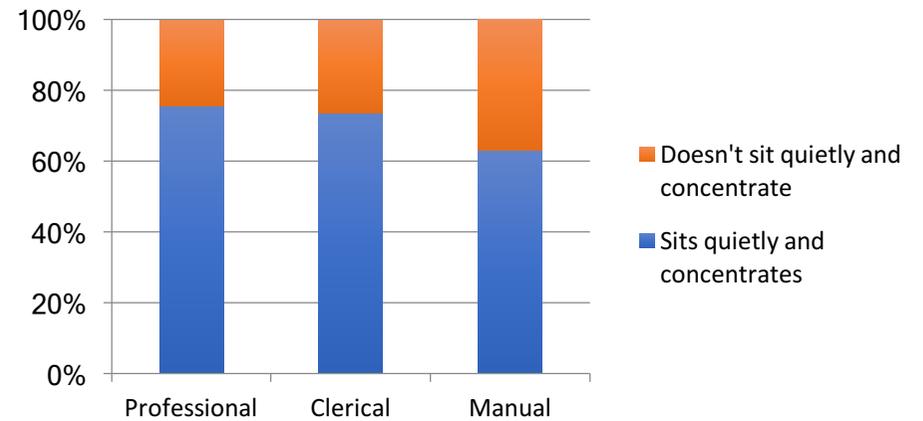


Figure 34: Using another device to play games and social class (n=1186)

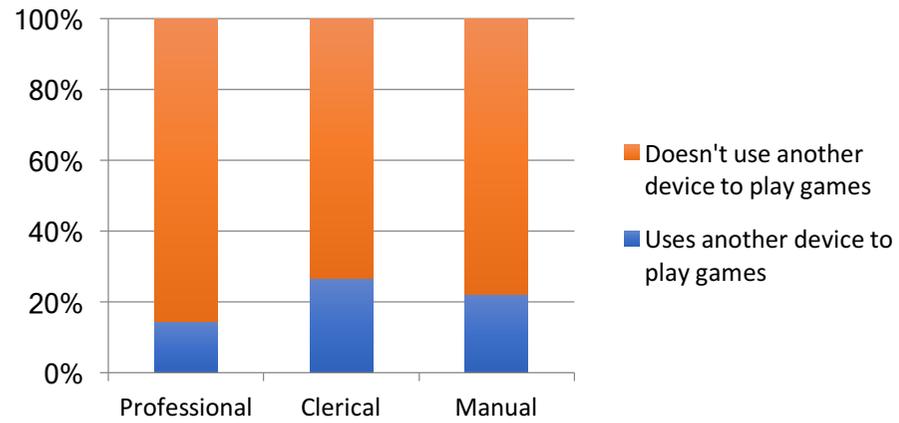
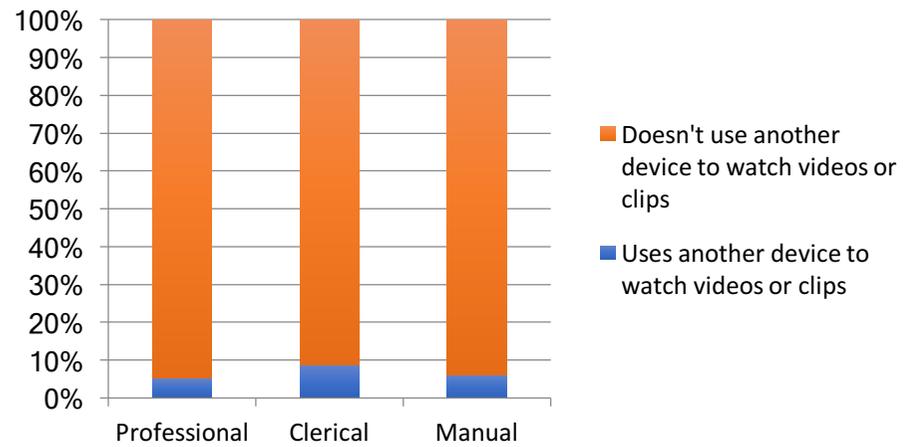


Figure 35: Using another device to watch clips/videos and social class (n=1186)



4.5.4. Gender patterns in children's activities whilst watching television

Concurrent activities data were cross-tabulated by child's gender. Chi-squared tests were used to determine whether there was a significant difference between the expected frequencies and the observed frequencies in one or more categories. Where there was a significant difference, effect sizes have been calculated using Muijis (2010) as a guide for interpretation. Significant results have been reported where the effect size is modest or above (<0.3). This analysis suggested that there was a significant relationship between a child's gender and engaging in types of concurrent activity whilst watching television:

- **Gender and singing whilst watching television** (Figure 36), chi-square ($n=1186$) = 16.589, $p<0.001$. Cramer's V suggests a modest effect size (0.118). A *higher* proportion than expected of girls were reported to sing when they watch TV (80.5%). A *lower* proportion of boys than expected did so (70.4%).
- **Gender and dancing whilst watching television** (Figure 37), chi-square ($n=1186$) = 14.864, $p=0.001$. Cramer's V suggests a modest effect size (0.112). A *higher* proportion than expected of girls were reported to dance when they watch TV (81.1%). A *lower* proportion of boys than expected did so (71.7%).
- **Gender and writing or drawing whilst watching television** (Figure 38), chi-square ($n=1186$) = 47.899, $p<0.001$. Cramer's V suggests a modest effect size (0.201). A *higher* proportion than expected of girls were reported to write or draw when they watch TV (49.5%). A *lower* proportion of boys than expected did so (30.1%).

Figure 36: Singing whilst watching and gender (n=1186)

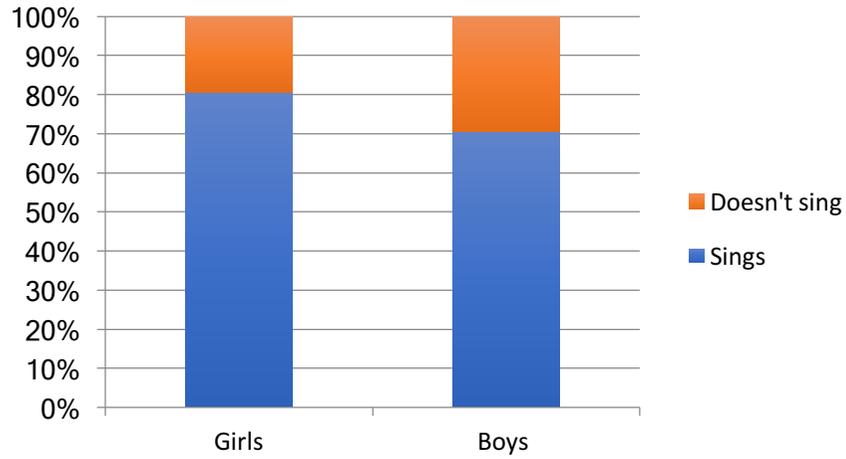


Figure 38: Writing and drawing whilst watching and gender (n=1186)

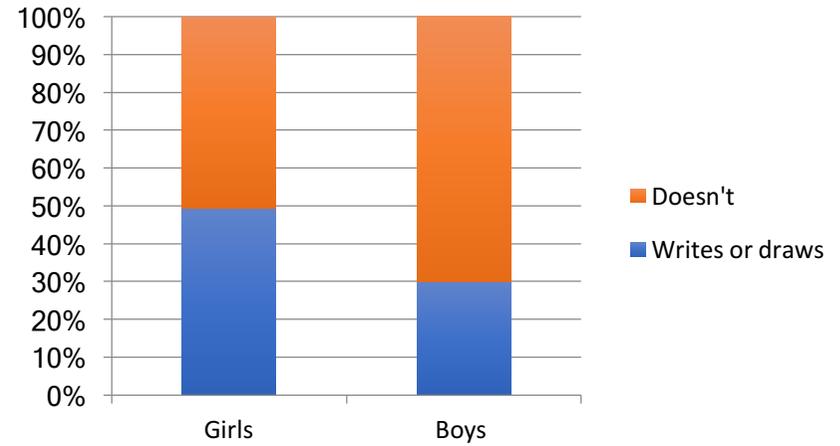
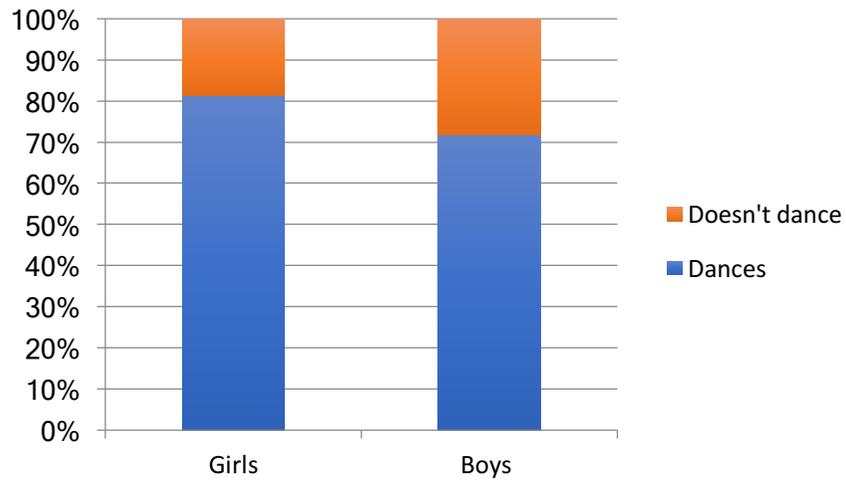


Figure 37: Dancing whilst watching and gender (n=1186)



4.6. Children's post-television viewing activities

4.6.1. Preschool children's activities after engaging with television

Previous surveys (e.g. *Digital Beginnings*, 2005) have traced what preschool children do whilst watching television. The *Digital Beginnings* survey did collect data on what children do after watching television, although this was discussed in the *Digital Beginnings* interviews. This line of questioning was added to the present survey in response to parent comments in the TA testing. The present survey data suggests that preschool children engage in a broad range of activities after watching television that are nonetheless related to it (Figure 39). Across the sample, a considerably large percentage of parents said that their child sings songs from the programme or film after watching (81.4%). Many parents also said that their child talks about the programme or film *afterwards* (71.4%) or uses catchphrases or dialogue from it (67.8%). This represents an important new finding.

Within the sample, there were also significant differences in multi-tasking in relation to age, social class and gender. Statistical analyses of activities after use by age suggest that younger preschoolers in the sample were broadly speaking *more* likely to use catchphrases or dialogue from the show, role-play a character from the show or play with related toys after watching. Preschoolers from professional families were, broadly speaking, *more* likely to use catchphrases or dialogue from the show or role-play a character from it after watching television. Girls were *more* likely to dress up as a character or sing songs from the show after watching TV. More detail on these factors can be found below.

Cross-platform follow-up activities

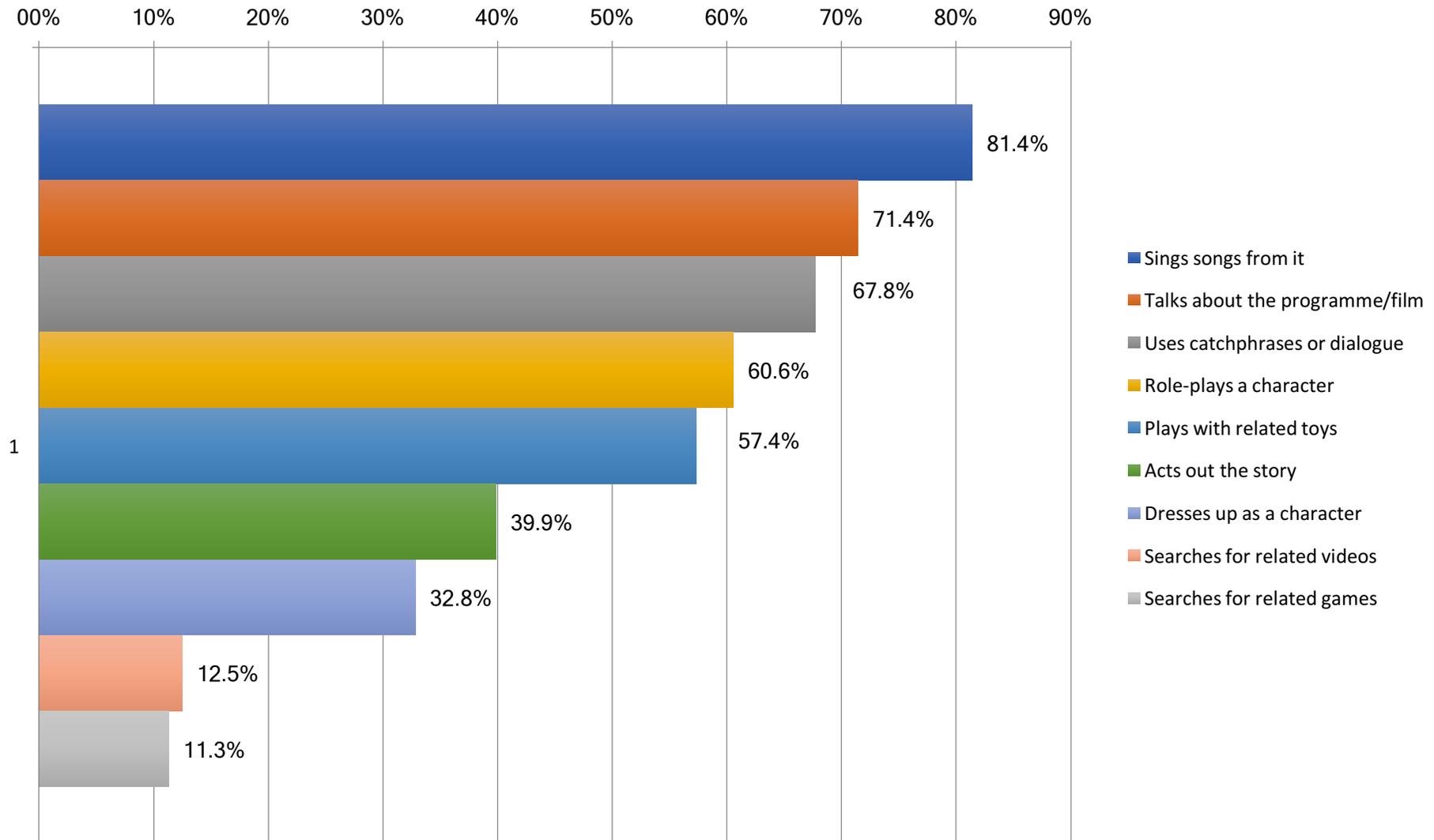
Consistent with their TV-watching concurrent activities, preschoolers were, broadly speaking, more likely to engage in 'traditional' play activities after watching television than engage in cross-platform follow-up activities. Only relatively small percentages of parents reported that their child would search for related videos (12.5%) or search for related games (11.3%) after watching television.

Social and physical follow-up activities

Parents reported that preschoolers engaged in a wide range of social and physical activities *after* engaging with television, painting a picture of vibrant, active and diverse activity taking place after preschool children watch television. Singing songs from the programme or film, talking about it or using catchphrases or dialogue from it were the most popular follow-up activities, although many parents also reported that their child role-plays as a character (60.6%), plays with related toys (57.4%) or acts out the story (39.3%) afterwards. The *Digital Beginnings* (2005) study identified similar patterns in its qualitative interviews, pointing out that children take on roles and re-play narratives from films both as they are watching and afterwards. The inclusion of this question in the quantitative survey means that

the present study can demonstrate the *extent* of these phenomena for the first time, representing a unique and important finding. It also allows for statistical comparison across gender, age and social class for the first time. The nature of this physical and social activity taking place after engagement with television requires further attention, which is addressed in the qualitative case studies.

Figure 39: Children's post television watching activities (n=1194)



4.6.2. Age patterns in children's activities after watching television

Post-watching activities data were cross-tabulated by the age of the child. Chi-squared tests were used to determine whether there was a significant difference between the expected frequencies and the observed frequencies in one or more categories. Where there was a significant difference, effect sizes have been calculated using Muijis (2010) as a guide for interpretation. Significant results have been reported where the effect size is modest or above (<0.3). This analysis suggested that there was a significant relationship between a child's age and engaging in types of activity after watching television:

- **Age and talking about the programme or film after watching** (Figure 40), chi-square ($n=1190$) = 45.173, $p<0.001$. Cramer's V suggests a modest effect size (0.195). Whilst there was a significant relationship between a child's age and talking about the programme or film after watching, there is not a clear (linear) pattern with regards to age. A *higher* proportion than expected of some preschoolers was reported to talk about the programme after watching (e.g. 79.2% of 4-4.5 year olds).
- **Age and using catchphrases or dialogue from the programme/film after watching** (Figure 41), chi-square ($n=1190$) = 23.695, $p<0.05$. Cramer's V suggests a modest effect size (0.141). A *higher* proportion than expected of some younger preschoolers was reported to use catchphrases or dialogue from the programme after watching (74.3% of 3-3.5 year olds and 70.3% of 4-4.5 year olds). Meanwhile, a *lower* proportion than expected of older preschoolers was reported to use catchphrases or dialogue from the programme after watching (65.0% of 4.5-5 year olds, 64.4% of 5-5.5 year olds and 63.1% of 5.5-6 year olds).
- **Age and role-playing a character after watching TV** (Figure 42), chi-square ($n=1190$) = 34.079, $p=0.001$. Cramer's V suggests a modest effect size (0.169). A *higher* proportion than expected of younger preschoolers was reported to role-play a character after watching television (64.3% of 3-3.5 year olds and 67.8% of 3.5-4 year olds). Meanwhile, a *lower* proportion than expected of some older preschoolers was reported to role-play a character after watching television (56.1% of 4.5-5 year olds, 50.0% of 5.5-6 year olds).
- **Age and play with related toys after watching TV** (Figure 43), chi-square ($n=1190$) = 25.618, $p<0.05$. Cramer's V suggests a modest effect size (0.147). A *higher* proportion than expected of younger preschoolers was reported to play with related toys after watching television (67.9% of 3-3.5 year olds, 59.0% of 4-4.5 year olds). Meanwhile, a *lower* proportion than expected of older preschoolers was reported to play with related toys after watching television (52.9% of 4.5-5 year olds, 54.2% of 5-5.5 year olds and 42.9% of 5.5-6 year olds).

Figure 40: Talking about the programme/film after watching TV, by age (n=1190)

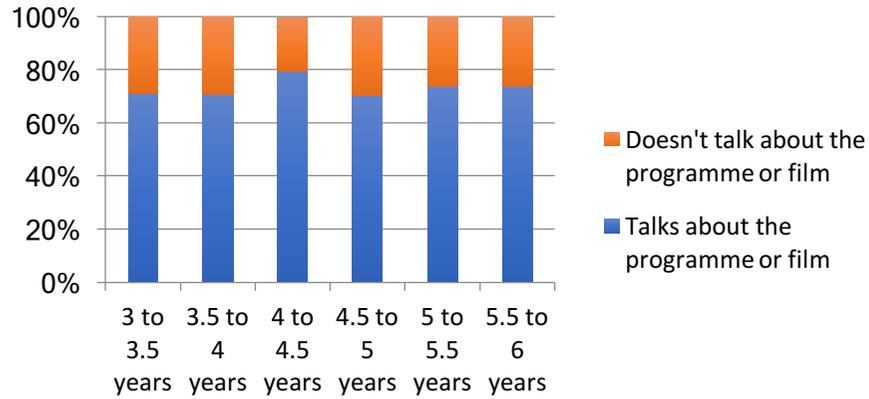


Figure 41: Using catchphrases or dialogue from the programme/film after watching TV, by age (n=1190)

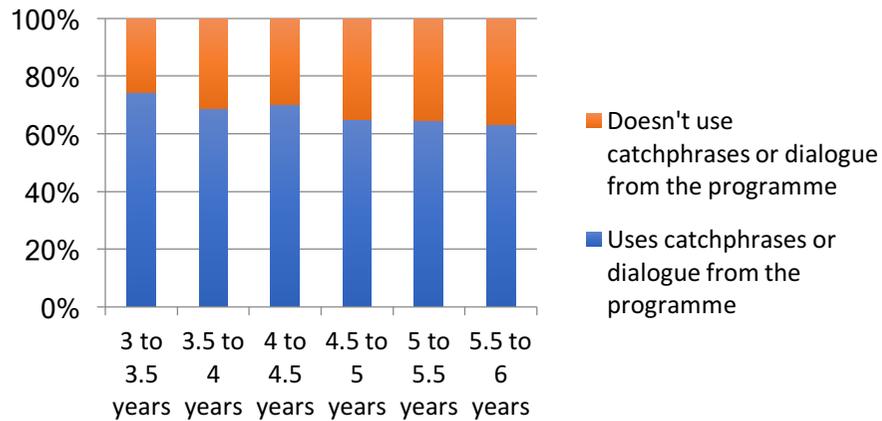


Figure 42: Role-playing a character after watching TV, by age (n=1190)

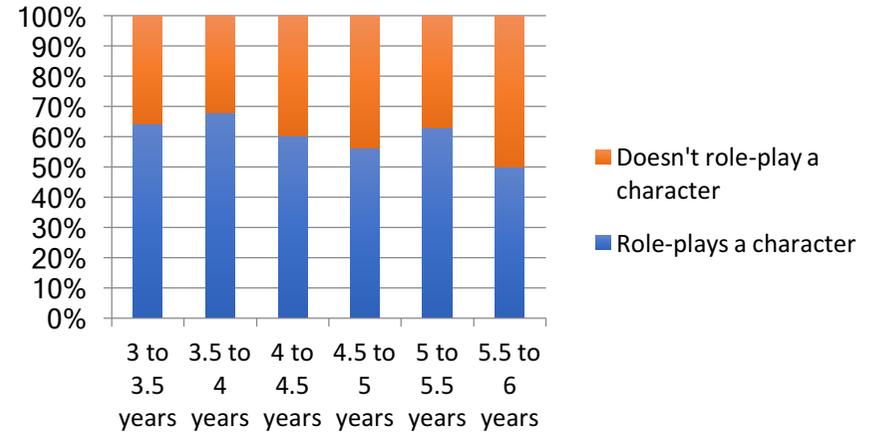
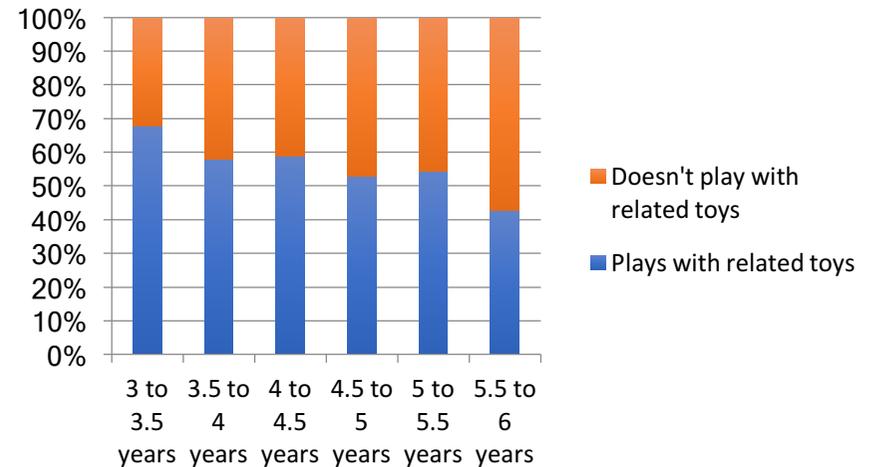


Figure 43: Playing with related toys after watching TV, by age (n=1190)



4.6.3. Social class patterns in children's activities after watching television

Post-watching activities data were cross-tabulated by social class, using the proxy measure of the highest occupation parent in the responding household. Chi-squared tests were used to determine whether there was a significant difference between the expected frequencies and the observed frequencies in one or more categories. Where there was a significant difference, effect sizes have been calculated using Muijis (2010) as a guide for interpretation. Significant results have been reported where the effect size is modest or above (<0.3). This analysis suggested that there was a significant relationship between a child's social class and engaging in types of activity after watching television:

- ***Social class and using catchphrases or dialogue from the programme after watching*** (Figure 44), chi-square ($n=1186$) = 17.378, $p<0.005$. Cramer's V suggests a modest effect size (0.121). A *higher* proportion than expected of children from 'professional' families was reported to use catchphrases or dialogue after watching television (70.7%). Meanwhile, a *lower* proportion than expected of children from 'manual' families was reported to use catchphrases or dialogue after watching television (61.7%).
- ***Social class and role-playing a character after watching*** (Figure 45), chi-square ($n=1186$) = 12.101, $p<0.05$. Cramer's V suggests a modest effect size (0.101). A *higher* proportion than expected of children from 'professional' families was reported to role-play a character after watching television (63.2%). Meanwhile, a *lower* proportion than expected of children from 'clerical' families was reported to role-play a character after watching television (53.9%).

Figure 44: Using catchphrases or dialogue from the programme after watching, by social class (n=1186)

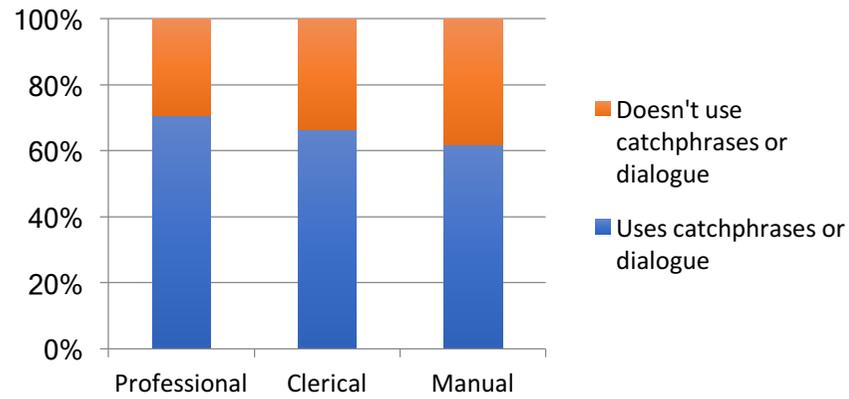
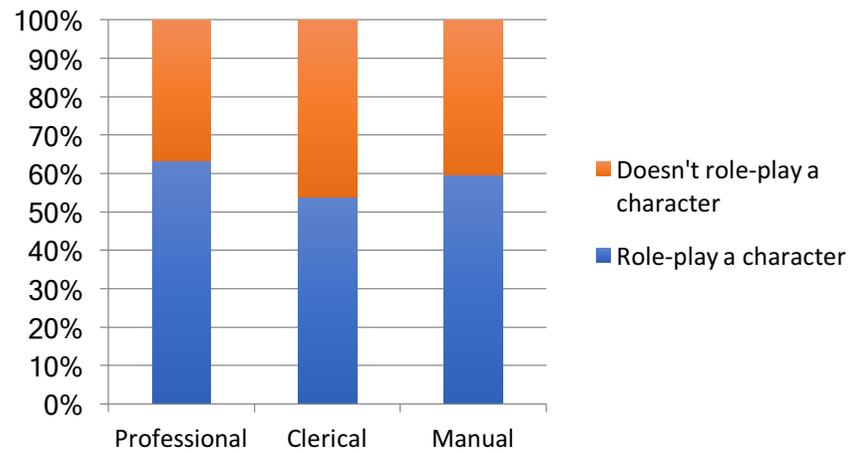


Figure 45: Role-plays a character after watching, by social class (n=1186)



4.6.4. Gender patterns in children's activities after watching television

Post-watching activities data were cross-tabulated by the child's gender. Chi-squared tests were used to determine whether there was a significant difference between the expected frequencies and the observed frequencies in one or more categories. Where there was a significant difference, effect sizes have been calculated using Muijis (2010) as a guide for interpretation. Significant results have been reported where the effect size is modest or above (<0.3). This analysis suggested that there was a significant relationship between a child's gender and engaging in types of activity after watching television:

- ***Gender and dressing up as a character after watching*** (Figure 46), chi-square ($n=1186$) = 18.655, $p=<0.001$. Cramer's V suggests a modest effect size (0.125). A *higher* proportion than expected of girls was reported to dress up as a character after watching television (38.9%). Meanwhile, a *lower* proportion than expected of boys was reported to dress up as a character after watching television (27.2%).
- ***Gender and singing songs from television after watching*** (Figure 47), chi-square ($n=1186$) = 37.108, $p=<0.001$. Cramer's V suggests a modest effect size (0.177). A *higher* proportion than expected of girls was reported to sing songs from television after watching (88.4%). Meanwhile, a *lower* proportion than expected of boys was reported to sing songs from television after watching (75.6%).

Figure 46: Dresses up as a character after watching, by gender (n=1186)

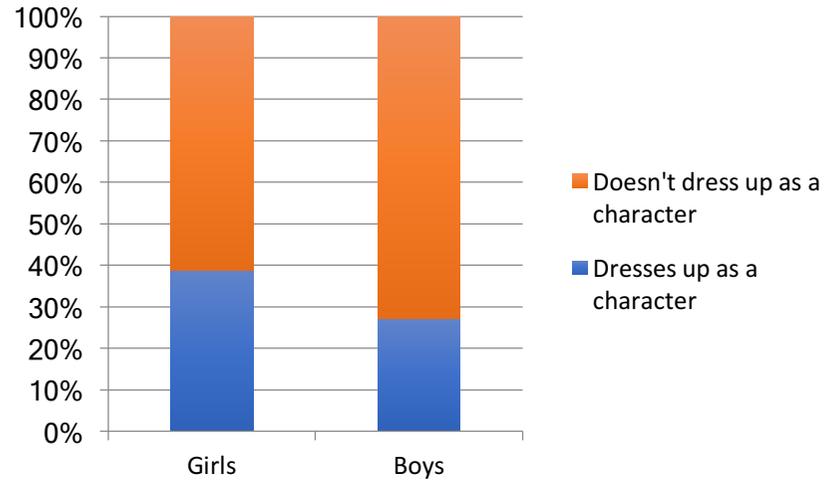
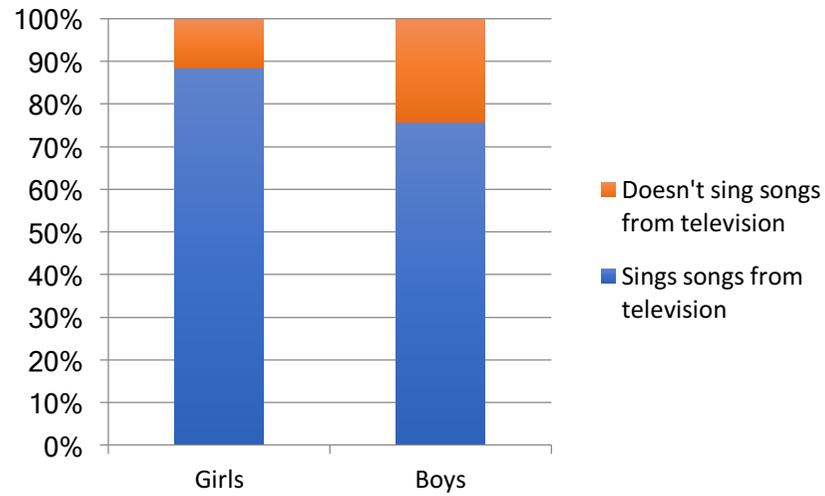


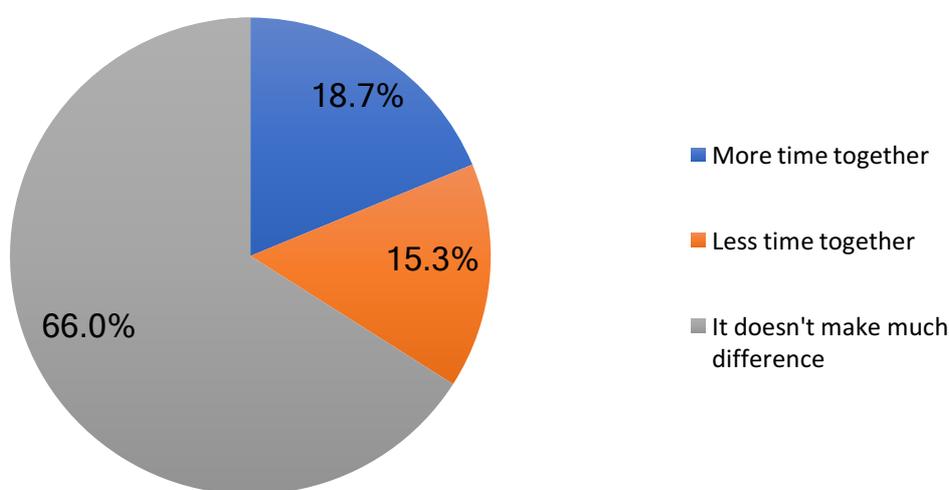
Figure 47: Sings songs from television after watching, by gender (n=1186)



4.7. The social contexts of children's engagement with TV&RM

Publications and public reporting still tend to characterise children's engagement with TV&RM as a rather solitary and potentially socially isolating pursuit (Winn, 2002; Public Health England, 2013). Parents were asked whether they felt the media in their homes caused their family to spend more time together, less time together or whether they do not make much difference one way or the other (Figure 48). Only 15.3% of parents felt that the media in their homes caused them to spend *less* time together. 18.7% felt that the media in their homes caused their families to spend *more* time together. The majority (66.0%) felt that it did not make any difference either way.

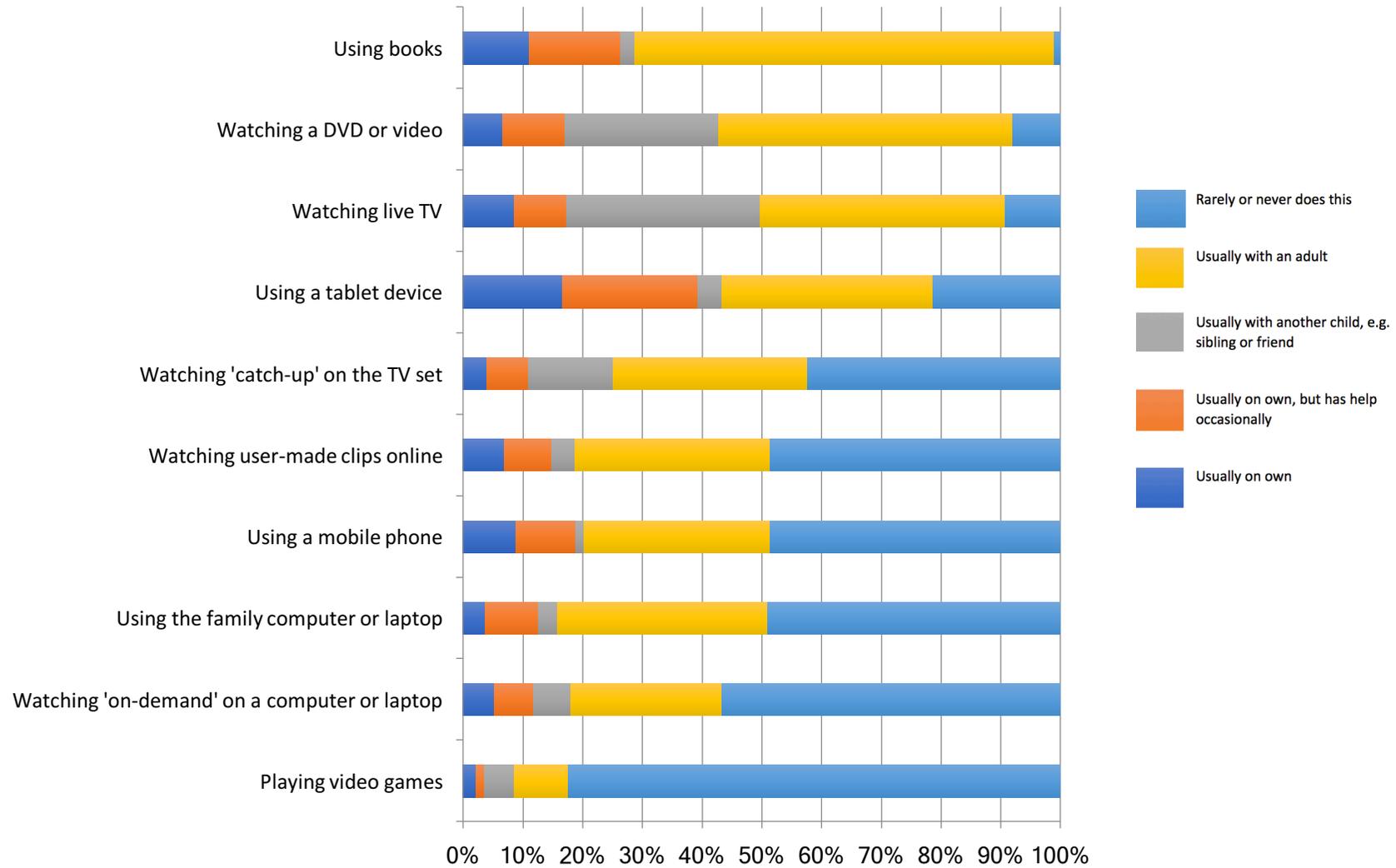
Figure 48: Do the media in family homes cause families to spend more or less time together? (n=1190)



4.7.1. Co-viewing contexts of engagement by platform

Parents were asked whom their child usually engaged in a variety of digital and non-digital platforms *with* (Figure 49). Books were by far the most likely to be used with an adult (70.3%). The digital activity most likely to be carried out with an adult was watching a video or DVD (49.2%). Indeed, watching a video or DVD emerged as a broadly sociable activity, with 25.7% saying it was something that their child was likely to do with another child (e.g. sibling or friend). Using a tablet was the activity most likely to be carried out by a child on their own (16.7%), although many parents said that their child would use a tablet with an adult (35.3%) or with occasional help from an adult (22.7%). Watching live TV (32.4%) and watching a video or DVD (25.7%) were the most likely activities to be done with another child (e.g. sibling or friend), although (again) parents were also likely to do this with a child (41.1% and 49.2% respectively).

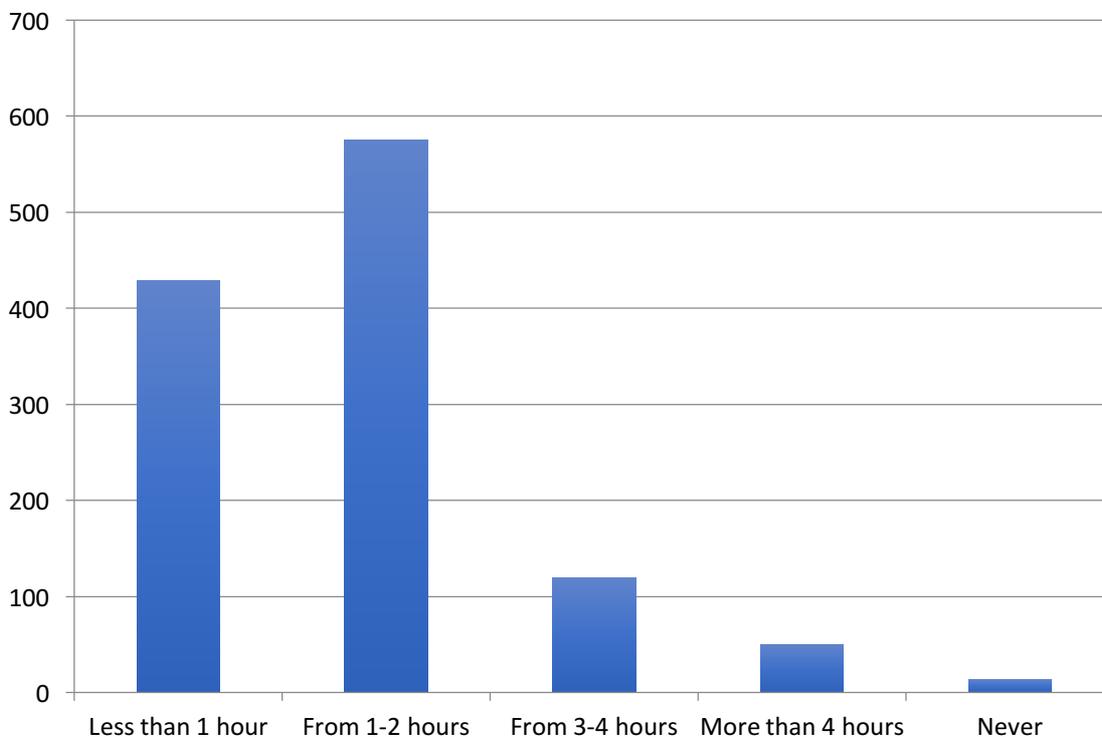
Figure 49: Co-viewing contexts by device/platform (range of n's from 1168 to 1179)



4.7.2. Parental co-viewing time: children's TV

Parents spent a significant time watching children's TV with their child. 62.7% of all parents spent an hour or more every day (Figure 50).

Figure 50: Time adults in household spend watching children's TV with child (n=1188)



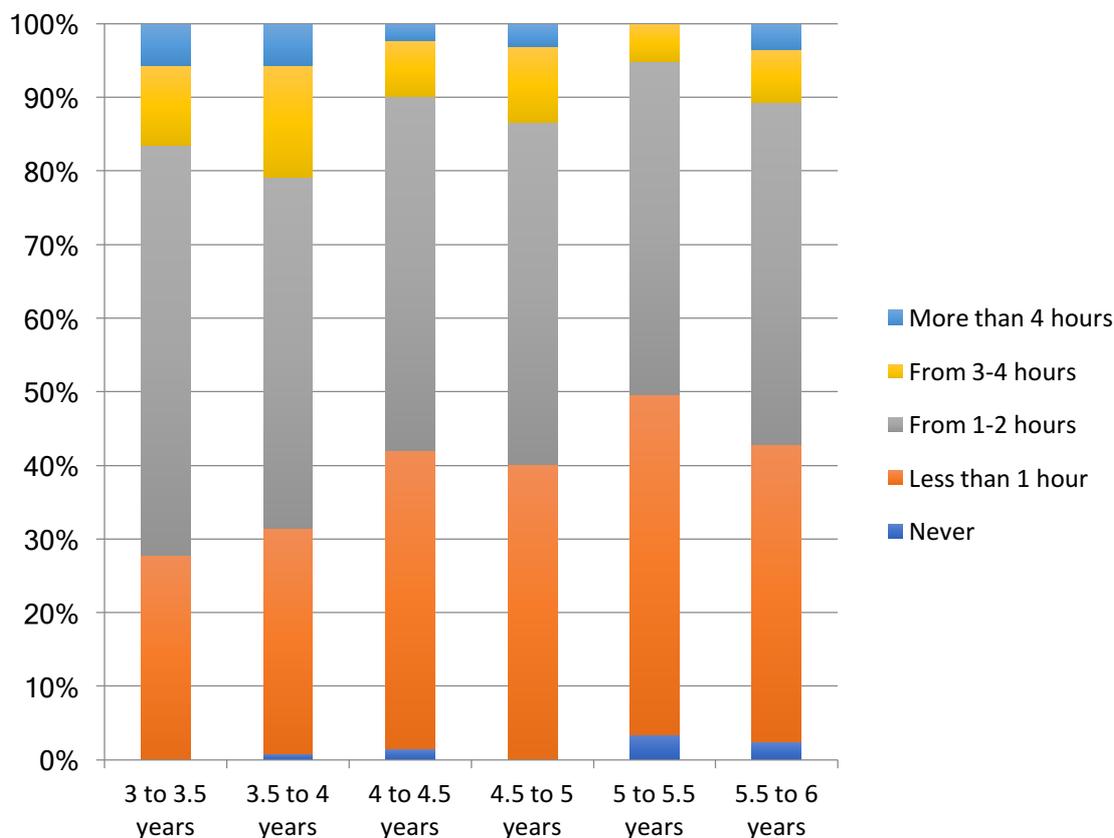
Within the sample, there were also significant differences in the amount of time adults in household spend watching children's TV with the child in relation to age and social class. Statistical analyses of activities by age suggest that parents of younger preschool children were broadly speaking *more* likely to spend a greater amount of time watching with their child. 'Professional' status parents were, broadly speaking, *less* likely to spend a greater amount of time watching with their child, which 'clerical' and 'manual' parents were *more* likely to spend a greater amount of time watching with their child. The data analysis suggests no significant relationship between a child's gender and the amount of time adults in household spend watching children's TV with that child. More detail on these factors can be found below.

Age and time adults in household spend watching children's TV with child

Parental co-viewing data were cross-tabulated by the age of the child (6-month age bands). Chi-squared tests were used to determine whether there was a significant difference between the expected frequencies and the observed frequencies in one or more categories. Where there was a significant difference, effect sizes have been calculated using Muijis (2010) as a guide for interpretation. Significant results have been reported where the effect size is modest or above (<0.3). The data analysis suggests a

significant relationship between a child's age and the amount of time adults in the household spend watching children's TV with that child (Figure 49), chi-square (n=1188) = 105.615, $p < 0.001$. Cramer's V suggests a modest effect size (0.149). A *higher* proportion than expected of parents of younger preschool children spent more time watching with their child (e.g. 55.8% of parents of 3-3.5 year olds spent 1-2 hours a day watching with their child). A *higher* proportion than expected of parents of older preschool children spent less time watching with their child (e.g. 40.5% of parents of 5.5-6 year olds less than an hour a day watching with their child).

Figure 51: Age and time adults in household spend watching children's TV with child (n=1188)

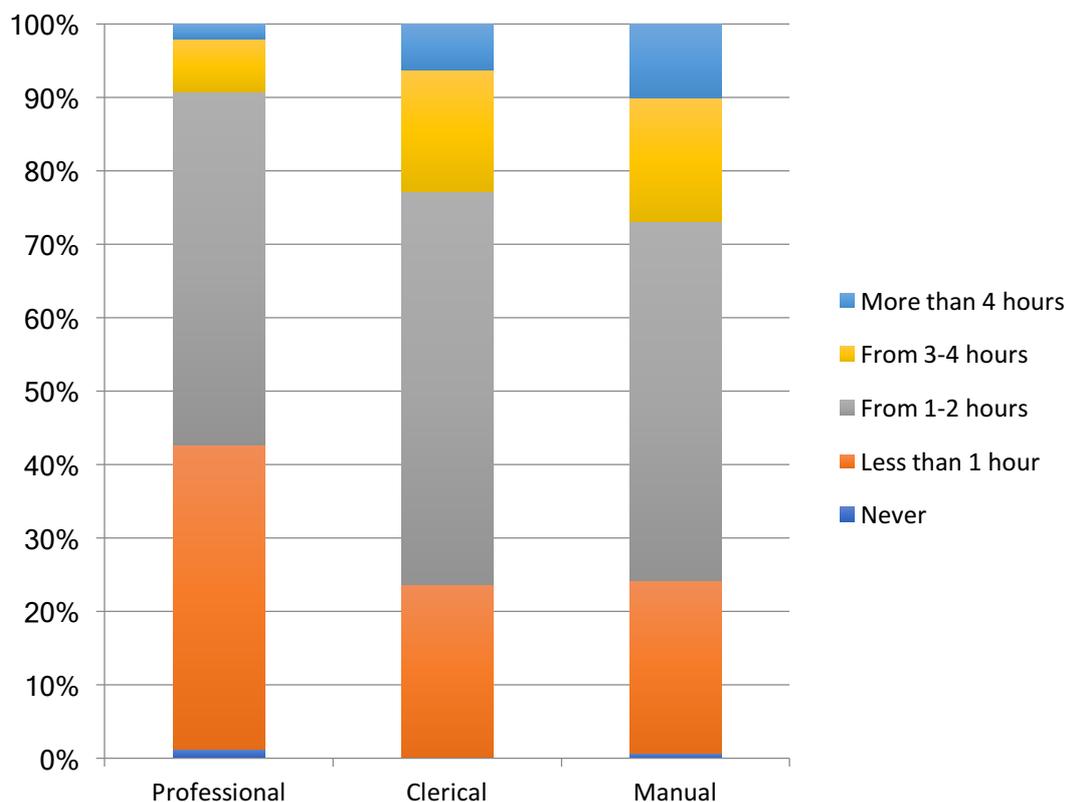


Social class and time adults in the household spend watching children's TV with child

Parental co-viewing data were cross-tabulated by the age of the child (6-month age bands). Chi-squared tests were used to determine whether there was a significant difference between the expected frequencies and the observed frequencies in one or more categories. Where there was a significant difference, effect sizes have been calculated using Muijis (2010) as a guide for interpretation. Significant results have been reported where the effect size is modest or above (<0.3). The data analysis suggests a significant relationship between the household's (highest) social class and the amount of time adults in the household spend watching children's TV with the main child (Figure 50), chi-square (n=1184) = 101.256, $p < 0.001$. Cramer's V suggests a modest effect size (0.146). A *higher* proportion than expected

of 'manual' parents said they spent 3-4 hours (16.8%) or more than 4 hours watching TV with their child (10.1%). A *higher* proportion than expected of 'clerical' parents said they spent 3-4 hours (16.5%) or more than 4 hours watching TV with their child (6.3%). Conversely, a lower proportion of than expected of 'professional' parents said they spent 3-4 hours (7.2%) or more than 4 hours watching TV with their child (2.0%).

Figure 52: Social class and time adults in household spend watching children's TV with child (n=1184)



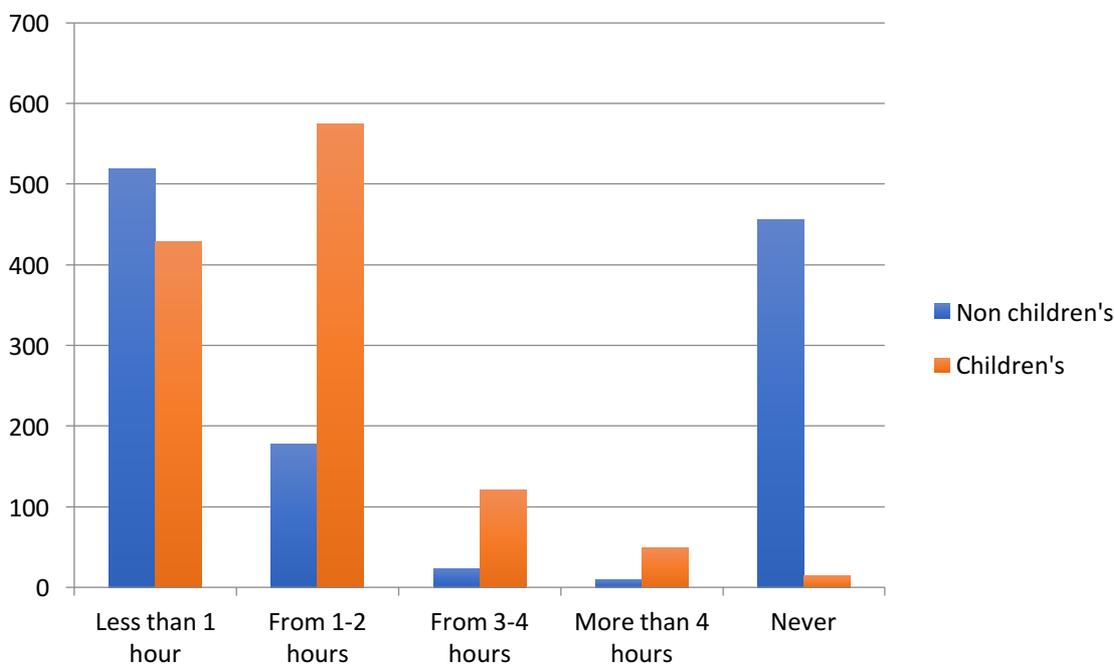
4.7.3. Parental co-viewing time: non-children's TV

Whilst parents also spent some time watching non-children's TV with their child (18.6% spent an hour or more per day), their responses suggested that they spent much more time watching children's-specific content with them (62.7% spent an hour or more per day).

Within the sample, there were also significant differences in the amount of time adults in the household spend watching non-children's TV with the child in relation to age (Figure 54) and social class (Figure 55). Parents of younger preschool children were less likely to watch non-children's TV with their child, whilst parents of older preschool children were more likely to spend a moderate amount of time watching non-children's TV with their child every day. Nuance such as this (often missing from work that treats 'preschoolers' as a coherent group) is important, since it shows how important change is in this age range. Professional parents were more likely to say that they 'never' watched non-children's TV with their child, whilst clerical and manual parents were more likely to spend a moderate amount of

time doing so. The data analysis suggests no significant relationship between a child's gender and the amount of time adults in household spend watching non-children's TV with that child. More detail on these factors can be found below.

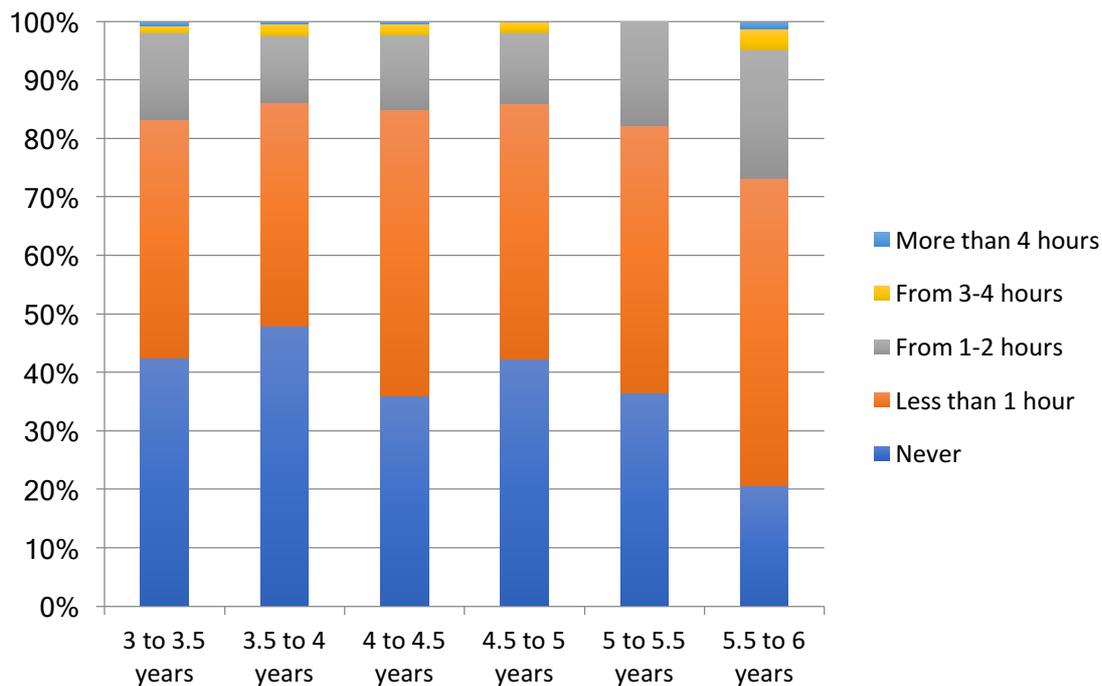
Figure 53: Time adults in household spend watching non-children's TV with child (n=1186)



Age and time adults in household spend watching non-children's TV with child

Non-children's TV viewing data were cross-tabulated by the age of the child (6-month age bands). Chi-squared tests were used to determine whether there was a significant difference between the expected frequencies and the observed frequencies in one or more categories. Where there was a significant difference, effect sizes have been calculated using Muijis (2010) as a guide for interpretation. Significant results have been reported where the effect size is modest or above (<0.3). The data analysis suggests a significant relationship between a child's age and the amount of time adults in the household spend watching non-children's TV with that child (Figure 52), chi-square (n=1186) = 154.782, $p < 0.001$. Cramer's V suggests a modest effect size (0.181). A *higher* proportion than expected of parents of younger preschool children said they *never* watched non-children's TV with their child (e.g. 42.6% of parents of 3.5-3 year olds and 47.8% of parents of 3.5-4 year olds). A *higher* proportion than expected of parents of older preschool children said they spent a moderate amount of time watching non-children's TV with their child every day (e.g. 12.1% of parents of 4.5-5 year olds; 17.8% of parents of 5-5.5 year olds; and 22.0% of 5.5-6 year olds).

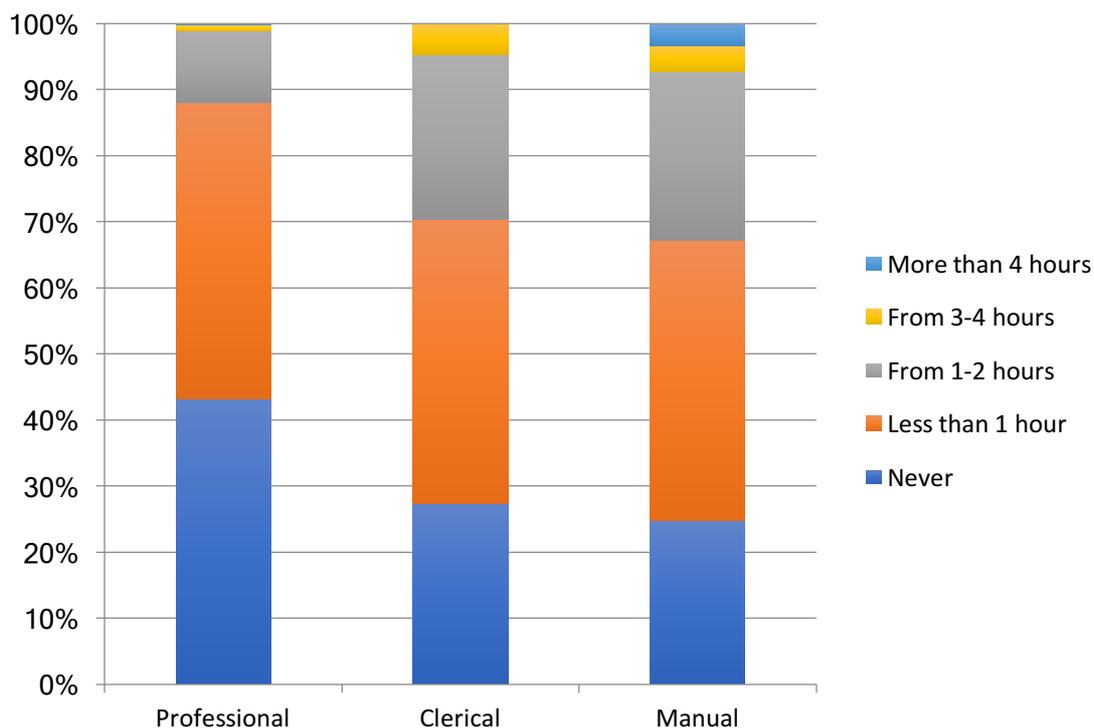
Figure 54: Age and time adults in household spend watching non-children's TV with child (n=1186)



Social class and time adults in household spend watching non-children's TV with child

Non-children's TV viewing data were cross-tabulated by the social class of the child (using highest parent occupation as a proxy measure). Chi-squared tests were used to determine whether there was a significant difference between the expected frequencies and the observed frequencies in one or more categories. Where there was a significant difference, effect sizes have been calculated using Muijjs (2010) as a guide for interpretation. Significant results have been reported where the effect size is modest or above (<0.3). The data analysis suggests a significant relationship between a child's social class and the amount of time adults in the household spend watching non-children's TV with that child (Figure 53), chi-square ($n=1182$) = 177.887, $p<0.001$. Cramer's V suggests a modest effect size (0.194). A *higher* proportion than expected of 'professional' parents said they never watched non-children's TV with their child (43.3%). A *higher* proportion than expected of 'clerical' or 'manual' parents said they spent a moderate amount of time watching non-children's TV with their child (25.0% and 25.5% respectively).

Figure 55: Social class and time adults in household spend watching non-children's TV with child (n=1182)



4.7.4. Parental co-viewing content: non-children's TV

Parents who said they spent some time watching TV not specifically targeted at children with their child were asked to name which non-children's shows they watched with their child. 114 different programmes were named, but there were some clear favourites (Table 15).

Table 15: Top 10 non-children's programmes watched by children

Programme	Number of survey responses	% of total
1. Strictly Come Dancing	125	18.8
2. News	47	6.8
3. You've Been Framed	37	5.6
4. Pointless	33	5.0
5. The X Factor	33	5.0
6. The Chase	30	4.5
7. The Simpsons	24	3.6
8. Eastenders	20	3.0
9. Emmerdale	19	2.9
10. Wildlife/ Nature Shows	18	2.7

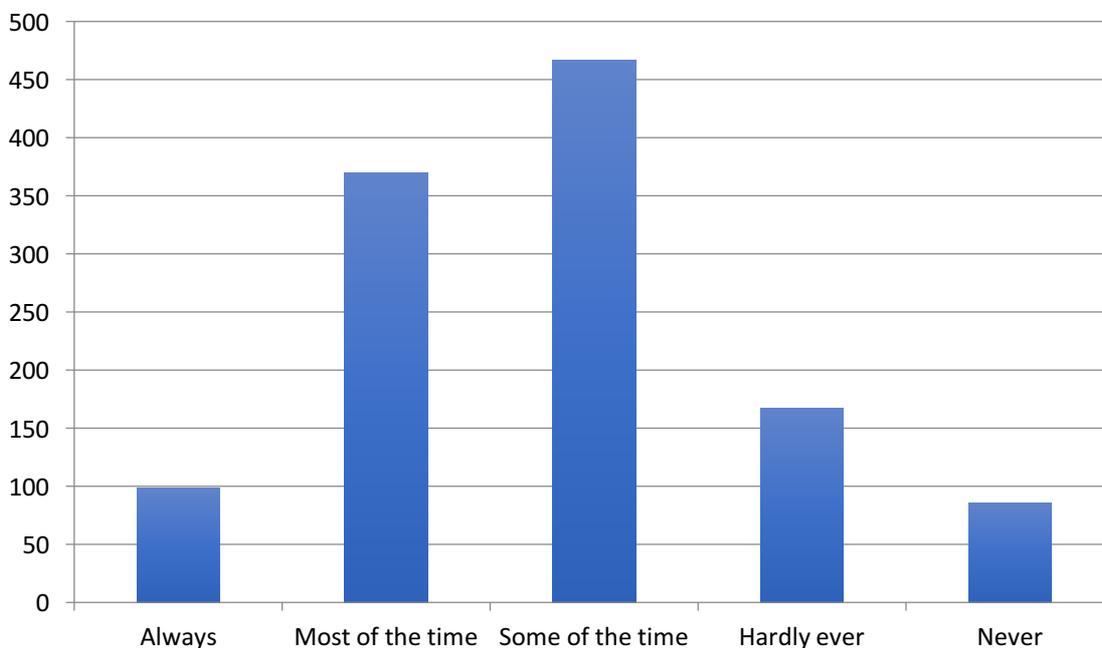
Strictly Come Dancing was by far the most popular non-children's programme parents watched with their preschoolers. However, this was quite a classed preference (Appendix U). Soaps like *Emmerdale* and *Eastenders* were the most popular choices for clerical and manual families.

4.7.5. Background television

Parents were asked how often the television was on, even if no-one was actually watching. The results suggest that 'background' television is surprisingly prevalent in many households (Figure 56). Across the sample, only 21.3% of parents said the TV was 'never' or 'hardly ever' on when no-one was watching. 39.3% said it was on 'some of the time' and 39.4% said it was on 'always' or 'most of the time'.

Understanding that the television might be on a lot of the time whilst no-one is actively watching complicates our understanding of what it means to engage with television as a young child. This notion is explored in greater detail in the qualitative case studies. Recent studies have also raised anxieties about background television, including suggestions that high levels of background television may affect the quality of play (Schmidt et al., 2008) or progress of learning (Vandewater et al., 2005). What this means again requires additional thought, and is explored in greater detail in the qualitative case studies. Statistical analysis of this data suggests that the television is more likely to be on in clerical or manual households and less likely to be on in professional households.

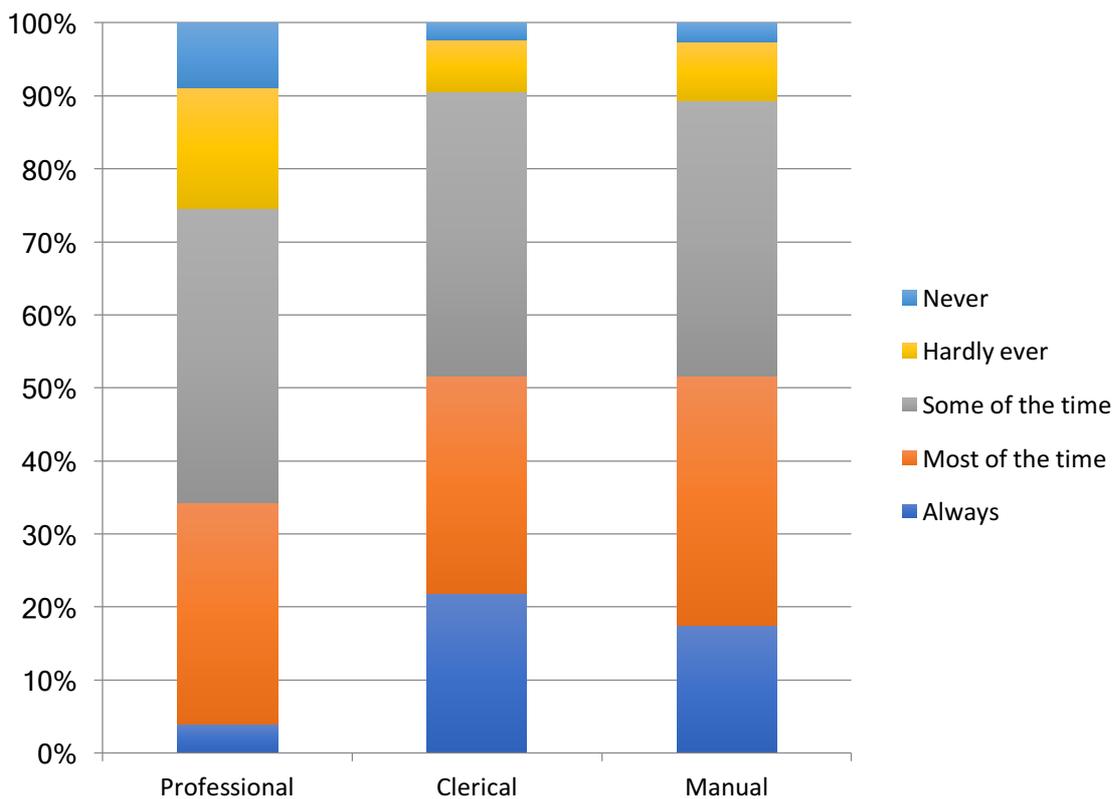
Figure 56: How often is the TV on, even if no one is watching? (n=1189)



Background TV prevalence, by social class

Background TV data were cross-tabulated by the social class of the child (using highest parent occupation as a proxy measure). Chi-squared tests were used to determine whether there was a significant difference between the expected frequencies and the observed frequencies in one or more categories. Where there was a significant difference, effect sizes have been calculated using Muijjs (2010) as a guide for interpretation. Significant results have been reported where the effect size is modest or above (<0.3). The data analysis suggests a significant relationship between a child's social class and the amount of time the television is on while no-one is watching (Figure 55), chi-square ($n=1185$) = 104.089, $p<0.001$. Cramer's V suggests a modest effect size (0.148). A *higher* proportion than expected of manual and clerical parents said the TV was on 'always' even if no-one was watching (17.4% and 21.9% respectively). Meanwhile, a *higher* proportion than expected of professional parents said the TV was on 'never' on if no-one was watching (8.9%).

Figure 57: Background television prevalence, by social class (n=1185)



4.8. Parent perceptions and attitudes to TV&RM

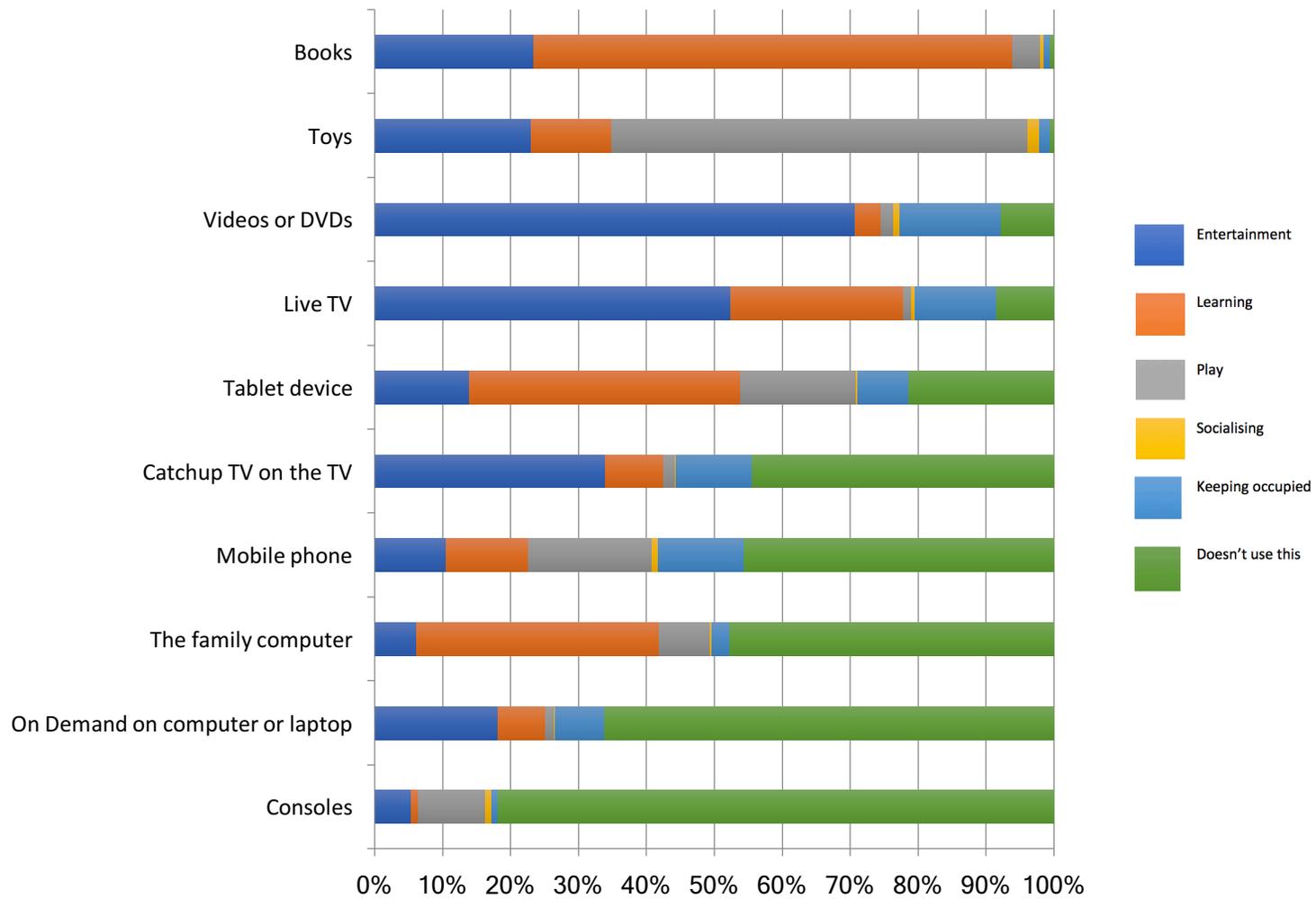
To understand parent perceptions and attitudes towards a range of different media and non-media activities and devices, parents were asked to identify what they encourage their child to use the activities or devices for (Figure 56). Consistent with some of the other findings, several activities/platforms emerged as generally unpopular for preschoolers, with parents saying that their child 'doesn't use this' (81.8% did not use consoles; 66.1% did not use On Demand on the computer or laptop; 47.7% did not use the family computer or laptop; 45.6% did not use a mobile phone; 44.5% did not use Catch-up TV on the TV set).

Perhaps unsurprisingly, books were the most likely item to be perceived as 'for learning' (70.5%). The digital device most commonly described as 'for learning' was the tablet (40.0%). The family computer or laptop (35.7%) and live TV (25.5%) were also perceived as 'for learning' to some extent. Watching videos or DVDs was the most likely activity to be described as 'for entertainment' (70.8%), although watching live TV was also frequently described as 'for entertainment' (52.3%). Toys were primarily perceived as for 'play' (61.3%) and 'entertainment' (23.0%). The activity most likely to be perceived as for 'keeping occupied' was watching videos or DVDs.

Summary

This thesis explores preschool children's intra-actions and social practices (Wohlwend, 2009) with TV&RM (TV&RM) at home. The quantitative data analysed and presented in this chapter has particularly contributed to addressing research question i: 'what are the television-viewing patterns of 3-6 year-olds, including transitions in choices and activities?'. It has also contributed to research questions ii-iv, telling us something about how much children engage with different activities and devices, the social contexts of those engagements and the difference made by social class, gender and age. The next chapter continues to address research questions ii-iv, presenting much more in depth, qualitative case studies of just six of the 1,194 families who originally filled in the questionnaire.

Figure 58: Parent perceptions of platform purpose (n=1189)



CHAPTER 5. QUALITATIVE ANALYSIS, FINDINGS AND INTERPRETATION

In the last chapter, I presented analysis, findings and some interpretation of the parent survey data, some of which has already been related to the qualitative data. This chapter presents the analysis of the qualitative data and some findings, which are interpreted in relation to the quantitative findings and some wider literature. We will return to both quantitative and qualitative data in Chapter 6, where findings are interpreted in tandem. As described in the methodology, combined interpretation is employed as part of a process of crystallisation in this multi-method study.

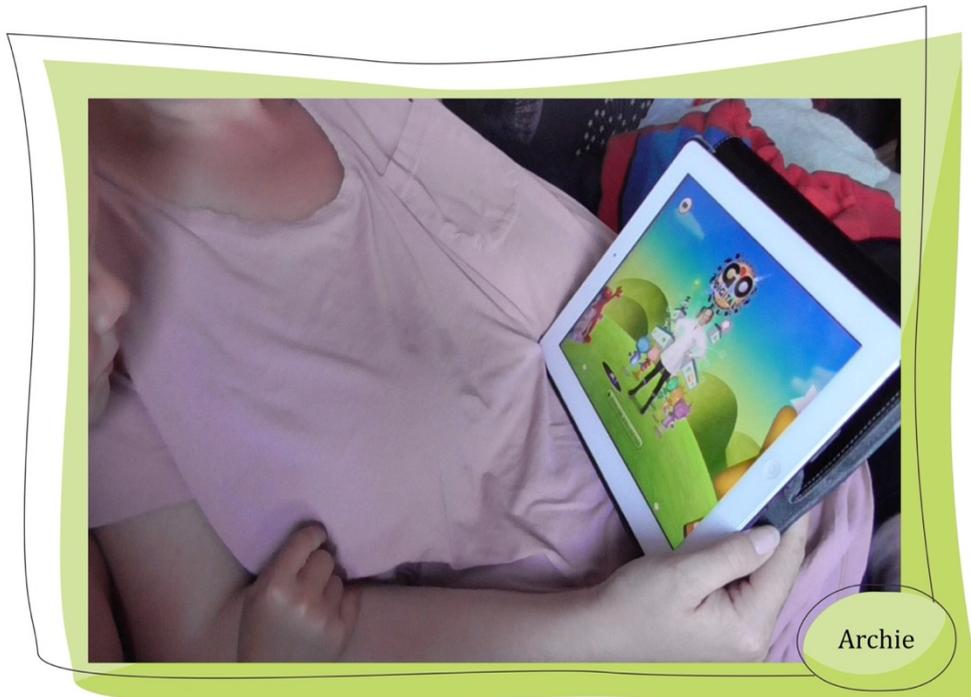
Each case study follows the same format. A brief pen portrait describes the family and the media environment of the home. Members' generalizations (Scollon & Scollon, 2004) are then summarised. These represent what participants in the nexus of practice say they do (normatively). In addition to the video data and coding of my data, I made fieldnotes, which enable me to provide what Scollon & Scollon (2004) describe as 'neutral' observations to compare with members' generalizations. It is, of course, important to acknowledge my own inevitable inability to be completely neutral in such observations. The child's and family's key practices are then summarised and examples of events at the nexus of key practices given. Finally, detailed micro-analyses of two moments from each case study are presented. These moments have been selected because they represent dense intersections of valued and expected practices (Wohlwend, 2009), wherein the child's intra-actions with digital devices or media texts intersected or became complicated by the historical trajectories of other bodies, objects or discourses.

Each of the families demonstrated different practices in relation to TV&RM. Some of the broad differences between the families' practices are noted in this chapter, especially those differences which may relate to social class. Figure 16 presents an overarching view of the practices identified across all six families. This framework came about through the refinement of codes generated in inductive analysis. They are not intended to be a definitive account of all children's practices with TV&RM. However, they provide a framework that represents the practices of the families in the six case studies.

Table 16: Overarching practices

Actor	Practice	Definitions
Child	Copying	<ol style="list-style-type: none"> 1. Directly copying media 2. Copying other people's media-related choices or behaviour
Child	Creating	<ol style="list-style-type: none"> 1. Painting, photographing or drawing in digital contexts 2. Painting, photographing or drawing in non-digital contexts, related to media interests
Child	Emoting	<ol style="list-style-type: none"> 1. Emotionally connecting with others via a media text or device 2. Using media as a platform for exploring or expressing emotion
Child	Exploring	<ol style="list-style-type: none"> 1. Exploring new devices 2. Exploring new texts or concepts 3. Mastering new operational skills 4. Exploring identity in relation to media 5. Exploring personal control in relation to media
Child	Extending	<ol style="list-style-type: none"> 1. Engaging in new, non-media activities, based on existing media interests 2. Engaging in new media activities, based on existing media or non-media interests
Child	Glancing	<ol style="list-style-type: none"> 1. Glancing at the screen sometimes
Child	Multi-tasking	<ol style="list-style-type: none"> 1. Engaging in two or more tasks at the same time, at least one of which involves a media text or device
Child	Performing knowledge	<ol style="list-style-type: none"> 1. Performing operational knowledge of media platforms 2. Performing knowledge related to media 3. Using media platforms to perform knowledge
Child	Playing	<ol style="list-style-type: none"> 1. Playing with digital toys and games 2. Playing with non-digital toys and games, in relation to media texts or platforms
Child	Role-playing	<ol style="list-style-type: none"> 1. Role-playing based on specific media content 2. Physical dressing up 3. Role-play related to personal interest, entangles with media interest
Child	Synthesising	<ol style="list-style-type: none"> 1. Play drawing on media alongside something else 2. Play repurposing media for something else
Child	Watching	<ol style="list-style-type: none"> 1. Watching the screen
Adult or peer	Extending	<ol style="list-style-type: none"> 1. Drawing on a child's existing media interests to engage them in new, non-media activities 2. Drawing on a child's existing media or non-media interests to engage them in new, media activities
Adult or peer	Facilitating	<ol style="list-style-type: none"> 1. Facilitating the continuation or deepening of a child's existing engagement with a media text or device (materially or otherwise) 2. Facilitating a child's (new) engagement with a media text or device on their request (materially or otherwise)
Adult or peer	Initiating	<ol style="list-style-type: none"> 1. Initiating a child's (new) engagement with a media text or device
Adult or peer	Relating	<ol style="list-style-type: none"> 1. Drawing a child's attention to a connection between their media interests and something else (digital or non-digital) 2. Drawing a child's attention to a connection between their non-media interests and something digital
Adult or peer	Scaffolding	<ol style="list-style-type: none"> 1. Supporting a child to achieve a digital competency currently beyond their current solo abilities 2. Supporting a child to achieve a non-digital competency currently beyond their current solo abilities, in relation to a media text or platform

5.1. Archie



5.1.1. A pen portrait of Archie and his family

Demographics: Archie is a White British boy aged 3 years and 8 months when I first visit in March 2015. He has six siblings: Liam (22); Jenna (20); Nathan (16); Ethan (12); Caleb (9); and Kyle (5). Archie lives in Sheffield with his mother, Beth, and father, Ryan. When I begin my research, all the siblings apart from Nathan still live with Archie and his parents, although Jenna will later move into her own apartment. Jenna is pregnant when I originally visit and when I return for Visit 2, Archie's new niece, baby Ruby, has arrived. Archie has lived for most of his life in LSOA Sheffield 075A (Manor Castle Ward). In the latest Index of Multiple Deprivation (2015), this area was ranked 2701 out of 32,844 in England, where 1 was the most deprived and 32,844 the least, making it in the top 10% of most deprived areas in the UK (IMD Decile 1). Beth is a full-time mum and categorised her work as such on the modified Hope-Goldthorpe (1981) scale, and identified Ryan's as 'skilled manual'.

Family history and culture: Archie lives with, and near, many extended family members. His paternal grandmother lives just over the road and his paternal aunt lives a few doors down, whilst his maternal grandmother lives down the road and mum's cousin lives next door. The family have been in their current house for 7 years, living close by in Sheffield prior to this. Beth is a full-time mum and spends a lot of time at home looking after her children and grandchildren. The house is always relatively busy when I visit, whether with those who live there or the whole extended family. At the beginning of my

research, Archie has already started going to nursery for three days a week, but is home with his mum all day Tuesday and Thursday. At the time of my fourth visit, Archie has had his leaving assembly from nursery and he starts school between Visits 5 and 6. Archie doesn't really have friends outside the family, but he spends a considerable amount of time with other young children in the extended family. Archie's family tree (Figure 59) illustrates how many near-age boys Archie has in his close family, in age order: his brother, Kyle (5), his nephew, Mason (5), his step-nephew, Robbie (4) and nephews, Logan (3) and Tyler (2). He is also fond of Izzy (Beth's cousin's daughter's daughter, a similar age to Archie). The boys are regular companions to Archie. Beth describes Archie as shy, and Kyle (along with her other children), as the 'complete opposite':

They've always been right stocky and chunky kids and dark hair and he's skinny and light and shy and they're more boisterous than you've ever known!

(Beth, Transcript, Visit 1).

She does, however, indicate that the older boys have an influence on Archie, something which is explored below.

Media environment of the home and other spaces: Archie's house is a media rich environment. The family spend time in front of (and around) the main TV set in the living room. The boys will come down in the morning and put it on, usually leaving it on until bedtime. Ryan will often join them, as well as Beth, although Beth will often be pottering around doing other things (housework, making novelty soaps, which she does as a small home business). The TV is on in the main room most of this time, even if not all family members are watching all the time. Archie shares a bedroom with Kyle and Caleb and the boys have their own Virgin-subscription TV set in their room, as well as an *X-Box*. The *X-Box* in the bedroom tends to be used by Kyle and/or Caleb a lot of the time, so Beth says Archie prefers to go into her bedroom to watch television if he wants to do that upstairs. Beth says that she watches very little television now, as the children always have control of the main TV set, although she does like *Eastenders* and *Holby City* and enjoys spending time using her iPad. Beth tends to make sure the boys are treated equally, so the remaining boys also have a TV and *X-Box* in their shared bedroom. Each of the boys has a *Kindle* with access to Netflix. Beth originally bought *Kindles* for Nathan, Ethan, Caleb and Kyle and an *Innotab* for Archie at the same time, however Beth relates that Archie wanted the same as the others as soon as he saw the *Kindles*, so Beth gave him hers, which she eventually replaced with an iPad for herself. More detail on the media environment at home and in other spaces is given below (Table 17).

Figure 59: Archie's family tree

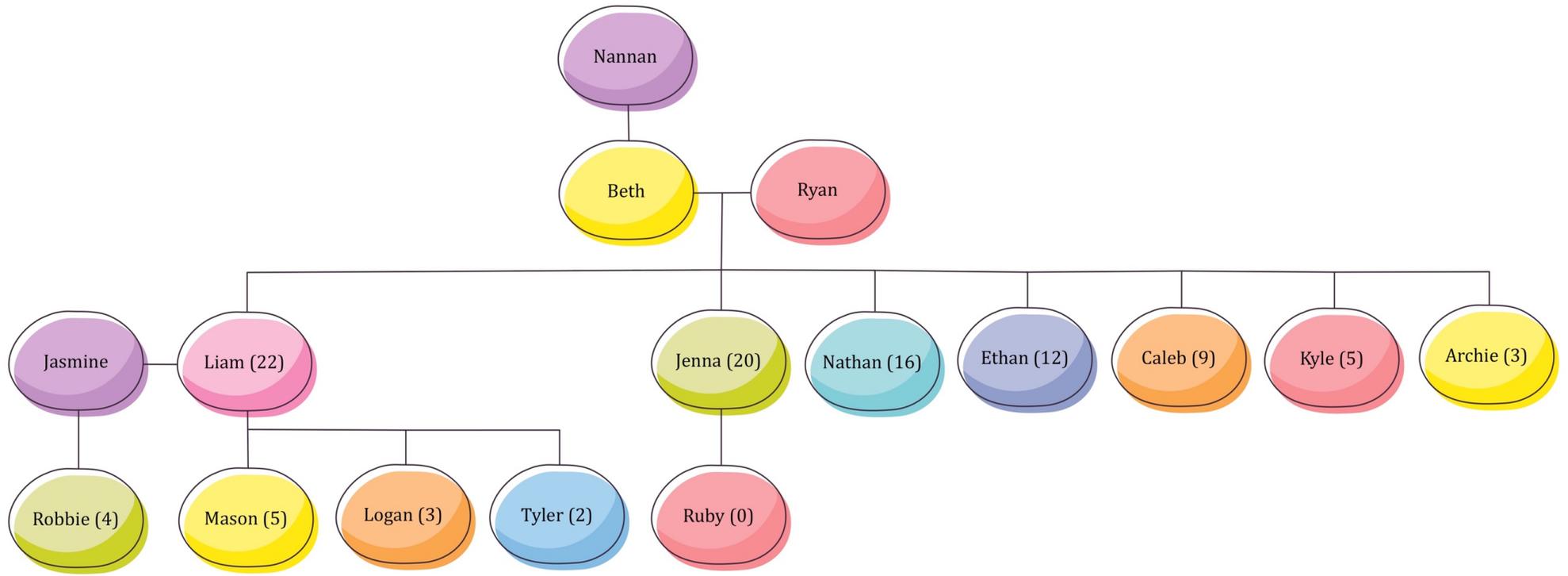


Table 17: Things that 'mattered' in Archie's case study

Bodies		Spaces
Archie	Logan	Archie's bedroom (shared with Kyle and Caleb)
Caleb	Mason	Back garden
Cousin Jackie	Mum	Home
Dad	Mum's mum	Liam and Jasmine's house
Ethan	Nathan	Living room
Fiona (Researcher)	Robbie	Mum's bedroom
Izzy	Ruby	Nathan's house
Jasmine	Spyro the Bearded Dragon	Nursery
Jenna	Tyler	Playcentre
Kyle		Robbie's bedroom
Liam		School

Digital objects and texts		
Alphablocks	Fiona's Kiddizoom digital camera	Mum's Smartphone
Angry Birds app (Kindle)	Fiona's video camera	Pyramid Solitaire
Archie's Innotab 3s	Go Diego Go	Robot Dog
Archie's Kiddizoom digital camera	Goat Simulator	Rugrats the Movie
Archie's Kindle	Henry Hugglemonster	Scooby Doo
Ben and Holly	Jelly Smash	Sherriff Callie's Wild West
Bop It Game	Lego Ninjago	Sofia the First
Bubble Guppies	Main TV	Sonic the Hedgehog
CBeebies Playtime	Mickey Mouse Clubhouse	Spiderman
CBeebies Storytime	Mickey Mouse Clubhouse (game)	Spiderman (game)
Cleaning teddy game	Miles from Tomorrowland	Subway Surfer
Doc McStuffins	Minecraft	Team UmiZoomi
Dora the Explorer	Minecraft Videos	Temple Run
Fiona's dictaphone	Mr. Tumble	Wild Kratts
Fiona's iPad	Mum's bedroom TV	X-Box

Non-digital things		
Balloons	Penguin Pile-Up (game)	Spiderman slippers
Boom bats and balls	Racing car roads carpet	Spiderman socks
McDonald's	Racing car toy	Spiderman wallpaper
PACT charity fundraiser	Spiderman bags	Washing line
Padding pool	Spiderman costumes	

5.1.2. Members' generalizations and researcher observations about TV&RM

My fieldwork with Archie's family was diverse, ranging from many sit-down chats with Beth (and sometimes her husband, Ryan, and/or daughter, Jenna) to running around the house or garden with Archie and any number of his young family companions. Most of these generalizations come from Beth's descriptions of her own and her family's actions with TV&RM at home, although Jenna was vocal (and knowledgeable) with regards to Archie's interests when she was there. Ryan (Archie's dad) would also chip in with pieces of information from time to time. Beth often tried to encourage Archie to contribute verbally, but his voice in much of the verbal transcriptions is joined immediately by several other children, making it difficult to discern coherent dialogue from Archie. Much more can be gleaned, however, from the video data.

Family co-engagement and multi-device layering

Beth asserts that the main TV is on in the living room pretty much all through the day:

Oh yeah, telly goes on soon as they're up in the morning, and their programmes is on 'til normally about 7 o'clock and then they go upstairs to their own tellies [...] If I touch that remote, what, a dozen times in how many years, I'd be lucky.

(Beth, Transcript, Visit 1).

Beth describes Archie and the other children using multiple devices at a time, even watching something on the *Kindle* and main TV simultaneously. Beth also implies that digital devices are deployed as a form of behavioural regulation:

Fiona: (laughs) someone's calmed down.

Beth: Oh, yeah, that's all you have to do, give 'em pair o' headphones and a Kindle!

(Transcript, Visit 2).

If presented in isolation, these statements might lead to an interpretation of media use in Archie's house as socially isolating. However, I observe a lot of shared family time in the living room wherein members of the family are engaging in solo and shared media practices in the same space, often fluctuating between solo and shared. In Visit 2, for example, Beth, Archie and I sit in the living room and the main TV set is on, but several other children and adults are in and out of the living room at the same time. At one point during my visit, Ethan and Kyle are sharing a *Kindle*, watching *YouTube* tutorial videos created by *Minecraft* fans. Beth herself refers to this in our first interview, explaining that she's rarely off her tablet, even when watching television. She uses it for playing app games as well as other parts of her everyday life, for example searching for new wallpaper online. She suggests that Archie has also adopted this practice, enjoying watching media (and engaging in other activities) on multiple platforms at the same time.

Some condemn ‘background television’, suggesting that it impairs the quality of parent-child interactions (Kirkorian et al., 2009) and concurrent toy play (Schmidt et al., 2008). Many also express concerns about multitasking across multiple devices suggesting that it may interfere with knowledge acquisition (Lee, Lin & Robertson, 2012) or impair executive functioning in later life (Baumgartner et al., 2014). The reality of family multi-device layering, however, is more complex. Arguably, many studies miss the details of the interactions that take place concurrently to such viewing. One example in Archie’s family occurs in relation to *Minecraft*. As Beth and Jenna report (and I also observe), both Kyle and Caleb frequently watch *YouTube* tutorials of *Minecraft* on their *Kindles* whilst playing *Minecraft* on their *X-Boxes*. In doing so, they extend their activity beyond single platform explorations, pushing their own levels of competence by engaging with more competent others through the *YouTube* platform (e.g. V.2). Beth’s comments also appear to confirm the suggestion that parents use media to occupy children whilst they are busy or to calm them down (Kabali et al., 2015). However, both the discourses of family members and my observations of the family contest the notion that this is the only function of the device. Firstly, members of Archie’s family demonstrate a good deal of shared knowledge of each other’s media (and other) tastes and interests:

Fiona: *And is this...*

Beth: *Bo on the Go.*

Fiona: *Is this one that Archie’s put on?*

Beth: *This is what he’s put on, I’ve not seen this one, this one’s a new’en.*

Fiona: *Yeah?*

Ethan: *I have, I’ve seen it loads of times!*

(Transcript, Visit 2).

The style of whole family co-engagement evident in Archie’s family complicates the discourse of the ‘electronic babysitter’ popularised by writers such as Palmer (2006). The interactions in Archie’s family are not the school-like, adult-child interactions witnessed in Rosie’s family. However, exchanges such as this expose a depth of shared family knowledge, suggestive of long histories of ongoing and shifting co- and solo- media engagement amongst members of Archie’s family. It is also true that solo, multi-device engagement can represent quite sophisticated self-directed learning in Archie’s family. As the example of Kyle and Caleb watching *YouTube* tutorials of *Minecraft* on their *Kindles* whilst playing *Minecraft* on their *X-Boxes* suggests, the boys are engaging with a more competent ‘other’ via *YouTube* to increase their abilities in *Minecraft* as an *X-Box* game.

Beth perceives Archie’s engagement as educational and interactive

Beth suggests that the kids are ‘in charge’ of choosing what’s on TV. She explains that Archie is often content with the *Disney Junior* channel, and will say, ‘I don’t like this one’ in relation to a particular show

if he ever wants it to be changed. She explains that Archie gets to choose everything on Tuesdays and Thursdays, when he's home all day. Archie has a strong level of control over his own media choices. He knows how to operate Netflix on his *Kindle* and can turn the main TV on and off. If he is dissatisfied with the content on the main TV downstairs and cannot make his choices heard, he will simply switch platform:

So basically, if something's on that he doesn't want to watch down here, he'll either go up to his room and take his Kindle or watch it upstairs.

(Beth, Visit 1).

As in the case of Olivia (5.3.), Beth says that Archie takes hundreds of photos of nothing on his tablet (V2). Like Niyat (5.2.), he spends time viewing photos his mum has taken. Beth stresses that Archie is choosing things that are 'educational'. She gives examples, including *Team UmiZoomi* and a game that involves 'counting chicks':

Beth: *Team UmiZoomi.*

Fiona: *Is that a Disney thing?*

Beth: *No, it's, er, educational thing, actually, Team UmiZoomi.*

(Transcript, Visit 1).

Although Beth does not explicitly expand on what she feels it means for an app or TV show to be 'educational', she does observe and comment on the fact that Archie favours TV shows that are 'interactive', including *Dora the Explorer*, *Team UmiZoomie* and *Bubble Guppies* in this. In the case of *Dora the Explorer*, she explains that the format of the show creates a sense of interactivity through its formal features, which simulate a computer: 'When you've got *Dora* on television, it's like having it on a computer, do you know, when you move mouse [...] it's, your cursor moves [...] and it'll say, like, which one and it'll put cursor o'er it, and then, it like sorta clicks it' (Beth, Transcript, Visit 2). She also describes his active engagement with these shows in terms of verbal response:

Beth: *He'll interact wi'em.*

Fiona: *What does he do?*

Beth: *He'll answer t'questions.*

Fiona: *Yeah?*

Beth: *And tell 'em which things they need to use.*

(Transcript, Visit 2).

Discussions about what might constitute 'educational' media engagement are complex and unresolved (c.f. Scott, 2018). Beth's reflections on the interactivity of TV shows like *Dora* tap into an important academic debate. Whilst pediatric scholars have called for guidance on media use for young children to be revised, pointing to the valuable interactivity of media such as touchscreen devices, there is still a prevailing sense that television is simply not interactive (e.g. Christakis, 2014). Such a model does not account for the practices Beth describes.

Shared media habitus and its provenance

During Visit 2, Beth describes the manifestation of *Spider-man* as a shared cultural resource in the family, especially amongst the younger boys. It starts when Beth asks Archie to tell me 'his favourite'. This is one of the first times Archie has really spoken to me and, I suspect, a strategy on Beth's part to get him used to me by steering the conversation to something exciting in Archie's eyes:

Beth: *Who's your favourite? Tell Fiona who's your favourite. Shall I remind you?*

Archie: *'erderman'.*

Beth: *Spider-man.*

Fiona: *Spider-man?*

(Noise in the background).

Beth: *What love?*

Kyle: *I saw the character of him.*

Fiona: *You've got the character of Spider-man?*

Beth: *Can you sort your tablets out, please.*

Robbie: *I saw him in play centre.*

Fiona: *You saw him in the play centre?*

Robbie: *Yeah.*

Fiona: *So, it was the real Spider-man, was it?*

Robbie: *No. Dressed up!*

(Transcript, Visit 2).

This 'piling on' of voices is typical of my attempts to directly converse with Archie. The moment also speaks to the familiarity the boys have with each other's tastes; tastes that are, indeed, difficult to pick apart or attribute simply to one individual. In Archie's family, *Spider-man* is one of several shared passions, alongside *Powerpuff Girls* and *Minecraft*. Though less actively involved, adults (including Beth, but often Ryan, Jenna and Jasmine too) are also able to share knowledge. This is one example of a kind of shared family media habitus (Lealand and Zanker, 2008) in which various members of the family participate meaningfully, though in different ways.

When I probe deeper about where the *Spider-man* 'thing' comes from, Beth narrates its provenance in an unexpected and interesting way:

Beth: *They're all Spider-man mad.*

Fiona: *So, they're all the same, yeah?*

Beth: *They're all Spider-man mad.*

Fiona: *Yeah. Do you know who started the Spider-man thing?*

Beth: *Er, well it were 'im what start-no, our Robbie, our Robbie started the Spider-man thing.*

[...]

Fiona: *And do you think that he got everybody else into it?*

Beth: *I think so, it were like our Rob had got it in his bedroom and things like that, it were like, once they saw that, it were like 'ahhh, Spider-man'...*

Fiona: *Yeah.*

Beth: *... so now we've got Spider-man costumes and Spider-man bags...*

Fiona: *I noticed!*

Beth: *... Spider-man slippers, and-*

Fiona: *Yeah (laughs) so when you say he had it in his bedroom, was he watching it on the telly in his bedroom?*

Beth: *No, he had it, he had wallpaper, he used to watch Spider-man, but he had wallpaper and things like that.*

[...]

Fiona: *So do they, do they also watch it now? Or is...*

Beth: *Yeah, they'll all watch it.*

Fiona: *Yeah, yeah.*

[...]

Fiona: *Do you think that...*

Beth: *They'll all play it a lot an' all.*

Fiona: *What, like on the videogame?*

Beth: *They play it on videogame but they also play it in, in...*

Fiona: *In the house?*

Beth: *... physical... pretend to be Spider-man and...*

Fiona: *Awww, I'd love to see that! (laughs).*

Beth: *(sighs).*

Fiona: *(laughs) um, so did the, did the, kind of the wallpaper and all of that, did that spark the interest in watching the show?*

Beth: *I think so.*

Fiona: *Or did they watch the show before?*

Beth: *I think they'd watched it before, but it weren't un- I don't think they actually took it in 'til they like saw wallpaper and thought like, oh, it's real this...*

Fiona: *Yeah.*

Beth: *... d'you know what I mean, I think they thought then it were like a real thing...*

Fiona: *Yeah.*

Beth: *Rather than just summat on't telly.*

(Transcript, Visit 2).

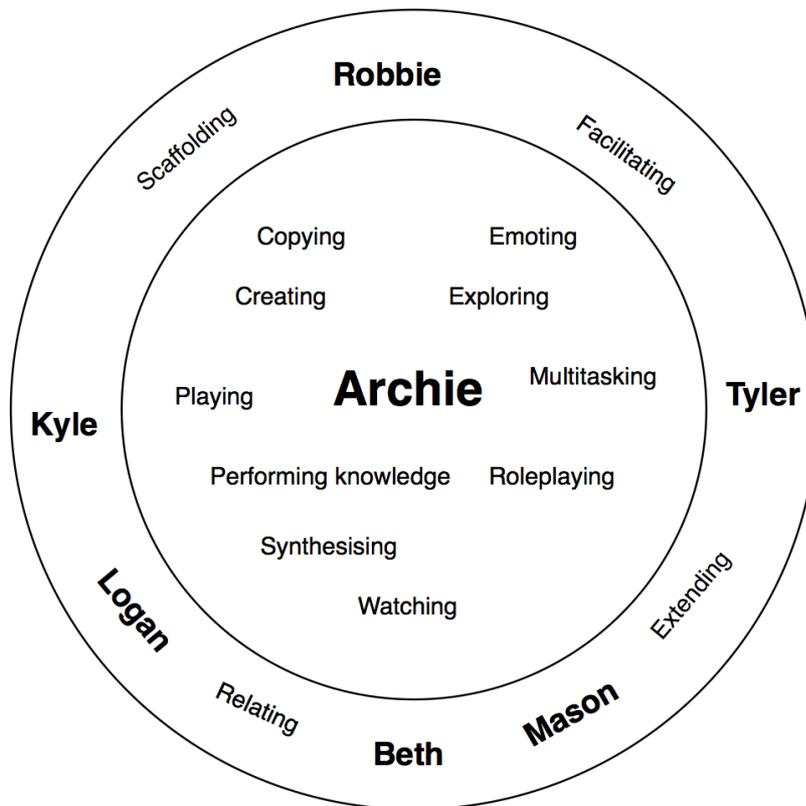
Beth is attributing the provenance of the *Spider-man* 'thing' both to a person (Robbie) and a set of physical objects (rather than a media text), most prominently, the *Spider-man* wallpaper. Previous researchers have discussed trans- or poly- media intertextuality, including their relationships with media texts in their material manifestations (Carrington, 2012; Kinder, 1991). Marsh (2004) refers to the 'narrative web' constructed when children are engaged with texts and artifacts related to their media and popular cultural interests – with this web providing a 'narrativised semiotic system' (p. 37). What is particularly interesting here is the 'by proxy' nature of discovering media texts via objects. The same is seen in the case of Rosie discovering *Frozen*, *Toy Story* and *Minions* through friends at nursery and owning related objects before engaging with the film or television versions. It is impossible to know exactly what Beth means when she asserts that the boys' excitement with the discovery of material objects relating to *Spider-man* relates to how they afford the phenomenon of *Spider-man* more status as a 'real thing' (rather than just 'something on the telly'). What was palpable to me, as an onlooker, is that physical play is central to the boys' ways of exhibiting and sharing their knowledge (including their knowledge of media texts). This idea is explored in greater depth in 5.1.5. Given their shared practices, it is no surprise to me that physical objects such as the *Spider-man* wallpaper can wield a kind of seminal influence on the boys.

Beth's discourse on 'playing it' (*Spider-man*) also fascinates me. As with other children in my study (e.g. Emma), the designation of 'playing' a media text is used interchangeably for digital play (e.g. on a videogame) and physical play (e.g. playing *Spider-man* with their bodies (Thiel, 2015)). It seems, as someone who spends a lot of time right in the middle of the play, that Beth is very much in tune with this. When I ask Archie whether the boys play *Spider-man* together earlier in the discussion, Beth chips in with a comment about the 'washing line' (Transcript, Visit 2). This thread is lost in the hubbub, but I later realise it was a small insight into the specifics of a shared and oft performed physical '*Spider-man*' game engaged in by the boys, outside in the garden. The way Archie's physical mastery of his home environment is developing in tandem (and intertwined) with his mastery of *Spider-man* the media text is reminiscent of Mackey's (2010) assertion that some of the same mapping and schema-building strategies which inform children's mastery of the physical environment also inform their learning to read.

Beth thinks that Archie started showing a proper interest in watching television around the age of two, reflecting that it seemed like a natural progression towards the practices the other boys engaged in: 'it were like he could join we'em' (Beth, Transcript, Visit 2). *Minecraft* can be traced as another shared 'ruling passion' (Barton & Hamilton, 1998) in the family. It is discussed multiple times during my visits. On Visit 3, Beth describes how Caleb was the first one to get into *Minecraft*. Around the time of my research, Caleb, Kyle and Robbie are all very into it, each engaging in the practice of watching fan-made *YouTube* videos whilst playing the game on their *X-boxes*. Archie is beginning to sit and watch them play, but has not asked to play for himself.

5.1.3. Key child and family practices with TV&RM in Archie's life

Figure 61: Archie and his family's key practices



Examples of events at the nexus of key practices:

1. Playing Spider-man on the washing line

At the nexus of the practices of role-playing, synthesising and performing knowledge, Archie 'plays *Spider-man*' outside on the washing line with Robbie and Kyle. Archie performs knowledge of *Spider-man*, drawing on a complex mix of object knowledge and social learning gathered through multiple historical instances of *Spider-man* play, with more-knowledgeable others contributing information about *Spider-man* where there are gaps in his knowledge.

2. Archie learns to play Subway Surfer and Temple Run

At the nexus of the practices of copying, playing and emoting, Archie pays attention to his brothers playing *Subway Surfer* and *Temple Run* until he learns how to play himself. His brothers are scaffolding his learning. Archie engages in deep play (Marsh et al., 2016), responding emotionally when he 'dies' in the game.

3. Archie and his brothers subvert the Dictaphone's intended use

At the nexus of the practices of exploring, emoting and synthesising, Archie and his brothers/nephews subvert the intended use of my Dictaphone. Historically, the boys have explored and mastered many other digital devices together and are drawn to my Dictaphone. They very quickly master the basic functions of the Dictaphone and are thus able to subvert its use to create a shared emotive experience. They take turns saying silly words and phrases and blowing raspberries into the Dictaphone, then playing them back to make each other laugh, taking great pleasure in the very simple affordances of the device.

5.1.4. ARCHIE MAKES THE ROBOT GO LITTLE DIDDY



The video extract on which this analysis was based can be viewed as file Archie_Robot.mp4 on the enclosed USB drive.

This analysis reflects on a moment where some of Archie and his family's key practices with TV&RM (exploring; relating; scaffolding; emoting) have combined and intersected with a number of relevant historical trajectories, including:

- (1) Fiona's tablet device as a physical object with specific affordances;
- (2) CBeebies and its shows as media texts (including *Nina and the Neurons*) with their own historical trajectories;
- (3) The *Nina and the Neurons* game in the *CBeebies Playtime* app;
- (4) the historical trajectory of Archie's position in the family structure and subsequent interest in blocks;
- (5) *Minecraft* and other media texts as shared ruling passions amongst the young boys in the family;
- (6) my historical trajectory, placing me as a unique physical presence in the family home.

The multimodal transcript in Table 18 describes a 37-second excerpt taken from a longer, 84-minute analysis of a play event. The excerpt illustrates how Archie's exploratory play is scaffolded by his mother.

Figure 62: Locating Archie's Nina and the Neurons exploration within his case study map

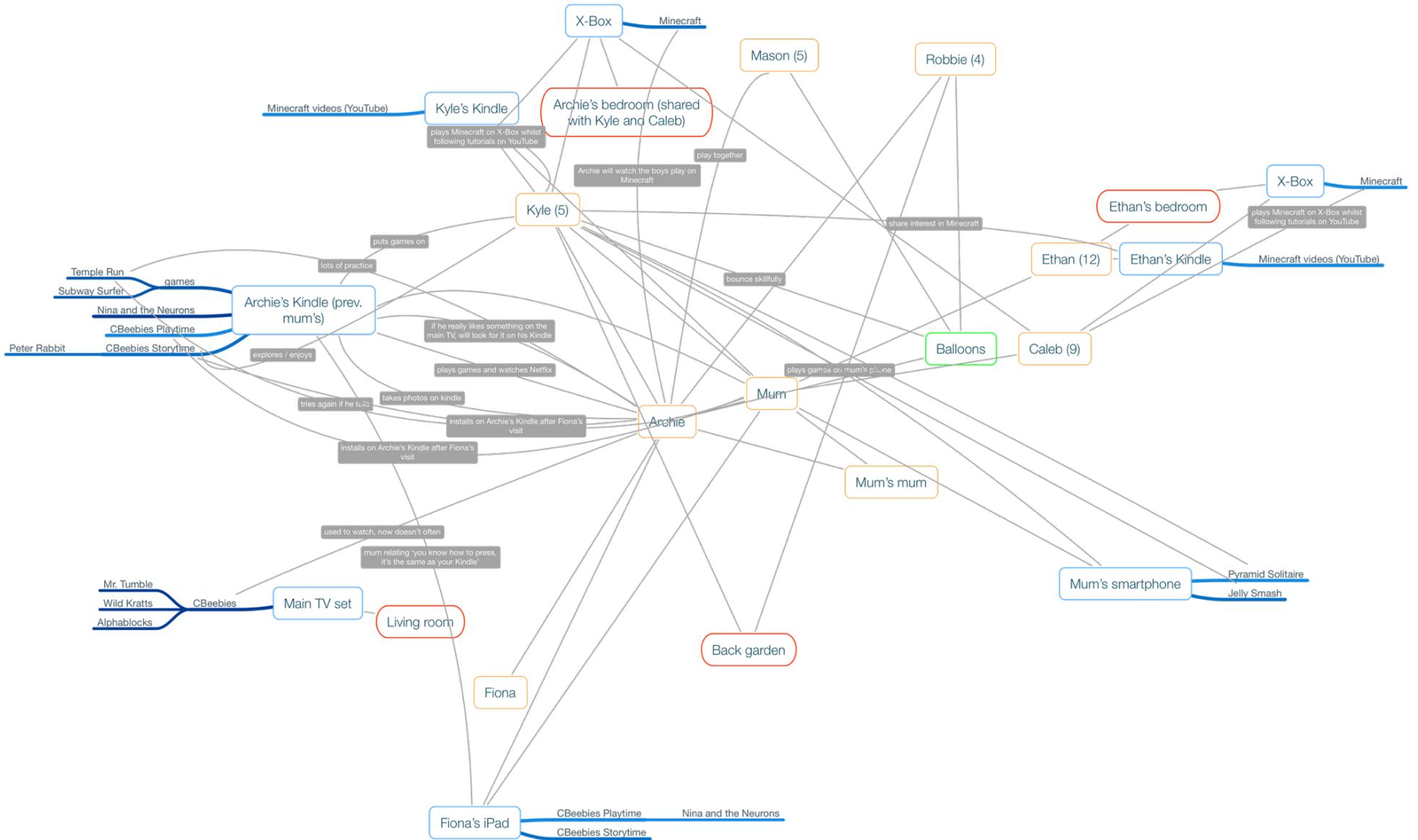


Table 18: Archie makes the robot go 'little diddy' with mum (Visit 3) multimodal transcription

Time	Bodies	Things	Intra-action	Discourse in place
00:04:15	Mum	Fiona's tablet; CBeebies Playtime app; Nina and the Neurons game	The tablet is sitting in its fold-out stand, propped up on the sofa. Mum is sitting next to it, with it resting slightly on her knee. Archie is kneeling on the floor with his hands close to the screen.	(M) Where's he going now?
00:04:17	-	Nina and the Neurons game	To the left of the screen, a robot is sitting on a block floor. A block wall ahead is obstructing his path to a star waiting beyond. A big green circle with a 'play' icon appears above the robot's head	-
00:04:18	Archie	Nina and the Neurons game	Archie's left hand appears. He points to the star waiting beyond the block wall. Archie withdraws his hand. It reappears, pointing upwards, as mum's right hand extends, her index finger pointing to the orange arrow button below as Archie's index finger points upwards	- (A) (pointing upwards) there
00:04:21	Mum	-	-	(M) Press this one
00:04:22	Mum	-	Archie's finger immediately follows his mum's direction	(M) See what you've got to do
00:04:23	Archie	Nina and the Neurons game	Archie taps the orange arrow button and three orange option buttons appear above it	-
00:04:24	Archie /Mum	-	Archie's finger immediately heads towards the screen, about to tap, but Mum's hand intervenes, gently grabbing his hand and pulling it back	(M) What's he got to do?
00:04:25	Mum	-	Archie pulls his hand up and back, Mum releases, Archie's finger lingers back over the options	(M) Has he got to open a door, has he got to go lickle diddy

00:04:28	Archie	-	Archie's finger tip bends back and forth, hovering over the right hand option button (featuring a picture of a robot shrinking)	
00:04:30	Mum	-	-	(M) He's got to go little diddy, an't he?
00:04:31	Archie	-	The tip of Archie's finger lengthens up	(A) Yeah
00:04:32	Archie	-	Archie presses the orange 'shrink' option button	-
00:04:32	Archie	Nina and the Neurons game	The orange option buttons disappear	-
00:04:33	Mum	-	Archie's finger/hand draws back	(M) Wow. Now press play, see if you can get there
00:04:34	Archie	-	Archie's left hand moves towards the screen, he taps the green 'play' circle above the robot	-
00:04:36	-	Nina and the Neurons game	The green circle disappears, accompanied by robotic noises. The robot rolls forward onto the first block. The play arrow underneath turns green with a beep and the robot progresses	-
00:04:41	Mum	-	Archie leans in towards the screen	(M) Watch'im!
00:04:42	-	-	The 'shrink' icon beneath the robot turns green with a beep. Archie is smiling and watching	-
00:04:43	-	Nina and the Neurons game	Archie is watching closely, the robot shrinks and moves forward, passing into the low chBethel at the bottom of the brick wall	(NATN) You made the robot...
00:04:44	-	-	The robot passes through the wall, growing back to normal size on the far side. As he does, his head touches the star, which dissolves with a beep, multiple smaller stars shooting out into the air. A smile appears on Archie's face	...small

00:04:46			The robot continues forward	(M) Yeah!
00:04:47	Archie	-	Archie leads up on his knees, torso twisting towards Mum, arms out, Beth is smiling, looking into Archie's face, darts a glance briefly at me, then back to Archie, her hand reaching behind his back	(A) He got a ba-da-wun
00:04:49	Archie / Mum		Archie's arms stretch behind Mum's neck, pulling her towards him for a hug	(M) Yeah, he got another star!
00:04:50	-	Nina and the Neurons game	The robot rolls onto the 'glowing' yellow and black striped stage start/finish point	(NATN) Brilliant!

Analysis: Archie makes the robot go 'little diddy' with mum

I am spending time with Archie and his family in V3. It is a hot summer day in June and I have been catching up with Beth and Ryan over a cup of tea in the garden while the boys eat lunch before returning inside. I have suggested that Archie might want to have a go with one or other of the *CBeebies* apps, which are loaded onto my iPad. The *CBeebies* apps, including the *Nina and the Neurons* game, are new to Archie, although Beth has told me that he likes *Nina and the Neurons* before (V1). I have not made any suggestions for how mother and son 'should' interact. The moment represents a type of play that is exploratory in the digital domain (Marsh et al., 2016). Despite asserting that she does not watch much television with the children, Beth demonstrates an extremely detailed knowledge of the media texts Archie is interested in. When I first bring my tablet out in Visit 3, she immediately recognises *Nina and the Neurons* and *Alphablocks*. Her instinct is to immediately begin making it relatable for Archie, both in terms of his knowledge and enjoyment of the texts ('What's that, what you were asking for t'other day with Kyle? *Alphablocks*' – Beth, Transcript, Visit 3) and on a more operational level in relation to using my iPad ('You know how to press em on, don't you [...] like you do on your *Kindle*. It's only the same as your *Kindle*' – Beth, Transcript, Visit 3).

In the moment of exploratory play, various 'things' (Archie, the tablet, the *Nina and the Neurons* game and Beth) are coming together to constitute an assemblage (Giugni, 2011). Exploratory play is linking this momentary human-object interaction with a universe of existing social practices (Wohlwend, 2009). Archie is demonstrating operational digital literacy skills (Green & Beavis, 2012). Beth is strongly scaffolding Archie's operational digital literacy skills with the tablet, enabling Archie to accomplish the operational tasks with her physical and verbal support. The verbal instructions and visual prompts of the *Nina and the Neurons* game itself seem to have relatively little on impact Archie's actions, which are responses to Beth. He is also drawing on, and quickly redeploying, his existing funds of knowledge (Moll et al., 1992) in a new context. Like Rosie's mum, Mary (5.4.), Beth is using verbal prompts. These verbal prompts differ in at least two important ways. Firstly, Mary's prompts serve to support traditional literacy development by extending beyond the action on screen. Beth's prompts instead (very effectively) support his operational digital competencies within the context of the immediate device and game. Archie is also being inducted into a different form of literacy learning. Beth is building on his existing understanding and use of the term 'little diddy'. Within the family, this term has a shared meaning of something small or tiny. Its use is local, rather than universal, representing at a microcosmic level an example of family or 'local' (Barton & Hamilton, 1998), rather than formal or 'school' (Cairney and Ruge, 1998), literacy.

In analysing this vignette, I am struck by how much positive emotional affirmation accompanies the efforts Archie makes in everyday tasks. Although I am an 'outside' (Thomson & Gunter, 2011) presence and my enthusiasm to watch is combining with Beth and Archie's interest in this play to produce this event, I know that accompanying effort (digital and non-digital) with positive emotional affirmation is

a well-established practice within Archie's repertoire of experience. When Archie listens carefully and follows his mum's instructions, his success is met with both a hug and verbal affirmation. I am confident that this act is not directed at me. Firstly, Archie's immediate response to his success is a smile (00:04:44) followed very quickly by physically reaching out to his mum (00:04:47). In other words, he initiates, knowing innately that he will be congratulated physically. I have also seen Beth and Archie interact in a similar way numerous times in relation to Archie's effort in attempting other things:

Beth: *Have you ate your dinner?*

Archie: *Yeah.*

Beth: *All of it?*

Archie: *Yep.*

Beth: *Gimmie five (Beth & Archie high five)*

Archie: *Now can I av (...)*

Beth: *Yeah, when you get me a baby wipe, I'll clean yer spaghetti off yer face.*

Archie: *Me can do it.*

Beth: *Go on, then, like that. Super starr!!! Gimmie another five for that!*

Archie: *(laughs) (Beth & Archie high five).*

Beth: *Clever boy.*

(Transcript, Visit 3).

Minecraft is a shared media passion amongst the younger boys in the family, including Caleb (9), Kyle (5) and Robbie (4). Beth notes (V2) that Archie will sit and watch them play, although he has not asked to play for himself. Although I cannot be sure, it strikes me that the 'block' visual format and programming-style tasks connect with aspects of *Minecraft*. I observe Archie watching the boys play on many occasions, both with digital and non-digital objects. During Visit 4, there is a moment where I am playing with Archie, Kyle, Robbie and Mason. The boys have picked up some big balloons on strings that have been lying on the kitchen floor. The boys have recently finished their lunch and seem to be looking for something to play with, picking up or touching various toys and non-toys in the kitchen and garden. Archie is the first to pick up a balloon, but puts it back down. Kyle and Robbie both pick up balloons and put them down on the way outside. By the time they get outside, Mason is holding an orange balloon and is bouncing it up and down rapidly on its string. Archie immediately reaches out to grab the balloon and is rebuffed by Mason. A debate ensues about whose balloon is whose, with Kyle bringing Archie's balloon outside and handing it to him. Not finding his own balloon, however, Kyle starts free playing some sort of adventure narrative, involving a princess and fighting 'baddies'. Archie joins in, but Robbie and Mason soon return to the balloons, approaching me (still videoing) and asking me to watch while they take turns to demonstrate physical mastery of this simple skill:

Mason: *I'm the world's champion bouncer, watch me.*

Robbie: *I'm the world's champion bouncer, watch me.*

(Video 1, Visit 4).

This continues, with the claims (and demonstrations) escalating as Archie and Kyle both join back in:

Robbie: *Watch this, I can do it reyt fast.*

[Archie moves closer to Robbie, bouncing his balloon enthusiastically].

Mason: *I can do it sideways.*

Archie: *[letting the balloon drop, walking away] I don't wanna do.*

Kyle: *Give me one!*

[Archie retreats to the playhouse, sitting down and sifting through toys].

Robbie: *I can do it really fast, watch.*

Mason: *I can do it with two.*

(Video 1, Visit 4).

This, and similar exchanges, demonstrate Archie's historical trajectory as one of the youngest (and potentially least physically capable) in a community of six brothers (and four nephews) who share very similar passions. In the vignette, *Nina and the Neurons* is affording Archie a different avenue to mastery/accomplishment in a digital realm that shares some aesthetic and conceptual qualities with games that the older boys like (especially *Minecraft*). As with Niyat (5.2.), one of Archie's established practices is exploring (and gaining physical mastery of) digital platforms and texts. Where Niyat is driven by 'grown up' devices (e.g. smart phones), Archie seems driven by the things that his brothers are into. Jenna and Beth describe Archie patiently taking his time to master *Temple Run*, trying again and again until he improves:

Jenna: *But he don't get mad, like whereas if Kyle if he can't do something, he'll want someone else to do it, whereas he'll try again.*

Fiona: *Really?*

Beth: *Yeah.*

(Transcript, Visit 1).

Beth tells me how early Archie started playing *Subway Surfer* and *Temple Run* after watching the other boys playing with them and learning how they work:

Beth: *Yeah, he's erm, cos he's worked out how to do it now, do you know what I mean? I think it's ...*

Fiona: *It's a bit challenging?*

Beth: *He watched them and he knows now, it's like he's challenging himself, do you know what I mean, cos he's got to get it o-... Subway Surfer, you've got to get it over trains and things like that-*

Fiona: *Yeah.*

Beth: ... and Temple Run, you have to get underneath things and ...

(Transcript, Visit 2).

Also like Niyat, Archie is driven to do things 'for himself'. Echoing the repetition of 'can do it' from Robbie and Mason when showing off their prowess with balloons, the phrase 'me can do it' is frequently heard from Archie (e.g. V3).

5.1.5. ARCHIE PLAYS THE POWERPUFF GIRLS



The video extract on which this analysis was based can be viewed as file Archie_Powerpuff.mp4 on the enclosed USB drive.

This analysis reflects on a moment where some of Archie and his family's regular practices (Wohlwend, 2009) with TV&RM (emoting, extending) have combined and intersected with a number of relevant historical trajectories, including:

- (1) the historical trajectory of Archie's position in the family structure;
- (2) *Powerpuff Girls* as one of the boys' shared ruling passions;
- (3) the material space and objects of the living room, including the table, dining chairs and sofa, as well as the boom bats as a physical objects with their own historical trajectories and affordances;
- (4) my historical trajectory, placing me as a unique physical presence in the family home.

The multimodal transcript in Table 19 relates to one 48-second excerpt, taken from a longer, 3-minute analysis of a play event. The excerpt illustrates how Archie, Kyle and Robbie collectively synthesise material objects and prior knowledge of media texts to perform a short, but genre-specific, original narrative. This moment has previously been presented in less detail in my previous work (Scott, 2016).

Figure 63: Locating Archie's Powerpuff Girls roleplay within his case study map

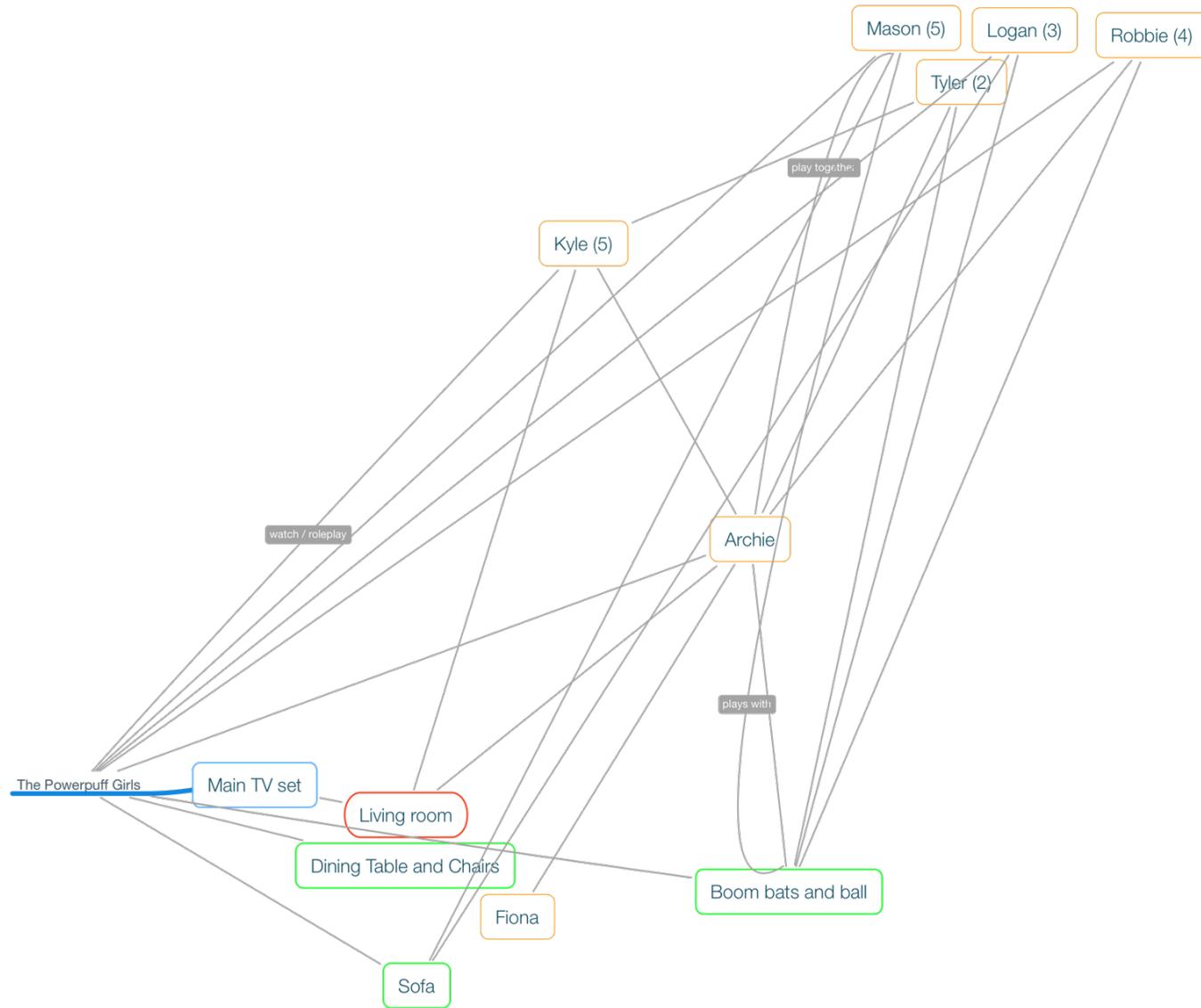


Table 19: Archie roleplays The Powerpuff Girls with Kyle and Robbie (Visit 4) multimodal transcription

Time	Bodies	Things	Intra-action	Discourse in place
00:00	Kyle, Logan	Boom bat	Kyle is sitting with his legs dangling off the dining room table, holding the boom bat in his hands. Behind, Logan is climbing off the table	(K) Blue!
00:01	Kyle, Robbie	-	The camera pans slightly to Robbie, who is watching Kyle	(K) Green!
00:04	Fiona	-	Kyle is chewing and holding the boom bat higher, looking at me, then...	(F) What, are those the different colours of the Powerpuff Girls?
-	Robbie		... looking to Robbie as he interrupts me	(R) I'm pink! I'm pink
-	Kyle		Kyle shakes his head, looking at Robbie, lowering the boom bat	(K) No, I am!
00:07	Robbie		The two boys are still looking at each other	(R) No, I am!
00:08	Kyle		Kyle shaking his head Jasmine interrupts, off-camera.	(K) No I am- (J) Look at that, he's sat up like-
00:10	Jasmine		Kyle turns his head to Jasmine, off-camera	(J) Kyle, you're showing off now, stop it
00:14	Robbie		Kyle turns his head back to Robbie	(R) Archie's Bubbles, Kyle's leader...
	Kyle		Kyle turns to me on the word 'leader', his face lights up Kyle lifts the boom bat above his head	- (K) Yeahhhhh! And I get to be the leader!
00:19	Robbie		Kyle shuffles himself across to the far end of the table	(R) ...and I- I'm Buttercup
00:20	Kyle		Kyle's legs swing over and he stands up on the dining chair, semi-dancing as he swings his fists alternately forward and back	(K) You two need to follow me-e, a-ha-ha-ha!

00:23	Archie		Archie runs rapidly from the living room (out of camera view) towards the kitchen, following his right arm, which is held out horizontally in front of him	
00:24	Fiona		Kyle jumps energetically from the chair onto the floor, holding the boom bat out in front of him and landing on his bottom on the floor	(F) Is this in <i>Powerpuff Girls</i> ?
00:26	Kyle, Archie	-	Kyle looks up at me with a smile on his face, Archie is starting to run back from the kitchen	(K) Ouch!
00:27	Archie	-	Archie is running towards the living room / in front of Kyle, with his right arm still out in front of him	(A) bo-bo-bow
00:28	Kyle, Archie	-	Kyle's foot is slightly out, but Archie's eyes are on it. He crumples down onto his knees as if falling, but his movements are controlled and he is smiling	
00:29	Kyle	-	Kyle gets up onto his feet, Archie looks up at him, smiling	(K) You need to follow me, t-
00:30	Kyle	-	Kyle turning around, moving off-screen	(K) (more slowly) you two need to follow me
	Robbie, Archie	-	Archie gets up onto his feet, begins following Kyle	(R) I don't, cos I've got two bats
00:33	Robbie	Boom bats	The camera pans to Robbie, holding both boom bats up horizontally in front of him	-
00:35	Kyle	-	The camera pans back to Kyle, who is beginning to raise his fists up into a semi-crouched, protective boxing position	-
00:37	Kyle, Archie	-	Archie, behind Kyle, comes closer, holding Kyle on his shoulders	(K) I'm a baddie, you crime!

-	-	-	On the word 'crime', Kyle starts running forward towards Robbie, but past and into the sofa, against / over which he drives/ control-falls over	
00:40	Kyle, Archie	-	Archie runs forward with both arms in front of him, following Kyle's path and also collapsing onto the sofa as Kyle begins to sit back up, smiling	(A) I'm a baddie, you crime
00:43	Jasmine, Archie, Robbie	-	Archie gets back to his feet	(J) Robbie!
00:44	Robbie	-	(Off-camera, Robbie can be heard banging the boom bat)	-
00:46	Kyle, Archie	-	Archie is standing behind the sofa, punching gently in front of himself with alternate hands.	(K) We. Always. Win this.

Analysis: Archie role-plays Powerpuff Girls with Kyle and Robbie

I am spending time with Archie and other family members on Visit 4. I spend a lot of time free-playing with Archie, his brother Kyle (5) and their four nephews: Mason (5), Robbie (4), Logan (3) and Tyler (2). I have been going where the boys choose and doing whatever they suggest. The boys have watched some television, and we have also been playing outside. There is a lot of fast-flowing role-play, one narrative morphing into the next. The boys have also been playing with 'boom bat' style toys (large, tennis bat shaped bats with stretched plastic inners that make a loud sound when hit with a ball). Other adults, including Robbie's mother, Jasmine, are in the kitchen. The boys are finishing off eating their sandwiches for lunch and as they do so, they have been telling me about a television show they like: *The Powerpuff Girls*. At some point, as they are telling me about it, the conversation erupts into seemingly spontaneous role-play. Though spontaneous in the moment, the boys' fluency in performing the roles suggests previous rehearsals.

Three of the boys (Kyle, Robbie and Archie) are co-constructing a physical play scene based on their mutual enjoyment of the television show, *The Powerpuff Girls*. Kyle (who is the oldest) appears to be taking the lead. The boys demonstrate shared knowledge of the characters' names and colours, suggesting that they know the show well. Their discussions about the role each of them will play also suggest prior instances of this play being created as a group, which they are drawing on now. In this vignette of role-play, various 'things' (the boys, the bats, *The Powerpuff Girls* as a media text) are coming together to constitute an assemblage. Role-play is linking this momentary human-object interaction with a universe of existing social practices (Wohlwend, 2009). One of these is Archie's practice of watching and copying the actions of the other boys in his family. Drawing on the material (the table, chairs, boom bats and sofa) and media (*Powerpuff Girls*) resources available to them, the three boys can very rapidly ad-lib an adventure scene appropriate to the *Powerpuff Girls* genre. In doing so, they demonstrate embodied literacy skills (Thiel, 2015). Kyle is also demonstrating traditional literacy skills, spontaneously inventing grammatically questionable but otherwise contextually relevant dialogue for the genre ('I'm a baddie, you crime'). Relatively unaffected by the adults close by, the boys are rather shaping and supporting each other's playful creations.

Although Archie is often somewhat less vocal than his playmates, it is interesting to note how much he is contributing. It requires close attention to observe, but Archie is the first to physically embody some of the co-constructed *Powerpuff Girls* play that Kyle is bringing to life verbally, putting his arm out in front of himself and running into the kitchen, superhero style, at 00:23.

5.2. Niyat



5.2.1. A pen portrait of Niyat and her family

Demographics: Niyat is a Black British girl aged 3 years and 3 months when I first visit in March 2015. Niyat's family also includes brother, Joshua (20), and sister, Rowena (14). The three siblings live in Sheffield with their mother, Senait, and father, Fikru. Niyat has lived for most of her life in LSOA Sheffield 075G (Manor Castle Ward). In the latest Index of Multiple Deprivation (2015), this area was ranked 7,043 out of 32,844 in England, where 1 was the most deprived and 32,844 the least, placing it in the top 30% of *most* deprived areas in the UK (IMD Decile 3). Niyat's mum is not in paid work, but looks after Niyat and is also learning English at college three days a week. She categorised her work as 'full time parent' on the modified Hope-Goldthorpe (1981) scale. Niyat's dad works as a taxi driver in Sheffield and works shifts, including some over night. Senait categorised his work as 'other' on the modified Hope-Goldthorpe (1981) scale.

Family history and culture: Niyat's mum and dad are originally from Eritrea. They moved to Sheffield five (Mum) and six (Dad) years before my research began. Niyat's parents are both from Eritrea, but explain to me that their country has multiple ethnic groups. Fikru is from the Tigrinya ethnic group (the majority ethnic group) and speaks Tigrinya as his first language. Senait is from the (much smaller) Bilen ethnic group and speaks Bilen as her first language. Beyond the immediate members described above, no close family live nearby, but the family has close friends from Eritrea living in Sheffield and Leeds.

The family are Catholic and all (including Niyat) frequently attend a local Catholic church in Sheffield. Their church has a large Eritrean congregation and the family are involved in regular social events relating to the church, including picnics/BBQs (one of which I attend as part of my time with the family). Niyat attends Sunday School at the family's church. At the beginning of my research, Niyat had already started going to nursery part-time for 14 hours a week. The rest of the time she tended to be at home.

Media environment of the home and other spaces: Niyat's family have a traditional Satellite TV in the living room. The television is hooked up to a satellite dish that enables them to access channels from Eritrea on the main TV at home. Niyat does not have a television in her bedroom and does all her TV viewing in the living room – either on the main television or watching short videos on *YouTube* on the family's laptop computer (living room) or the family's *Kindle*. Senait particularly likes to watch an American TV channel called the 'Church Channel'. She makes lots of videos and takes lots of photos on her smartphone, most which document everyday family life (many of Niyat and the other children, and many of singing and dancing at church services). Fikru likes to watch news and documentaries on the television, but does not watch shows from back home, feeling that African TV does not bring a true image of his country and tends to be full of politics and propaganda. Joshua tends not to watch much television at all – he is in college and due to start university the following year, so tends to spend a lot of time in his own room working. Rowena, meanwhile, loves music and exercise and will engage with both on various media platforms. Senait shows me videos on her smartphone of Rowena dancing to music videos on music channels and doing exercise routines on the main TV set, both of which Niyat is also joining in with in the videos. More detail on the media environment at home and in other spaces is given in Table 20.

Figure 64: Niyat's family tree

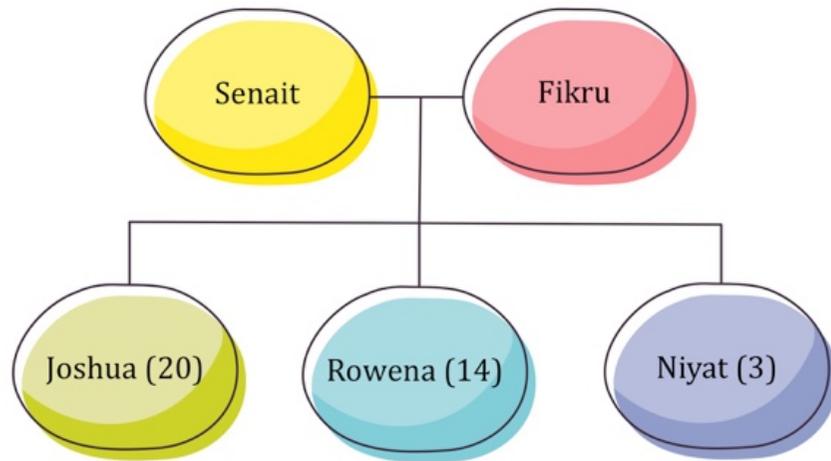
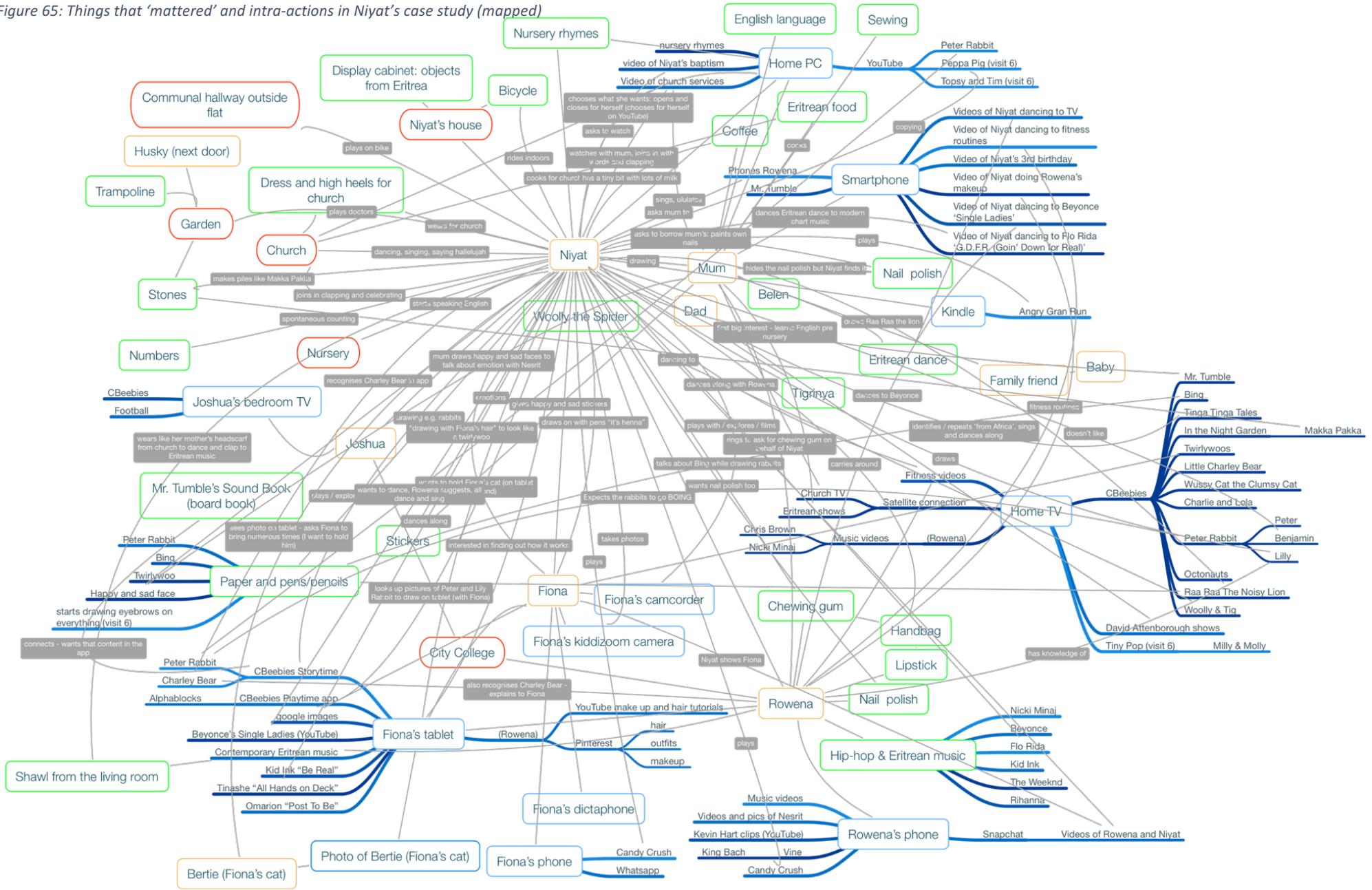


Table 20: Things that 'mattered' in Niyat's case study

Bodies		Spaces
Bertie (Fiona's cat)	Husky dog next door	Church
Brother (Joshua)	Mum (Fikrum)	City College
Dad (Senait)	Mum and Dad's friends from	Communal hallway outside flat
Family friend (with new baby)	Eritrea	Garden
Fiona (researcher)	Niyat	Home
Friends at church	Sister (Rowena)	Nursery
Digital objects and texts		
Angry Gran Run	Fiona's smartphone	Nicki Minaj
Beyoncé	Fiona's tablet	Octonauts
Beyoncé's 'Single Ladies' music video	Fitness videos	Peppa Pig
Bing	Flo Rida	Photo of Bertie (the cat)
Candy Crush	Football	Raa Raa the Noisy Liona
CBeebies	Hip hop music	Rihanna
CBeebies playtime app	Home made videos of Niyat and family	Rowena's phone
CBeebies Storytime app	Home PC	The Weeknd
Charlie & Lola	In the Night Garden	Tinga Tinga Tales
Chris Brown	Joshua's bedroom TV	Tiny Pop
Church TV	Kevin Hart clips	Topsy and Tim
Contemporary Eritrean music	Kindle	Twirlywoos
David Attenborough shows	Little Charley Bear	Whatsapp
Eritrean TV shows	Main TV set	Woolly and Tig
Fiona's camcorder	Milly and Molly	Wussy Cat the Clumsy Cat
Fiona's Dictaphone	Mr. Tumble	
Fiona's Kiddizoom camera	Mum's smartphone	
Non-digital things		
Bicycle	Handbag	Shawl
Chewing gum	Lipstick	Stickers
Coffee	Mr. Tumble's Sound Book	Stones
Display cabinet: objects from Eritrea	Nail polish	Trampoline
Dress and high heels for church	Numbers	Woolly the Spider
Eritrean food	Paper and pens/ pencils	
Eritrean language (Tigrinya / Belen)	Sewing	

Figure 65: Things that 'mattered' and intra-actions in Niyat's case study (mapped)



5.2.2. Members' generalizations and researcher observations about TV&RM

A note on communication in Niyat's family

My fieldwork with Niyat's family involved ethnographic study focused on Niyat, but encompassed time spent with Senait, Fikru, Rowena and Joshua, as well as family friends. Information was related to me in a very specific way in this case study, which requires some explanation. On my first visit, Senait lacked confidence in her English language abilities. As such, Fikrum answered most of my formal interview questions during Visit 1, informally explaining and interpreting for Senait. Indeed, on most occasions, meaning was conveyed between myself and various family members via shifting assemblages of bodies. Often, Senait used a lot of gestures and Bilen: systems of signs that Fikru would translate to English for me. When Fikru was not there, Senait and Niyat would work collaboratively to convey meaning, demonstrating through gesture, touch and movement and 'telling' verbally, in a mix of Niyat's early English and Senait's (increasingly confident) English. When Niyat's older sister, Rowena, was home, she would also act as an informal translator. In addition to a diverse range of embodied communicative practices, Niyat spoke a mixture of English, Bilen and Tigrinya. Depending on the grouping of bodies in the room, meaning would sometimes emerge and evolve as the communication unfolded. My own understanding changed or deepened depending on who was there and what they communicated, as in the following excerpt about our comparative dinner plates:

Niyat: *Why's mine- bad- da ti- small one?*

Fiona: *Why's yours a small one?*

Niyat: *Why's mine- bad da ti- small one?*

Fiona: *Well cos you're small.*

Niyat: *'Cos you have the big one.*

Fiona: *Yeah, but I'm a bigger girl.*

Niyat: *(Unclear) big if ti- big – ti- lickle one, but small one. This one-*

Rowena: *Just eat! (laughs).*

Fiona: *What does Niyat say?*

Rowena: *I don't know!*

Niyat: *'Cos if you big you have the big titer?*

Rowena: *She says if you have big you have big 'titer'. 'Titer' is 'in general', is the same thing.*

Fiona: *Yeah, that's how it works. Those are the rules.*

Rowena: *Yeah that's the rules.*

(Transcript, Visit 5).

In the earlier stages of the exchange, I am adopting a technique of 'making do' with the communication I understand, responding to the best of my ability based on what I comprehend in the moment. When

Rowena can translate a single, but important, word, this new information instantly increases my depth of understanding, although I have not been entirely on the wrong track. In Niyat's family, several English language words and phrases have found their own unique set of well-established, but non-conventional, collective meanings within the context of the family. These shared meanings are often very much about humour, some examples being: 'cheeky', 'naughty', 'pleased to meet you' and 'goodbye'. For example, when Niyat is riding her bike away from us in Visit 2, Senait will say 'goodbye', which makes Niyat laugh (since everyone knows she is not really going away). Similarly, 'sorry, sorry' is often used, not to genuinely signify an apology, but more as a way of comforting. For example, Senait uses the phrase to soothe a baby who is crying during Visit 4. Members' generalizations in the case, then, incorporate a wide range of information about the media choices and preferences of multiple family members, narrated by themselves and by others. As such, I attempt to make clear who is relating whose media choices in the descriptions below.

Media choices, being one of the 'grown-ups' and control

Niyat's mum, dad and sister all display detailed knowledge of her media choices. From very early on in my conversations with the family, various members construct Niyat as an active (and, indeed, forceful) agent in asserting her media choices in the family home:

Fiona: *Do you sometimes have on your own programmes? Do you watch television?*

Fikru: *Ya, we watch, but she doesn't let us watch!*

Fiona: *(laughs) OK.*

Fikru: *She watch the CBeebies all the time!*

(Transcript, Visit 1).

Though Senait, Fikru and Rowena seem to agree on this, there is little sign of concern in the family's discourses about Niyat's media choices. Fikru is critical of his own home country's media, which he describes as biased in favour of the government; 'It's only for them how to stay in the power, so that I don't want to see' (Fikru, V1). However, there is no evidence that this concern extends to any of Niyat's media choices. We never discuss the notion of limiting or controlling Niyat's media engagement in any way, nor do we explicitly discuss how Niyat's parents view the potential benefits and pitfalls of media engagement (our communications tend not to focus on this type of question at all). All three stress the ongoing precedence of *CBeebies* and *Peter Rabbit* as Niyat's 'favourites', and the growing favourite, *Bing*; 'Even if she, if she is not watching the TV, if she's in another room, when she comes here find her sister watching TV, she say, 'Change it!' (Fikru, V1). It is not until my final visit almost a year later (March 2016) that significant change is reported. Niyat's new 'favourite' has become *Tiny Pop*, particularly the show *Milly and Molly*.

Niyat's control is bounded, reaching primarily to the front room and its devices (main TV set and family PC). Joshua, for example, talks of retreating to his bedroom (where he has his own TV set) to watch football, something that he has long since learnt will not be tolerated by Niyat for long in the front room. The family convey how Niyat frequently tests these borders, both in terms of space and devices. Niyat will invade Joshua's bedroom to watch *CBeebies* and protest for her right to play with her mum's smartphone. This characterization rings true in my own interactions with Niyat. When I bring my tablet on our fifth visit, she becomes fascinated - not with any of the games or apps she can access, but with learning to log into the device by tapping the four-digit pass code. As Fikru suggests, Niyat will not be placated with the 'child version' of anything, showing a fascination with adult devices, such as her mum's smartphone and the family *Kindle*:

Fiona: *Does she play lots of games like this?*

Senait: *She like, yeah. My phone is her phone (laughs).*

Fiona: *(Laughs) Is it hard for you to use the phone, because she's always playing with it?*

Senait: *Yeah, she's playing.*

Fiona: *Do you have a tablet?*

Fikru: *Yeah, a tablet.*

Fiona: *A Kindle one, yeah? Does she like to use that?*

Fikru: *Yeah, she uses that as well, she got her own, but, was a time her brother and her sister got everything she ... She will play with this one, if her sister is using that one, she say, give me!*

Fiona: *OK, so that's a grown up one.*

Fikru: *Yeah.*

Fiona: *Is this a one for children?*

Fikru: *This only for children.*

Senait: *For children.*

Fiona: *So when she realized it wasn't as, she thinks it's not as good as the adult one?*

Fikru: *Yeah, she's, she want all adult, yes.*

(Transcript, Visit 1).

Although the family perceive Niyat as very active in her media choices (indeed, her choices are palpable in the family home), she is also strongly influenced by her family. Niyat is a preschooler living with three adults and a teenager. In this sense, Niyat's parents (and sister) share some affinity with Olivia's mum. They are perhaps not completely aware how much Niyat's operational digital skills are influenced by their own digital use.

Eritrean culture and shared family passions

Whilst my field notes back up this notion that Niyat is very self-directed and assertive in her media choices, there is also a great deal going on in Niyat's case study in relation to both her families' shared media (and wider) passions and their link with Eritrean culture. There is a large amount of overlap between the media habitus of the women in the family (Senait, Rowena and Niyat). Barton and Hamilton (1998) coin the term 'ruling passions' to explain how people's presiding interests often dictate their literacy practices. For the women of the family, dancing to music played on various media platforms is one such 'ruling passion'. Senait loves to watch Eritrean television and an American satellite channel that she describes to me as 'The God Channel'. Her 'ruling passion' (Barton & Hamilton, 1998) appears to be watching (and participating in) singing and dancing from both church and 'back home' (Eritrea). Since long before I start to visit, a significant part of Niyat's media diet has been Senait's homemade video clips and videos created by other members of the family's church congregation. In conversation, Senait frequently shows me clips on her smartphone in lieu of explaining things verbally. Many of these clips feature the singing and dancing during the family's church services and many feature Niyat dancing along to the music in church or on the television.

As I have with other parents in the study, I try to question Fikru and Senait about their opinions regarding Niyat's media engagement, however many of my lines of questioning fall a little flat as we struggle to share meaning. Fikru, however, responds to one question about Niyat's engagement with Eritrean culture via television:

Fiona: Do you feel quite pleased that she is sort of interested in Eritrean culture and that she's learning about those from television? Or is it, not important?

Fikru: Ah. No, it's good for her to, like, the culture, but she's more than mine, she's interested in her mother's culture.

Fiona: OK. Really?

Senait: (laughs).

Fikru: Yeah. Because she doesn't see from me, er, the clothing, because her mother, she's wearing always her cultural clothes, you know, so she's interested over there.

(Transcript, Visit 1).

Fikru's response suggests that the family place some level of importance in media as a potential means of educating Niyat about her cultural heritage. However, Fikru seems content that Niyat is more engaged with her mother's culture than his own. He also describes an overlap between his own media passions and Niyat's. He loves to watch documentaries, particularly David Attenborough (nature) ones, and on my sixth visit in March 2016, he eagerly reports that Niyat has been watching one. Whilst Fikru and Senait note that Niyat shows little interest in Eritrean television per se, they show me how excited and involved she becomes when Eritrean women dance and sing:

Fikru: She always comes, she says Eritrean TV, she shouts, shut down, shut down, CBeebies! She don't want to watch it.

Fiona: *Really?*

Senait: *But dance a lot, when I dance.*

Fikru: *When it is some dancing, she's watching for then, yeah.*

Fiona: *OK, so if it's Eritrean TV with dancing in...?*

Senait: *Yes. I show you on my phone.*

(Transcript, Visit 1).

Senait describes Rowena's media interests in terms of watching (and dancing along to) fitness videos on the television and music videos. When Rowena is home from school for the holidays on my fifth visit, she shares a good deal of detail about her own media habitus with me directly. Rowena talks about an appreciation of rap and hip hop, including artists like Rihanna, Chris Brown and Nicki Minaj. As with her mum's music, Niyat will dance along to both fitness routines and music videos with her sister. Senait has multiple clips of this, which she shows me. An especially memorable example, which Senait shows me on multiple visits and will eventually send to me via *Whatsapp*, is a short clip of Niyat dancing to Beyoncé's 'Single Ladies' music video. In this clip, Niyat is visibly younger and dancing excitedly to the song. Rowena can be seen standing behind Niyat, also dancing, but almost off-camera. Niyat dances free-style, but imitates many of Beyoncé's iconic dance moves from the 'Single Ladies' video with practiced skill, including: perching her hand on her waist whilst twisting her hip to the front; holding her hand vertically in the air as if to show off a wedding ring; and shaking her head from side to side during the 'oh oh ohs' of the chorus.

Niyat's family is an interesting case, in that Rowena, Joshua and their parents are immigrants, whilst Niyat was born in the UK, but is nonetheless a member of an immigrant family. Elias and Lemish (2008) examine the complex roles that different media play in the lives of immigrant families. Although their work considers immigrant children from the former Soviet Union living in Israel, the authors discuss the sometimes-conflicting roles that media (host language, mother tongue and global) play in immigrant families, providing a useful reference for Niyat's case. The authors suggest that the parents in their study tended to abandon aspirations of transmitting home culture in favour of at least imparting language – often negotiating with their children to ensure a portion of their media engagement remained relevant to 'home' culture. As Elias and Lemish suggest, there is indeed evidence in Niyat's case that Eritrean media is serving to maintain 'shared cultural heritage and internal family unity' (p. 27). In contrast with Elias and Lemish's observations, however, family members' dialogues in Niyat's case demonstrate little evidence of this negotiation. Although her family clearly delight in her interest in *aspects* of Eritrean culture, Niyat is free to choose, engaging eagerly with the elements of Eritrean culture that inspire her interest. Elias and Lemish note that parents lack willingness to engage with their children's cultural worlds, suggesting that the cultural integration of immigrant children usually involves a broadening of the intergenerational cultural gap. Again, the opposite appears true in the case of Niyat's family, where family discourses focus not on difference in media choice, but instead on the places where multiple, diverse interests intersect. It will, of course, remain to be seen what happens in later years but, for the

moment, Senait, Rowena and Niyat take pleasure in noticing and articulating their shared passions, mutually documenting these with smartphone videos.

Niyat's English language learning with TV&RM

Senait has noticed that Niyat has been learning English from UK media texts from a very early age:

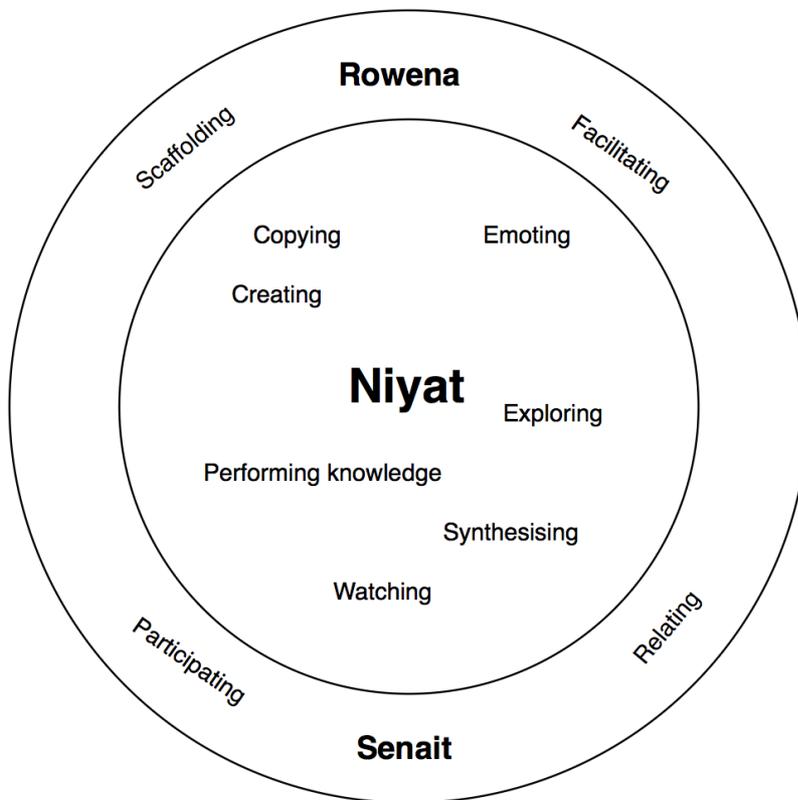
Senait: And then she like Mr. Tumble. She talk me English. She not going to nursery, but she learning from Mr. Tumble [...] when she first in years, one years.

(Transcript, Visit 2).

Studies demonstrate incidental acquisition of foreign languages by children when watching foreign language television (Kuppens, 2010). It is interesting to observe a similar process in this context. Niyat is already able to converse adequately with me in English on our first visit, raising the question of whether she is simply bilingual (with Tigrinya and Bilen as her mother tongue) and is learning English as a foreign language, or multilingual, since the languages routinely 'spoken' at home are Tigrinya (dad), Bilen (mum) and English (media). Certainly, Senait's generalisations about this process appear positive – Senait is, herself, trying to improve her English, and appears pleased that Niyat is learning in this way.

5.2.3. Key child and family practices with TV&RM in Niyat's life

Figure 66: Niyat and her family's key practices



Examples of events at the nexus of key practices:

1. Niyat's 'gathering' and stone piles

At the nexus of the practices of copying, performing knowledge and synthesising, Niyat physically performs embodied knowledge related to media in a 'traditional' medium, making piles of stones in the family's garden. Niyat is a prolific copier of television and other moving image media. Having watched *In the Night Garden* for some time, her mother notices that she begins carrying stones and making piles of stones in the garden sometimes. Senait also describes how Niyat takes her stone to nursery one day. The practice potentially intersects with broader historical trajectories. Copying her mother and seemingly connecting with a broader interest in 'being grown up', Niyat has been developing a habit of 'tidying' small objects in the apartment.

2. Niyat dancing to Flo Rida's G.D.F.R. video

At the nexus of the practices of performing knowledge, synthesising and emoting, Niyat performs knowledge of traditional dance from her mother's country (Eritrea). Niyat is drawing on complex

clusters of shared meaning. Flo Rida is a hip hop artist and his G.D.F.R. (Goin' Down For Real) video features him in character as a basketball coach with professional dancers who double as basketball players dancing in the background. Hip Hop music, dancing and workout routines are some of Rowena's ruling passions (Barton & Hamilton, 1998).

3. Niyat asks to watch her own baptism

At the nexus of the practices of relating and watching, Senait relates Niyat's present day experiences to her own life history, showing her the video of her own baptism. In doing so, Senait is supporting Niyat's ongoing identity construction and understanding of her own life history, as well as extending the learning opportunity around the roles of babies and mothers. This is a well-established practice and, consequently, Niyat will now ask to watch the baptism video again and again, creating a new learning opportunity each time.

5.2.4. NIYAT EXPLORES CBEEBIES STORYTIME



The video extract on which this analysis was based can be viewed as file Niyat_Storytime.mp4 on the enclosed USB drive.

This analysis reflects on a moment where some of Niyat and her family's regular practices (Wohlwend, 2009) with TV&RM (exploring, performing knowledge and synthesising) have combined and intersected with a number of relevant historical trajectories, including:

- (1) the historical trajectory of Niyat's arrival as youngest in a family of older children and her affective response to this;
- (2) the historical trajectory of the family's arrival in the UK and the resulting communicative mix;
- (3) certain *CBeebies* media texts including *Peter Rabbit* and *Bing* as part of Niyat's Funds of Knowledge;
- (4) my historical trajectory, placing me and my tablet device as physical presences in the family home; and
- (5) the *CBeebies Storytime* app and the *Mr. Tumble's Sound Book* board book as physical objects with their own historical trajectories and affordances.

The multimodal transcript in Table 21 describes a 95-second excerpt taken from a longer, six-minute analysis of a play event. The excerpt illustrates Niyat's exploratory play with the *CBeebies Storytime* app.

Table 21: Niyat explores the CBeebies Storytime app (Visit 3) multimodal transcription

Time	Bodies	Things	Intra-action	Discourse in place
11:03	Fiona, Niyat	Fiona's tablet; <i>CBeebies</i> <i>Storytime</i> app	Niyat is smiling, lying on the floor on her tummy in front of Fiona's tablet (propped up on its fold-out case). She is watching the screen, displaying a cartoon storybook labelled <i>CBeebies Storytime</i> . Her left hand holds the left hand side of the tablet's screen and her right hand is hovering free	-
11:05	-	Fiona's tablet; <i>CBeebies</i> <i>Storytime</i> app; Sarah & Duck	On-screen, the storybook's page turns, and the characters Sarah and Duck appear, along with the title: 'Balloon Race'	-
11:06	Niyat	-	Niyat looks from the screen to Fiona as she speaks, Fiona is reaching across to turn the volume up by pressing the button on the top of the tablet	(N) Dere-det and dock!
11:07	Fiona	-	Niyat opens her mouth excitedly, attention drawn back to the screen	(F) (laughs) Yeah!
	-	<i>Storytime</i> app		(STA) Remember to visit the library...
	Senait	-	Niyat turns and looks over her left shoulder, beginning to stand.	(S) (calls from the next room)
	-	<i>Storytime</i> app		... to find new stories
11:14	Niyat	Squeaky toy	Off-camera Niyat stands on a squeaky toy, which makes a sound	(FT) (squeaks) (N) (shrieks and then laughs)
11:16	Fiona		Fiona's left finger can be seen pointing to Sarah and Duck, on-screen	(F) have- have you ever seen these guys before?
11:19	-		Niyat's hands appear back on-camera	-

	Niyat		Niyat's head is turned to the left. She starts to get up, still looking to her left	(N) I-in-the-is-drawer
11:24	Fiona; Niyat	TV unit	Niyat is on her feet and walking to the TV unit	(F) Yeah?
11:25	-	<i>Mr. Tumble's</i> sound book	Niyat picks up a <i>Mr. Tumble's</i> sound book and turns round, holding it up, to show Fiona	(N) Like this
11:28	-	-	Niyat places the book back on the TV unit and walks back to Fiona. She nods	(F) Ohhhh! Is this also CBeebies? Yeah?
11:32	Niyat	-	Niyat points at the book	(N) I want to do that-
		-	Niyat points to the tablet, before flopping back down	(N) –but in here
11:35	Fiona	-	Niyat leans forward. On-screen, the storybook's page turns, and characters from <i>Peter Rabbit</i> appear, along with the title: 'The Unguarded Garden'	(F) You want to do that, but in here?
11:37	Niyat	-	-	(N) Oh! Peter Rabbit!
		-	Niyat is watching the screen	(STA) The Unguarded Garden
11:41	Niyat	-	Niyat's right hand finger hovers near the screen	
11:44	Niyat	-	Niyat is looking at the screen, gesturing with her hand as she speaks. After she speaks, she turns to look Fiona in the face	(N) Why not carry like dis?
11:46	Fiona	-	-	(F) Hmm? D'you want to play with the Peter Rabbit story?
11:49	Niyat	-	Niyat nods	-
11:50	Fiona	-	Fiona reaches her left hand towards the screen	(F) I think you need to just click on-
11:53	Fiona	-	Fiona points at the characters in the centre of the screen	(F) – touch it with your finger

11:53	Niyat	-	Niyat instantly taps the characters in the centre of the screen with her right hand finger	-
	-	-	Two rectangular option buttons: 'Read to me' and 'Read by myself' appear on screen, along with some additional characters. Niyat draws her arm back to itch her ear	(STA) Choose read to me to hear the story read to you-
	-	-	Niyat taps on the picture of a fox dressed in a suit which has appeared	(STA) – or-
	-	-	Noticing that nothing happens when she taps the fox, Niyat taps 'Read to me' instead	
12:00	Niyat	<i>Storytime</i> app	The first page of the storybook appears, with text in a rectangular box over a static image of four clothed rabbits walking in front of a hedgerow. Niyat itches her cheek, paying attention to the screen	(STA) One summer day-
		<i>Storytime</i> app	Niyat taps the rectangular box with the text in, but nothing happens on-screen	(STA) – Peter
12:04	Niyat	<i>Storytime</i> app	Niyat taps on the rabbit characters	(STA) – Lily, Benjamin and-
12:07	Niyat	-	Niyat turns to look at Fiona	(STA) – Cottontail were hopping through the woods
12:08	Niyat	-	Niyat taps the screen repeatedly, seemingly at random	(N) Is not- is not boy-ing
12:09	Niyat	-	Niyat leans back and starts standing up and moves off-screen (she is moving her body up and down)	(N) Is not do boing, boing
12:12	Fiona	-	Niyat flops back down on her front	(F) It doesn't do boing boing? D'you think on the next one he might do a boing?
12:16	Niyat	-	-	(N) No

12:17	Fiona		Niyat flops back down on her front, watching again	(F) No? (STA) – behind the bush by tapping on them?
12:23	Fiona	-	Niyat looks at Fiona	(F) so it says d’you want to hide behind the bush by tapping on them?
12:26	Niyat	-	Niyat taps several times on the screen	-
12:33	Fiona	-	Niyat holds her hand palm up in front of her in a gesture of annoyance	(F) d’you want to try tapping on them? (N) why he not do boing?

Analysis: Niyat explores the CBeebies Storytime app (Visit 3)

I am spending time with Niyat and her mother on V3. I have brought my own tablet device and Niyat is exploring the *CBeebies Storytime* app which is new to her, although *CBeebies* and many of the media texts referenced in the app are not. I have not made any suggestions for how mother and daughter 'should' interact. The moment represents a type of play that is exploratory in both traditional (Hughes, 2002) and digital (Marsh et al., 2016) domains. On her own, Niyat is physically exploring this new tablet as a specific physical object, touching, swiping and tapping, whilst also exploring the virtual affordances of the new digital context the apps provide. She does, however, bring extensive existing knowledge of many *CBeebies* media texts and negotiating a digital device. Three of the micro-interactions within this vignette are particularly interesting. Firstly, when I ask Niyat if she has seen *Sarah and Duck* before, she immediately jumps to her feet and physically fetches her *Mr. Tumble's Sound Book*. Secondly, Niyat's suggestion that she wants 'that, but in here'. Finally, her frustrations that the rabbit characters in the *Storytime* app 'don't go boing, boing'.

Niyat is the youngest member of the family and, at 3, is significantly younger than the other four occupants of the house (her sister and brother are 14 and 20 respectively). Many of Niyat's non-digital practices relate to physically performing knowledge with material objects associated with being older, including her handbag, lipstick and chewing gum. One of Niyat's established practices is exploring (and gaining physical mastery of) 'adult' digital devices, a practice which she tended to initiate herself, seeking (and receiving) Senait and Rowena's support in facilitating this. I also experience this for myself during Visit 5 when Niyat is determined to learn how to enter the four-digit pass code to operate my tablet. When we are playing together, Niyat has used the phrase 'do my hand' many times (e.g. during Visits 3 and 5). Her accompanying physical gestures show that she wants me to place my hand on top of hers so that she can learn the physical movements necessary to master navigating digital devices (or to trace a shape in the context of drawing with pens on paper). This is an interesting instance of the notion of operational digital literacy learning at home (Scott & Marsh, 2018). Whilst I am the participant here, it feels as though Niyat is trying to induct me into a broader family practice of physical showing, which is ordinarily supported by Senait and Rowena.

This leads us to another whole family practice, which I argue is very much related to mastery, and involves a wider kind of 'learning/communicating by showing'. Niyat is growing up in a complex multilingual context and communication frequently takes place with me, as well as amongst family members, in a blend of English, Tigrinya, Bilen and other modes, including gesturing, touching and showing. In addition to the practice of narrating parts of Niyat's history (e.g. her own baptism) through showing on a digital device, Senait explains another multimodal communicative practice to me. Sometimes, when Niyat starts to cry or have a small tantrum, Senait will communicate with Niyat using 'happy' and 'sad' stickers:

Senait: (laughs) I give her sticker, when she cry, I say hey, sticker crying, if you happy, happiness.

Fiona: *Is that for me? Thank you, Niyat! It's the letter J.*

Senait: *If Niyat is sad, I put for her this one.*

Fiona: *Awwww.*

Senait: *If Niyat happy, where is happy Niyat?*

Fiona: *What's that?*

Senait: *This happy.*

Fiona: *It's the letter 'O'. Are those stickers? So do you put these on her?*

Senait: *Yeah! She is cry, no, I put on, no I'm not crying, I take this sticker is crying.*

Fiona: *Oh! So she doesn't want the sad sticker?*

Senait: *She doesn't want sad or cry. Sticker (speaks in home language).*

(Transcript, Visit 2).

Many examples of Niyat's way of describing the world within the data suggest a blurring of boundaries between modes. In Visit 5, we are drawing with pens and paper when Niyat holds strands of my hair and begins to 'draw' in the air with them. During the same visit, we use the tablet to look up pictures of Lily (from *Peter Rabbit*) to draw. I ask Niyat which one she would like to draw. She replies verbally and physically, indicating she wants to draw a jumping up and down Lily:

Fiona: *Yeah. Which Lily should we draw?*

Niyat: *Want one (jumps up and down like a bunny).*

(Transcript, Visit 5).

The assemblage can be better understood in relation to the trajectories of Niyat's historical practices, both in terms of physically mastering 'adult' digital devices and 'learning by showing'. In her responses to *Sarah & Duck, Mr. Tumble* and *Peter Rabbit*, Niyat is performing knowledge of *CBeebies* media texts. Niyat's frustration with Peter not going 'boing, boing' intersects with both her developing range of embodied literacy practices and her desire to physically master 'grown up' digital devices. Her existing Funds of Knowledge (Moll et al., 1992) relating to rabbits and, specifically, the rabbits in *Peter Rabbit* as a media text, suggest that Peter *should* run, scurry and, most importantly, jump up and down. Indeed, this physical movement is a big part of Niyat's understanding and physical enjoyment of *Peter Rabbit*. This disappointment is coupled with the frustration that even tapping the screen (an action which, seconds earlier, made something happen) will not animate Peter and his friends.

5.2.5. NIYAT DANCES TO SINGLE LADIES



The video extract on which this analysis was based can be viewed as file Niyat_Beyonce.mp4 on the enclosed USB drive. An additional video clip of Niyat dancing to Single Ladies before the research began can also be viewed as file Niyat_Beyonce2.mp4.

This analysis reflects on a moment where some of Niyat and her family's key practices with TV&RM (performing knowledge; copying; facilitating) have combined and intersected with a number of relevant historical trajectories, including:

- (1) the historical trajectory of the family's engagement with dancing in church, both in Sheffield and in Eritrea;
- (2) the historical trajectory of the Rowena's love of music videos and Niyat's emerging interest;
- (3) Beyoncé's 'Single Ladies' music video as an important media text in the family's shared media habitus;
- (4) my historical trajectory, placing me and my tablet device as physical presences in the family home; and
- (5) the red shawl as a physical object with its own historical trajectory and affordances.

The multimodal transcript in Table 22 describes three short excerpts (lasting 83, 25 and 35 seconds, respectively) taken from a longer, seven-minute analysis of a play event. The excerpt illustrates how Niyat's dancing draws on a mixture of immediate and past physical and media textual resources, performing embodied knowledge (Wohlwend, 2013; Wargo, 2017) of 'Single Ladies' as a media text, but also drawing on an affective connection to her experiences of women in her community (including her mother) dancing at weddings and in church, both in the flesh and digitally.

Figure 68: Locating Niyat's Single Ladies dance within her case study map

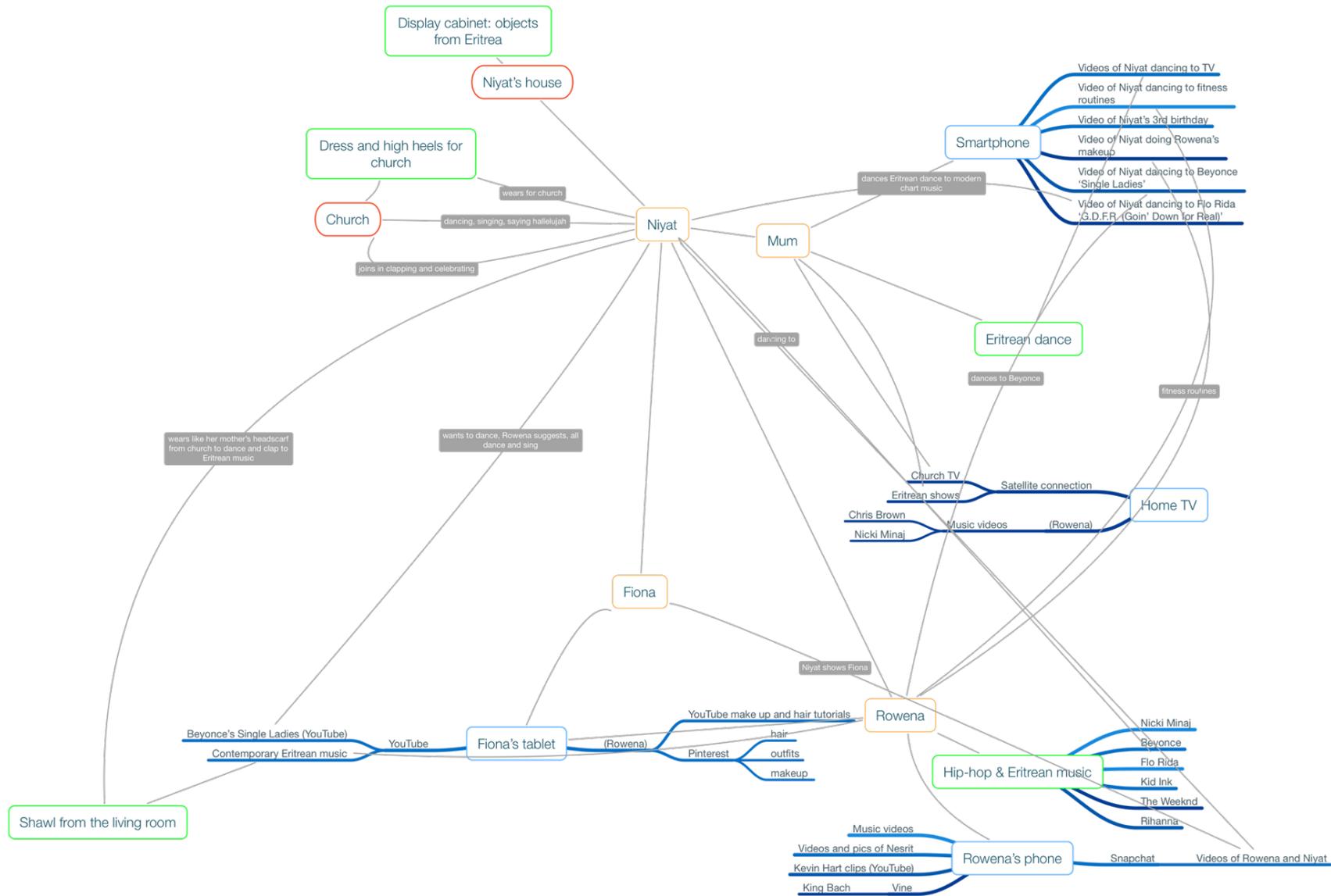


Table 22: Niyat dances to 'Single Ladies' (Visit 5) multimodal transcription

Time	Bodies	Things	Intra-action	Discourse in place
08:55	Fiona, Niyat	<i>Kiddizoom</i> digital camera; Fiona's tablet	Niyat is sitting with her back to Fiona and the videocamera, playing with the buttons on the <i>Kiddizoom</i> digital camera	-
09:57	Niyat	Fiona's tablet	Fiona's tablet sits on the floor, propped up on its' fold-out tablet case. Niyat turns around suddenly, looks briefly at Fiona, places the camera on the floor and gestures towards the tablet device with her right hand	(N) I need, I need to dance
09:01	Fiona, Niyat	-	Fiona taps the tablet screen with her right hand	(F) Huh?
09:02	Niyat	-	Niyat holds both arms at 90 degrees to her body, clenching her fists and moving them up and down alternately, looking at Fiona	(N) Dance
		-		(F) Dance?
09:04	Niyat	-	Niyat points very briefly to the tablet, then looks back to Fiona	(N) Yeah, I want to dance
09:05	Fiona	-	Fiona pulls the tablet a little closer to herself and Niyat, Niyat leans closer, partially lying down on her tummy. Fiona taps the screen with her right hand, Niyat watches closely, Fiona types in the 4 digit pin number	(F) So what would you like to dance to?
09:07	Rowena	-	-	(R) (off-camera) Put all the single ladies
09:10	Fiona	-	A smile spreads on Fiona's face. She looks to Rowena and back to the screen, continuing to tap as she searches for the <i>YouTube</i> app	(F) She likes that one. I heard that you could dance to that one as well
	-	-		(R) (laughs)

09:20	Fiona	-	Niyat continues to stare closely at the screen and what Fiona is doing, Fiona uses two hands, tapping with her fingers to type into the <i>YouTube</i> search bar	(F) (laughs) err...
09:28	-	-	-	(F) do you recognise this one?
09:29	Niyat	-	Niyat smiles, reaches to tap the screen with her right hand	(N) n-I like dis
-	-	-	-	(F) I like this
09:32		-	Fiona taps with her right hand, Niyat looks up at Fiona	(N) You like it?
09:34	Fiona	-	Niyat looks back at the screen as Fiona continues to tap	(F) Yeah! But I don't know the dance
	Fiona	-	-	(YT) Introducing the new-
09:37	Fiona	Fiona's tablet; <i>YouTube</i>	Fiona draws back, grabbing the videocamera with her right hand to reposition it. Niyat looks at Fiona's face.	(F) Ugh advert
09:39	-	-	The camera focuses directly on the screen. Niyat is tapping on the advert with her right hand. Fiona reaches towards the screen with her right hand	(F) Boring advert
09:42	Rowena	<i>YouTube</i> , Rocket Raccoon	'Rocket Raccoon' from the ' <i>Guardians of the Galaxy</i> ' film appears on-screen in the advert, snarling	(R) no, wait
09:43	Niyat	-	Niyat sees Rocket Raccoon, recoils, then looks at Fiona, giggling. Fiona's right hand index finger is hovering close to the screen	(N) urrrrh!
09:48	-	-	The 'throbber' circles on screen. Fiona reaches above to turn the volume up using the volume button, then taps to enlarge the video on screen as soon as it loads	-

09:52	Niyat	Main TV set	Niyat's attention has wandered to the action on the main TV set	-
09:54	Niyat	Tablet, <i>YouTube</i> , 'Single Ladies' music video	The opening sounds of 'Single Ladies' play on the tablet. The screen remains black	(SL) All the single ladies
10:00	-	-	The video (black and white, three dancers in black leotards) appears on screen, Niyat is lying on her tummy, resting her head on her left hand. She nods her head from side to side and sings a vague approximation of the lyrics along to the first 'Single Ladies' response	(SL) All the single ladies (N) Ah ahh-ahh (singing along)
	-	-	Niyat is watching the video attentively	(SL) All the single ladies (all the single ladies), all the single ladies (all the single ladies), all the single ladies (all the single ladies) (N) Ah ahh ahh, ah ahh ahh, ah ahh ahh, ah ahh ahh (singing along)
10:03	Fiona	-	-	(F) I thought you were gonna do the dance?
	-	-	Niyat turns her head to Fiona, smiling. She sits back and up, onto her knees, now moving her head from side to side, but moving her body from side to side in time to the music, too, as her eyes watch the screen very attentively	(N) uh uh oh (singing along)
10:10	Niyat	-	Niyat turns her head to observe Fiona, still dancing side to side. She sees Fiona smiling (off camera) and smiles, then laughs, dancing and looking at Fiona, before darting a glance at her mum (to her left, off-screen), then turning back to watch the screen attentively	

[...]

11:19	Niyat, Rowena	Tablet, rug	Rowena is lying on her front on the floor, browsing the tablet to find an Eritrean song. Niyat is lying on top of her, also on her belly. Since she is searching, the video is no longer visible, but the audio of 'Single Ladies' continues	(N) This is my sister!
11.24	Niyat	-	Niyat starts shaking her head slightly (to the music)	
11.25	Fiona, Niyat	-	-	(F) oh oh oh (singing along) (N) oh oh oh (singing along)
11.26	Niyat, Fiona	-	Niyat gets up onto her knees rapidly, looking at Fiona. She holds her hands flat in front of her, pumping them back and forward alternately in time to her 'oh oh ohs'	(N) oh oh oh (singing along) (F) oh oh oh (singing along)
11.30	Niyat	-	Niyat is giggling as she continues the dance, eyes on Fiona, standing up	-
11.31	Niyat	-	Niyat leans back on her heels, shaking her hips and continuing to move her hands along with song	(N) oh oh oh (singing along)
11:33	Niyat	Tablet, <i>YouTube</i> , 'Single Ladies' song	Hearing the chorus, Niyat stands up rapidly...	(SL) If you liked it, then you should have put a ring on it
11:36	Niyat	-	... turning her right hip forward and shaking her bottom back and forth, arms stretched out in front	

11:37	Fiona	-	Niyat is continuing to shake her hip/bottom back and forth in a very accurate reconstruction of Beyoncé in the 'Single Ladies' video	(F) (laughing) (N) (laughs)
11:38	Niyat	-	Niyat continues, placing both hands on her hips	(F) That's just like Beyoncé! (SL) If you liked it, then you should have put a ring on it
11:40	Niyat	-	Niyat swings her right hand out to the side, rapidly flipping it so that her palm faces forward, then back (repeatedly, approximating the iconic 'ring on it' dance move Beyoncé has popularised) [...]	
14:36	Niyat	Red shawl	Rowena has found an Eritrean song on <i>YouTube</i> . Niyat is standing, dancing, swinging her hips from side to side, whilst swinging her right arm from side to side. The red shawl is wrapped around her shoulders	(S) (speaks in home language) (N) Mama
14:46	Niyat, Rowena	-	Niyat incorporates a clap into the dance, then adjusts the shawl, first pulling it over her head, then holding it down near her hips, then finally pulling it fully over her head and drawing the ends in front	(R) Dance!
15:03	Niyat	-	Niyat incorporates the clapping back into the dance	

Analysis: Niyat dances to 'Single Ladies'

I am spending time with Niyat, Rowena and Senait on V5, during which time Niyat and I have been drawing rabbits in a sketchpad, including Peter and Lily from *Peter Rabbit (CBeebies)*. Niyat is lying on the floor playing with my *Kiddizoom* digital camera, pressing the buttons and generally exploring how it works. Niyat suddenly says, 'I need, I need to dance'. My tablet is out on the floor, since we have been using it to google images of Peter Rabbit and Lily Bobtail to copy. Concurrently to saying she'd like to dance, Niyat gestures to my tablet with her hand. When I ask what she'd like to dance to, Rowena chimes in with the suggestion of Beyoncé's 'Single Ladies'.

Though I am an 'outside' presence and my willingness to participate is combining with Niyat's interest in this activity to produce this particular event, I know that dancing along to music videos is a well-established practice within Niyat's play repertoire. Senait has shown me videos of Niyat dancing to this song (and others) on several previous visits. 'Single Ladies' was released in October 2008, over 3 years before Niyat was born. It has existed as a media text/s (song and video) her whole life, indeed pre-dating her. Senait has previously sent me a short video clip of a visibly much younger Niyat dancing to the 'Single Ladies' music video on the main television screen. Senait has also shown me a good many similar short video clips and often shows them to Niyat, too. A great deal of communication between the three women in the family is based around the sharing of short clips, many of which feature Niyat. When 'Single Ladies' finishes, Rowena finds an Eritrean song that she likes, which she plays on *YouTube*. Niyat dances along, taking a red shawl that Rowena has been using to keep herself warm and wrapping it around herself in a style similar to the arrangement worn by her mother and other women whilst dancing in church. Niyat incorporates the shawl into the dance, as well as clapping along. Watching, Rowena comments on the dance, seemingly providing some sort of context or explanation for me:

Rowena: *When we go to a wedding.*

Fiona: *Yeah?*

Rowena: *She just sits down, watches everyone, she analyse everyone.*

Fiona: *Really?*

Rowena: *And then when she comes here, she does the exact thing that they do. Like, when she see, like, mother, struggling with her children, trying to dance, she holds this and does exactly what they do. She just dressed our traditional dress, she put music on, she does what they were doing exactly.*

(Transcript, Visit 5).

On multiple occasions, I have witnessed Niyat dancing first hand, discussed this practice with Senait and Rowena and been shown these video clips (primarily on Senait and Rowena's smartphones) of Niyat dancing. The context and the nature of the dancing vary. During my very first visit, I explain that my research is about children and television. One of the very first things Senait tells me about during this visit is that Niyat dances along when she and her mother are watching women dance in church on Eritrean TV. Senait immediately shows me what she finds harder to tell me by playing me videos on her

smartphone, including one of Niyat dancing at church. I eventually witness a similar practice in situ during Visit 4, when I accompany the family to a church service at their local Catholic church:

The congregation are standing singing and clapping. A group of eight men and two women are in a circle at the front of the church, leading the singing, clapping, dancing and ululating. A priest stands at the lectern. The man in the middle of the circle has a drum he is banging. The camera pans to Niyat, who is standing next to another similarly-aged girl, both clapping along. The clapping along varies sometimes, getting faster or slower, hands rise higher sometimes along with the music. Niyat imitates what the adults do with their clapping. Niyat sometimes stops and looks up at the lady standing to her right, or looks around inquisitively at her mother, who is in the row behind. I am making a video with my video camera. Several others are making videos on tablet devices.

(Notes from video recording, Visit 4)

During Visit 3, we have been drawing in the sketchpad when *CBeebies' Tinga Tinga Tales* comes on the main television, which has been playing in the background. Niyat immediately starts to sing along, approximating the lyrics to the opening tune: 'Tales from Africa'. *Tinga Tinga Tales* involves telling the stories of its animal characters through songs accompanied by bright visuals. A little later, 'The Dance of the Horns' comes on as the finale of the episode and Niyat immediately starts to dance along, shaking her shoulders and bending forward and back to the beat, then waving her arms from side to side, before dancing around in circles. As Rowena will later do in Visit 5, Senait watches Niyat then comments on this, seemingly as way of contextualizing or explaining this behaviour to me:

Senait: Copy. This my country's dancing she show (showing Fiona a video on her smartphone of Niyat dancing in the style of Senait's country, whilst watching a video on the music channel).

(Transcript, Visit 3).

A good deal of research has considered music videos in relation to young black women and adolescents (Emerson, 2002; Ward et al., 2005). Emerson (2002) explores how black women use popular culture to express independence, self-reliance, and agency - comments that are particularly convincing in relation to the positive role that black female performers and producers appear to play in Rowena's identity construction. Less has been written in relation to children of Niyat's age and music videos, with the research that does extend towards younger girls tending to problematise such engagement and relate it to an alleged trend in the 'sexualisation' of childhood (Oppliger, 2008; Levin & Kilbourne, 2008). Willett (2011) draws on Corsaro's (1997) notion of interpretive reproduction to explain how the 5-7 year old children in her study adapt the same song ('Single Ladies') for playground consumption, substituting moves learnt in an after-school dance club for Beyoncé's original (bent over, butt-slapping) choreography. Willett points out that through such adaptation, the children 'align' the song with their other pop media consumption and production practices, particularly *Disney* musicals.

Mapping Niyat's broader practices adds contextual depth to the momentary action, suggesting that Niyat's interest and engagement in 'Single Ladies' as a media text is also about something 'more' than the just song itself. Niyat is not simply copying what she sees onscreen, nor is she adapting the moves for a particular audience. When the music video first starts, she is watching attentively. However,

Rowena begins to navigate *YouTube* to find some Eritrean music, meaning that the song is playing as audio only by the time Niyat gets up to dance. Niyat's dance moves and gestures are very accomplished reconstructions of Beyoncé's iconic 'Single Ladies' moves, meaning that they exist as part of Niyat's embodied repertoire. These physical representations of the on-screen action have clearly been rehearsed on many past occasions and now exist as a form of what Thiel (2015) would describe as embodied literacy. The vignette also exemplifies how Niyat is beginning to develop operational digital literacy at home (Scott & Marsh, 2018). Wanting to dance, Niyat elicits my support in achieving her goal of playing music to dance to, by physically gesturing towards the device. In doing so, she shows an awareness of the affordances of a particular digital technology.

Little current literature accounts for the complex layering of different media texts and re-watching practices that are going on in this case study. Short film-making and re-watching are joint family media practices, performed especially by Senait and Rowena. Senait consistently relates, for Niyat, dance in the present moment to a variety of past experiences through the re-playing of these video clips. A knowledge of Niyat's practices over time make it clear that her dancing is, in fact, deeply intertwined with her identity as a member of this specific family and community. Though the context and nature of the dancing varies, what remains constant is that Niyat is performing knowledge of aspects of dance in a way that connects her to the women who are important in her life. When in church, watching videos of her church congregation or Eritrean ladies on Eritrean TV, she performs an approximation of traditional Eritrean dance moves, learnt from careful study of these sources in combination with study of her own mother's dancing. As Rowena highlights, she also performs a variety of observed accompanying cultural practices, e.g. a mother struggling to hold her baby whilst dancing. When the 'Dance of the Horns' song comes on during *Tinga Tinga Tales*, her performance draws on both the immediate televisual text and on her embodied knowledge of Eritrean traditional dance. Similarly, Niyat's dancing in the 'Single Ladies'/scarf dance vignette (V5) is connecting digital and non-digital components with the trajectories of objects and bodies in complex things. Various 'things' (Niyat, the tablet, the 'Single Ladies' music video, the Eritrean music video, the red scarf, Fiona and Rowena) are coming together in two consecutive momentary assemblages. Dance links this momentary interaction to existing histories of social practices. Specific physical knowledge relating to 'Single Ladies', traditional Eritrean dance and culture (e.g. how to wear a scarf during worship, how to clap along) all exist as parts of Niyat's funds of knowledge. Analysis of Niyat's broader practices, then, demonstrates that her dancing is 'about' more than just the scarf as a physical object or 'Single Ladies' as a media text. As an adult researcher, this may be ultimately unclear, but it seems that she is exploring dimensions of both identity and affect.

5.3. Olivia



5.3.1. A pen portrait of Olivia and her family

Demographics: Olivia is a mixed-race (White and Asian) girl, aged 3 years and 5 months, when I first visit in April 2015. She is an only-child and lives in Sheffield with her mother, Teresa (27). Teresa split up with Olivia's father a year before the research began, although he still lives in Sheffield and Olivia spends some time with him once a week. Olivia has lived her whole life in LSOA Sheffield 048D (Park Ward). In the latest Index of Multiple Deprivation (2015), this area was ranked 1,433 out of 32,844 in England, where 1 was the most deprived and 32,844 the least, making it one of the top 10% most deprived areas in the UK (IMD Decile 1). Olivia's mum categorised her work as 'unskilled manual' on the modified Hope-Goldthorpe scale (1981). She did not give any information about the work of Olivia's dad.

Family history and culture: Teresa moved to the UK from Poland eight years ago. On my first visit, Olivia has very recently started attending nursery for three afternoons per week. Teresa likes the independence that living on her own in Sheffield has brought, although she now has no family nearby and only a few close friends, most of whom are also Polish. Olivia tends to spend time with other Polish children rather than with children from her nursery. Most of the children she plays with are the offspring of Teresa's friends, who are also Polish. Some are considerably older than Olivia, although some are of a similar age. She also plays with some of the children living on their street. Olivia tends to speak mostly Polish at home. Teresa feels she will learn English in nursery, so there is no need to teach her at home, although she has noticed that Olivia also picks up English from watching the television.

Media environment of the home: Olivia's family have a traditional TV in the living room. Olivia does not have a TV in her bedroom and tends to do most of her viewing on the main set. On my first visit, the family had a Sky TV subscription. However, on my second visit, Teresa mentioned that she had cancelled this subscription, so Olivia was tending to watch more *CBeebies* and shows on Amazon Prime, via the main TV set. Teresa tends not to watch much television on the main TV set herself. She will watch 'her' shows (new movies and TV dramas) on her own laptop. This means that she can move around the house when she is doing housework. Olivia's father bought Olivia a tablet (iPad), which she uses for games, drawing and to watch television shows that she finds on *YouTube*. Teresa mentions on our first visit that she is not a fan of the iPad and prefers other brands, although it seems Olivia uses the iPad frequently. Teresa has a smartphone, which Olivia uses from time to time to take of photographs at home and sometimes to play mini games. Another significant space for Olivia is her mother's friend's house, where she watches Polish television shows on her mum's friend's TV set. More detail on the media environment at home is given in Table 23.

Figure 69: Olivia's family tree

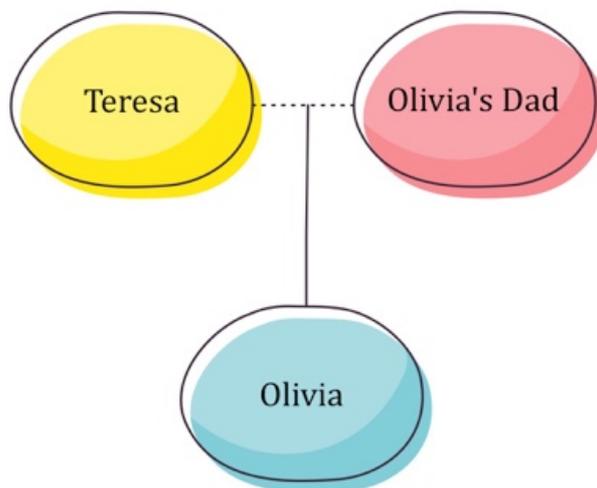


Table 23: Things that 'mattered' in Olivia's case study

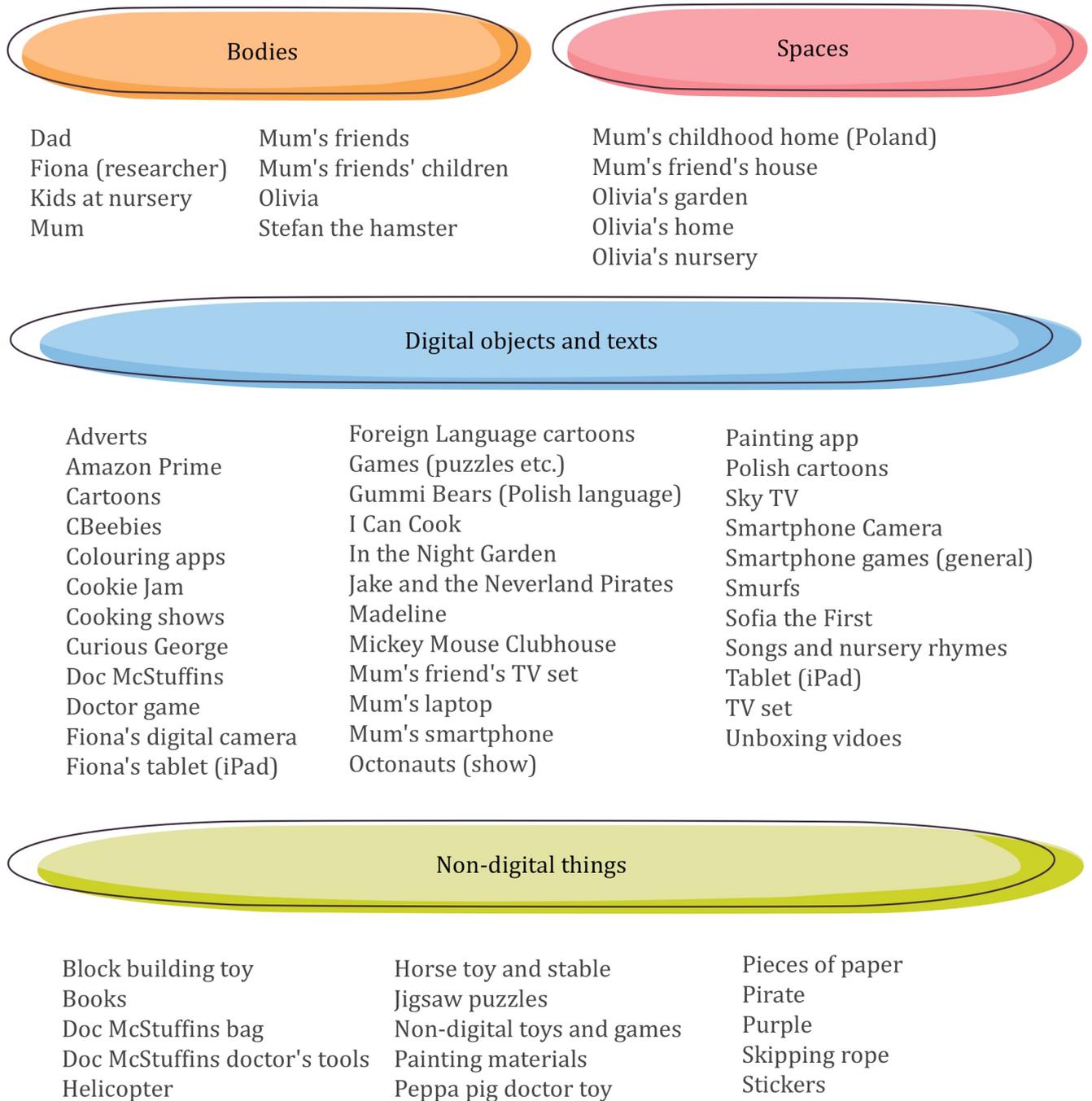
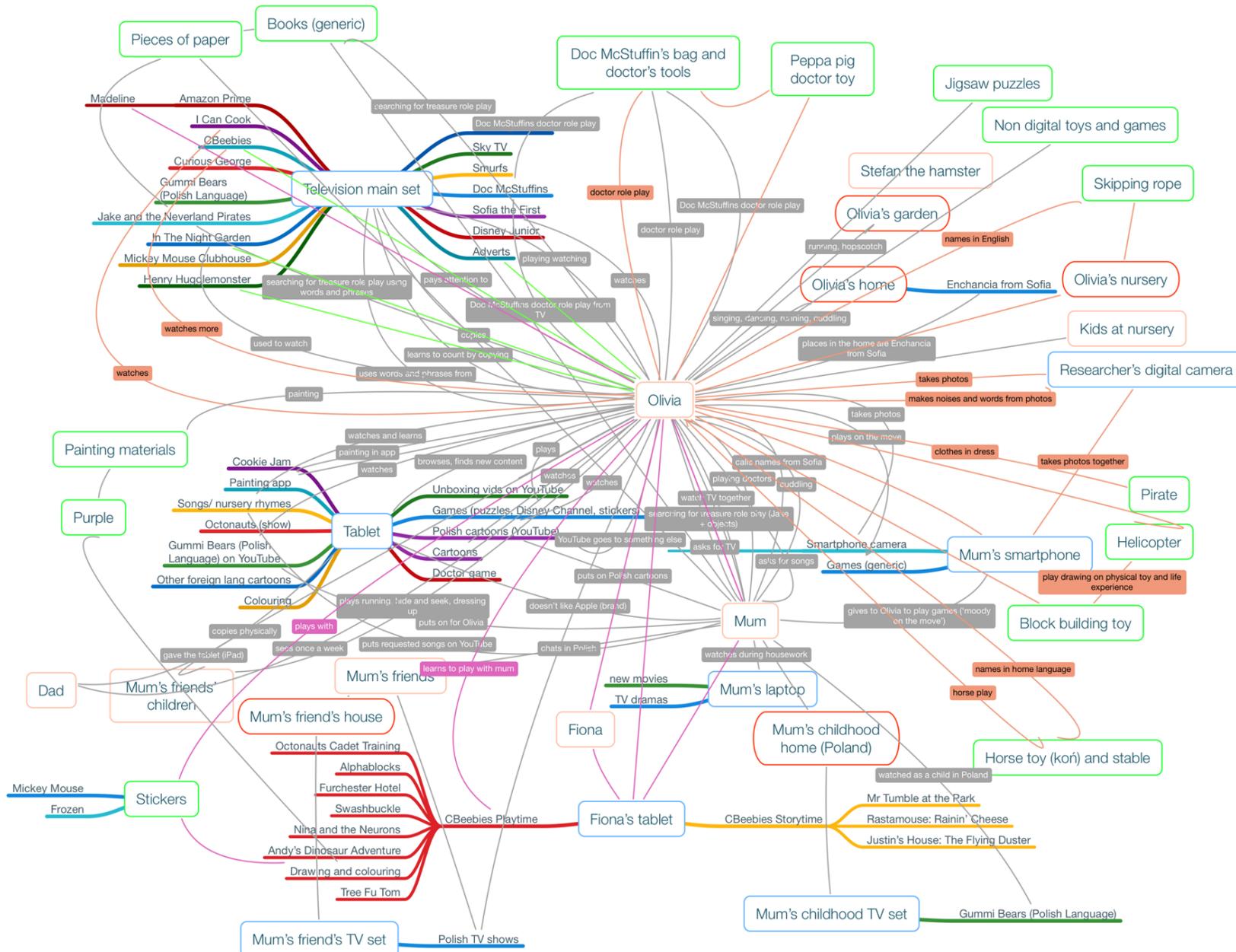


Figure 70: Things that 'mattered' and intra-actions in Olivia's case study (mapped)



5.3.2. Members' generalizations and researcher observations about TV&RM

My fieldwork with Olivia's family was limited to ethnographic study with Teresa and Olivia. Members' generalizations are therefore limited to Teresa's descriptions of her personal, and Olivia's, actions with TV&RM at home.

Teresa constructs Olivia as an active child

In our early interactions, Teresa is keen to describe Olivia as an active child. On our first visit, she stresses that the television is not the most important thing in Olivia's life: 'She's not even bothered by TV' (Teresa, Transcript, Visit 1). Teresa's conceptualisation of the 'active child' does, however, include engagement with TV&RM:

Teresa: She is quite active even though TV is on most of the time with cartoons on, because that's the only programme I'm using. Only from time to time I've seen her standing watching, but most of the time she's playing.

(Transcript, Visit 1).

In all my early interactions with parents, I was conscious of my own role as 'academic researcher' and the extent to which discourses about children and television were being constructed performatively, particularly during these early stages. As Seiter (1995) highlights, parents are bombarded with messages about TV&RM (including negative judgments) and may feel the need to moderate their statements based on the expectations of others. At the same time, the 'neutral observations' in my field notes support the suggestion that, whilst Olivia is increasingly interested in the TV, she is still far more interested in other things;

It was really noticeable that Olivia did not pay much attention to the TV when I was there. A new person in the house (and especially one who would play with her) was far too exciting. She barely glanced at the TV, even though it was on the whole time and at one point her new favourite show (about cooking) came on.

(Fiona's Fieldnotes, Visit 2).

Indeed, Teresa's comments, combined with my observations of Olivia, backed up the findings of the parent survey, suggest that children in this age bracket do participate in a wide range of other activities whilst engaging with the television.

Teresa conceives TV&RM as filling a gap in Olivia's home language acquisition

Teresa is a native Polish speaker and felt ill equipped to assist with Olivia's English language acquisition prior to her starting nursery. She has expressed some concern that Olivia has made few friends at nursery so far, suggesting that 'there is a language barrier' (Transcript, Visit 1). She notes Olivia's surprising level of confidence, however; 'she deals very well with that because she's not scared of talking

English' (Transcript, Visit 1). Indeed, Teresa is happy for Olivia to watch cartoons because she has observed that they are helping her to develop basic competencies, for example counting in English (which she has learnt to do from the television) and vocabulary, e.g. learning to sing English language nursery rhymes by playing them repeatedly on *YouTube* on her tablet device. Teresa perceives Olivia's evolving English language competencies as entangled with both her ongoing engagement with English-language television at home and the move to nursery:

Teresa: She's picking up a lot of English from the cartoons recently. Not so much before, although we had Sky TV all the time, but she was speaking only in Polish. Right now she's mixing it, but I think it's connected to nursery as well because she's started going to nursery.

(Transcript, Visit 1).

Studies demonstrate incidental acquisition of foreign languages by children when watching foreign language television (Kuppens, 2010). It is interesting to observe a similar process in this alternate context. Olivia is already able to converse adequately with me in English on our first visit, raising the question of whether she is truly monolingual (with Polish as her mother tongue) and is learning English as a foreign language, or bilingual, since the languages routinely 'spoken' at home are both Polish (mum) and English (media).

Teresa notices that Olivia's relationship with TV&RM is changing

Teresa talks a lot about recent changes in Olivia's relationship with media. Olivia's earliest television interest was adverts. As she began to lose interest in adverts around the age of two, they were replaced with cartoon texts such as *Henry Hugglemonster* and *In The Night Garden*. Shortly after she turned 3, Olivia started to copy the television more. Although she had always been interested in cartoons, she also started to show more interest in cartoons that depict adventures at this time (narrative-rich texts, such as *Jake and The Neverland Pirates* and *Octonauts*). Teresa thinks these changes also relate to Olivia's evolving cognitive abilities, 'she started understanding it more' (Teresa, Transcript, Visit 1), and they also coincided with Olivia beginning nursery. This change occurred a couple of months after Olivia began attending nursery. A pattern of change, from glancing to fully watching and from certain texts (cartoons / adverts) to those with greater narrative complexity, is witnessed across the case studies in this project. To a certain extent, the case studies support the findings of classic laboratory studies of children's TV viewing (e.g. Anderson & Levin, 1976) which suggest that viewing increases as attention increases with age. However, the present qualitative case studies, alongside the present survey data, also complicate what is happening within this transition. The quantitative data suggested that younger children were actually more likely than their older counterparts to spend more time engaging with traditional television on the main TV set, although this gives no indication of the level of attention that is being paid to the TV. The quantitative data also suggested a significant relationship between a child's age and their engagement with different types of concurrent activity whilst watching television. For example, younger

children were more likely to sing and dance whilst watching television and older children were more likely to write or draw whilst watching television.

Teresa depicts Olivia as taking the lead in many media choices and practices

Teresa expresses various preferences regarding Olivia's TV&RM engagements, relating to their perceived educational value and to a sense of nostalgia and shared emotional connection between mother and daughter. Such preferences are backed up in action, with Teresa saying she has downloaded particular games because Olivia is 'learning to count or some puzzles' (Teresa, Transcript, Visit 1) and that she has found and played Polish-language television show *Gummi Bears* for Olivia on *YouTube* because it is a media text she remembers fondly from her own childhood. Teresa's opinions about educational content link to a variety of existing literature concerning parental preferences for seemingly educational apps. However, she also tends to report instances wherein Olivia takes the lead, selecting her own texts and platforms, directing her mother towards her own choices where necessary or even subverting her mother's intentions:

Teresa: I'm putting some Polish cartoons as well, but now not so much because as soon as I put some cartoon on she's browsing and finds something different and she's changing it.

(Transcript, Visit 1).

Similarly, Teresa expresses a dislike for the iPad Olivia's father bought her, but describes its frequent use. This simultaneous parental dislike coupled with significant use is echoed in Chaudron et al.'s (2015) recent study. Teresa also describes multiple instances of Olivia instigating imaginative play drawing on TV&RM and inviting her mother to join in. Her comments suggest that Olivia is typically the 'lead player':

Teresa: She's playing a lot of doctor stuff or Jake from the Neverland Pirates.

[...]

Fiona: How does she get you involved?

Teresa: She's telling me, 'You're this one and you go there,' and, 'Come on let's go find treasure.'

(Transcript, Visit 1).

This pattern is subverted during Visit 3, wherein Olivia is exploring a tablet device I have brought to show her the *CBeebies Playtime* and *Storytime* apps. Teresa gently intervenes in Olivia's engagement, to enable her to accomplish more with the support of a skilled adult than she could do alone (Vygotsky, 1978);

Fiona: Mum doing lots of interaction with Olivia in a way I haven't particularly seen before – perhaps because they're exploring the new game on the tablet. Exploring together, e.g. mum asking questions to prompt Olivia, directing her with what she needs to do when she's unsure (scaffolding).

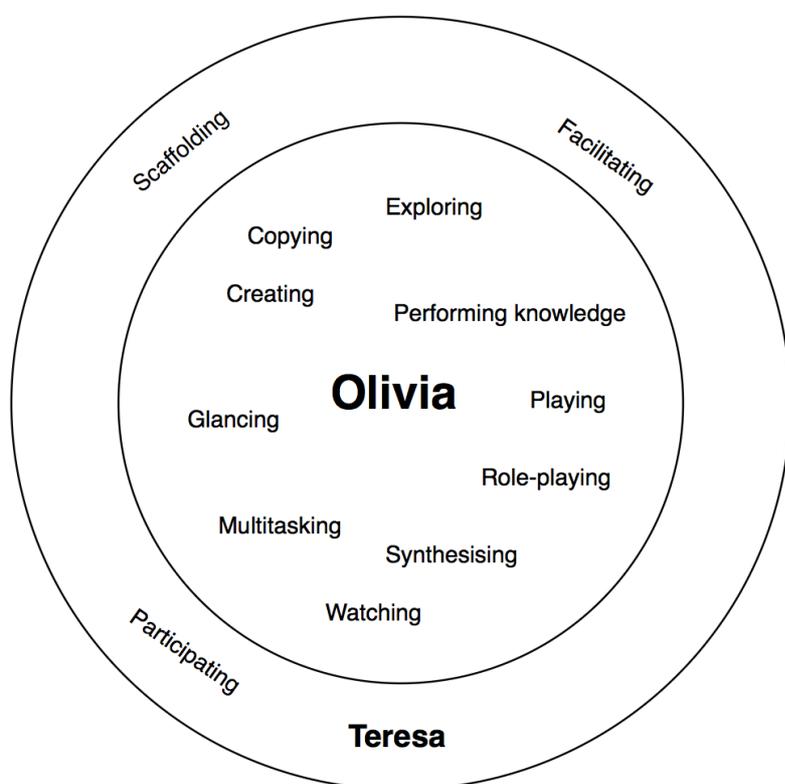
(Fiona's Fieldnotes, Visit 3).

My own field notes, then, demonstrate Olivia gaining new operational digital literacy skills (Scott & Marsh, 2018) on the tablet and digital camera through intra-actions involving Teresa. In the latter

example, Teresa is leading the activity in a very traditionally educative way although, more typically, Olivia is described as taking the lead. It is possible that the artifice of the research situation on Visit 3 may have produced interactions atypical of ‘regular’ practices. It is possible, however, that Teresa is simply unaware of how much she is personally contributing to developing Olivia’s capabilities with digital texts and devices. Traditional literacies scholars make clear how important adult participation in children’s home literacy practices are (Dorsey-Gaines & Taylor, 1988; Weinberger, 1993), although intervention in play practices is also a complex issue (Scott, 2018). This is a topic that requires further attention across the range of case studies.

5.3.3. Key child and family practices with TV&RM in Olivia’s life

Figure 71: Olivia and her family’s key practices



Examples of events at the nexus of key practices:

1. Polish language naming and play with the Barbie stable set

At the nexus of the practices of playing, copying and performing knowledge, Olivia plays with her Barbie horse and stable playset using onomatopoeic and Polish language. Olivia first describes her horse as an ‘ee-haw’ and secondly a ‘koń’ (Polish word for ‘horse’).

2. Renaming people and places

At the nexus of the practices of synthesising, playing and copying, Olivia re-names her mum as characters from *Sofia the First* and renames everyday places as 'Enchancia' (the kingdom where the character, Princess Sofia, lives).

3. Making noises and speaking words, inspired by photographs

At the nexus of the practices of performing knowledge and creating, Olivia makes noises and repeats the word 'rainbow', inspired by the rainbow filter she has found whilst taking photographs on Fiona's digital camera. In line with Mackey's (2002) study, Olivia is 'playing the text', her knowledge of oral literacy intertwining in her expanding understanding of the world.

5.3.4. OLIVIA PLAYS DOCTOR



The video extract on which this analysis was based can be viewed as file Olivia_Doctor.mp4 on the enclosed USB drive.

This analysis reflects on a moment where some of Olivia's regular practices (Wohlwend, 2009) with TV&RM (role-playing; performing knowledge; and synthesising/repurposing/reimagining) have combined and intersected with a number of relevant historical trajectories, including:

- (1) the historical trajectory of Olivia's English language learning;
- (2) the *Doc McStuffins* text as one of Olivia's Funds of Knowledge;
- (3) my historical trajectory, placing me as a unique physical presence in the family home; and
- (4) the *Doc McStuffins* medical bag play set, *Peppa Pig* medical bag play set and *Play-Doh Doctor Drill 'n Fill Set* braces roller as a physical objects with their own historical trajectories and affordances.

The multimodal transcript in Table 24 describes two one-minute excerpts taken from a longer, 13-minute analysis of a play event. The excerpt illustrates how Olivia's play synthesises material objects and prior knowledge of *Doc McStuffins* as a televisual text, enabling her to perform knowledge of the English language and subject-specific embodied literacies (Thiel, 2015) of medical objects.

Figure 72: Locating Olivia's doctor's role-play within her case study map

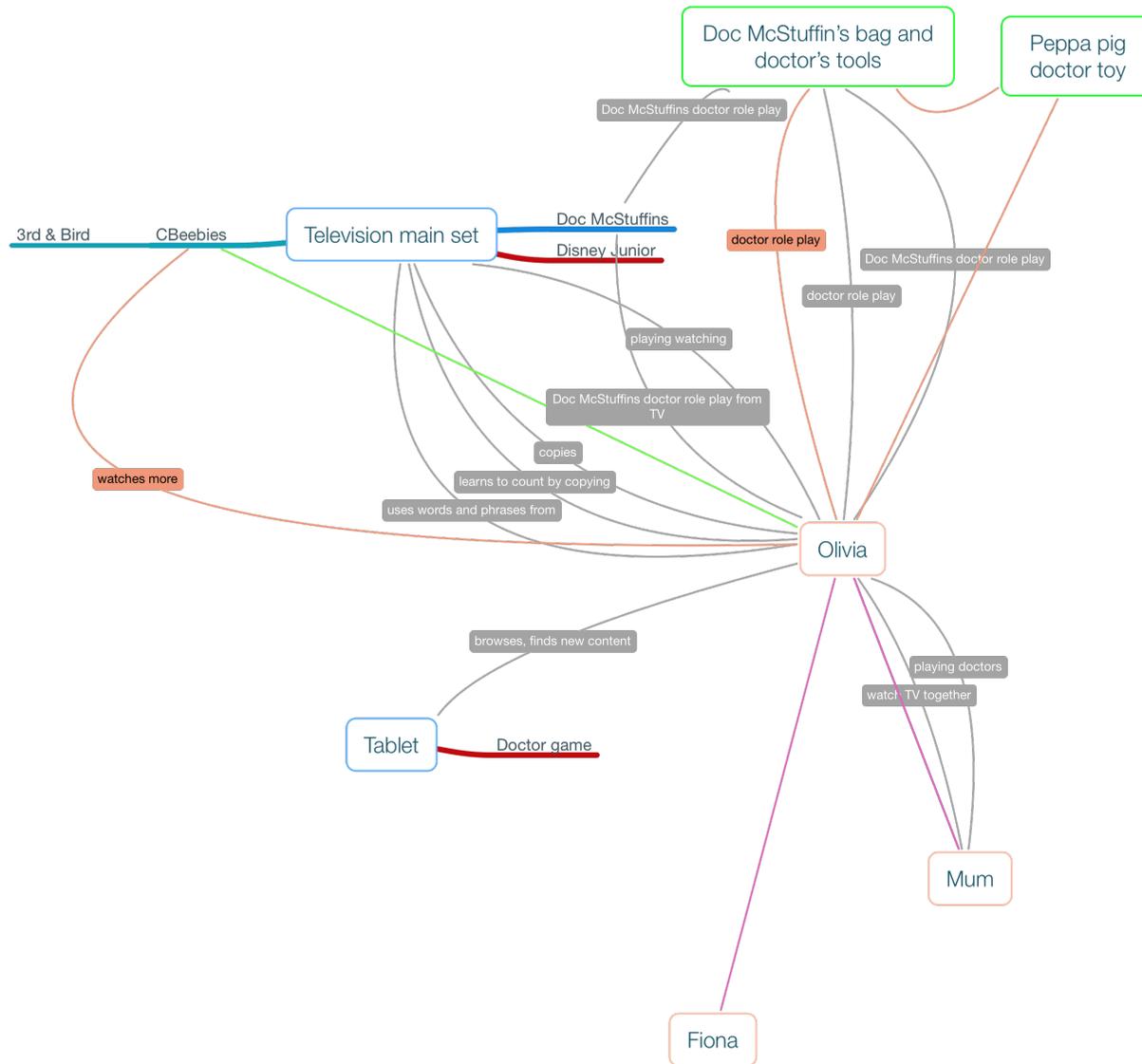


Table 24: Olivia's doctor role-play (Visit 2) multimodal transcription

Time	Bodies	Things	Intra-actions	Discourses in place
03:40	Fiona		Holds out her arm towards Olivia	(F) Do you want to give me an injection?
	Olivia	Toy syringe	Leans towards Fiona with the toy syringe, compresses the syringe	
	Olivia		Smiles at Fiona	(O) laughs
03:42	Fiona		Static	(F) exclaims Ooooooh! That's sore. I think I might need to put a plaster on that.
	Olivia	Toys on the floor	Smiles. Reaches out to grab toy otoscope	(O) laughs And now dis...
03:47	Fiona		Static	(F) Is that to listen to my ears?
	Olivia	Toy otoscope	Holds the otoscope close to her eye	(O) Yah, is, -isten...
03:52	Fiona		Static	(F) ... or to my eyes?
	Olivia		Smiles at Fiona	(O) laughs
	Fiona		Static	(F) laughs
03:56	Olivia	Toy plasters	Smiling, reaches to pick up toy plaster	(O) And now, because this one is plaster...
	Olivia	Toy plasters	Reaches to pick up second plaster, combining it with the first	(O) ... and the three. Is here three
04:04		<i>Third and Bird on the main TV set</i>		(T&B, in the background) I must have been mistaken...
	Fiona		Static	(F) A plaster?
04:06	Olivia	Plasters	Arranges two plasters in her hands	(O) Yeah
04:07	Fiona			(F) Yeah. What do you use plaster for?

04:09	Olivia	<i>Doc McStuffins</i> , plaster	Places plastic plaster around her wrist	(O) Du hands...
	Fiona			(F) Yeah, the hands if they've hurt their hand?
04:13	Olivia		Pushes plaster on, secures it	(O) Yeah, like this. I have little hands
		<i>Third and Bird</i> on the main TV set		(T&B) sings Somewhere, over the hills, I've...
	Fiona			(F) Oh, does that feel a bit better when you've got a plaster on?
04:20	Olivia		Eyes flicker towards the television but remain down on wrist	(O) Yeah
	Fiona			(F) Yeah
		<i>Third and Bird</i> on the main TV set		(T&B) sings ... finally found my dream
	Olivia	<i>Third and Bird</i> on the main TV set	Glances up at the TV for a moment	(O) I have it...
04:26	Olivia		Looks back to Fiona; glances briefly at camcorder	(O) Plaster
	Fiona			(F) Yeah
	Olivia		Looking at hand / plaster	(O) I have it...
04:28	Olivia		Looking at hand; extends index finger to count	(O) One...
	Olivia		Continuing to look at hand as she extends middle finger to count	(O) Two...
04:31			Extends ring finger, looks up to Fiona	(O) And like dis...
	Fiona		Holds out three fingers herself	(F) Three?

04:34	Olivia	Eyes dart between her own fingers and Fiona's	(O) Yeah.
		[...]	
12:46	Olivia	Searching the toy box; picks up modelling clay cutter	(O) And this one is in the plaster...
12:50	Olivia	Pressing the modelling clay cutter inside the plaster against the floor	(O) ... watch dis, watch dis, watch dis
12:56	Olivia	Working the modelling clay cutter inside the plaster in front of her; laughs	(O) Is not working
13:00	Olivia	Drops the first plaster, grabs a different plaster; attaches it to the modelling clay cutter	(O) This one must be
	Fiona		(F) Goes on that?
13:04	Olivia	Smiles. Plaster now firmly attached, pushes the modelling clay cutter and plaster device around the floor like a toy car	
	Fiona	Olivia pushing the modelling clay cutter	(F) What's that?
	Olivia		(O) It's a (incomprehensible)
	Fiona		(F) It's a...?
13:14	Olivia	Olivia hands the device to Fiona	(O) It's a (incomprehensible)
	Olivia/ Fiona	Fiona tries to push it across the floor on its edge (Fiona laughs; Olivia looks at Fiona's face; laughs)	(F) Oh, silly. Silly Fiona
		Olivia reaches forward, adjusts the device	(O) Like dis
	Fiona	Lifts the device	(F) Like this?
13:22	Olivia	Shakes hands expressively, shaking head	(O) Is not roll

Analysis: Olivia's doctor role-play

I am spending time with Olivia and her mother on V2. The main television set is on in the background, currently playing *3rd & Bird* (CBeebies). However, Olivia's attention is on me (the visitor) and on the task in hand. I have asked Olivia if she would like to show me 'where she likes to play' and 'where her toys are'. After first showing me a skipping rope and a pirate doll that she puts into a dress, Olivia physically shows me several toys from her doctor's bag. From here, my obvious interest and willingness to be involved evolves quickly into some light doctor role-play. My willingness to participate is combining with Olivia's interest in this play to produce this event or moment, I know that doctor role-play is a particularly well-established fixture within Olivia's play repertoire, having been observed multiple times and described to me in detail by her mother in Visit 1. It is difficult to pick apart the exact origins of different aspects of this play, although Teresa has previously suggested that the play first began with this bag as a physical object:

Teresa: *I think when I picked up this bag she started playing it.*

(Transcript, Visit 1).

In this instance, Olivia's frequently occurring play-practice relating to the doctor's bag and to *Doc McStuffins* as a television text involves me as a player. However, Olivia's mum is her more regular play partner:

Fiona: *What do you play with these?*

Olivia: *With mummy of course.*

(Transcript, Visit 1).

Teresa's verbal descriptions suggest she tends to participate in, rather than lead, these moments of play.

The bag in question is a purple plastic *Doc McStuffins* (Disney Junior) brand toy doctor's bag with a pink glitter lid that opens to reveal a set of toy doctor's implements inside (stethoscope, plasters, syringe etc.) The bag itself, and the implements, inside correlate with the ones the characters use in the show. For example, in S.1, E.1 ('Knight Time: A Bad Case of the Pricklethorns'), *Doc McStuffins* uses a plaster to fix a thorn injury on Boppy's stomach after he lands in a rose bush.

Olivia's play connects digital and non-digital components with bodies and spaces in complex ways. In this instance of role-play, various 'things' (Olivia, the plasters, the *Doc McStuffins* branded doctor's bag toy set, the *Peppa Pig* doctor toy set, the modelling clay cutter, Fiona and Teresa) are coming together to constitute a momentary assemblage (Giugni, 2011). Here, play links a momentary intra-action to a universe of existing histories of 'social practices' (Wohlwend, 2009). Though *Doc McStuffins* is not immediately present as a televisual text (*3rd & Bird* is onscreen), engagement with *Doc McStuffins* has historically been the basis of multiple significant practices in Olivia's life. Specific knowledge relating to *Doc McStuffins* (characters, plotlines, language and specific medical knowledge) exists as part of Olivia's Funds of Knowledge (Moll et al., 1992). Similarly, Olivia's historical life experiences mean English

language learning is a significant part of her current trajectory. It is interesting to note that, although Olivia has been watching *Doc McStuffins* for some time, her mother attributes the provenance of the doctor role-play to the *Doc McStuffins* doctor's bag as a physical object;

Fiona: *Is she always being Doc McStuffins or is it wider than that?*

Teresa: *Sometimes she's a patient. Not particularly Doc McStuffins. She's just playing either a doctor or I'm a doctor, she's a patient.*

Fiona: *Where do you think she's got the interest in that from?*

Teresa: *I don't know. I think when I picked up this bag she started playing it.*

Fiona: *Is that a doctor's bag?*

Teresa: *Yes.*

Fiona: *So she's been quite influenced by the toy?*

Teresa: *Yes.*

(Transcript, Visit 1).

Olivia verbally performs knowledge of a specific piece of medical equipment in English, naming and counting 'plasters'. She also accurately conveys more than this with her body, including the purposes of several medical items. This knowledge and understanding is expressed multimodally, predominantly through the physical gestures of her body: 1) compressing the toy syringe against Fiona's arm; 2) holding the toy otoscope to her eye as if to look inside an ear; and 3) placing and securing the toy plaster around her own wrist. Taylor (2014) examines children's bodily 'intertextual referencing' (p. 402) in classrooms, concluding that knowledge and interpersonal relationships are realised through gesture and posture in addition to language. Importantly, Taylor notes that the National Curriculum in the UK values pupils' face-to-face classroom interaction in terms of standard spoken English, whilst other modes tend to be interpreted as gaps and silences. The speed and confidence within which these three physical actions are performed suggests that, in addition to having been witnessed by Olivia in *Doc McStuffins*, they have been physically rehearsed on past occasions of doctor role-play and now exist as a form of embodied literacy (Thiel, 2015).

As a physical object, the bag is an artifact of Olivia's daily life. It is also an object with its own agency and significant individual (social) history (Carrington & Dowdall, 2013), not least in relation to its transmedia relatives such as *Doc McStuffins*, the televisual text, which has in turn also been an important artifact in Olivia's life for a long time. At the same time, analysis of Olivia's broader play practices demonstrates that doctor role-play spans beyond play solely drawing on *Doc McStuffins*, either as televisual text or as a physical object. There are multiple coded instances of Olivia launching into doctor role-play, sometimes with the *Doc McStuffins* bag, sometimes re-purposing other objects.

Multiple sources of media, materials (non-digital as well as digital) and broader narratives are coming together in the process of play, resulting in a new text of sorts, produced by Olivia. Later in the play sequence, Olivia's doctor role-play seamlessly transitions into play with the *Peppa Pig* medical set and,

then, to something new (also well-practiced and using the plasters), beyond the intended use of the toy set or either media text specifically. Around eight minutes into the play sequence, Olivia is still playing with the plasters but begins to search around the floor for another object to combine with the plaster. It seems from her concentrated sorting that she has something specific in mind. This new object is a yellow and grey plastic roller and comes from another medically-themed play-set, the *Play-Doh Doctor Drill 'n Fill Set*. This object is a 'braces roller', a small tool with a moveable roller that is designed to cut *Play-Doh* into a row of small square shapes that represent dental braces. It is intended that the resultant 'braces' are then placed on the plastic teeth of the patient included in the set. However, this is not how Olivia uses the tool. Instead, she purposefully fits the plaster around the braces roller and begins to push it around the floor, in the manner of a toy car. Here, Olivia is again seamlessly drawing on her interest in medical objects, the affordances of a non-digital object related to a media text and a non-digital object unrelated to a media text (but related to the medical narrative) to produce something new. The moment seems to 'matter'. It is clearly an established practice, since it comes with 'right' and 'wrong' ways of physical enactment. Whilst my attempt to participate is welcomed, my incorrect use of the cutter/plaster device is immediately corrected. On reflection, in the moment I moved the tool in the way I assumed it should be moved (and, having investigated further, the way its designers intended it to move). In the closing moments of this play vignette, then, Olivia is again demonstrating how she synthesises/repurposes/reimagines physical objects (the toy plasters and roller), taking flight on a new play trajectory (Thiel, 2015).

5.3.5. OLIVIA MAKES A PHOTO STICKER



The video extract on which this analysis was based can be viewed as file Olivia_Sticker.mp4 on the enclosed USB drive.

This analysis reflects on a moment where some of Olivia's key practices with TV&RM (creating; exploring; performing knowledge) have combined and intersected with a number of relevant historical trajectories, including:

- (1) Fiona's tablet device as a physical object with specific affordances;
- (2) *CBeebies* and its shows as media texts with their own historical trajectories;
- (3) the historical trajectory of Olivia's learning with creating, especially with stickers and taking photographs;
- (4) the historical trajectory of Olivia and Teresa's English language learning; and
- (5) my historical trajectory, placing me as a unique physical presence in the family home.

The multimodal transcript in Table 25 describes two, minute-long excerpts taken from a longer, 22-minute analysis of a play event. The excerpt illustrates how Olivia's exploratory play draws on her own past experiences with media texts and digital and non-digital objects, as well as on her mother, as resources, enabling her to develop new digital literacy skills.

Table 25: Olivia makes a photo sticker on the tablet with Mum (Visit 3) multimodal transcription

<i>Time</i>	<i>Bodies</i>	<i>Things</i>	<i>Intra-action</i>	<i>Discourse in place</i>
12:56	Olivia, Teresa	Tablet; <i>CBeebies Playtime</i>	Olivia and Teresa are both looking at the tablet screen. Olivia taps a right hand finger on the 'camera' icon to the right hand of the screen	
	Teresa			(T) Uh-ohh!
12:57		<i>CBeebies Playtime</i>	Olivia smiling broadly; Teresa picks up the tablet, holding it vertically in front of Olivia	(CP) Camera! Take a photo of something and let's use it to make a picture
	Teresa		Olivia reaches her right finger towards the tablet, presses the 'x' in the top right corner, closing the camera window (laughs)	(T) Go on, take a picture, go on, take a picture
13:04	Teresa	Tablet; <i>CBeebies Playtime</i>	Teresa taps the camera icon again	(CP) Camera! Take a photo of something and let's use it to make a picture
13:06	Teresa		The screen displays a mirror image of Olivia. Teresa gestures (with her left thumb, whilst holding the tablet) to the correct on-screen icon to take the picture Olivia taps the correct icon with her right hand	(T) Go on, take a picture here
13:07	Teresa		The screen freezes briefly, then six 'stickers' appear, each with Olivia's selfie photo inside. Olivia laughs	(T) Uh-ohh!
13:08		<i>CBeebies Playtime</i>		(CP) Stickers! Choose a sticker to add to your picture
	Olivia, Teresa		Both laughing, looking at the screen	
13:11	Teresa		Teresa looks at Olivia	(T) You have a sticker. Look!

		Olivia reaches her hand out, Teresa taps her gently on the arm, Olivia taps on the sticker, the tablet makes a beeping noise and a sticker is placed on Olivia's drawing on-screen	(T) Go on, tap it
	Teresa		(T) Uhh!
13:18	Olivia	Continues to tap, placing multiple photo stickers on her drawing, each time the tablet making a beeping sound. Olivia and Teresa laugh	
		[...]	
19:02		<i>CBeebies Playtime</i> The screen displays the six stickers with Olivia's selfie photo on, each a different shape	
19:04	Olivia	Olivia playing with her hair with left hand, points at the diamond sticker with her selfie image inside, circling it with her finger	(O) What's that shape?
19:05	Teresa	Looks at the screen. Olivia is covering her eyes, tired and slightly giggling	(T) What's that shape
19:09	Teresa	Gestures towards the diamond on-screen with an open hand, Olivia also points	(T) What's that shape? I don't know what's that shape...
19:10	Teresa		(T) ... diamond?
19:10	Olivia	Nods her head up and down, very emphatically, smiling	
19:12	Teresa		(T) Diamond shape

19:12	Teresa	Looks momentarily at Fiona, and at the diamond on the tablet. Points to the star sticker	(T) And what's that shape?
19:13	Olivia	Looks at the star sticker on the tablet, still smiling with nodding dying away	
19:16	Teresa	Looks briefly at Olivia and back to the screen	(O) Star
19:17	Teresa	Points to the square sticker	(T) And this one?
19:19	Olivia		(O) Triangle
19:20	Teresa		(T) No, it's skw... (O) Square (T) Square

Analysis: Olivia makes a photo sticker on the tablet with Mum (Visit 3)

I am spending time with Olivia and her mother on V3. I have brought my own tablet device and Olivia is exploring the *CBeebies Playtime* app, which is new to her, although *CBeebies* and many of the media texts referenced in the app are not. I have not made any suggestions for how mother and daughter 'should' interact. The moment represents a type of play that is exploratory in both traditional (Hughes, 2002) and digital (Marsh et al., 2016) domains. With her mum, Olivia is physically exploring this new tablet as a specific physical object, touching, swiping and tapping, whilst also exploring the virtual affordances of the new digital context the apps provide. She does, however, bring extensive existing knowledge of both physical creative play with art materials (stickers, taking photos, drawing etc.) and creative play on a digital device with digital resources to the process.

One of Olivia's established practices is taking photographs on her mum's smartphone. This is a practice that she has uncovered by herself rather than with her mother's explicit guidance:

Teresa: If she can't unlock it, she can go straight through to camera and then I end up deleting 200 pictures.

Fiona: What does she take pictures of?

Teresa: Everything. She just walks around and takes pictures.

(Transcript, Visit 1).

The assemblage can be better understood in relation to the trajectory of Olivia's historical practices with photo-making on digital devices. Firstly, it is evident from Teresa's account that this skill has not been explicitly taught, nor has it been encouraged. Olivia has discovered (most likely through a combination of watching her mother and physical experimentation) that taking photographs is something she can do with the smartphone without needing her mother's password. Secondly, Olivia's photo-making practice is prolific. It may not be possible to state for certain why Olivia is so driven in this activity or what it 'means' to her; however, it clearly 'matters' (Horton, 2010). Rautio's (2013) description of autotelic material practices provides a lens to consider Olivia's established digital photo-making practice. Since discovering that her mother's smartphone affords photo-making without a password, Olivia has repeatedly returned to the device to take hundreds of images of 'everything'. As Rautio points out, such obsessive practices are often discussed in relation to individual traits, but can arguably be more usefully interrogated by starting from the practice itself. In doing so, we are more likely to notice how both human and material entities are playing a role in the activity. Teresa's smartphone can be seen to work 'teleplastically' (Ash, 2010) to pre-shape potentials and possibilities for Olivia's developing digital practice. This historical practice, then, has been produced by an ongoing inter-relation between the smartphone as a physical device with specific affordances and human players (Olivia and Teresa). Teresa does not mention her own role in this process, perhaps unaware or undervaluing her potential to teach. Marsh, Hannon, Lewis and Ritchie (2017) discuss how young children become initiated into family digital literacy practices, pointing out that sometimes parents scaffold digital literacies

intentionally, employing 'didactic pedagogies to teach specific skills' (p. 54). However, at other times, scaffolding is so ingrained in everyday life that parents find it hard to recognise that teaching has occurred. A number of studies (e.g. Plowman, McPake and Stephen, 2010; Chaudron et al. 2015; Marsh et al., 2015) show that parents are models of many practices in relation to digital literacies, and that this often relates to ethnotheories and family histories. Critics of digital engagement in early childhood are frequently quick to point out that parents might not be aware of the role their own digital engagements at home has on influencing their children's fixations on digital devices, especially in 'digital addiction' literature and media discourses (e.g. Park and Park, 2014; Lynn, 2018). Moments such as this one support the finding that some parents may be unaware of just how much their own behaviour has a positive influence in terms of young children's digital competencies in relation to modelling.

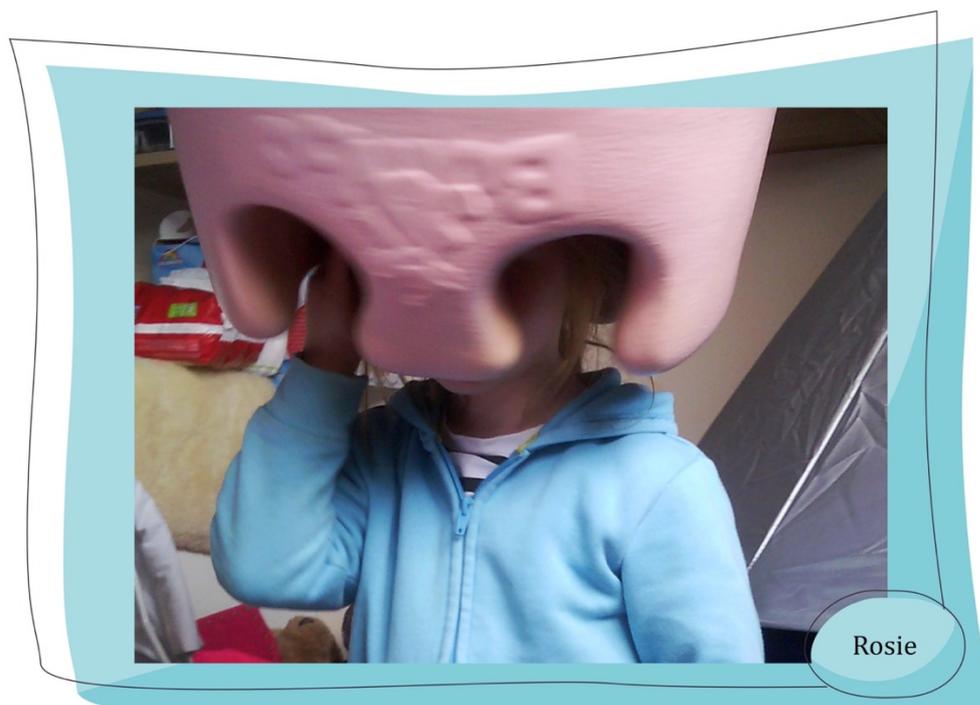
In the vignette of exploratory play, various 'things' and discourses (Olivia, the tablet, the *CBeebies Playtime* app and Teresa) are coming together to constitute an assemblage (Giugni, 2011). Exploratory play is linking this momentary human-object interaction with an array of existing social practices (Wohlwend, 2009), Olivia's photo-making being one of these. She has 'taught herself' to take photos using the smartphone. Today, she is being invited to do something similar with her mum in a more formal context. Olivia is able to very rapidly develop and demonstrate new operational digital literacy skills (Green & Beavis, 2012). Her action is being scaffolded by verbal instructions and visual prompts from the *CBeebies Playtime* app and by her mother's verbal and physical guidance (pointing, holding, gesturing, tapping). She is also drawing on, and quickly redeploys, her existing funds of knowledge in a new context. Within moments, Olivia has taken a photograph and is manipulating it to create a photo sticker within the app.

Something interesting is also happening with traditional literacy skills in this interaction. Language links this moment with Olivia and Teresa's individual and collective language practice trajectories. While Olivia is playing with the app, it throws up a spontaneous informal learning opportunity relating to the names of shapes in the English language. Seeing the diamond shape on-screen, Olivia asks her mother what it is called. Olivia's historical life experiences mean English language learning is a significant part of her current trajectory. However, English language learning is also a significant part of Teresa's current trajectory. Teresa is momentarily unsure, but suggests 'diamond'. When Olivia enthusiastically nods agreement, Teresa's intuition is confirmed. Teresa then takes a lead in the learning, repeating the process with the star and square shaped stickers on screen. Together, Teresa, Olivia and the app are exchanging different types of knowledge to consolidate Teresa and Olivia's knowledge of shape names in English. This finding has some resonances with the work of Kenner et al. (2008), who demonstrate the reciprocity of teaching and learning between generations of Sylheti/Bengali-speaking families, describing intergenerational exchanges between grandparents and grandchildren negotiating activities on a computer. However, Kenner et al. (2008) suggest that adults usually provide knowledge of literacy and numeracy, whilst children help with computer skills. Olivia's case is particularly interesting in that

her engagement with English-language television means she can reciprocate her mother's English-language support.

In play theory, parents have long been viewed as crucial social actors, intervening positively in play to enhance its educative potential. This tradition of parental intervention continues in relation to children's interactions with the digital, but is frequently reduced to mediating or limiting children's engagement (e.g. Nevski & Siibal, 2016) rather than positively scaffolding playful learning. Some examples in the latter mould do exist, however. McPake et al. (2013) employ sociocultural theory to explain how children's digital play at home is enhanced through guided interaction from an adult. Here, employing a sociomaterial lens uncovers how learning at home is being co-produced at the intersection of digital objects and human bodies. The digital, then, can be seen to play a social role in learning.

5.4. Rosie



5.4.1. A pen portrait of Rosie and her family

Demographics: Rosie is a White British girl aged 4 years and 7 months when I first visit in April 2015. She has recently gained a baby brother, Oscar, and lives in Sheffield with her mother, Mary (35) and father, Paul. Rosie also spends a considerable amount of time with her paternal grandparents, who live in a close-by area of Sheffield. Rosie has lived for most of her life in LSOA Sheffield 046C (Nether Edge Ward). In the latest Index of Multiple Deprivation (2015), this area was ranked 27,132 out of 32,844 in England, where 1 was the most deprived and 32,844 the least, placing it in the top 20% of *least* deprived areas in the UK (IMD Decile 9). Rosie's mum is currently on maternity leave with Oscar, although she previously worked 3 days a week as a Primary School Teacher and categorised her work as 'professional or technical' on the modified Hope-Goldthorpe (1981) scale. Rosie's dad works full-time as a Solicitor and Mary categorised his work as 'professional or technical' on the modified Hope-Goldthorpe (1981) scale.

Family history and culture: Mary trained to be a teacher when Rosie was a baby. Mary began part-time work at a school and, soon before the research began, Rosie's baby brother (Oscar) arrived. At the beginning of my research, Rosie had already started going to nursery part time (3 days a week) and would also spend time each week at her Grandma and Grandpa's house. Rosie has her last day at nursery shortly before my fourth visit (mid-July, 2015). Between visits 5 and 6 (Sept 2015), Rosie begins school full time. Rosie's family have an active social life and Rosie frequently spends time with other adults, including her Uncle, and children, including the offspring of her parents' friends

Media environment of the home and other spaces: Rosie's family have a traditional, Freeview TV in the living room. The family do not have Sky television at home, but Rosie frequently spends time at a neighbour's house, where the family do have Sky TV. Rosie does not have a television in her bedroom and does all her TV viewing in the living room. Mary suggests that she and Paul watch little television, as they do not tend to enjoy the same things. They watch Channel 4 news regularly and watch other shows on Channel 4 for their own enjoyment, but this tends to be on catch-up after Rosie has gone to bed. Paul likes to watch and play football, and this is something that Rosie has started to show an interest in, although she is more interested in playing football with her dad in the park, supporting Sheffield Wednesday and wearing the associated football gear than sitting down to watch it on the television. The family also have family movie nights from time to time (once every couple of months) where they will often re-watch a favourite, such as *Happy Feet*.

Rosie does not have her own digital devices but her mother has a tablet, laptop and smartphone. The tablet is from Mary's work as a schoolteacher and is therefore already loaded with a variety of intentionally educational apps for primary age children. Rosie has access to this at certain times and not others (to keep her busy while Mary is getting ready in the morning, for example, but not in the car). She used to watch some shows (e.g. *Peppa Pig*) and engage with the *CBeebies* website/games on her mum's laptop, but this practice has declined recently. Up until around Visit 5, Rosie did not have access to her mother's smartphone. Mary downloaded some game apps (e.g. *Vet Doctor*, maths games) onto it to entertain Rosie during their ferry trip to France for a family holiday, however, and she has subsequently been asking for it. Rosie does have her own 'kids' digital camera and enjoys taking photos with it.

There are a couple of other relevant media spaces in Rosie's life. One is her Grandma and Grandpa's house. Rosie does not tend to watch the main television there, but she watches content on their laptop and tablet, particularly *Peppa Pig*. The neighbours have Sky TV and Rosie is particularly excited to watch *Spongebob Squarepants* there ('She has really good television! *Spongebob!*' – Rosie, Transcript, Visit 1). The children also occasionally watch some television content at nursery (e.g. *Pingu*). However, what is far more striking is the proxy media exposure Rosie experiences socially via the other children at her nursery. Since spending time at nursery, Rosie has developed an interest in, and awareness of, multiple media texts that she has never encountered first hand. She even owns related products and initiates play related to these texts, e.g. *Frozen*, *Toy Story* and *Minions (Despicable Me)*. More detail on the media environment at home and in other spaces is given in Table 26.

Figure 74: Rosie's family tree

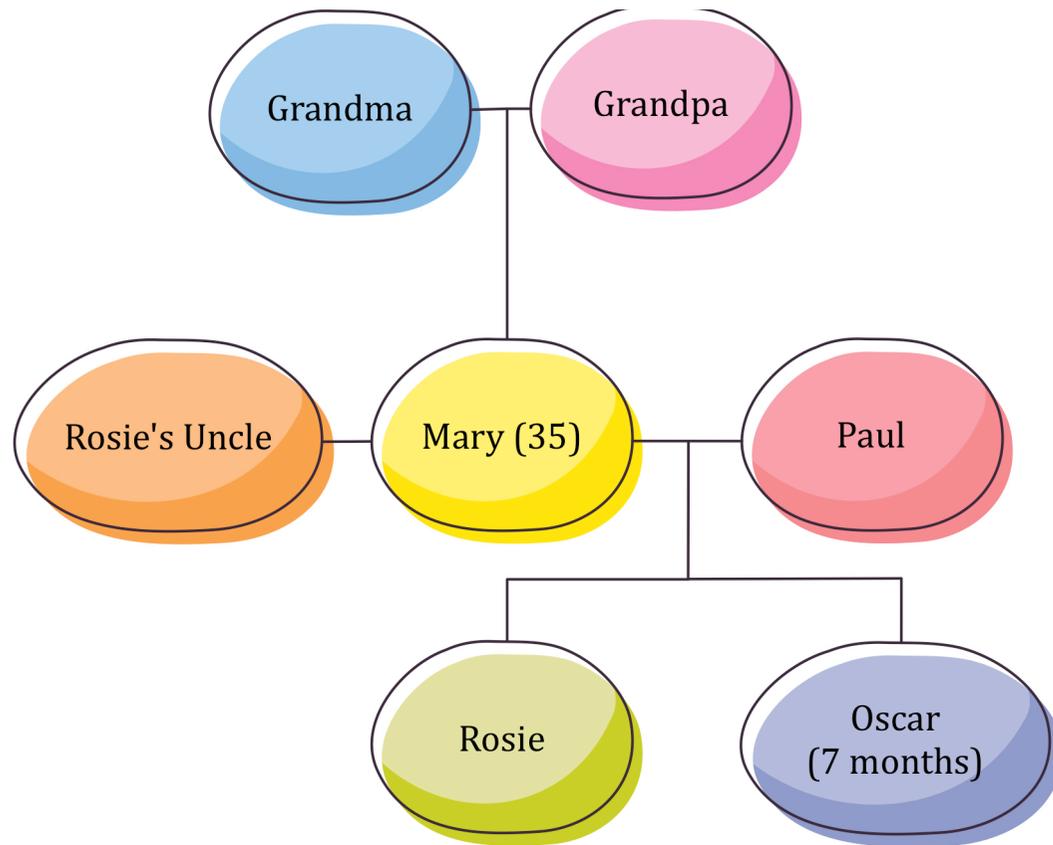
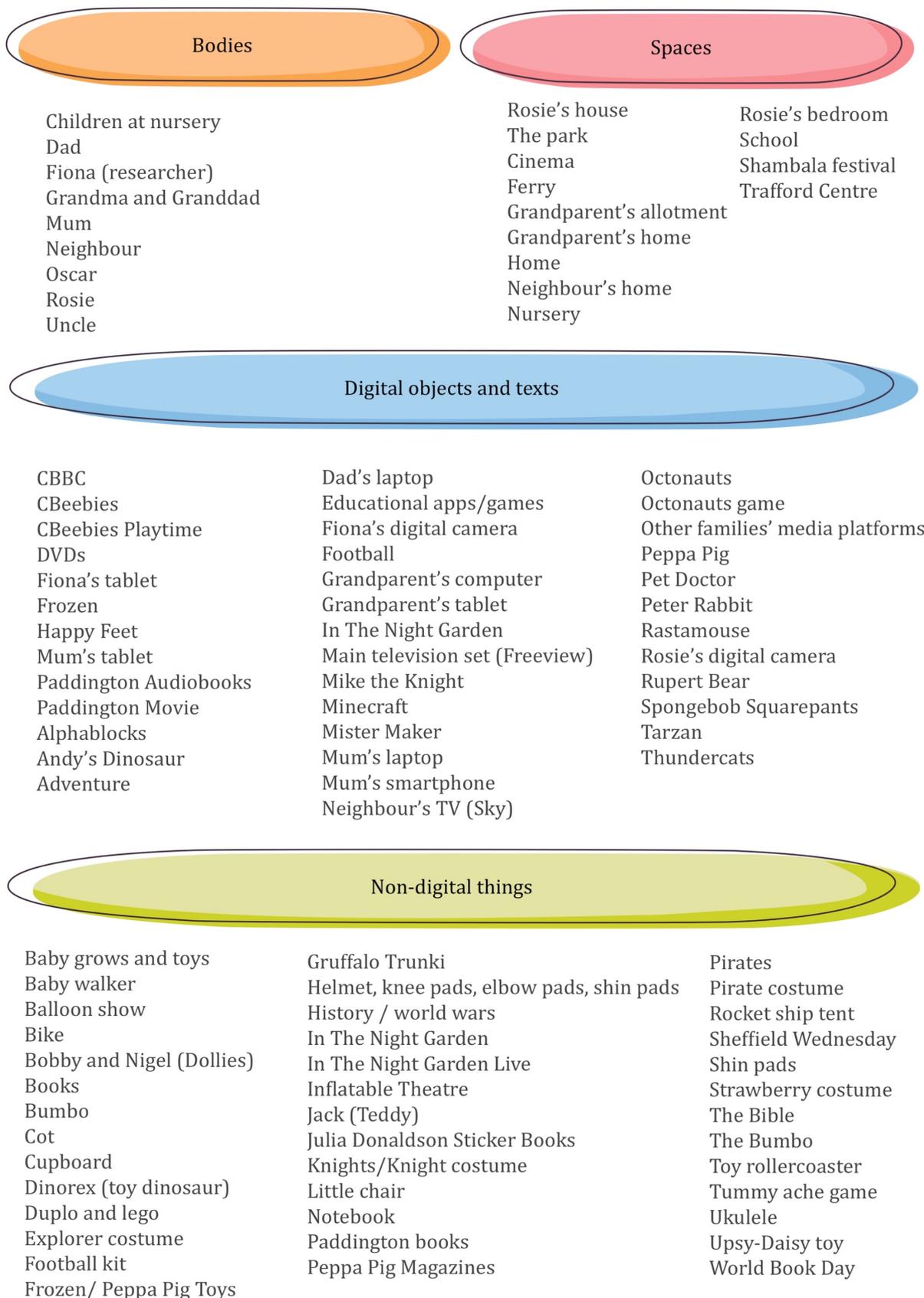


Table 26: Things that 'mattered' in Rosie's case study



5.4.2. Members' generalizations and researcher observations about TV&RM

My fieldwork with Rosie's family was predominantly limited to ethnographic study with Mary, Rosie and Oscar. Whilst I met Rosie's father, Paul, we did not discuss Rosie in depth. Some of the members' generalizations originate from Mary's descriptions of her personal and her family's actions with TV&RM at home. Though she is still under five when I first visit, Rosie is strikingly forthright in articulating: her own opinions and preferences; practices with TV&RM (and historic changes in these practices); emotional responses; and motivations for engagement. For example, her own account of the switch away from *CBeebies* to *CBBC*:

Rosie: *One morning, I was watching telly, a programme I didn't like, which was Bing, then I started watching CBBC [...] It's babyish, the music, it's all baby.*

(Transcript, Visit 1).

Rosie's own vocalizations are thus an important part of members' generalizations in this case study. In addition to the video data and coding of my data, I also made field notes, which enable me to give some brand of 'neutral observations' to compare with members' generalizations (Scollon & Scollon, 2004). It is, of course, important to acknowledge my own inevitable inability to be completely 'neutral' in such observations.

Media choices, control and notions of taste and value

Mary frequently articulates value judgements with regards to media content. When I question Mary directly about her own role, she refutes consciously shaping Rosie's media choices whilst simultaneously demonstrating how her own attitudes have shaped what has been made available to Rosie at home:

Fiona: *It sounds like there are particular things that you've encouraged Rosie to watch. Is it a conscious choice on your part?*

Mary: *Not really, it's just to do with the timing of the day. For example, CBeebies, there isn't any time that's going to be that bad [...] There isn't really anything within children's TV I would mind her watching.*

(Transcript, Visit 1).

Mary limits Rosie's exposure primarily to specific children's TV only, following a rationale that children's TV is 'safe'. Although this could theoretically include a range of children's media, it is noticeable that Rosie's main engagement is with *CBeebies* and, latterly, *CBBC*. It is true, however, that Rosie is sometimes exposed to some other content, such as *Peppa Pig* (introduced by her grandparents). Mary is also conscious of how often Rosie develops an interest in physical objects and play relating to a media text that she has encountered by proxy and not first hand, in particular in relation to other children, including

at nursery. Mary suggests that Rosie has not been given the option of engaging with particular media platforms and therefore does not:

Mary: *I feel you have to set the parameters and places where we don't have it, such as the car. She'll never ask to have it there. It is quite a good thing.*

(Transcript, Visit 3).

On Visit 5, Rosie has been exposed to some mini games on her mother's smartphone and begins to ask for her mum's phone so she can play them.

Mary speaks explicitly about the value she perceives in broader art forms, especially theatre, and describes how she extends Rosie's existing interest in *In the Night Garden* the TV show by taking her to the live (theatrical) show:

Mary: *I've always been keen to take Rosie to the theatre. I know it's not highbrow, but it was a good way in [...] I see the value of it in terms of excitement, imagination, the literacy benefits [...] I'd like her to be exposed to all art forms.*

(Transcript, Visit 2).

Mary also perceives Rosie's general (and media) interests as being somewhat individual compared to her peers. Her comments and actions frequently suggest that she is keen to encourage Rosie to pursue what she perceives to be 'individual' interests over more 'mainstream' ones. Her language frequently suggests an informed awareness of, and ongoing reflection on, topical debates about 'mass culture':

Mary: *Rosie is quite a unique character [...] she is into certain things, and they're probably not mainstream culture [...] She has picked up on certain mass culture things, like she has a few Frozen things but she's never seen Frozen, and she has Peppa Pig things but she doesn't watch it on the telly.* (Transcript, Visit 1).

Mary is aware that these interests may change when Rosie starts to spend more time at nursery and, eventually, school. Mary sees Rosie's interests as 'less conventional', particularly in terms of gender. Rosie likes dressing up as more traditionally male characters (in particular, knights and pirates). Rosie enjoys playing football with her dad and riding her bicycle. She is noticeably interested in (and takes pleasure in talking about) the clothing related to these pursuits (football kit, helmet and kneepads). Rosie's dad (Paul) got shin pads for his birthday this year, and afterwards Rosie asked for shin pads for hers. These, along with other costumes and kit, are worn often, and frequently outside of their 'intended' purpose (e.g. shin pads at home, just for fun). Her media interests are very much in sync, with current favourites including *Mike the Knight*. Mary is candid about past discussions with her husband, feeling that her own conscious attempts 'not to be too girly' with Rosie (Mary, Transcript, Visit 1) may have been instrumental in Rosie's developing tastes. Her husband, meanwhile, thinks these are simply Rosie's 'natural' inclinations: 'Paul would say that he just thinks that Rosie is like that, and it isn't really because of anything we have or haven't done' (Mary, Transcript, Visit 1).

In summary, Mary articulates a value system with regards to media and wider influences in Rosie's cultural life that prioritises her views on: safety; education; the arts; and 'niche' or individual interests.

Mary particularly distances herself from texts that she perceives as problematically gendered. She displays a sense of trust that *CBeebies* and *CBBC* will be safe in this regard.

Rosie's self-professed motivations for engagement, meanwhile, are also often education oriented:

Fiona: *Is that one you enjoy watching Rosie? Yes? What do you like about it?*

Rosie: *I get to learn about animals.*

(Transcript, Visit 1).

There are indications that Rosie shares her parents' values about what constitutes valuable engagement with TV&RM and why. The 'education' narrative present in Rosie's articulations is something that connects strongly with her mother's expressed values. Analysis of these family narratives, combined with the micro-analysis of practices below, begins to illuminate a very specific example of the role TV&RM play in the reproduction of specific attitudes and values.

Oscar and media as 'holding activity'

Since Rosie's baby brother arrived in September 2014, Mary says that she has increasingly used TV&RM as what she describes as a 'holding activity' (Mary, Transcript, Visit 1). Leaving Rosie with *CBeebies* in the morning gives her a chance to have a lie in after an unsettled night with Oscar and after Paul has left for work. Apps on the tablet and other (non-digital) activities that Rosie enjoys (like sticker books) are used in a similar way; 'You need an activity. At the end and beginning of the day [...] it's quite chilled and doesn't feel onerous, for her or for us' (Mary, Transcript, Visit 3). To a certain extent, Mary voices some level of concern about how she may be judged by others for leaving Rosie alone with the television:

Mary: *Yes, a kind of holding activity, really, not ideal, but... I sometimes get a bit conscious, when the curtains are open, maybe if someone went to the shops and came back and she was still there, but she was fine.*

(Transcript, Visit 1).

It is useful to view Mary's comments alongside Seiter's (1995) analysis of mothers' support group discourses about television and how they varied in relation to status (class, income, occupation etc.) Lesley – a working-class mother – is described as feeling guilty about her own TV viewing and its impact on her daughter, Kelly, for whom she wanted 'something more' (p. 156). 'The pleasures of television viewing' Seiter reflects, 'come at the cost of a great deal of Lesley's self-esteem' (p. 160). Whilst Mary describes feeling 'conscious' about Rosie's TV viewing, she does not perceive this engagement as damaging to Rosie – just of limited value. Mary's comments about certain forms of media including children's television and children's tablet game apps confirm that she sees them as being of limited educational value; 'They're not educational. You tap and they go faster. It's like competition and race' (Mary, Transcript, Visit 3). Interestingly, Mary also articulates a belief that there is little value in her co-engaging in such apps (i.e. those with intrinsically limited value) with Rosie:

Mary: *They don't need adult interaction. Some of the ones on the laptop did a bit more, like using the mouse, that kind of fine motor skill [...] You can converse like this, but not actually doing the app.*

(Transcript, Visit 1).

The data, in fact, contains multiple examples of Mary scaffolding Rosie's learning with various digital platforms and texts, even those of limited perceived value. She can be seen supporting the development of 'traditional' oral literacy skills through dialogues associated with digital play; 'You can converse like this, but not actually doing the app [...] sometimes she might ask, what does this mean?' (Mary, Transcript, Visit 3). Mary and Rosie play with the *Alphablocks* app in Visit 3 and Mary returns to the topic when we are talking two months later. She notes that she has noticed the benefit of the learning Rosie has been doing with this particular app *and* her mother: 'The *Alphablocks* one has been really good and those little very short songs they have stayed in Rosie's mind. Certain ones we've sung together, remembered and they've helped her learn more letters' (Mary, Transcript, Visit 5).

In contrast to the way she generally speaks about television and apps on the tablet, Mary's descriptions of reading traditional books with Rosie suggest she regards traditional print text as a priority and something that is important to engage with together:

Mary: *We read a lot of books [...]*

Fiona: *When did you start reading books?*

Mary: *She's had book right from birth, but from being a year, she will have had books every night.*

Fiona: *You read to her?*

Mary: *Yes, and pretty much that's been three picture books a night.*

(Transcript, Visit 2).

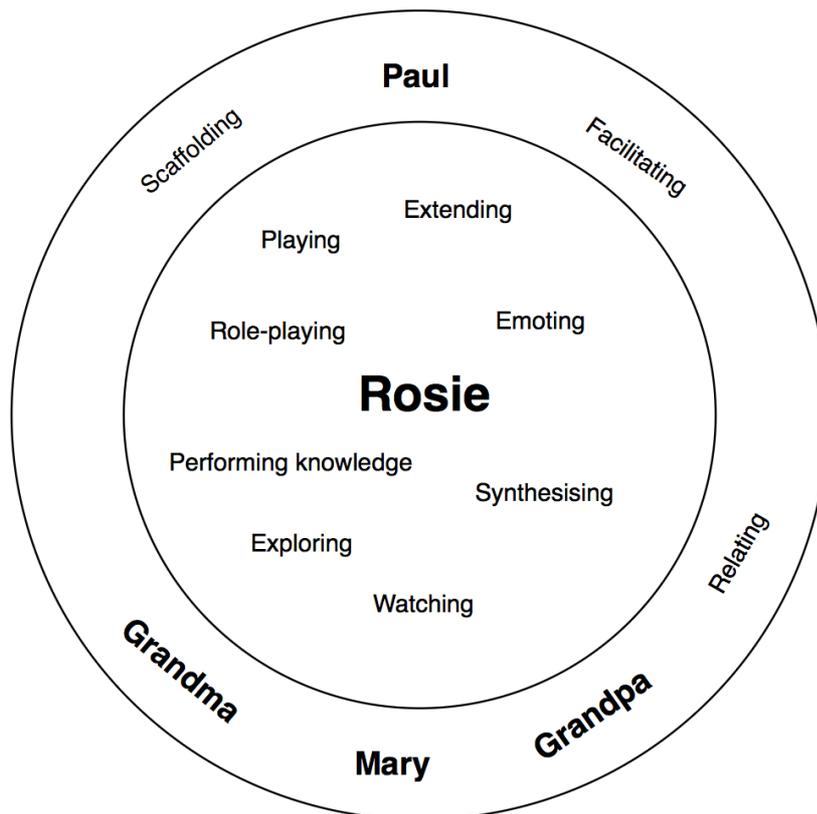
To an extent, Brunsdon's (1990) comments on status and attitudes to TV ring very true in relation to Mary's attitudes: 'watching television *and* reading books about postmodernism is different from watching television and reading tabloid newspapers, even if everybody concerned watched the same television' (p. 69). Ultimately, it seems Mary is confident enough in the value of the experiences she provides for Rosie at home to feel that she need not harbour anxiety or social shame about her increased use of media as a holding activity since Oscar's birth. It is, however, interesting to note the complex cultural value judgements being made here and their inter-relation with how Rosie's media engagement becomes more, or less, social at home. Notably, Mary suggests that she is more likely to invest time in supporting educational activities personally. A significant exception to this is the self-described 'family event' (Mary, Transcript, Visit 2) of watching a DVD (e.g. *Happy Feet*), something that everyone in the family will sit down to together once every couple of months. Towards the end of the research process (Visit 6), Mary articulates how engagement with the process of my research has changed her perspective on precisely this issue, having reached a personal realisation as a parent that family engagement with TV&RM is more than just a 'holding activity':

It's made me think about it in a less polar way. I'm either playing with you (or interacting with you) or I'm giving you a holding activity that you can do independently without me, so I can get on with everything else. I actually see in television and the iPad that you can have a bit of both.

(Mary, Transcript, Visit 6).

5.4.3. Key child and family practices with TV&RM in Rosie's life

Figure 76: Rosie and her family's key practices



Examples of events at the nexus of key practices:

1. Mum teaching Rosie about diversity in response to 'Happy Feet'

At the nexus of the practices of watching, extending and relating, Mum relates Rosie's initial question about a character (Mumble) in a film (*Happy Feet*) to the example of children at nursery having 'different talents'. In doing so, she supports Rosie to extend the learning opportunity afforded by the movie.

2. Rosie performing second-hand 'Minions' knowledge

At the nexus of the practices of copying, performing knowledge and creating, Rosie performs knowledge of *Minions* without having watched any *Minions* films first-hand. Rosie is drawing on a complex mix of

social and object knowledges, creating information about *Minions* where there are gaps in what Jacob (from nursery) has discussed with her.

Rosie synthesises life experience and Octonauts as part of exploring her ongoing identity construction

At the nexus of the practices of emoting, synthesising and exploring, Rosie's play synthesises prior knowledge of *Octonauts* as a media text with her recent life experiences to explore identity and emotion.

5.4.4. ROSIE PLAYS AN ASTRONAUT



The audio extract on which this analysis was based can be viewed as file Rosie_Astronaut.mov on the enclosed USB drive. Related photos taken by Rosie can also be viewed as files Rosie_Photo1.jpg to Rosie_Photo21.jpg.

This analysis reflects on a moment where some of Rosie and her family's regular practices (Wohlwend, 2009) with TV&RM (emoting, extending) have combined and intersected with a number of relevant historical trajectories, including:

- (1) the historical trajectory of Oscar's arrival in the family and Rosie's affective response to it;
- (2) the *Mike the Knight* and *Octonauts* media texts as part of Rosie's Funds of Knowledge;
- (3) my historical trajectory, placing me and my digital camera as physical presences in the family home; and
- (4) the Bumbo, the *Mike the Knight* toy helmet and knight costume, the toy sword and the rocket ship tent as physical objects with their own historical trajectories and affordances.

The audio transcript in Table 27 and description of photographs in Appendix V relate to one ninety-second excerpt, taken from a longer analysis of a play event. The excerpt illustrates how Rosie synthesises material objects, prior knowledge of media texts and emotional responses to life events to perform a short (but complicated and emotionally significant) original narrative.

Figure 77: Locating Rosie's astronaut role-play within her case study map

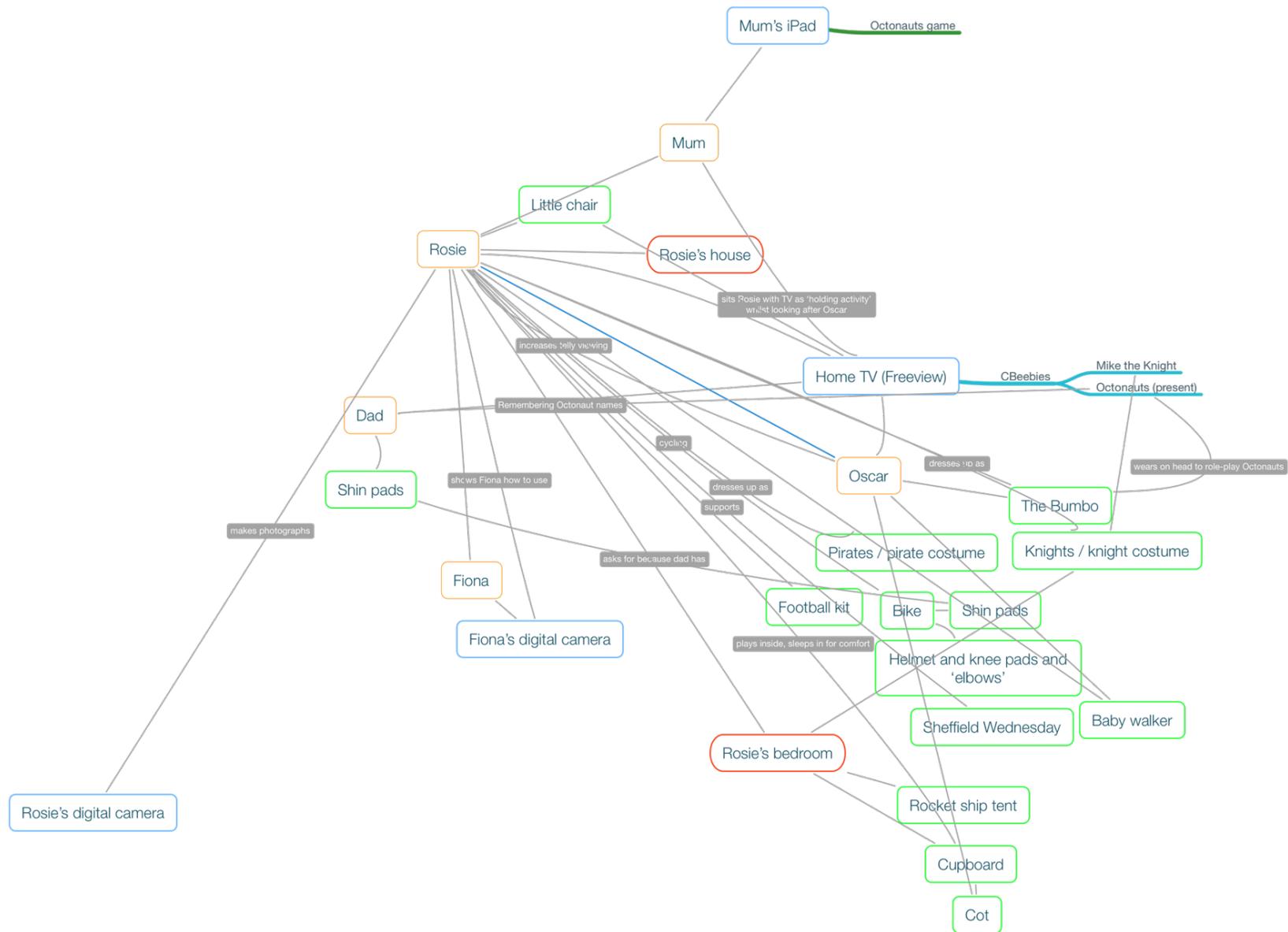


Table 27: Rosie roleplays as an astronaut (Visit 2) audio transcription

Time	Bodies	Things	Discourse in place
1:39:02	Rosie	The Bumbo	(R) Ah! I like the Bumbo.
1:39:03		Fiona's Digital Camera	(DC) an artificial flash sound can be heard as Rosie takes a photo
	Fiona		(F) (laughs) You like the what?
	Rosie		(R) The Bumbo
	Mum		(M) (begins to say something in the background)
1:39:05	Rosie		(R) This! This is the favourite thing about the rocket
1:39:08	Fiona		(F) Now this doesn't look like a toy to me
	Rosie		(R) I like it!
	Fiona		(F) ... but it is
	Mum		(M) She uses it as a helmet
1:39:15	Fiona		(F) Wow (laughs) that's a... that's an interesting toy
1:39:19	Mum		(M) Yeah
1:39:20	Rosie		(R) Five, four, three, two, one, lift offffff!!
1:39:24	Mum		(M) Yeah
	Fiona		(F) (laughs)
1:39:26	Mum		(M) A couple of weeks ago, Rosie wasn't very well and I was lying in bed with her at night and when I woke up in the morning, she wasn't there, but I could hear her sleeping and after a while I realised that she was in the rocket asleep.
	Fiona		(F) (laughs) Well that is exciting
	Rosie		(R) It was comfy!

1:39:40 Fiona (F) Can I take a picture of you with your, with your... what's it called?

1:39:43 Rosie (R) Bumbo

Fiona (F) With your Bumbo on your head?

Mum (M) (sucks her teeth) of course

Fiona (F) (laughs)

Rosie (R) It's like a rocket ship

Fiona (F) Rocket ship!

Rosie (R) Yeah! Rocket ship!

Mum (M) I'll be back in a sec

1:39:54 Fiona (F) (laughs) OK. So I see, so you have to put this on when you go in your rocket, cos it's a helmet, so it'll protect you in space?

1:40:02 Rosie (R) Yeah

1:40:04 Fiona (F) Yeah? If you put it on, would you be able to breathe in space?

Fiona's Digital Camera (DC) an artificial flash sound can be heard as Rosie takes a photo

1:40:08 Fiona (F) If you went to the moon for example?

Rosie (R) Yeah. Because I've got my back on, and I've got, um, um, a special suit. A long sleeved t-shirt and [inaudible] trouser and off we go!!

1:40:26 Fiona (F) Off we go!

Analysis: Rosie role-plays as an astronaut

I am spending time with Rosie and her mother on V2, and I have asked Rosie if she would like to show me 'where she likes to play' and 'where her toys are'. Rosie has shown me a variety of objects and spaces. After many other objects and much discussion, Rosie begins to physically interact with, and speak about, a baby walker in the living room:

Rosie: *I like sitting in here.*

Fiona: *You don't sit in here, do you?*

Rosie: *I do.*

Fiona: *Isn't that for Oscar?*

Rosie: *Yes, but I sit in there.*

[...]

Mary: *All the things that are for Oscar, Rosie likes.*

[...]

Rosie: *I pretend to be Oscar.*

(Transcript, Visit 2).

Immediately after this, Rosie (and Mary) invites me to visit Rosie's bedroom at the top of the house. Here, Rosie begins to physically interact with, and speak about, another object whose purpose and provenance in Rosie's life are unfamiliar to me. I later learn (presenting data at an academic conference) that a 'Bumbo' is a seat that allows babies to sit independently in an upright position. Like the baby walker, the Bumbo is designed for a baby and is too small for Rosie to fit into comfortably. This specific Bumbo (like the baby walker) is an object that once belonged to Rosie, but now belongs to Oscar. Oscar's recent arrival in Rosie's life has resulted in a number of changes. On multiple occasions, Rosie expresses frustration with Oscar in relation to his behaviour with physical objects:

Fiona: *Is this the wheels?*

Rosie: *Yes. It's not good when my brother's here.*

Fiona: *Why's that?*

Rosie: *He will break it.*

(Transcript, Visit 5).

My presence and my willingness to participate is combining with Rosie's interest in this play to produce this particular event, I know that dressing up and performing in specific items of clothing is a well-established practice within Rosie's play repertoire. I have observed this multiple times and Mary has also spoken of this. Indeed, a good deal of the non-digital objects that matter in Rosie's case study are clothes (pirate costume, shin pads, football kit, explorer costume). When speaking about her practices, Rosie has often focused on protective clothing, without any type of prompting from an adult:

Rosie: *I like cycling. With my helmet and kneepads and elbow pads on. Sometimes you go really fast.*

(Transcript, Visit 1).

As a physical object, the Bumbo is itself a historic artifact of Rosie's life as well as an object with its own agency and individual social history (Carrington & Dowdall, 2013). Rosie is physically interacting with the Bumbo, placing it on her head. As Mary confirms, it serves as a symbolic representation of a helmet in Rosie's play, as it has many times before. In this moment, an object of historical social significance for Rosie (the Bumbo), reclaimed from a younger sibling whose disruptive presence is troubling her, becomes an object with protective and magical affordances. Rosie's narrations of what she is doing with the Bumbo on a literal level are also densely entangled with an emergent 'launch' role-play, which occurs abruptly and seemingly in response to the stimulus of the Bumbo. Whilst the provenance of the routine is difficult to definitively evidence, this spontaneity suggests that this is not being invented and performed for the first time but, conversely, has been rehearsed on past occasions and now exists as a form of embodied literacy (Thiel, 2015).

Multiple sources of media, materials (non-digital as well as digital) and broader narratives are coming together in the process of play, resulting in new combinations. Rosie and her mum have made reference to the *The Octonauts* on multiple occasions. *The Octonauts* is a children's TV show portraying the adventures of an underwater exploring crew made up of anthropomorphic animals living in an undersea base (the Octopod). Various emergencies relating to animals in need of help necessitate the launching of rescue missions in a fleet of aquatic vehicles, each with its own specific set of affordances. The lead character, Captain Barnacles, frequently negotiates the take-off or landing of these vehicles in a manner similar to the one Rosie is enacting. For example, in S.4, E.2, 'Octonauts & the Hidden Lake', he safely lands a vehicle on ice: 'prepare for ice landing in 3...2...1...'. Rosie is also a fan of *Mike the Knight*, a children's TV show portraying a knight-in-training (Mike) whose father (The King) is away exploring other lands. Mike, too, dresses in protective clothing that affords him certain powers.

Rosie's play connects digital and non-digital components with the trajectories of objects and bodies in complex ways. Various 'things' (Rosie, the Bumbo, the *Mike the Knight* costume, the sword, the bedroom, Fiona and Mary) are coming together to constitute a momentary assemblage (Giugni, 2011). Play links this momentary intra-action to a universe of existing histories of social practices (Wohlwend, 2009). Specific knowledge relating to *Mike the Knight* and *Octonauts* (e.g. characters, plotlines and language, but particularly ideas about clothing) exists as part of Olivia's existing Funds of Knowledge (Moll et al., 1992). Similarly, Rosie's recent life experiences mean that ideas about personal and interpersonal identity and change, safe spaces and protective clothing are a significant part of her current emotional trajectory. Analysis of Rosie's broader play practices demonstrates that her role-play is 'about' more than the Bumbo as a physical object or *Octonauts* and *Mike the Knight* as media texts. There are multiple coded instances of Rosie launching into adventure role-play with a central theme of physically clothing or locating herself inside an object or space with protective affordances, sometimes with the *Mike the*

Knight costume or space rocket tent, sometimes re-purposing other objects such as the Bumbo. Rosie draws on her range of interests to produce something new. The moment seems to ‘matter’ (Horton, 2010). In engaging in this play, it seems, she is exploring dimensions of both identity and affect. This work extends the work of Pahl (2007) and Rowsell and Pahl (2007).

5.4.5. ROSIE EXPLORES ALPHABLOCKS



The video extract on which this analysis was based can be viewed as file Rosie_Alphablocks.mp4 on the enclosed USB drive.

This analysis reflects on a moment where some of Rosie and her family’s key practices with TV&RM (exploring; performing knowledge; scaffolding; extending) have combined and intersected with a number of relevant historical trajectories, including:

- (1) Fiona’s tablet device as a physical object with specific affordances;
- (2) *CBeebies* and its shows as media texts with their own historical trajectories;
- (3) the historical trajectory of Rosie’s learning;
- (4) the historical trajectory of Mary’s career and aspirations for Rosie; and
- (5) my historical trajectory, placing me as a unique physical presence in the family home.

The multimodal transcript in Table 28 describes a one-minute excerpt taken from a longer analysis of a play event. The excerpt illustrates how Rosie’s exploratory play is scaffolded and extended by her mother, expanding a digital literacy learning opportunity into a traditional literacy learning opportunity.

Figure 78: Locating Rosie and Mary's Alphablocks exploration within her case study map

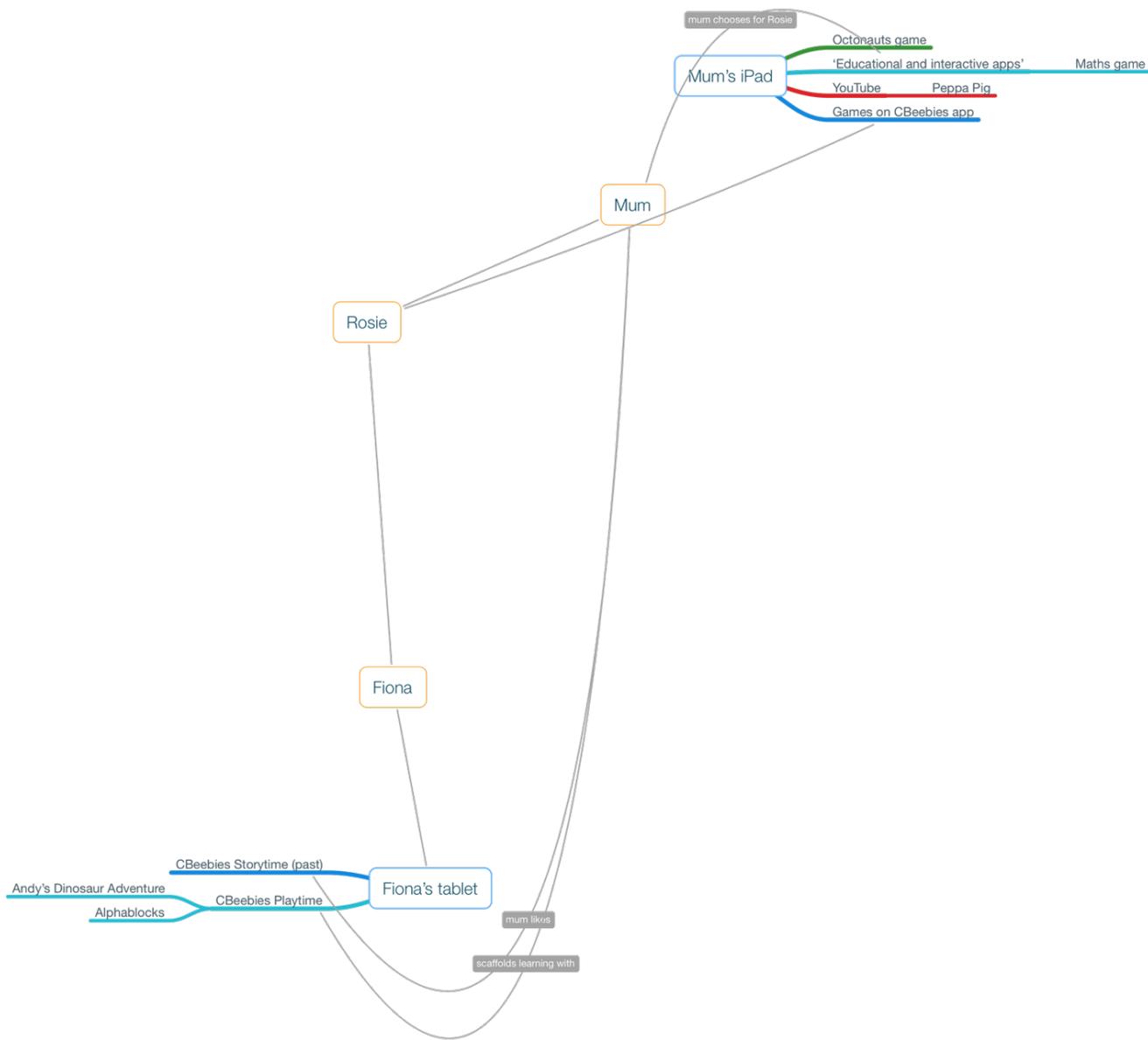


Table 28: Rosie and Mary explore the Alphablocks game on Fiona's tablet (Visit 3) multimodal transcription

Time	Bodies	Things	Intra-action	Discourse in place
21:29	Mum, Rosie	Tablet; <i>CBeebies</i> <i>Playtime</i> (<i>Alphablocks</i>)	'S' and animated figure appears on-screen	-
21:30	Mum	-	Rosie attending to screen; Mum viewing screen upside-down	(M) (off-screen) Oh, you know this one...
21:32	Rosie	-	Rosie taps the yellow circle in the top, right-hand corner with one finger. Her eyes are on the screen.	(AB) Ssssssss...
			Rosie attending closely to <i>Alphablocks</i> animation, on-screen, the 'S' character sags, then takes flight	(AB) S-s-s... S starts sagging, then she soars
21:41	Rosie	-	Rosie's glance remains on the screen for a moment after the song, then looks at to make eye contact with her mum, itching her neck	-
21:42	Rosie	-	Bring her arms up, then round to touch her chest through her shirt, smiling	(R) She's got lots of air inside her
21:44	Mum	-	Mum and Rosie make eye contact, Rosie's eyes return to the screen as mum leans to look.	(M) Has she?
21:46	Mum	-	Mum leans closely in to Rosie and the screen	(M) Is she like a balloon?
21:47	Rosie	-	Rosie's finger hovers over the blue right hand arrow (to progress to the next letter), then she presses the yellow circle again (to replay)	(R) Look...
			The animation replays onscreen	(AB) Ssssssss... S-s-s... S starts sagging, then she soars
21:54	Mum / Fiona	-	Mum plays with her necklace, mother and daughter's eyes still on the screen	(M) Oh, 'sagging' (Fiona is heard laughing slightly, offscreen)

21:56	Rosie	-	Rosie looks up at her mother, who leans back slightly	(R) What does 'sagging' mean?
21:57	Mum	-	-	(M) Liiiiiiike....
21:59	Mum	-	Rosie puffs out her cheeks to make a 'blowing' face	(M) If you kind of
22:00	Mum	-	Rosie watching, mum now off screen	(M) flop down, and you haven't got enough air in you
<i>[CHANGEOVER TO VISIT 3, VIDEO 2]</i>				
00:00	Mum	-	Camera shifts left to mum. Mum sags her upper body down, gesturing with her hands	(M) You're sagging down
00:04	Rosie	-	Camera shifts right to Rosie, who is watching	(R) Like that?
00:05	Rosie	-	Rosie sags dramatically, folding over her head, upper body and arms, finally holding one foot with her hands	-
00:07	Rosie/ Mum	-	Rosie holds her position, holding her foot	(M) Yeah, that'd be sagging
00:10	Rosie	-	Rosie unfurls, presses the blue right hand arrow, pressing the yellow circle	(R) If it was real
00:12	Rosie	-	Rosie emphatically rests her hands on her knees	-
00:20	Rosie	-	Rosie watching	(AB) T-t-t-t-t. 'Tuh' tuts when it's time for tea...

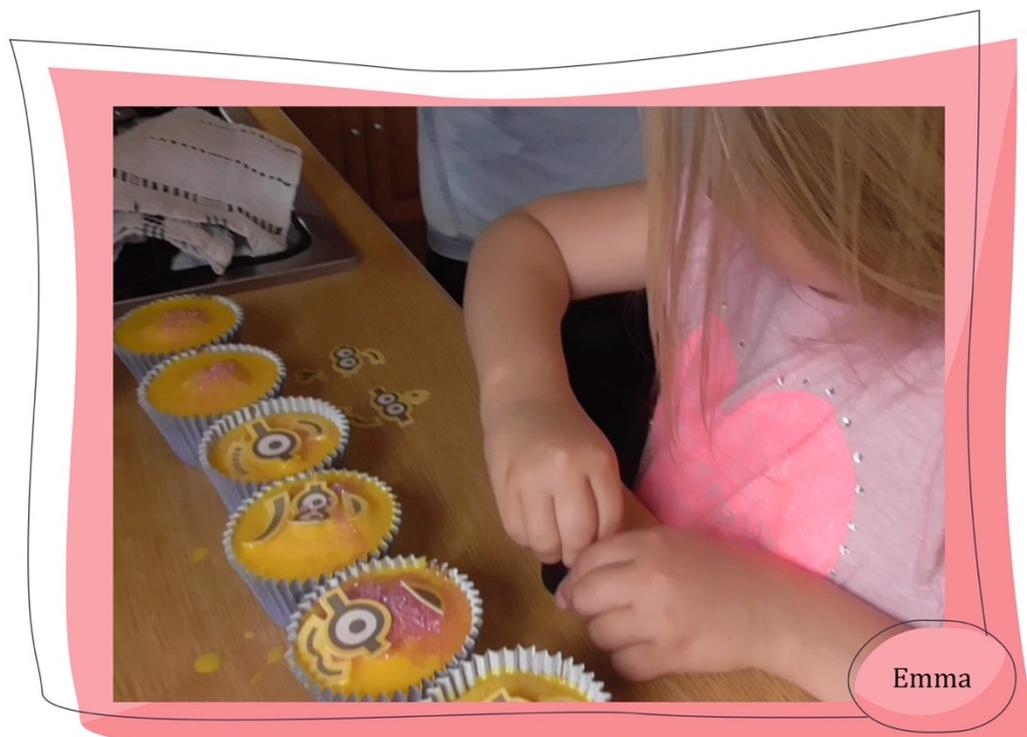
Analysis: Rosie and Mary explore the Alphablocks game on Fiona's tablet

I am spending time with Rosie and her mother on V3. I have brought my own tablet device and Rosie is exploring the *CBeebies Playtime* app, which is not new to her, although this version of the *Alphablocks* game is. I have not made any suggestions for how mother and daughter 'should' interact. The moment represents a type of play that is exploratory in both traditional (Hughes, 2002) and digital (Marsh et al., 2016) domains.

In the vignette of exploratory play, various 'things' (Rosie, the tablet, the *Alphablocks* game and Mary) are coming together to constitute an assemblage (Giugni, 2011). Exploratory play is linking this momentary human-object interaction with a universe of existing social practices (Wohlwend, 2009). Today, Rosie is demonstrating operational digital literacy skills (Green & Beavis, 2012). As Mary has previously noted in our discussions, she is not expending much effort in attempting to scaffold Rosie's operational digital literacy skills with the tablet. Rosie is managing to accomplish the required operational tasks with the assistance of the verbal instructions and visual prompts of the *Alphablocks* game itself. Undoubtedly, she is also drawing on, and quickly redeploying, her existing funds of knowledge in a new context. However, Mary is supporting traditional literacy development by extending the action on screen. Mary is framing Rosie's learning with the tablet in a style very similar to school teaching, scaffolding her progress with eye contact, verbal prompts and literary elaboration (is she 'like a balloon'?). The game on the screen serves as a prompt for Mum to take Rosie further with her learning, allowing her to gain new vocabulary ('sagging') and cementing the learning with a physical gesture to understand and remember the word and its meaning. Indeed, the wider section from which this extract is taken is dense with examples of Mary extending the activity and scaffolding Rosie's traditional literacy skills.

Though centred on a digital device, the learning that is taking place is not quantitatively dissimilar to the kind of traditional literacy scaffolding Cairney and Ruge (1998) observe in some parents at home, closely resembling 'typical classroom interactions' (p. 35). As is often the case with ethnographic studies, this practice was something so noticeable that it began to form the basis of a working theory before my analysis even began. However, it was during the coding process that it most notably 'spilled out'. Some sort of 'traditional' practice supplements almost every media interest in Rosie's life. For example, Rosie enjoys watching football on the television, but also owns her own football kit and plays football in the park with her dad. This practice came to be defined in my coding model as 'extending', as Rosie's parents extended her digital/media interests into associated non-digital activities.

5.5. Emma



5.5.1. A pen portrait of Emma and her family

Demographics: Emma is a White British girl aged 4 years and 6 months when I first visit in May 2015. Emma is the only child living in the home throughout my PhD research, although her mother shares that she is pregnant at the end of my project. Gary also has three older children, Sam (24), Chloe (18) and Jack (15). Emma spends time with her step-siblings, but I never meet them. Emma lives in Sheffield with her mother, Ashleigh, and father, Gary. Emma has lived for most of her life in LSOA Sheffield 056B (Beighton Ward). In the latest Index of Multiple Deprivation (2015), this area was ranked 5641 out of 32,844 in England, where 1 was the most deprived and 32,844 the least, placing it in the top 30% of most deprived areas in the UK (IMD Decile 3). Before that, Emma lived in a different house in the same area of Sheffield for a year. Emma's mum is a Nail Technician and categorised her work as 'skilled manual' on the modified Hope-Goldthorpe (1981) scale. Ashleigh categorised Gary's work as 'unskilled manual' on the modified Hope-Goldthorpe (1981) scale.

Family history and culture: Although Ashleigh works, she is home with Emma on Mondays and Tuesdays. Ashleigh works weekends and can often be quite busy. Emma's grandmothers play an active role in her life, Both Ashleigh's mum and Gary's mum look after her sometimes while Ashleigh is at work. Ashleigh's Nan and Granddad also live just up the road, and Emma visits them regularly. Emma has been going to nursery for over a year (two hours, five afternoons a week) and starts school in September 2015 (between visits 5 and 6). Ashleigh is very aware that Emma is 'around adults constantly' (Ashleigh,

Visit 1) and feels nursery is an important opportunity for her to be around other children. Emma does not have many close-in-age friends, either in her family or living nearby. She plays out on the street with some local girls who are nine. She also plays with a similar-age male friend next-door, although Ashleigh points out that Emma sees herself as older than him:

When they argue it's: 'I'm a big girl and I can do this'.

(Ashleigh, Transcript, Visit 1).

Emma also has an imaginary friend, a 14-year-old boy she calls 'Dante'.

Media environment of the home and other spaces: Emma's family have a TV set in the living room with a Satellite subscription. Emma has a TV in her bedroom, which has a Netflix subscription. Ashleigh and Gary have their own media interests and enjoy watching comedies like *The Mighty Boosh* and *Bo>Selecta!* together. Ashleigh also likes to watch *EastEnders* and *Big Brother*. Gary tends to be out at work a lot, but Ashleigh will often be in the same room as Emma, or very close by, engaging with whatever she is watching whilst also getting bits of housework done. The family watch a lot of family movies together at home and, towards the end of my fieldwork, have started going to the cinema to do this, too. Emma does not have her own tablet, but her mum and dad allow her to use theirs very frequently. More detail on the media environment at home and in other spaces is given in Table 29.

Figure 79: Emma's family tree

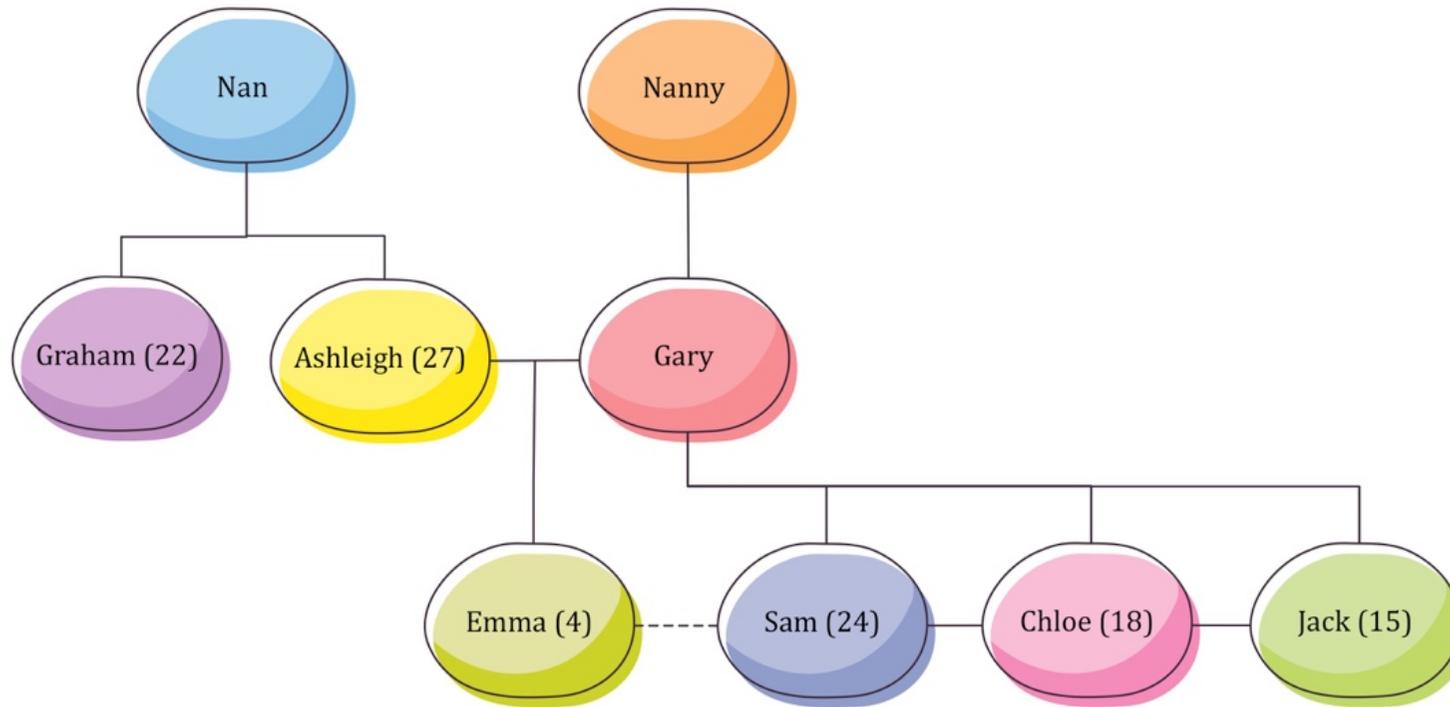


Table 29: Things that 'mattered' in Emma's case study

Bodies **Spaces**

Chloe		Back garden
Dad		Dad's 'man cave'
Dante (Emma's imaginary friend)		Emma's bedroom
Emma		Emma's old bedroom
Fiona (researcher)		Home
Jack		Living room
Kiki the dog	Sam	Nan's house
Mum	The boy next door	Nursery
Nan (Mum's mum)	The girls who play out on the street	The Cinema
Nanny (Dad's mum)	Uncle Graham	Upstairs

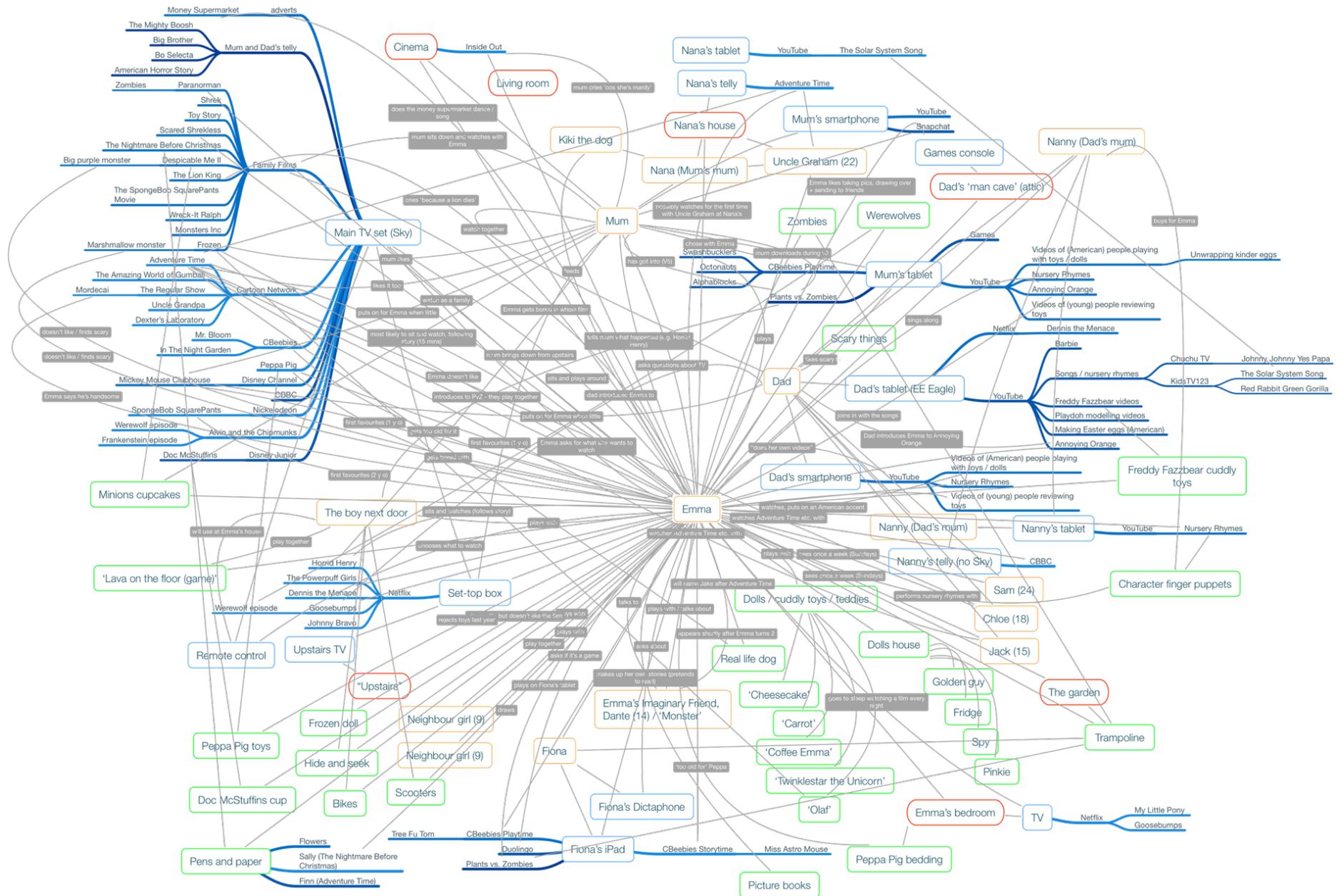
Digital objects and texts

(American) Easter eggs videos	Goosebumps	Plants vs. Zombie
Adventure Time	Horrid Henry	Playdoh modelling videos
Alvin and the Chipmunks	In The Night Garden	Scared Shrekless
Annoying Orange videos	Inside Out	Set-top box
Barbie videos	Johnny Bravo	Shrek
CBBC	KidsTV123	SpongeBob Squarepants
CBeebies Playtime	Kinder eggs unwrapping videos	The Amazing World of Gumball
CBeebies Storytime	Main TV set	The Lion King
Chuchu TV	Mickey Mouse Clubhouse	The Mighty Boosh
Dad's games console	Monsters Inc.	The Moneysupermarket.com advert
Dad's smartphone	Mr. Bloom	The Nightmare Before Christmas
Dad's tablet	Mum's smartphone	The Powerpuff Girls
Dennis the Menace	Mum's tablet	The Regular Show
Despicable Me (& Despicable Me II)	My Little Pony	The Solar System Song
Dexter's Laboratory	Nan's tablet	The SpongeBob Squarepants Movie
Doc McStuffins	Nan's telly	Toy Story
Emma's bedroom TV	Nanny's tablet	Uncle Grandpa
Fiona's Dictaphone	Nanny's telly	Videos of American people playing with toys
Fiona's iPad	Netflix	Videos of children reviewing toys
Freddy Fazzbear Videos	Nursery Rhymes	Wreck-It Ralph
Frozen	Peppa Pig	YouTube

Non-digital things

Bikes	Frozen doll	Picture books
Character finger puppets	Hide and seek	Scary things
Cuddly toys	Lava on the floor game	Scooters
Doc McStuffins cups	Minions cupcakes	Teddies
Dolls	Pens and paper	Trampoline
Dolls house	Peppa Pig bedding	Werewolves
Freddy Fazzbear cuddly toys	Peppa Pig toys	Zombies

Figure 80: Things that 'mattered' and intra-actions in Emma's case study (mapped)



5.5.2. Members' generalizations and researcher observations about TV&RM

My fieldwork with Emma's family consisted largely of conversations with Ashleigh and play (and playful discussion) with Emma. These generalisations mainly come from Ashleigh's descriptions of her own and her family's actions with television and related media at home, although Emma's dad, Gary, was also vocal (and knowledgeable) with regards to Emma's interests when he was there. In the earliest stages (perhaps V1 only), Ashleigh would encourage Emma to contribute verbally by asking her questions or instructing, 'tell the lady about...'. This quickly became unnecessary, as Emma became interested in my approach to the visits. Emma was usually keen to play with me and to engage in the type of questions and mode of questioning we gradually evolved between us, which frequently involved just the two of us (e.g. playing upstairs or outside in the garden). Emma's voice is 'heard' a lot in the audio transcriptions. It is important, though, to note how complex some of Emma's vocalisations are. Somewhat similarly to Niyat, Emma tended to synthesise multiple influences and ideas when speaking. A response to a question from me could (and often did) evolve very quickly into a short instance of role-play, drawing on both the immediate situation and multiple other 'threads'. Some of these threads can be identified and attributed to particularly prevalent ruling passions in Emma's life (for example, her tendency to narrate in an American drawl, which derives from her historical and ongoing engagement with American user-generated *YouTube* content). Others remain ambiguous to me, even after re-watching the videos multiple times and carefully reflecting across the whole dataset.

Education, digital platforms and active play

Like Archie's mum (Beth), Ashleigh asserts that the main TV in the living room is on pretty much all of the time when she and Emma are home. Ashleigh describes it as 'company', preferring to always have something reassuring playing in the background. However, Emma is rarely still in front of the TV during the day. Like many of the other children in the study, Emma's play ranges all over the house (and garden) while the television is on in the background. Ashleigh describes how Emma typically 'settles' in a more focused way in front of the television from about 3pm, when she is beginning to get tired from the day's play. Ashleigh expresses a preference for Emma to be involved in traditional, active (as opposed to sedentary, tablet) play in our first interview, although she simultaneously acknowledges that Emma is unlikely to sit still for long anyway:

We've got some games on there, but she's not fussed about playing them. She just wants to watch YouTube [...] I don't like her playing too much on things, I like to watch her play with her dolls. She's got a lot of imagination, I don't want her just sat there with a tablet. She's quite energetic anyway, she wouldn't be bothered.

(Ashleigh, Transcript, V1)

Conversely, Ashleigh and Gary characterise both *YouTube* videos and tablet games as educational. During Visit 2, we discuss Emma's love of the *ChuChu TV* and *KidsTV123* videos she has discovered on *YouTube*, which both parents see value in:

Gary: *There's one where a guy sings about planets and stuff. She watched it the other day at your mum's.*

Ashleigh: *Green Gorilla.*

Gary: *It's an American guy and he sings songs about colours, shapes, planets.*

Fiona: *So it's learning stuff?*

Gary: *Yes. She watches all of that.*

(Transcript, V2).

Similarly, when I ask Ashleigh about how she chooses what to download onto her tablet for Emma, she focuses on educative qualities, noting that Emma can learn to read and mix colours using the *Peppa Pig* app and spell using the *Alphablocks* app (V3). Ashleigh characterises Emma as keen to learn with digital devices, to the point of impatience when something is slightly beyond her grasp. As with Niyat, one of Emma's established practices is exploring (and gaining physical mastery of) more 'adult' digital platforms and texts, seeking (and receiving) Ashleigh's support in facilitating this. As explored in both vignettes below, Ashleigh contributes a huge amount to scaffolding Emma's skills in different domains.

Gender and media choices

Just as Rosie's mum talks about Rosie's less conventional choices in terms of gender, Ashleigh notices that Emma makes less conventionally gendered media choices. However, in contrast with Mary's comments, Ashleigh suggests that Emma is still quite traditionally gendered in other choices:

She's very girly. She likes to dress up and wear dresses, but isn't that bothered about watching it on telly. She's not a love story kind of girl, I think she's going to be a horror girl. Not like mummy.

(Ashleigh, Transcript, V1).

Although Ashleigh expresses a tiny bit of disappointment that Emma does not show an interest in certain things she would like to share with her (like watching *Frozen*), she is encouraging of her niche interests. When we return to the topic during Visit 7 (9 months later and 5 months after Emma starts school), it seems little has changed:

She loves pink and lipstick, and she is a girly girl, but from some of the stuff she watches, and what she likes to play, she's quite boyish in that way. She's a bit of both. She wouldn't think nothing of climbing a tree, but she'd want to do it a dress [...] She's not frightened to get dirty - she'll be straight in.

(Ashleigh, Transcript, V7).

Emma's preference for traditionally gendered objects, but non-traditionally gendered play and media create another variation in relationships between transmedia texts and objects:

Fiona: *Is that a Frozen dolly over there?*

Ashleigh: *She likes to play with the dolls, but hates the film and I love it.*

(Ashleigh, Transcript, V1).

Emma loves the traditionally gendered toys that accompany very feminine media texts (she even still has pink *Peppa Pig* bedding) but, having given them a fair chance, remains completely uninspired with their content as media texts.

Maturity, horror and emotion: Emma's tastes for the strange, funny and spooky

Much like Rosie's mum, Ashleigh describes Emma's general (and media) interests as being somewhat individual compared to her peers'. Although Emma used to like *CBeebies* and *Peppa Pig*, Ashleigh says that she started to get bored with both around the age of 3. Ashleigh perceives that Emma probably found them too 'babyish', sensing being around adults (and older children) influences her tastes:

I don't know if it's playing with older girls on the street that made her think: No, I can't watch that, it's for babies.

(Ashleigh, Transcript, V1).

Ashleigh notes that when Emma started nursery, her tastes did not change, observing that whilst most of Emma's same-age peers were still watching things like *Peppa Pig*, Emma continued to enjoy and expand upon her specific tastes. After Emma goes to school (between visits 5 and 6), Ashleigh says that the girls in her class are still watching babyish things, although this does not stop Emma from making friends and having them round to play. Emma's tastes include *Cartoon Network* cartoons like *Adventure Time* and *The Amazing World of Gumball*. Ashleigh is also aware that Emma is keen on a variety of content she has found on *YouTube*. Much of what she gets into on television comes from seeing adverts when *Cartoon Network* is on:

She'll watch whatever's advertised that looks a bit strange.

(Ashleigh, Transcript, V1).

Ashleigh notes that Emma is particularly into zombies, werewolves, ghosts and monsters. The film *ParaNorman* (in which a young boy can communicate with ghosts) is a favourite, and Emma will often specifically ask to re-watch things that have monsters and ghouls in:

Emma: *I want to watch Alvin and the Chipmunks.*

Ashleigh: *Which one?*

Emma: *Frankenstein.*

(Transcript, V2).

Ashleigh says Emma likes 'all the ghostly telly things', as well as the film *Shrek* and *Monsters Inc.* (V1). Ashleigh (Emma) even talks to me about Emma's imaginary friend (sometimes called 'Dante' and sometimes 'Monster'). *Adventure Time* persists as a favourite from V1-V4, although around Visit 5,

Emma moves on to *The Regular Show*. Ashleigh remembers that Emma first started watching *Adventure Time* with her Uncle Graham (Ashleigh's brother, 22) whilst at her Nan's house. Ashleigh thinks that this is how she became interested in 'the strange':

I think that's how she got into the strange side of it.

(Ashleigh, Transcript, V2).

The allure of vampires and werewolves for teens and pre-teens has been well documented in recent years, no doubt partly as a response to the successes of young adult film, book and TV phenomena such as *The Vampire Diaries* and the *Twilight* series. There is no evidence that Emma is drawing on such young adult texts (although it is possible that she may have discussed some of these with the two 9-year-old girls on her road). Until relatively recently, less has been written about children (especially preschool children), enjoyment of fear and the 'horror' genre. As Lester (2016) contends, children have tended to be (and sometimes still are) constructed as vulnerable and in need of protection from 'horrific' media. Many studies concerning children and horror have focused on its negative effects, tying children's pleasure in horror into the media violence debate (Barker & Petley, 2002 critically review this literature). Buckingham's (1996) empirical study on children's emotional responses to horror reveals a far more nuanced range of possibilities for children's pleasure in (and emotional relationships with) horror, pointing out that engagement with the genre allows children to demonstrate maturity and confront difficult emotions, but can also be purely pleasurable. Arguably, a little of all three may be true in Emma's case.

In our Visit 1 interview, Ashleigh says that Emma's taste for spooky and strange things does not come from her or her father, as neither of them enjoys the genre:

Ashleigh: Yes, I don't like scary things, whereas Emma thinks it's brilliant and can't wait until she can watch old films.

Fiona: Is she taking after anybody or is that coming from her?

Ashleigh: It's just her personality. Her dad's not into anything like that.

(Transcript, V1).

During Visit 2, however, Ashleigh and Gary relate that her dad introduced Emma to *Goosebumps*, a popular children's 'horror' show from his childhood that is now available on *Netflix*:

Fiona: Do you remember that from we were kids?

Gary: Yes. I told her about it and then I saw it on Netflix.

[...]

Ashleigh: If we're flicking through and there's a scary film on Netflix, she'll want to watch that [...] I'm not a fan. I don't like scary things. He does.

Gary: They don't faze me at all.

Fiona: Do you think that's where she's got it from? You introducing her to things like Goosebumps?

Gary: Yes.

Ashleigh: *It is you, isn't it? Not me.*

(Transcript, V2).

As an outside observer, it is noticeable that Emma's favourites are generally both offbeat and humorous: qualities shared with some of the shows Ashleigh and Gary love to watch together (including *The Mighty Boosh* and *Bo' Selecta!*). Though based around humour, *The Mighty Boosh* features a wide range of monsters as part of its surreal storylines. Ashleigh and Gary also like to watch *American Horror Story* together after Emma's bedtime ('It's bonding for us when she's in bed', Ashleigh, Transcript, V1). Something that is noticeably similar between Emma's 'ruling passion' (Barton & Hamilton, 1998) and her parents' media choices is the intersection of horror and comedy. Both Emma and her parents are choosing media texts that are not based on 'pure' horror, but on 'comedy horror'. Quirky or offbeat humour (both on- and off-screen) is an important part of Emma's emotional experience and the emotional experiences of her parents. Indeed, the humour of horror is a central feature of the whole family's media habitus. Shared humour is another thing that allows Emma to connect with her parents on a more mature level than might perhaps be expected of a child her age. The association between horror and humour, however, appears to be under-explored in scholarly literature, especially in relation to children's media experiences.

Ashleigh's descriptions of Emma's emotional life also suggest there is some truth in Buckingham's (1996) notion that horror gives some children a space to deal with emotion. When Emma and Ashleigh discuss going to the cinema (for the first time) to see *Inside Out*, it seems Emma is considerably more comfortable engaging with emotion via the supernatural than through more 'human' narratives:

Fiona: *Did mummy cry?*

Ashleigh: *Yes, she said I embarrassed her. 'You're right embarrassing when you cry.'*

Fiona: *Did you cry, Emma?*

Emma: *No.*

Fiona: *But mummy did?*

Emma: *Yes.*

Fiona: *Why do you think mummy cried?*

Emma: *Because she's mardy.*

(Transcript, V5).

Much like Senait's descriptions of Niyat, Ashleigh notes Emma's desire to master adult things and the frustration that accompanies not being able to achieve this mastery. Ashleigh tries to pick games for Emma that will be within her capabilities, which is why she originally downloaded the *CBeebies Playtime* app:

I don't know, I just came across it and thought it looked her age. She gets frustrated when she can't do certain things.

(Ashleigh, Transcript, V3).

Although Emma says she likes the *CBeebies Playtime* app, her mum and dad report that when she gets access to their tablets or smartphones, she tends to favour watching videos on *YouTube*. In these choices, again, she seems to favour somewhat offbeat, scary and funny content. Ashleigh describes some of the sort of content she watches, and Emma also shows me directly. Some examples include:

- American user-made Kinder egg unwrapping videos;
- *Annoying Orange* videos (a series in which fruit with human mouths and eyes joke around and perform songs, speaking in American accents);
- User-made *Freddy Fazzbear* content;
- Chuchu TV nursery rhymes (e.g. 'Johnny Johnny Yes Papa').

Emma's parents (especially Ashleigh) have a good level of knowledge about Emma's media (and other) interests. When she is allowed access to one of her parents' tablets, Emma will find and repeatedly play (usually singing along to) some of her favourite songs. During my fieldwork, these were most commonly *ChuChu TV* songs (e.g. 'Johnny Johnny Yes Papa' or 'Humpty Dumpty') or *Annoying Orange* songs (e.g. 'No More Mr. Knife Guy'). Ashleigh and Gary concede that some of Emma's 'ruling passions' can be annoying to hear repeatedly:

Ashleigh: *Horrendous.*

Fiona: *Horrendous because it's American?*

Ashleigh: *I don't know what it is.*

Fiona: *I've never heard it either.*

Ashleigh: *You don't want to have!*

(Transcript, V2).

At the same time, these texts stand as meaningful shared media habitus in the family and there is, again, a shared entertainment in the 'awfulness' of texts like *Annoying Orange*. I return to Emma's family in February 2017 to undertake fieldwork for a different research project with Emma's new baby sister, Wanda (9 months). During this time, Ashleigh and Gary frequently link their smartphones with the smart TV to play content for Wanda, especially *Chuchu TV* video clips on *YouTube* (having been introduced to them by Emma). Wanda demonstrates physical play involving touching her head along to the *Chuchu TV* song 'Head, Shoulders, Knees and Toes'. This learning is supported by the TV and by Emma and Ashleigh's imitations of the gestures.

Emma's interest in *Plants vs. Zombies* is explored in one of the vignettes below. During our conversation on Visit 5, it becomes clear that Ashleigh has been playing the game a lot (she tells me she has even been dreaming about it) and, whilst Ashleigh may well have started getting interested to support Emma, it seems the game is becoming another shared 'ruling passion' (Barton & Hamilton, 1998) for Emma and her mum.

Agency, trust and maturity

Although Ashleigh consciously seeks and downloads some content for Emma that she feels will be educative, Emma is ultimately a very active agent in her own media choices. Her parents do not intervene despite her incessant replaying of *Annoying Orange* songs and will even absorb her choices into their own media routines (as with *ChuChu TV* and *Plants vs. Zombies*). Ashleigh and Gary express normal parental concerns about the risks of being online. However, on several occasions when I am speaking with Ashleigh and Gary, they relate Emma's agency to a sense of trust:

Fiona: *Were you worried she's find something inappropriate?*

Gary: *Yes but you can block that.*

Fiona: *She has a childproof lock thing?*

Gary: *Yes.*

Fiona: *So you've never have a problem with anything like that?*

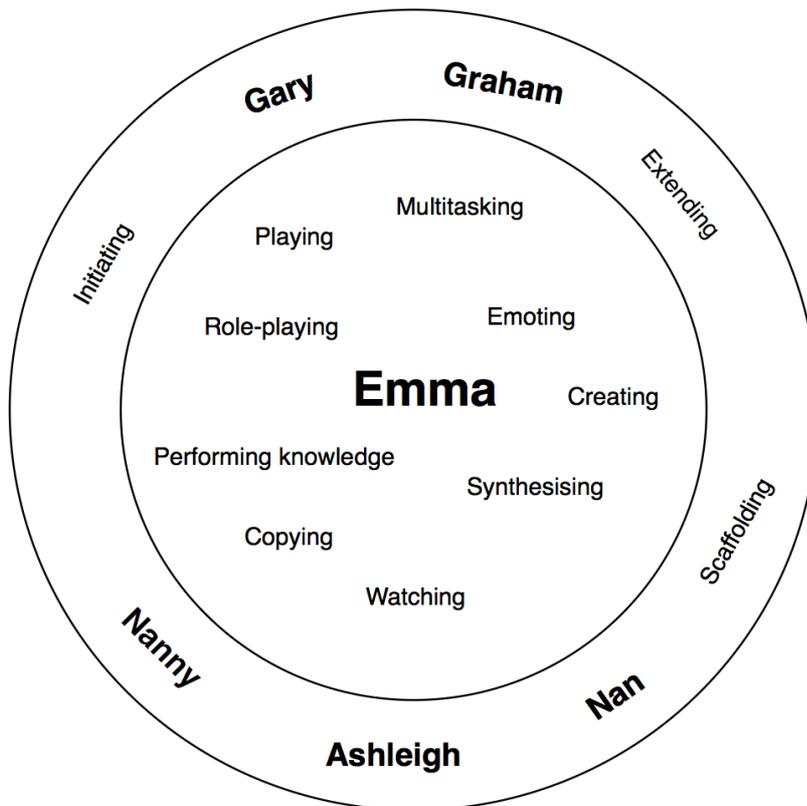
Gary: *No. She knows she's not supposed to be watching things like that.*

(Transcript, V2)

The level of trust Emma's parents place in her means that Emma is empowered to explore and pursue her interests at her own pace (with certain caveats and precautions in place). This permissive-leaning style is counter-balanced by parents who are willing to discuss whatever comes up in an adult way.

5.5.3. Key child and family practices with TV&RM in Emma's life

Figure 81: Emma and her family's key practices



Examples of events at the nexus of key practices:

1. 'Cheesecake said get away from my baby!'

Emma is perhaps the most prolific 'synthesiser' of all the children in the study, drawing on eclectic media elements to create momentary productions. At the nexus of the practices of synthesising, copying and performing knowledge, Emma performs a brief skit drawing on *Shrek*, *Eastenders* and amateur-made *Shrek* spin-off and *YouTube* hit, *SuperMarioLogan*. Emma weaves a diverse range of (child and adult) media knowledges (gathered and rehearsed through multiple historical instances of watching and playing) together. The scenarios being played out evolve and mutate through time, resulting in sometimes surprising dramatic performances, e.g. 'Cheesecake said get away from my baby!' (Emma, Transcript, Visit 1).

2. Nanny extends nursery rhyme play with finger puppets

At the nexus of the practices of copying, synthesising and extending, Gary's mum ('Nanny') buys finger puppets for Emma, which she uses to extend her regular practice of acting out, partially inventing and

singing songs from her media interests, e.g. *ChuChu TV*'s 'The Finger Family Song' (short video clip sent to Fiona by Ashleigh, 23/06/2015).

3. Emma's doll's house

At the nexus of the practices of creating, synthesising and performing knowledge, Emma spontaneously narrates a scene from her doll's house, the full 'source threads' of which I am unable to identify. Physical objects with relationships to TV and related media (The Beast from *Beauty and the Beast*, Mumble from *Happy Feet* – renamed 'Penguin') and physical objects not specifically related to TV and related media (the doll's house, the doll's house furniture) combine. Emma is drawing on the prince and princess narrative trope in an entertaining way ('oh, aren't I the most beautiful princess'), demonstrating an understanding of the conventions of polite adult conversation ('well hello there'; 'wanna go and sit on there?'; 'Penguin, tell me all about your day'), embodying these through the plastic characters' role-play.

5.5.4. EMMA PLAYS ZOMBIES VS. PLANTS



The video extract on which this analysis was based can be viewed as file Emma_Zombies.mp4 on the enclosed USB drive.

This analysis reflects on a moment where some of Emma and her family's key practices with TV&RM (synthesising; exploring; performing knowledge; emoting) have combined and intersected with a number of relevant historical trajectories, including:

- (1) Fiona's tablet device as a physical object with specific affordances;
- (2) the trampoline as a physical object and space;
- (3) the *Plants vs. Zombies* game as a media text with its own historical trajectories;
- (4) the historical trajectory of Emma's social position as the only child in a family (and community) of grown-ups;
- (5) zombies as one of Emma's ruling passions;
- (6) my historical trajectory, placing me as a unique physical presence in the family home.

The multimodal transcript in Table 30 describes four very short excerpts (17-second; 13-second; 20-second; and 48-second), taken from a longer analysis of a play event. The excerpts illustrate how Emma translates digital game-play into the physical world.

Figure 82: Locating Emma's Plants vs. Zombies play within her case study map

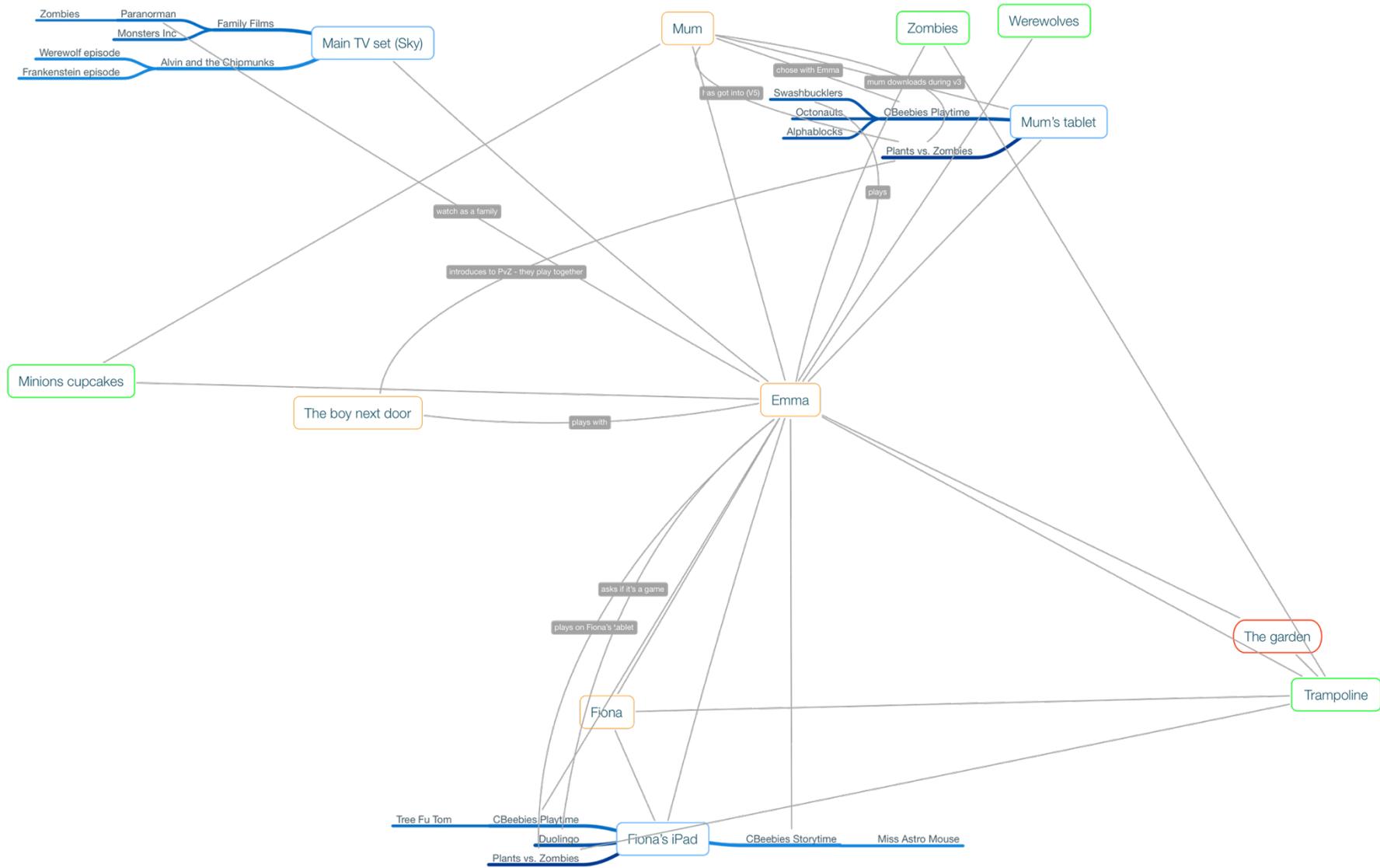


Table 30: Emma plays *Plants vs. Zombies* (Visit 4) multimodal transcription

Time	Bodies	Things	Intra-action	Discourse in place
			<i>[Visit 4, video 2]</i>	
00:06:20	Emma	Mum's tablet; <i>Plants vs. Zombies</i>	Emma is lying on her left-hand side on the sofa. Mum's tablet is lying flat in front of her. <i>Plants vs. Zombies</i> is playing on-screen. Emma's eyes are on the screen.	-
00:06:21	-	-	Emma reaches her right hand out to tap the 'falling sun' on screen with her finger ('collecting' it)	(E) I hate zombies
00:06:23	Emma, Fiona	-	Emma has missed and taps again, successfully tapping the 'falling sun'	(F) Why'd you hate zombies?
00:06:25	Emma	-	Emma taps on screen, highlighting an area of lawn she can plant on, but not planting anything, then drawing her arm back	(E) Because they're stupid
00:06:28	Fiona	-	Emma is watching the action on screen	(F) They don't seem that stupid, they're quite good-
00:06:30	Fiona, Emma	-	Emma taps another falling sun ('collecting' it)	(F) -at getting into you house
00:06:33	Emma	-	Emma withdraws her arm, still watching the screen	(E) They're not gonna get into my house
00:06:35	Fiona	-	Emma continues to watch	(F) Are you sure?
00:06:37	Emma	-	Emma reaches to tap on three falling suns, collecting them all	(E) Yeah
			[...]	
00:09:40	Emma		Emma is still seated, but looking away towards the TV set, biting her thumb	-

00:09:41	Emma	<i>Plants vs. Zombies</i>	Emma turns quickly towards the screen. A zombie slides downwards, then slides slowly inside the house, via the front door	(PVZ) (dramatic music plays)
00:09:43	Emma	<i>Plants vs. Zombies</i>	Emma's right hand moves to the screen. She attempts to tap on a sun (lower screen), then another (upper screen). The game doesn't respond and the 'suns' are not 'collected'	(F) uh! (makes shocked noise)
00:09:45	Emma	-	Emma just looks at the screen	-
00:09:47	Fiona	-	-	(F) What's happened?
00:09:48	-	<i>Plants vs. Zombies</i>	On top of the game, green horror-style writing (all caps) appears: THE ZOMBIES ATE YOUR BRAINS!	(PVZ) (blood-curdling) noooooo!!!!
-	-	-	The writing enlarges slowly, covering most of the screen	(PVZ) (yell continues)
00:09:50	Emma	-	Emma reaches behind her head with her right hand	(E) Got in my house
00:09:52	Fiona, Emma	-	Emma looks at Fiona	(F) Oh no!
00:09:53	Emma	-	Emma looks down	(E) I want another mini-game
<i>[Visit 4, video 3]</i>				
00:06:50	Emma, Mum	Dining chair; plastic jug; cake mix; bun tin	Emma is standing on a dining chair in the kitchen, watching while mum finishes scraping cake batter into bun tins	(M) When they cool...
00:06:54	Emma, Mum	-	-	(M) ... you can decorate them
00:06:55	-	-	Emma sits down onto the chair	(M) 'kay?

00:06:57	Emma	-	Emma looks at me briefly, then slides off the chair	(E) Want to go and play the game
00:06:59	Mum	-	Emma is walking towards the open back door	(M) Go and play the game
00:07:00	Emma	-	-	(E) - I just want to go
00:07:01	Mum	-	Fiona swerves the camera to catch a look at the back of the <i>Despicable Me</i> cupcake packet, then up to follow Emma walking out of the door into the garden, hopping down the stair and running out onto the grass. The trampoline can be seen ahead of her [...]	(E) Or d'you want to play outside?
00:10:10	Emma, Fiona, Mum	Trampoline	Emma and Fiona are bouncing on the trampoline, which is an enclosed style trampoline with netting around the sides. Mum is in the camera's foreground, pinning out washing onto the line	(F) That's pretty high
00:10:12	Emma, Fiona	-	Emma jumps high then bounces on her bottom	(F) Oh!
00:10:13	-	-	Emma doesn't get back up, but stays lying on the floor of the trampoline...	(E) (Laughs excitedly)
00:10:14	-	-	...as Fiona's bounces move her about	(F) That's a really good trick
00:10:16	-	-	-	(F) (looks towards mum briefly) a really good trick
00:10:17	Emma	-	Starting to stand herself up on the trampoline, mum steps in front of the trampoline temporarily	(E) We're playing Zombies versus Plants
00:10:20	Fiona	-	Mum is pinning the washing, little can be seen behind	(F) Zombies versus Plants?
00:10:22	Emma	-	-	(E) Yeah, and the zombie's outside
00:10:25	Fiona	-	-	(F) (in shock) oh!!!

00:10:26	Fiona	-	-	(F) Are we playing it now?
00:10:27	Emma	-	Emma is beginning to bounce	(E) Yeah. It's pretend, though
00:10:28	Fiona	-	-	(F) OK
00:10:29	Emma	-	-	(E) Pretend Zombies
00:10:30	Fiona	-	-	(F) Pretend Zombies
			<i>[Visit 4, video 3]</i>	
00:00:58	Emma; Fiona	Trampoline	Fiona and Emma are bouncing energetically	(F) (laughs)
00:01:00	Emma	-	-	(E) Zombie's goin down't chimney now
00:01:03	Fiona		Fiona begins to bounce right, towards Emma	(F) Noooooo!!! Can I come over here? I'm terrified
00:01:05	Emma	-	Emma points to the left hand side of the trampoline	(E) No, you have to go there
00:01:06	Fiona	-	Fiona begins to bounce over to the left	(F) But then I'm near the zombie
00:01:07	Emma	-	Fiona continues to travel left, pushing her hair behind her ears, Emma continues to bounce	(E) I'll punch it in't face
00:01:08	Fiona	-	Fiona bounces on 'her' spot on the left hand side, Emma continues to bounce	(F) OK, well done
00:01:09	Emma	-	Emma points forward	(E) It fall now- a-
00:01:10	Fiona	-	-	(F) Where is it?
00:01:11	Emma	-	Emma points at the floor of the trampoline, between Fiona and herself	-
00:01:12	Emma	-	-	(E) It were just there

00:01:13	Fiona	-	Both bouncing, Fiona looks at the spot on the floor of the trampoline	(F) Oh well done
00:01:14	Emma	-	Emma swings her right arm up behind her and down towards the spot on the trampoline's floor	(E) I punched it
00:01:15	Fiona; Emma	-	Emma is now swinging multiple punches towards the spot on the trampoline, no longer bouncing, alternating arms	(F) And what, did he go away?
00:01:17	Emma	-	Emma begins bouncing again	(E) Yeah
00:01:18	Fiona	-	-	(F) Oh well done
00:01:19	Emma	-	-	(E) I'm gonna slice it in half with a stick
00:01:20	Fiona	-	Fiona is lagging, bouncing more slowly, Emma bounces eagerly	(F) You're gonna slice it in half with yer stick?
00:01:22	Emma	-	-	(E) Yeah
00:01:23	Fiona	-	-	(F) Poor zombie
00:01:24	Emma	-	Fiona is bouncing more energetically	(E) I know but... they can eat yer brains
00:01:27	Fiona	-	Fiona looks over her shoulder, distracted	(F) Yeah... we don't want that
00:01:32	Fiona; Emma	-	Fiona looks alternately from Emma to over her shoulder	-
00:01:33	Emma	-	Both still bouncing, Fiona looks at Emma	(E) Right, they're trying again now
00:01:35	Fiona	-	Emma ends a bounce, still, her knees buckling, reaching her hands to hold the netting behind for support as she begins to sit	(F) They're trying again?
00:01:36	Emma	-	Fiona stops suddenly, legs slightly apart, arms out, palms facing down; Emma flops to the ground	(E) You have to stop bouncing
00:01:37	Fiona	-	Fiona looks at Emma	(F) OK. Do I need to sit down?

00:01:39	Emma	-	Fiona bounces quickly down to a cross-legged position, looking towards the house, then Emma again, watching her	(E) Yeah. Oh, wait, now the zombies are coming, a big wave
00:01:45	Fiona	-	Looking around	(F) Where? Where are they?
00:01:46	Emma	-	Emma is very quickly up and bouncing again, Fiona follows suit more slowly	(E) C'mon, we've got to keep bouncing now

Analysis: Emma plays *Plants vs. Zombies*

I am spending time with Emma and her mum on Visit 4. It is a warm summer day in August and Emma and I have been playing *Plants vs. Zombies* on mum's tablet for a considerable time (Visit 4, Video 2). Visit 4 happened in early August, only 2 weeks after Visit 3 (late July). During the previous visit (V3), I introduced Emma to my tablet and suggested she might want to have a go with one or other of the *CBeebies* apps. Emma had already played *CBeebies Playtime* on her mum's tablet before the research began and had enjoyed it. Presented with *Playtime* and *Storytime*, she elects to play with *Storytime*, which she'd never tried before. Emma plays for a little time with the *Miss Astromouse* story (from the *CBeebies* show, *Show Me, Show Me*). Emma lets the tablet play the story to her, listening calmly and tapping the screen to make it progress when needed. After it finishes, I ask her if she liked it and she tells me 'it was good', but immediately asks to play on the (more familiar) *CBeebies Playtime* app ('the thingy one'). Having had a go at a couple of games on that, she presses the iPad's 'home' button, asking 'have you got any more games?' As we start to discuss, she is swiping the screen to review the icons, asking 'is that a game?' first of *Japanese (Mind Snacks)*, a Japanese language-learning app with a grinning, pink cartoon bear as its icon and secondly of *Plants vs. Zombies*, a 'tower defense' style game app with a cartoon zombie icon.

After Mum has said yes, Emma and I embark on getting into *Plants vs. Zombies*. This is not straightforward, as the game requires some basic knowledge. Emma is playing in 'my' version of the game (*Plants vs. Zombies* is one of my own favourites), so she is in the middle of the action rather than at the start. She is, therefore, playing on a medium difficulty level and without the tutorial introductions that normally greet a new player who has downloaded the app for the first time. However, Emma seems very motivated. The game's 'narrator', 'Crazy Dave', appears on screen. Gibberish audio approximating a man's voice plays as a written message appears on screen: 'Man, those zombies just keep a-comin'. At this stage in the research process, one method I have started to adopt with Emma is asking her questions that may well seem beyond her ability, since they often lead to interesting responses. I tentatively ask her, 'what does he say?' Emma peers at the screen and responds: 'he says tap the zombies to kill the sunflowers'. As in the case of Archie's brother, Kyle, Emma is inventing dialogue that, whilst inaccurate, is in keeping with the genre of the game, both thematically (i.e. zombies) and operationally (tap to kill). Since this is the first time she has opened the app, which has by this point been open for just under 60 seconds, she is generating this dialogue based on existing funds of knowledge (Moll et al., 1992) and direct observations from the last minute. Elements such as the reference to the sunflower clearly derive from the latter, whilst the thematic and operational awareness can derive only from existing funds of knowledge. We know that zombies are one of Emma's ruling passions (Barton & Hamilton, 1998) and she is drawing on multiple historical instances of viewing and replaying/synthesising typical zombie narratives to invent this simple narrative in the moment. The operational notion of tapping to kill, meanwhile, is likely to stem from Emma's previous play with similar style tablet games. Having discovered *Plants vs. Zombies*, Emma continues to play the game until I leave more than an hour and a

half later. As I am leaving, Emma asks to continue playing, at which point Ashleigh begins installing *Plants vs. Zombies* onto her own tablet.

When I return two weeks later for V4, it is obvious that Emma has been playing the game during my absence. It is also clear that her mum has been involved in this. Ashleigh is getting on with housework, but the mother and daughter's exchanges give an insight into the way they have been interacting in relation to the game. Ashleigh (also new to *Plants vs. Zombies*) has gained detailed knowledge of the game:

Emma: *Mummy, do you need a- do you need a sunflower?*

Ashleigh: *Yeah, I would.*

(Transcript, Visit 4).

She is also scaffolding Emma's skills verbally. For example, when Emma plants a 'Hypno-Shroom' on the lawn, she becomes frustrated that it is 'sleeping' and thus offering no defence whatsoever against the approaching Zombies. Continuing her housework, but with one ear open to Emma, Ashleigh chirps in to our conversation with some (accurate) understanding of the game-play that Emma has so far been missing:

Emma: *I don't like it when it's asleep.*

Fiona: *You don't like it when it's...?*

Ashleigh: *You what?*

Emma: *Asleep.*

Ashleigh: *Well, you're not meant to use them ones in't day. They're night-time ones.*

(Transcript, Visit 4).

Despite this assistance, and despite her obvious delight in the game, Emma is becoming increasingly frustrated. *Plants vs. Zombies* is marketed to adults and is not designed for preschool children. As such, its rules are a little complicated and it is not straightforward to operate. Later in Visit 4, Ashleigh finishes some housework and begins a planned activity with Emma, which is baking a box of *Minions* cupcakes from the movie, *Despicable Me*. The cupcakes will need to go into the oven to bake before they can be iced (Emma's favourite part) and Emma declares that she wants to 'go and play the game' (Visit 4, video 3). Rather than heading to the living room to take up where we left off in the digital game, she runs out into the garden. As explored in my methodology (3.5.), Emma then invites me to play on the trampoline with her. Soon after, and without any prior discussion or prompting, she declares that we are 'playing Zombies versus Plants'. We trampoline for more than an hour in total during the visit and, as we do, the game's features and rules evolve.

In this vignette, various 'things' (Emma, the tablet, the *Plants vs. Zombies* game, me, the trampoline and Mum) are coming together to constitute an assemblage (Giugni, 2011). Play is linking this momentary human-object interaction with a range of existing social practices (Wohlwend, 2009). As with Niyat, one

of these established practices is exploring (and gaining physical mastery of) more 'adult' digital platforms and texts, seeking (and receiving) Ashleigh's support in facilitating this. Drawing on the material (the trampoline), the bodily (hers and mine) and the media text (*Plants vs. Zombies*) resources available to her, Emma very rapidly invents, enacts and narrates a version of the game. In doing so, she demonstrates some traditional literacy skills (for example, telling me that a 'huge wave of zombies is approaching'). The data is rich, but several things stand out as interesting. Firstly, as with Archie and his brothers 'playing *Spider-man*', 'playing' a media text constitutes a merging of digital and physical play (Thiel, 2015). Secondly, the translation of the game across different platforms opens new possibilities and affordances. Though I cannot be sure, I sense that this translation relates to Emma's existing social practices linked to being the only child in a family (and community) of grown-ups and Emma's affective response (frustration). In *Plants vs. Zombies* the digital game, it is not possible to directly 'fight' zombies. The game-play involves planting garden plants with a variety of special abilities. These plants will prevent the zombies from entering your house for as long as they withstand the zombies' attempts to eat them. Within the digital format, rigid rules dictate how zombies can be overcome and there is little space to subvert or adapt. When Emma, yet again frustrated with the zombies destroying her defences, attempts to tap the screen (00:09:43), the game fails to offer the desired response, or even a visual, audio or haptic acknowledgment of her frustrated tapping attempts. In contrast, Emma's narration of our (physical) reproduction of the game ('Zombies versus Plants') includes multiple methods of attack and defeat. Some clearly derive from elements of the game, e.g. when Emma says we are 'exploding' zombies with 'cherries' (a cherry bomb is a weaponized plant in the game). Several, however, are very human and physical lines of attack that are not possible in the game:

Fiona: *But what if they don't win?*

Emma: *Err, oohh! I'll punch em in't face.*

(Video 3, Visit 4).

The multimodal analysis highlights another example of this, i.e. slicing the zombie in half with a stick. By translating the digital game to a physical platform, Emma has created a situation in which she can defend her 'house' (the trampoline), dictating for herself (and for me) which physical (and imagined physical) skills are required to defeat the zombies and 'win the game'. In common with Niyat's frustrated response to the static character of Peter Rabbit in *CBeebies Storytime* (5.2.4.), Emma's frustration with the limitations of the digital is prompting her to translate the game-play into the physical. By extending their play from on-screen to off-screen play, Emma and Niyat claim greater autonomy and richer scope for their play.

5.5.5. EMMA PERFORMS THE MONEYSUPERMARKET.COM ADVERT



The video extract on which this analysis was based can be viewed as file Emma_Moneysupermarket.mp4 on the enclosed USB drive.

This analysis reflects on a moment where some of Emma and her mum's regular practices (Wohlwend, 2009) with TV&RM (copying; performing knowledge; emoting) have combined and intersected with a number of relevant historical trajectories, including:

- (1) the historical trajectory of Emma's social position as the only child in a family (and community) of grown-ups;
- (2) the *Moneysupermarket* advert as a media text with its own historical trajectory;
- (3) my digital camcorder as a physical object with its own historical trajectories and affordances;
- (4) my historical trajectory, placing me as a unique physical presence in the family home.

The multimodal transcript in Table 31 relates to two excerpts (one 20-seconds and one 31-seconds), taken from a longer, 130-second analysis of a play event. Amongst other things, the excerpt illustrates how Mum's support has enabled Emma to develop mature digital critical literacy skills.

Figure 83: Locating Emma's Moneysupermarket performance within her case study map

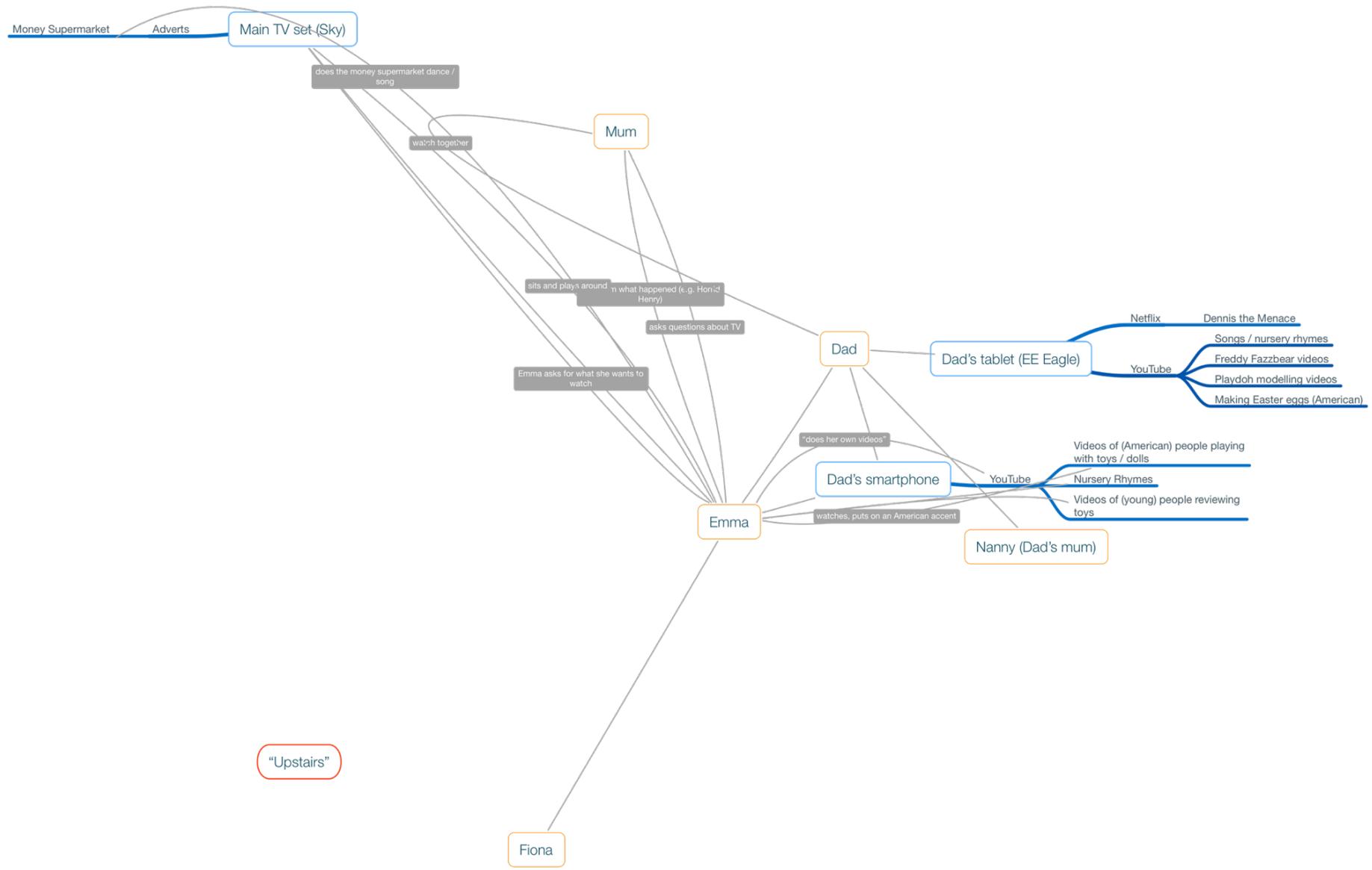


Table 31: Emma performs the Money Supermarket advert (Visit 2) multimodal transcription

Time	Bodies	Things	Intra-action	Discourse in place
09:40	Mum	Kiddizoom camera; Peppa pig bedding	Emma is sitting on her bed, looking down at the Kiddizoom camera, which she is playing with. Emma looks up briefly at her mum, then back down at the camera	(M) She's been copying that advert as well
09:44	-	Kiddizoom camera	Emma is browsing images	(KZC) (makes boing noises)
09:44	Fiona	-	-	(F) Which one?
09:45	Mum	-	The camera is on Emma, then veers slightly away and back	(M) Erm. <i>Moneysupermarket</i>
09:48	Mum; Emma	-	Emma immediately smiles	(M) Don'tcha.
09:49	Emma	-	Emma looks up at her mum, shaking her hair from in front of her eyes slightly. Her face lights up as her mouth opens to a full grin	(M) In'tya?
09:50	Fiona; Emma	-	Emma is already leaning forward to lift herself up off the bed, still smiling broadly	(F) Ohhh
09:52	Mum	-	Emma is shuffling herself to the edge of the bed	(M) Are you gonna show Fiona?
09:52	Fiona	-	Emma swings her legs over the edge of the bed	(F) Oh, will you show me?
09:54	Emma	-	Emma makes eye contact with Fiona, still smiling	(E) OK
09:55	Fiona; Emma	-	Emma's legs are on the floor	(F) OK
09:56	Emma	-	Emma walks towards the wall at the other end of the room, pushing her hair back with her left hand	(E) (giggles)

09:57	Fiona	-	-	(F) (laughs)
09:58	Emma; Mum	-	Emma places her left hand on her hip and she walks quickly forward	(M) Are you gonna sing it?
09:58	Emma	-	Emma strides forward, jutting her left and right shoulders and hips forward alternately, both hands on hips	(E) Don't you wish your girlfriend was-
10:00	Emma	-	Emma is reaching the wall and turns the corner to walk along it abruptly, jutting her right elbow forward as she turns on the word 'hot'	(E) -hot like me
10:02	Emma	-	Emma rapidly rotates on her left leg, turning 180 to strut back towards Fiona and the camera	-
10:03	Emma	-	Emma shuffles/ skips towards the corner in front of her, leading with her right hip (both hands still on her hips, smiling)	(E) Don't you wish your girlfriend was-
10:04	Emma	-	Emma is facing the camera straight on, hands on hips	(E) -me like me
10:05	Emma	-	Emma bounces up and down on the spot	(E) Don't ya?
10:06	Emma	-	Emma turns left, her left hip/elbow leading. She is smiling, mouth open, almost laughing	
10:07	Emma; Fiona; Mum	-	Emma performs a full-on strut, striding forward, jutting her left and right shoulders and hips forward alternately, both hands on hips	(F&M) (laughing)
10:08	Emma	-	Emma rapidly rotates on her right leg, turning 180 to strut back towards Fiona and the camera	-
10:09	Emma	-	Emma is performing to camera, shooting a quick glance to Mum	(E) Don'tchaa?
10:00	Emma	-	Emma holds the position momentarily, before continuing to shuffle (right hip forward)	(F&M) (laughing)

			[...]	
10:56	Emma; Fiona	Office chair	Emma is sitting on an office chair, her arms on its arms, facing inwards with her legs on the seat. She swings around to the right as she watches me	(F) Have you heard of adverts?
11:01	Emma; Mum	-	Emma is looking into space thoughtfully as she continues to swing round on the chair	(M) D'you know what adverts are?
11:02	Mum	-	-	(M) She knows what toy adverts are
11:03	Fiona		Emma's eyes dart to Fiona	(F) Yeah
11:05	Emma	-	Emma's eyes look at Fiona, then Mum	(E) Yep
11:06	Emma	-	Emma pushes off against the floor with her foot and glides forwards on the chair	-
11:07	Fiona	-	Emma is watching Fiona	(F) So d'you know what that's an advert for?
11:10	Mum	-	Emma rotates on the chair	(M) Yes you do, cos what does it say at end?
11:14	Emma	-	Emma pushes her torso up, moving her weight onto her arms, sitting 'tall' onto the chair	(E) (American accent) Is your moneysupermarket genit?
11:18	Mum	-	Emma is looking at Mum, smiling	(M) (laughs) yeah, you're right
11:19	Fiona	-	Emma spins	(F) Yeah... and what's moneysupermarket?
11:22	Emma	-	Emma turns round, pushing her hair out of her face and sitting 'properly' on the chair (on her bottom). She looks down, then at Mum	(E) Er. It wants you to go to that supermarket
11:27	Fiona	-	Emma leans back, propping her legs up on the chair's arm	(F) It wants you to go to that supermarket, yeah.

Analysis: Emma performs the *Moneysupermarket* advert

I am spending time with Emma and her mum on my second visit. We have been chatting about various things and Emma has also been showing me around the spaces she plays in and things she plays with. As described in the case of Niyat, Emma tends to show me rather than telling me about her interests verbally. For example, she has been showing me her doll's house and its inhabitants, predominantly acting out dialogues between the characters (in American accents) rather than responding to my traditional questions and prompts with verbal accounts. In this moment, various 'things' (Emma, Mum, the *Moneysupermarket* advert as a media text, me, the digital camcorder) are coming together to constitute an assemblage (Giugni, 2011). Performative play is linking this momentary human-object interaction with a universe of existing social practices (Wohlwend, 2009). One of these is Emma's practice of watching and copying/repeatedly performing *YouTube* videos and television adverts. Drawing on the media resources available to her, Emma very skilfully performs the dance/physical gesturing of the character in the advert and the song. In doing so, she demonstrates embodied literacy skills (Thiel, 2015). As in the case of Niyat's Beyoncé performance, there are many researchers who would express concern over Emma's performance, relating such displays to an alleged trend in the 'sexualisation' of childhood (Oppliger, 2008; Levin & Kilbourne, 2008). Firstly, the dance routine she is copying is implicitly 'sexy'. The humour embedded in the advert stems from a man adopting a stereotypically female style of (overtly sexualized) dancing, donning tiny shorts and high heels and dancing in an exaggerated style to emphasise his rear. The advert's theme song is also *The Pussycat Dolls'* 'Don't Cha', a song whose lyrics taunt its subject by asking if they wish that their girlfriend was as 'hot' as the singer. Willet (2011) observes 5-7 year olds performing songs in the playground, arguing that the girls perform playground-appropriate versions, censoring out the sexually suggestive moves. Willet draws on Corsaro's (1997) notion of interpretative reproduction, noting that this censoring relates to dominant discourses that define childhood and girlhood. It is certainly true that Emma's performance is muted. The strut, hip thrusting, tune and majority of the lyrics are imported from the advert's original dance (and song). The hands-on-hips element is added. Noticeably, Emma does not sing the most sexual lyric ('freak like me'). The performance is also discernably missing the most sexualized aspects of the dance (the advert's dancer sticks his rear out prominently and shakes it). The absence of the most sexual lyric and movements fit with Willet's censoring explanation, although several other elements may lend to this erasure.

It is not possible to identify for sure what informs the specifics of Emma's spontaneous performance, but knowledge of Emma and her interests invites a possible explanation. In her enjoyment of the advert, as with many other interests, Emma seems motivated very much by humour, particularly sharing humour with the adults in her life. Her mum has only to mention *Moneysupermarket* (09:45) for Emma's face to light up (09:48). She giggles at points in her performance, as Ashleigh and I laugh along, too. The advert is 'funny', perhaps most obviously because a man is strutting/dancing in an unexpected and stereotypically female-gendered way, and performing this action with such panache and conviction.

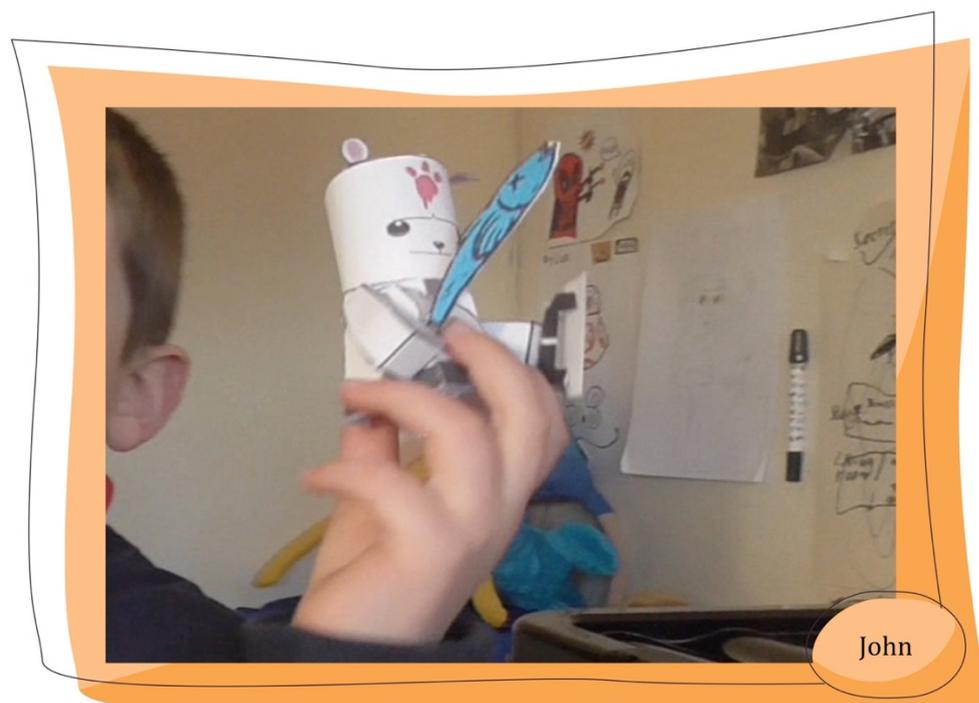
Emma's recreation of the advert centres on the humour of this confident forward strut, which she emphasizes with the addition of the hands-on-hips gesture. In her performance, Emma is doing more than copying or even just *performing* embodied knowledge (Thiel, 2015) of the advert as a text. She is also demonstrating both an understanding of physical humour and the ability to recreate (and embellish) what makes the advert funny in the first place – finessing her performance for her adult audience. Her use of the space and improvised physical touches (for example, turning suddenly to face the camera on a particular lyric) also show an awareness of the digital camcorder and how the performance might be composed on-screen, linking with Emma's fascination with user-made videos from young *YouTubers*.

In the brief conversation between me, Mum and Emma that follows, Emma demonstrates sophisticated critical media/digital literacy skills. There is a long history of developmental psychologists trying to experimentally assess children's understanding of television adverts and their persuasive intent. Oates, Blades & Gunter (2002) conclude that their 'focus-group' study with young children backs up previous findings, suggesting that 'effective verbal articulation of the purpose of advertising does not properly emerge until age eight' (p. 244). More recently, Carter et al. (2011) claimed that understanding persuasive intent emerged even later, with only 40% of their 11–12-year-old participants being able to describe this purpose. Emma is 4 years and 7 months old during this visit in June 2015 and, although she has mistakenly interpreted *Moneysupermarket* as a traditional supermarket, she very clearly articulates the persuasive intent of the advert – 'it wants you to go to that supermarket' (11:22). Given that the visual content of the advert is abstract (not directly related to the product on sale), it is unsurprising that Emma has confused *Moneysupermarket* with a 'real-life' supermarket (as opposed to a price comparison website). Emma's excellent critical literacy skills undoubtedly relate to both her interest in adult content and her mother's continued willingness to discuss topics with her at a very adult level. Although I cannot be sure, it seems that Emma and her mother have discussed the issue of 'adverts' on several occasions. Although her memory is prompted by her mum's question, Emma's assertion (very much 'in her own words', and specific to the advert in question) speaks to a genuine understanding, rather than simply mimicking something she has previously been told.

Carter et al. (2011) argue that, for many children under the age of 12, 'persuasion knowledge' (p. 968) has not yet crystallised into a robust cognitive defence. The authors thus suggest extending restrictions on advertising to 12 at the least. Oates et al. (2002), meanwhile, suggest that children need to be better informed, suggesting specific teaching about advertising could be provided by parents or during their education. Though it may feel counterintuitive to many, Emma's vignette demonstrates how exposure to (adult) advertising, when combined with discussions with a more competent other, can be beneficial, helping a child to develop critical digital literacy skills at a very early age. Indeed, the way Ashleigh is working with her daughter is consistent with Parry's (2016) description of the 'appropriate pedagogic and conceptual tools' (p. 325) children need to develop as critical, cultural and collaborative readers of 'words, images, sounds and texts and thereby of the world'. The debate about children's relationship with advertising is, of course, much larger. In her comparative study of families in India, Banaji (2010)

observes that the discourses of 'protection' and 'vulnerability' associated with childhood serve to increase adult control over the leisure time of children from middle-class families in India, whilst the lower-middle-class urban children whose parents cannot always be present to 'protect' them 'speak with and display the greatest sense of their own autonomy and efficacy' (p. 69). In this sense, Banaji points out that the rhetorical constructions of childhood as a period of vulnerability 'might serve some children, in some contexts well if applied to aspects of their lives, while harming and stifling others if applied to areas in which they might conceivably display independence and autonomy' (p. 67).

5.6. John



5.6.1. A pen portrait of John and his family

Demographics: John is a White British boy aged 4 years and 7 months when I first visit in July 2015. John's brother, James, is relatively close in age (7). John lives in Sheffield with his mother, Lisa, and father, Matt. For the last year, the family have been living in LSOA Sheffield 003E (West Ecclesfield Ward). In the latest Index of Multiple Deprivation (2015), this area was ranked 27,585 out of 32,844 in England, where 1 was the most deprived and 32,844 the least, placing it in the top 10% of *least* deprived areas in the UK (IMD Decile 9). The family moved to their current house from another part of Sheffield a year before my research began (July 2014). Lisa used to work as a Lunchtime Supervisor in a school, although has recently stopped working to become a full-time parent. She categorized her own work as 'professional' and 'full time parent' on the modified Hope-Goldthorpe (1981) scale. Matt is a Dental Technician and Lisa categorized his work as 'professional' on the modified Hope-Goldthorpe (1981) scale. He is additionally studying part time at University.

Family history and culture: Although Lisa used to work as a Lunchtime Supervisor, she recently paused work to become a full-time parent, and is at home with John much of the time. John has been going to nursery for about a year (two full days and one half day a week). John begins school between our third and fourth visit. John's Grandma lives just 10 minutes down the road so John also spends time there. Although James (7) is more than two years older than John, the pair spends a lot of time together. Lisa says that James is a big influence on what John likes doing and watching, although she notes that John

seems to be more 'boyish', whilst James is more 'sensitive' (V1). The family have lots of friends, including the boys' cousins and many similar-aged friends (mostly James'). Lisa has a friend with two children of similar ages to John and James (a boy and girl). The four like to play together and will often visit each other's houses.

Media environment of the home and other spaces: John's family have a Freeview TV in the living room. They used to have a Virgin Satellite subscription, but Lisa decided to get rid of it. They also had Netflix, but again recently cancelled this. However, James finds a lot of shows they liked on Netflix via *YouTube*. The home computer is connected to the main TV, so the boys can then watch this content on the big screen. The boys do not have digital devices in their bedroom, but have access to a range of devices downstairs, including a shared family tablet, *X-Box* and *Wii U*. James is a much bigger user of the tablet than John, although John will sometimes use it while they are out and about (e.g. playing on the *CBeebies* app when they go to swimming). During V1, Lisa points out that John cannot use things like *YouTube* on the tablet yet, but that James will help him to find the things he wants to watch (e.g. *Mario* or *Minecraft* videos). John and his brother spend time at their grandma's house, where they can watch satellite TV, and John will often watch more TV there than when he is at home (she has 'more channels'). Lisa does not like how they tend to ask for things they have seen on adverts when they get home. The family also have family movie nights from time to time (once every couple of months) where they will watch a movie they have never seen before, like a superhero movie or family film such as *The SpongeBob Movie*, making an occasion of it:

We don't tend to have one every weekend even though they love it but maybe every other weekend we'll all sit down with popcorn and sweets and try and watch a film we've not seen before. We'll bring the covers down and they really like that.

(Lisa, Transcript, V1).

More detail on the media environment at home and in other spaces is given in Table 32.

Figure 84: John's family tree

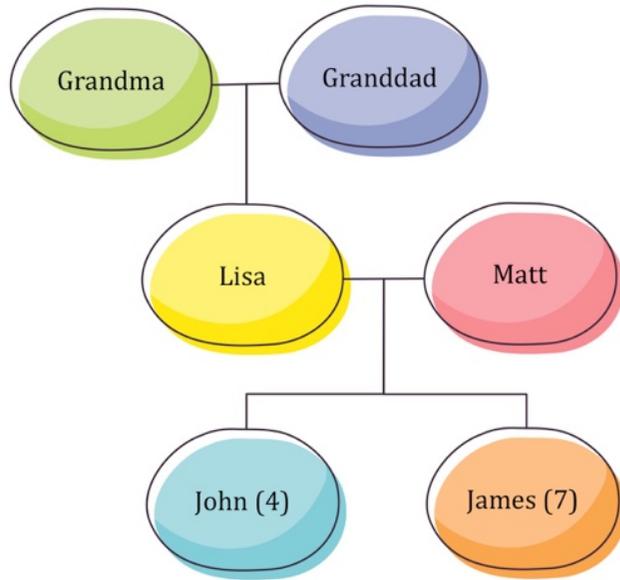


Table 32: Things that 'mattered' in John's case study

Bodies **Spaces**

Dad	John's friend, Max	Grandparent's house
Dottie the dog	Mum	Home
Fiona (the researcher)	Tango the dog	Hospital
Ginny the cat		John and James' bedroom
Granddad		Living room
Grandma		Nursery
James		School
John		Wildlife park

Digital objects and texts

Adventure Time	In The Night Garden	Skeletons cartoon
Annoying Orange	Iron Man	Spider-man
Avengers	Lazy town	Splatoon
Avengers Assemble	Main TV set	SpongeBob Squarepants
Avengers: Age of Ultron	Mario Kart	Star Wars VII
Batman	Mario videos	Superhero films
Bedroom TV set (Freeview, with DVD player)	Minecraft	Teletubbies
Ben and Holly	Minecraft videos & tutorials	Temple Run
Castle Crashers	Minion games	The Cat in the Hat
Danger Mouse	Minions	The Cat in the Hat
Deadpool	Mum's smartphone	The Spongebob Movie
Dennis the Menace	Night at the Museum (films)	Thundercats
Family tablet	Nintendo DS	Topsy and Tim
Fan-made Freddy Fazbear videos	Numberjacks	Wayne's World
Five Nights at Freddy's	Octonauts	Wii U
Flow Free (game)	Old TV set (Virgin subscription)	Xbox 360
Funnybones	Operation Ouch	You've Been Framed
Grandma's tablet	Peppa Pig	YouTube
Grandma's TV	School TV	
Home computer (mini mac)	Shaun the Sheep movies	

Non-digital things

Adventure Time mug	Guardians of the Galaxy poster	Peppa Pig figures
Batman	Hanging toy storage net	Photos of themselves
Bowser teddy	Jake teddy	Props for dressing up
Bunkbeds	Lego	Star wars figures
Captain Underpants book	Lego brick Minecraft sword	Superhero action figures
Castle Crashers masks	Lego brick Minecraft zombie head	Superhero outfits
Castle crashers paper bear	Lego minifigures	Superman t-shirt
Diary of Wimpy Kid (book)	Map of Europe poster	The Cat in the Hat (book)
Dressing up boxes	Masks & hats	The human skeleton poster
Finn teddy	Minions socks	Willy Wonka hat
Finn teddy	Minions teddy	Willy Wonka jacket
Globe toy	Pens and paper	

5.6.2. Members' generalizations and researcher observations about TV&RM

Members' generalizations represent what participants in the nexus of practice (normatively) say they do (Scollon & Scollon, 2004). My fieldwork with John's family consisted of conversations with Lisa and play (and playful discussion) with John and James. A lot of generalizations come from both Lisa and James' descriptions of John and their family's actions with TV&RM at home, although John's dad, Matt, was also vocal (and knowledgeable) with regards to John's interests when he was there. John and James seemed to really enjoy the 'toy tour' (Plowman & Stevenson, 2013) method that was introduced in V2. Both boys were keen to show me many objects in their (shared) bedroom, including toys, dressing up clothes, posters and things they had created themselves. This meant that material artifacts were a very effective way-in to interviewing, creating something of a 'third-party' (Levy and Thompson, 2015, p. 4) that seemed to enable both boys to speak very easily about their practices in a way that direct interviewing would not elicit. On all subsequent visits, the boys re-played the format without any prompting from me and it became an important way that I communicated with them and gathered information in this case study. In addition to the video data and coding of my data, I also made field notes, which enable me to give some brand of 'neutral observations' to compare with members' generalizations (Scollon & Scollon, 2004).

Media choices, influences and co-viewing

Lisa describes the influence James has over John's media (and other) choices and interests. John is motivated by his brother's interests despite lacking the operational skills to control such digital games himself:

Fiona: Did someone encourage him to play those or did he watch other people play and wanted to join in?

Lisa: Yes, it was watching James. When he first started playing at three and a half it was Mario Kart, so John would be sat with Matt and me and we would be pressing the buttons but he would think he was doing it. It was probably since just before Christmas that he's learned to do it independently. We've never played this one before, but another one similar to it. He would just sit there holding it and press anything. Now he's gotten a bit older he knows what to press.

Fiona: What do you think he was getting out of it?

Lisa: I think it was superheroes and that he wanted to join in with his brother. His character would just stay still.

(Transcript, V2).

Lisa describes how, towards bedtime, the boys will most likely be in the living room together, with James playing on the tablet as John is watching some TV. Lisa says that James is very unlikely to go upstairs even if John is watching something 'young' that he does not like (such as *Peppa Pig*). James would much rather have company. There is, then, little serious conflict in terms of what is watched, with multiple devices allowing James to disengage from content that he finds too young without discouraging or disparaging John's choices (or physically leaving John's company). In this sense, the brothers have found

a way to be in each other's company, when their interests overlap and even when they do not. At the same time, and as described by Niyat and Archie's parents, Lisa does describe how John's frustration shows itself from time to time. In the below extract, Lisa is reflecting on a moment from Visit 3 wherein James has switched a video game off:

Lisa: *You've seen John kick off!*

Fiona: *That's quite a normal occurrence?*

Lisa: *Yes. He's four and he finds it frustrating sometimes to get his point across.*

(Transcript, V4).

This frustration with the gulf in operational skills between similarly aged siblings is not unlike that described in Archie's case study. As with Archie's case study, however, there are also many more examples of shared media passion-related play that allow for shared participation.

John's father, Matt, is also an important influence on both boys' media choices. Lisa brings it to my attention on multiple occasions that Matt has specifically introduced the boys to something, or that it was one of his childhood favourites. Matt loved superheroes as a child. He also introduces John and James to *Castle Crashers*, a videogame whose significance in the family's literacy practices is explored below.

Object and character-led media habitus

Lisa describes the boys' media passions, of which superheroes are the most prominent, but which also include *Super Mario*, *Freddy Fazbear* and *Minions*. John and James' bedroom is full of material objects relating to their passions – books, posters and toys, but especially dressing up costumes and props. The boys frequently dress up as superheroes and role-play with these objects and they possess a good deal of knowledge in relation to them, much of which they impart to me throughout my visits. During my first interview with Lisa on Visit 1, John talks to us in abstract terms about what superheroes are and what they do:

Fiona: *What's a superhero?*

John: *Saves the day.*

[...]

Fiona: *Do you save the day when you're dressed up as Batman? Yes? What do you do?*

John: *Protection.*

Lisa: *You protect people. From who?*

John: *Bad guys.*

(Transcript, V1).

On multiple occasions, Lisa articulates the boys' passions in terms of their material iterations. For example, Lisa says that she thinks the boys want to watch *The Avengers* films because 'they have all the stuff' (Lisa, Transcript, V1). Lisa describes some of John's very first moments engaging with TV (*Peppa Pig*) in relation to both James and material objects. Before *Peppa*, John had been into *In The Night Garden*, mainly making noises and getting excited. Getting *Peppa* figures represented a change in engagement to fuller involvement in the narrative:

Lisa: *Yes, that's when he got little figures and was playing with them. He didn't draw then, he just started to get into drawing, or telling me the story of what happened.*

(Transcript, V2).

This has been especially true for John, since his older brother already had a lot of the 'stuff', although Lisa describes a similar object-led process for both boys:

Fiona: *How did he first start getting into it, was it the telly or toys and games?*

Lisa: *For John, it was all of the toys we already have of superheroes.*

Fiona: *So that's something they enjoy doing together a lot?*

Lisa: *Yes, and their dad likes superheroes.*

Fiona: *What about for James then, how did he get into superheroes?*

Lisa: *Just his age, and people bought him superheroes. Girls get dolls, boys get superheroes, and his dad likes them.*

(Transcript, Visit 2).

Arguably, many of the boys' passions are driven by material character representations. When I ask Lisa about how John has transitioned between one interest and the next, she describes how characters lead his choices:

Maybe he gets bored or maybe because James puts this idea in his head about a different character and he'll want to start getting obsessed with that character.

(Lisa, Transcript, V1).

It is interesting to note how Lisa describes the role of material objects in John's life. During V2, Lisa says she thinks John will easily remember his own past in terms of the presents he got on different birthdays:

Fiona: *Can you think of the most important events in his life?*

[...]

Lisa: *Each year he's been bought-, his birthday, he remembers his birthdays and what he's done for them and how old he was. Maybe what he got for his birthday as well.*

(Transcript, Visit 2).

Lisa also explains that when John was 2, James was hospitalized quite seriously for a couple of weeks with pneumonia. During this time, John's grandma and dad bought him lots of toys to try and comfort him.

Control and media as education

As in the case of Mary's descriptions of Rosie's media use at certain times of the day, Lisa clearly describes the boundaries of John's television viewing. Lisa contends that the television is not on a lot of the time, explaining that it is on at set times of the day and for particular reasons. The family have the main TV set on first thing in the morning, when John's having his lunch, and then for a little bit before bedtime. The TV will also be on if John's ill. Much like Rosie's mum towards the end of our research, Lisa perceives that certain types of media engagement can be educational. Lisa's discourses around John's media use frequently include comments about various (potentially) educative qualities, from number learning to healthy eating:

He has got into wanting to watch Numberjacks all of the time, which I think is good because it's teaching him a lot about numbers.

(Lisa, Transcript, V1).

I thought it might influence him to eat more fruit and vegetables but it didn't!

(Lisa on *Lazy Town*, Transcript, V1).

Something that is particularly evident to me as an onlooker is the prevalence of 'traditionally educative' objects and activities relating to media interests in John and James' lives. John's mum and dad (as well as grandparents) encourage both boys to take part in activities relating to their media interests. John shows me two of his *Busy Books*, which look like oversized hardback books. Inside are a traditional book, a variety of plastic figurines and a play mat. John has the *Marvel Avengers Assemble* and *The Amazing Spider-man Busy Books*. The boys draw prolifically and their bedroom walls are packed with drawings of media characters (e.g. the *Super Mario* brothers) alongside film posters (e.g. *Guardians of the Galaxy*) and traditionally 'educative' posters (e.g. a map of the world). John's dad plays a very active role in extending the boys' media interests through 'making'. The boys show me multiple examples of dressing up clothing and toys that their father has either made or helped them make. Dad sews James a *Willy Wonka* hat from scratch to form part of his costume for World Book Day. He also assists the boys in making their own creations, e.g. when James makes a *Minecraft* zombie out of Lego. These types of practices have been coded as 'extending' in my data analysis.

Much like Rosie, John is free to pursue his interests but somewhat limited by some of the choices his parents have already made for him (particularly in terms of both families' choice to limit TV subscriptions at home to Freeview only). Both Rosie and John explore other shows and channels not available to them at a grandparent's house. Also, like Mary, Lisa's statements reveal a greater level of explicit rules regarding John's media engagement than many of the other families (compared, for example, to Archie or Niyat's families):

Fiona: *Does he search for things himself on the tablet?*

Lisa: *No.*

Fiona: *So you'll find them for him?*

Lisa: *Yes.*

Fiona: *What about his brother?*

Lisa: *Yes, he can, which is probably a bit scary when they're typing stuff in.*

Fiona: *Have you had any problems?*

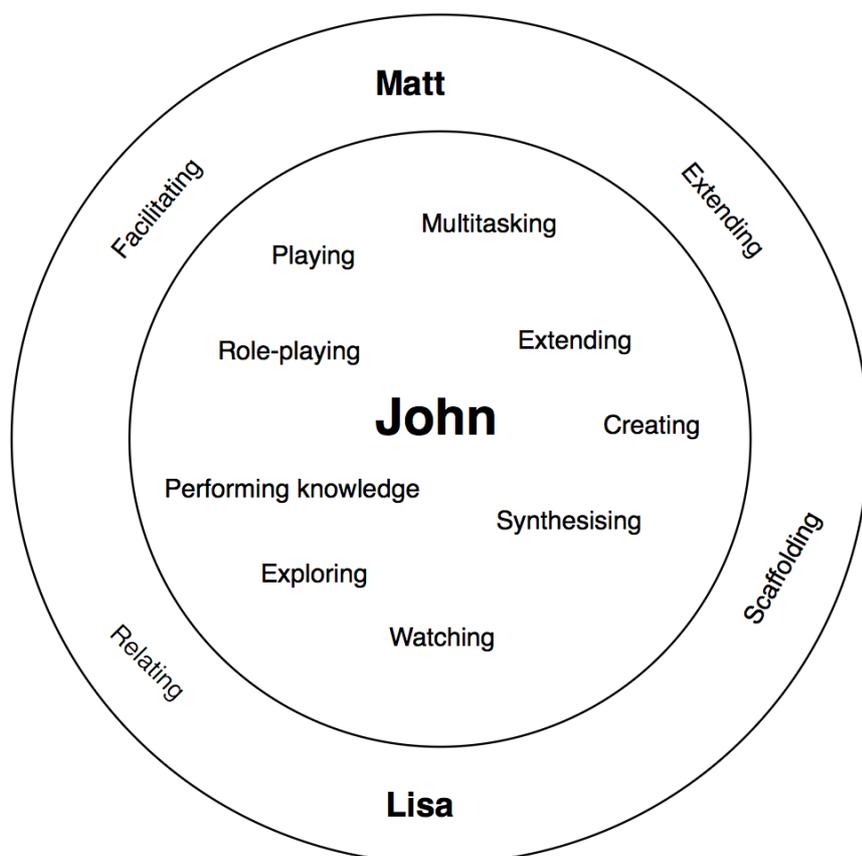
Lisa: *No. I think James would tell us if he did find anything scary or anything like that.*

(Transcript, V1).

Unlike Rosie, however, John has an older brother who is both operationally skilled in accessing content via means other than the main TV and familiar with a range of Satellites-subscription-only television shows. This means that John is exposed to shows via *Netflix* and any content that James can find online, particularly on *YouTube*.

5.6.3. Key child and family practices with TV&RM in John's life

Figure 86: John and his family's key practices



Examples of events at the nexus of key practices:

1. Dad extends the boys' knowledge of Castle Crashers characters

At the nexus of the practices of extending and performing knowledge, Dad assists the boys in going online to find (and then print) a chart that lists all of the *Castle Crashers* characters' names, with their pictures alongside. The boys put it up on their wall, enabling them to refer back to it in their play and discussions.

2. John and James synthesise life experiences and media characters in their repeated 'hanging teddies' game

At the nexus of the practices of synthesising, performing knowledge and playing, John and James repeatedly hang their teddies up in a line on their bunk beds, whilst chatting about the provenance of the toys and the media characters they represent. Some of the teddies relate to specific media texts (Bart Simpson, Bowser) and some do not (Monkey, Max Bear, John the Raccoon). This play synthesises prior

knowledge of a wide variety of media texts and family histories ('when John was first born, I gave John this teddy' – James playing the game, V4) into a game the boys have co-created and repeatedly performed. This is one of the repeated processes through which they extend each other's knowledge of characters and narratives, whilst reaffirming their own shared histories.

3. Mum initiates John's learning with the Numberjacks app

At the nexus of the practices of initiating, watching and relating, Mum downloads the *CBeebies Playtime* app onto the family tablet for John. John recognizes the *Numberjacks* characters from TV and is enthused to play the maths games.

5.6.4. JOHN PLAYS CASTLE CRASHERS



The video extract on which this analysis was based can be viewed as file John_Castle.mp4 on the enclosed USB drive.

This analysis reflects on a moment where some of John and his family's key practices with TV&RM (role-playing; creating; extending; performing knowledge) have combined and intersected with a number of relevant historical trajectories, including:

- (1) the cardboard knight masks as physical objects with specific affordances;
- (2) the *Castle Crashers* game as a media text with its own historical trajectories;
- (3) the historical trajectory of John's social position as the younger of two close-in-age brothers;
- (4) superheroes as one of John and James' shared ruling passions;
- (5) my historical trajectory, placing me as a unique physical presence in the family home.

The multimodal transcript in Table 33 describes a 90-second excerpt of a play event. Amongst other things, the excerpt illustrates how John and James perform knowledge of a shared media passion, *Castle Crashers*. Figures 88, 89 and 90 are still images taken from video data obtained during V3 and V5. This moment has previously been presented in less detail in my previous work (Scott, 2016).

Figure 87: John and James' Castle Crashers play within John's case study map

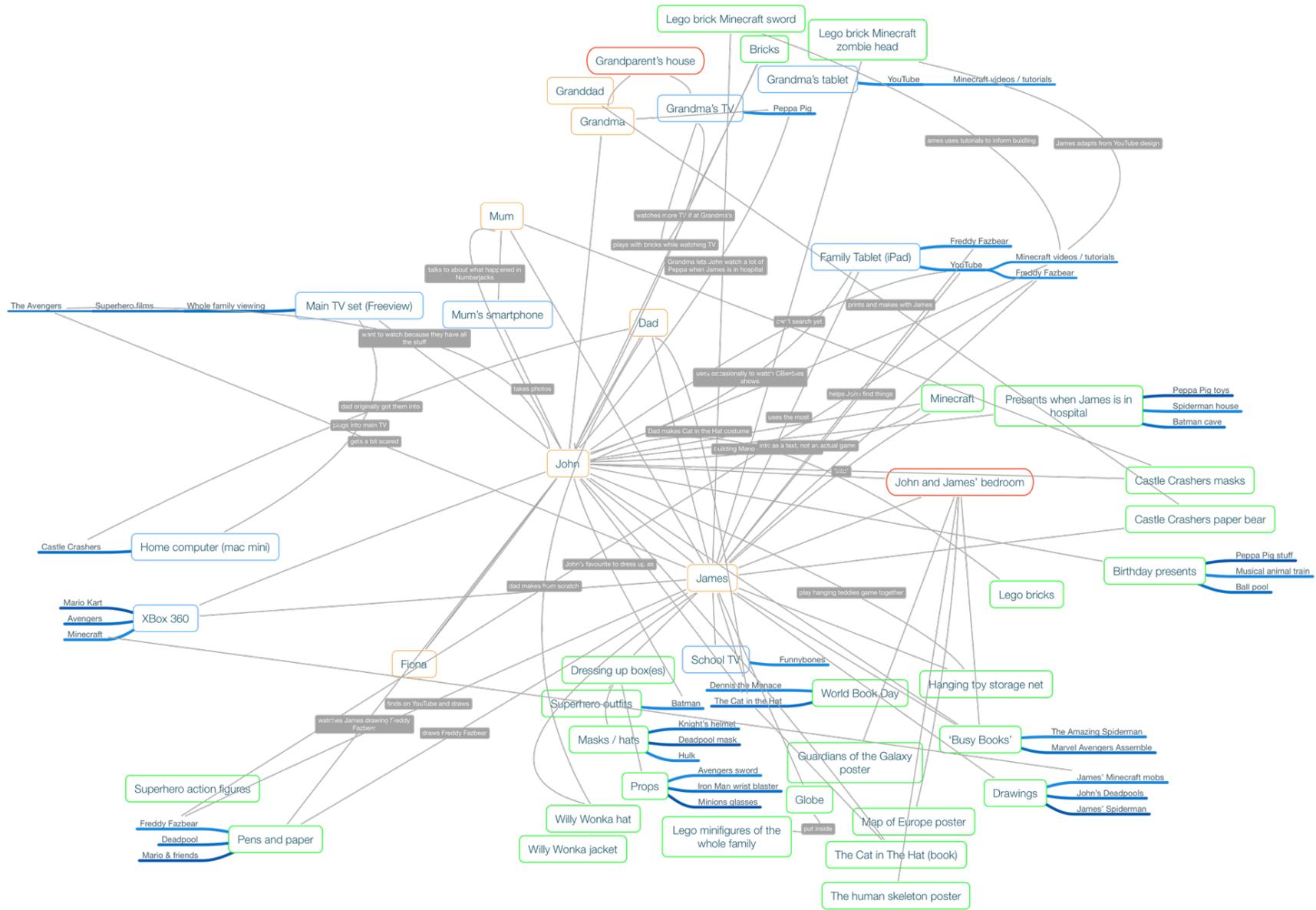


Table 33: John and James' Castle Crashers play (Visit 5) multimodal transcription

Time	Bodies	Things	Intra-action	Discourse in place
00:07:27	John; James; Fiona	Wooden toy chest	The camera is pointed towards the boys, who are rooting through a wooden toy chest	-
00:07:28	-	Orange <i>Castle Crashers</i> mask	John find an orange cardboard <i>Castle Crashers</i> mask. He hands it to James	-
00:07:29	James; Fiona	-	James slips the mask over his face. It is held in place behind his head with elastic	(F) Oh-ho-ho!
00:07:30	-	-	-	(F) You guys are so good at making costumes!
00:07:33	Fiona; John	Green <i>Castle Crashers</i> mask	The camera pans rapidly left to John, who is now slipping a green <i>Castle Crashers</i> mask over his face	(F) And you've got one! So who are you?
00:07:37	John	-	John holding the bottom of his mask with both hands	(Jn) The green one-
00:07:38	James	-	Camera pans to right to James	(Js) I'm the- I'm the orange one
00:07:40	Fiona	-	-	(F) And you're the orange one!
00:07:41	John	-	Camera pans left to John, pointing to the eye holes on his mask	(Jn) I'm the green one
00:07:43	Fiona	-	-	(F) So what-
00:07:44	John	-	John's hands go down and behind him, and he bends at his knees	(Jn) That trumps farts
00:07:45	Fiona	-	-	(F) You can jump far?

00:07:46	John	John bends down again, hands behind his bottom to demonstrate	(Jn) No, I trumped FART, I trump fart
00:07:48	Fiona; John	John is watching Fiona	(F) You trump farts?
00:07:49	John	-	(Jn) Yeah, it's smelly
00:07:50	John; Fiona	John looks to James	(F) That's not a super power is it? (laughs)
00:07:52	John	John looks to Fiona	(Jn) It is, it's his power
00:07:55	John; James	John looks to James. The camera pans slightly right as John is pulling his mask his face, resting it on the top of his head. John watches James as he talks	(Js) He dun't- that's what you think, but it's not, it's green gas and-
00:08:02	James	Camera pans right to James, whose mask is also rested on the top of his head, off his face	(Js) -he does it and it gets the people
00:08:03	James; Fiona	James walks forward towards Fiona	(F) Oh, OK. So he kind of scares everybody else off with his gas?
00:08:07	James	-	(Js) It doesn't come out of his bottom
00:08:09	Fiona	- Camera pans left towards John	(F) It doesn't come out of his bottom?
00:08:09	James	John makes eye contact with Fiona. He's laughing. He looks at James	(Js) It comes out of his hands
00:08:11	Fiona	John looks to Fiona. He touches his mask-	(F) (laughing) does it? OK
00:08:13	James	-and looks to James	(Js) And it's not fart
00:08:14	Fiona: John	John rapidly pushes his hands forwards, palms-first, all ten fingers spread wide-	(F) (laughing)

00:08:15	John	-	-then repeats the gesture several times	(Jn) It gets out of his hands
00:08:17	John; Fiona		John slips the mask back down onto his face	(F) It comes out of his hands-
00:08:19	Fiona; James	-	Camera pans right to James	(F) - so what does your guy do?
00:08:20	James	-	James looks at Fiona. He begins to pull his mask back down onto his face	(Js) Er, he's got fire powers and he can-
00:08:22	James		James's hands move down in front of him, coming together to form a 'ball' shape (fingers interlocked, left hand above right)	(Js) - do fire balls and-
00:08:23	James	-	James lift his hands to either side of his head, forming fists	(Js) - like-
00:08:25	James	-	James's fists move slightly back, then rapidly forward, his fists 'bursting' out into fingers as they move forward	(Js) - spread it
00:08:26	John	-	Camera pans left, back to John. He mask is off his face again	(F) Wow, OK... (Jn) Yes, and he c-
00:08:27	John	-	John is looking at Fiona (his arms down by his sides)	(Jn) And when
00:08:29	John	-	John is looking at Fiona, then forwards, thinking	(Jn) Once when I were the fire one
00:08:31	John	-	John raises his arms, index fingers pointing slightly	(Jn) I
00:08:33	John	-	John is looking at Fiona, his arms go down. On 'jumped', he jumps slightly	(Jn) Um, when I jumped
00:08:34	John	-	-	(Jn) Fire were at bottom of me, I went-

00:08:37	John	-	John bends down on his knees, then jumps, looking down, arms down	(Jn) – and PHWUO!
00:08:38	John	-	On landing, John looks at Fiona	(Jn) And fire were under... me
00:08:39	Fiona	-	John is looking at Fiona; he begins to nod	(F) Is that when you were the orange one? Yeah?
00:08:41	John	-	-	(Jn) Yeah
00:08:42	John; Fiona	-	John pulls his mask back onto his face with both hands	(F) Wow
00:08:44	John	-	John looks at Fiona through his mask eyeholes	(Jn) Fire comed out of me
00:08:45	Fiona; John	-	John turns to James	(F) (laughs)
00:08:47	Fiona	-	John is walking forward, he pushes the mask up, about to take it off	(F) So did you guys make these masks yourselves?
00:08:49	John	-	-	(Jn) n-
00:08:50	James	-	The camera pans to James, who has taken his mask off and is looking down	(Js) No, we had a little bit of help
00:08:52	Fiona	-	-	(F) From...
00:08:54	James	-	Looking at the camera, smiling	(Js) My mum and dad

Figure 88: John's Deadpool drawings (left) and James' Deadpool drawing (right) (Visit 5)



Figure 89: James' Foxy the Pirate toy dress-up (left) and drawing (right) (Visit 3)



Figure 90: John's cardboard 'Bear' figure (left) (Visit 5); John and James' Castle Crashers masks (right) (Visit 5)



Analysis: John and James' Castle Crashers play

I am spending time with John and James on Visit 5. By now, the boys have fallen into a pattern of showing me things as part of my visits and are keen to hang out in their bedroom, playing and talking me through the things they are most interested in interacting with at the moment. The boys are digging through objects in their wooden toy chest when they come upon two cardboard masks (Figure 90). Without verbalising anything, the boys begin to put them on and I start to ask a few questions, which they answer. The masks relate to characters from the videogame *Castle Crashers*, which, Lisa has earlier explained, their dad likes playing. Having seen their dad play, the boys have been playing the game both as a videogame and as an imaginative (physical) game:

John used to go-, he's finished nursery now, he'd be like, 'I'm this character', and be really extreme.
(Lisa, Transcript, V2).

Taking equal turns, the boys impart and explain knowledge in relation to the videogame. As in the case of Archie's *Powerpuff Girls* play with other boys in his family, John and James demonstrate shared knowledge of the characters' colours, which suggests they know the game well. In this vignette of exploratory play, various 'things' (John, James, the masks, the *Castle Crashers* media texts and me) are coming together to constitute an assemblage (Giugni, 2011). Performative play is linking this momentary human-object interaction with a universe of existing social practices (Wohlwend, 2009). John is drawing on his existing funds of knowledge (Moll et al., 1992) in relation to the *Castle Crashers* text. He explains the characters and their unique abilities, embodying the knowledge of these superpowers physically (Thiel, 2015) to demonstrate in more detail. As he does so, James finesses his specific knowledge of the character with some corrections (the green knight does not fart, he emits green gas). Furthermore, it comes out of his hands (not his bottom). John immediately accommodates this updated knowledge, stating: 'it gets out of his hands'.

Towards the end of the clip, we gain some insight into the role that Mum and Dad are playing in this vignette. *Castle Crashers* is a media passion shared by the boys, but Lisa and Matt have helped the boys to translate this interest into making masks that they can then role-play with. In doing so, John and James' parents are supporting the development of 'making' skills. Although there has been increased discussion in recent years about the role that 'makerspaces' might play in the lives of young children (Marsh et al., 2017), design and technology have always been embedded in the early years curriculum and beyond. The traditional 'making' activities which John's family encourage (drawing, designing, making) draw on the digital, both in terms of John and James' ruling passions (media texts like the *Marvel* series, *Minecraft* and *Castle Crashers*) and in terms of using technology (e.g. templates found online, *YouTube* tutorials). Though centred around a media text, the learning taking place is not quantitatively dissimilar to the kind of drawing, designing and making that young children are encouraged to engage with as part of developing design and technology curriculums in nursery and

school. As with Rosie's case study, this family practice was something so noticeable that it began to form the basis of a working theory before my analysis even began.

As in Rosie's case, almost every media interest in John and James' life was supplemented by some sort of 'traditional' activity. This practice came to be defined in my coding model as 'extending', as John's parents extended his digital/media interests into associated non-digital activities. By mapping John's extended practices, I can trace the family's set of established media habits through numerous occurrences during the visits I made. During V3, James draws a picture (Figure 89.) while John is watching *Numberjacks* on TV. Later, I notice James is holding a stuffed toy fox that is wearing an eye-patch and holding a hook (Figure 89.). When I ask him about it, he explains that it is 'Foxy the Pirate' (who I later learn is a character from the digital game *Five Nights at Freddy's*). As with the masks in V5, dad has taken a digital interest and extended James' play into a different realm:

Fiona: *How have you made his costume?*

James: *We got some wool and I made him an eye patch.*

Fiona: *That's so cool.*

James: *We got some tin foil and I rolled it up to make a hook.*

Fiona: *Is he your favourite character from this game?*

James: *Yes.*

Fiona: *Is he the one you were drawing over there?*

James: *Yes.*

Fiona: *What's he called again?*

James: *Foxy the Pirate.*

Fiona: *Is he a nice character, or a naughty one?*

James: *A naughty one.*

Fiona: *What does he do?*

James: *He scares you.*

Fiona: *Now you've got a real Foxy the Pirate, do you play games with him?*

James: *I only made him yesterday, so I haven't played any games with him.*

Fiona: *He's very cool. Did Mummy help you make him?*

James: *Dad helped.*

(Transcript, V3).

During V3, John and James show me various Lego creations in their bedroom. Most strikingly, James has created a *Minecraft* sword and zombie head. Neither derives from a specific *Minecraft* Lego set. Instead, John has found and followed a user-made *YouTube* tutorial to create the sword. He started out following a similar process for the zombie head, but has adapted the suggestions online to make a *Minecraft* zombie rather than a human character:

Fiona: *How did you come up with that?*

James: *Well, I was watching YouTube and I found it on YouTube and then we made it.*

Fiona: *So, the- video of someone else making a sword?*

James: *Yeah.*

[...]

James: *That's a zombie face.*

Fiona: *So where did you get the idea for that one?*

James: *Erm, I just thought of making it when erm my grandma was looking after me.*

Fiona: *Oh really, so you didn't watch a video on YouTube for that one? You just did that one yourself?*

James: *Yeah.*

Fiona: *It's really good, it looks really like it doesn't it?*

James: *Well, I was watching YouTube but it weren't a Minecraft Zombie, it was a different character, then I realized I didn't have enough pieces, to it, to look like a human, so I made it look like a zombie instead.*

Fiona: *What makes it look more like a zombie d'ya think?*

James: *Cos it's green.*

[...]

James: *And I made a Minecraft head what I thought I would look like in Minecraft.*

Fiona: *Wow, where did you get the idea to do that?*

James: *Erm, well, after probably, or, on father's day, I made it cos he got a book with a lego mug in it and it looked like the right size for a head and then I did make a body for it, but then it kept breaking.*

(Transcript, Visit 3).

John has followed a similar process to the boys in Archie's case study, as both groups of boys watch *Minecraft*-related tutorials. Whilst the boys in Archie's case study seek videos to support their building within a digital game itself, John has sought out videos that enable him to translate his *Minecraft* construction into a traditional 'making' domain.

Whilst the Lego *Minecraft*-building examples are led by James, many other Lego models have been built by both boys. My observations suggest that John is gradually adopting similar 'making' practices. The boys share a variety of media-related ruling passions, both those that they have first-hand knowledge of and those which they have discovered through objects, costumes and other texts (e.g. books or *YouTube* videos). Both extend these interests through physical making and creating. However, the process through which knowledge is shared and replayed varies. Likewise, the roles played by media texts versus physical objects also vary. Earlier in V5, for example, John shows me a 3-dimension paper model of the 'Bear' character from *Castle Crashers* (Figure 90). James and his granddad have created the bear:

James: *There are little pieces on the piece of paper, and you had to cut them out and make that.*

Fiona: *Where did you find it?*

James: *The computer. We printed it out.*

Fiona: *Did you guys find it, or did mum and dad?*

James: *I found it with my granddad.*

John: *I wasn't there. I was at school.*

Fiona: *Was it when you were ill?*

James: *Yes. I didn't make it all. My granddad made most of it.*

Fiona: *It's cool.*

James: *You can cut it out and stick it.*

(Transcript, Visit 5).

John was not involved in the making on this occasion, but he does have detailed knowledge of the object, both in terms of where it came from and what it represents (he explains to me how granddad constructed it so its head could move). In this instance, both boys have already engaged directly with *Castle Crashers* as a videogame (hence an awareness of Bear's significance as a character), whilst John's knowledge of the object's immediate provenance reveals shared play and conversation between the boys over the bear as a physical object. During V4, John shows me some drawings he has created (Figure 88) depicting the *Marvel* character, *Deadpool*. They are stuck on the wall next to his bed (the lower bunk). By the top bunk, James has a similar drawing stuck to his wall (Figure 88). Neither boy has seen the film (although James has seen the trailer, and both have some level of knowledge of, and engagement, with *Deadpool* as a character). In this case, both boys perform knowledge of *Deadpool* in their discussions relating to the drawings without having a deeper knowledge of *Deadpool* as a media text. Whilst John says *Deadpool* is his 'favourite guy', James demonstrates a more sophisticated understanding ('He's a bit crazy. In the *Deadpool* trailer, I saw him with someone's head cut off').

In terms of practices, then, non-digital play is closely interwoven with digital play. Non-digital educative material is also closely interwoven with media-related ruling passions at a very physical level in the boys' lives. This is especially the case in their bedroom, where a *Guardians of the Galaxy* poster can sit easily alongside a world map. Undoubtedly, the boys' lives are media dense, with media passions infiltrating almost every domain of their lives, including their physical spaces. Their case is a compelling example of how media interests are difficult to separate from young children's developing academic interests and, indeed, form an important part of them. There is also evidence in John and James' case that these passions and practices are being extended within their formal educative spaces, too:

Lisa: *They were all into Mario at one point, and the activities they set out, they set them out around things that they are interested in to get them to interact better. They are really good with that.*

Fiona: *It sounds like his learning has been really linked to that interest with superheroes?*

Lisa: *It's helped him because he's interested in them and it hasn't been boring, so he probably doesn't know he's learning.*

(Transcript, V2).

5.6.5. JOHN EXPLORES CBEBBIES STORYTIME



The video extract on which this analysis was based can be viewed as file John_Storytime.mp4 on the enclosed USB drive.

This analysis reflects on a moment where some of John and his dad's regular practices (Wohlwend, 2009) with TV&RM (exploring; performing knowledge; extending; relating) have combined and intersected with a number of relevant historical trajectories, including:

- (1) the historical trajectory of John's physical learning and the family's engagement in educational days out;
- (2) the *CBeebies Storytime* app as a media text with its own historical trajectory;
- (3) my tablet as a physical object with its own historical trajectories and affordances;
- (4) my historical trajectory, placing me as a unique physical presence in the family home.

The multimodal transcript in Table 34 relates to two excerpts (one 50-seconds and one 30-seconds), extracted from a longer, 13-minute analysis of a play event. Amongst other things, the excerpt illustrates how Dad's support enables John to develop operational digital literacy skills whilst exploring a new digital app.

Figure 91: Locating John and Dad's CBeebies Storytime exploration within John's case study map

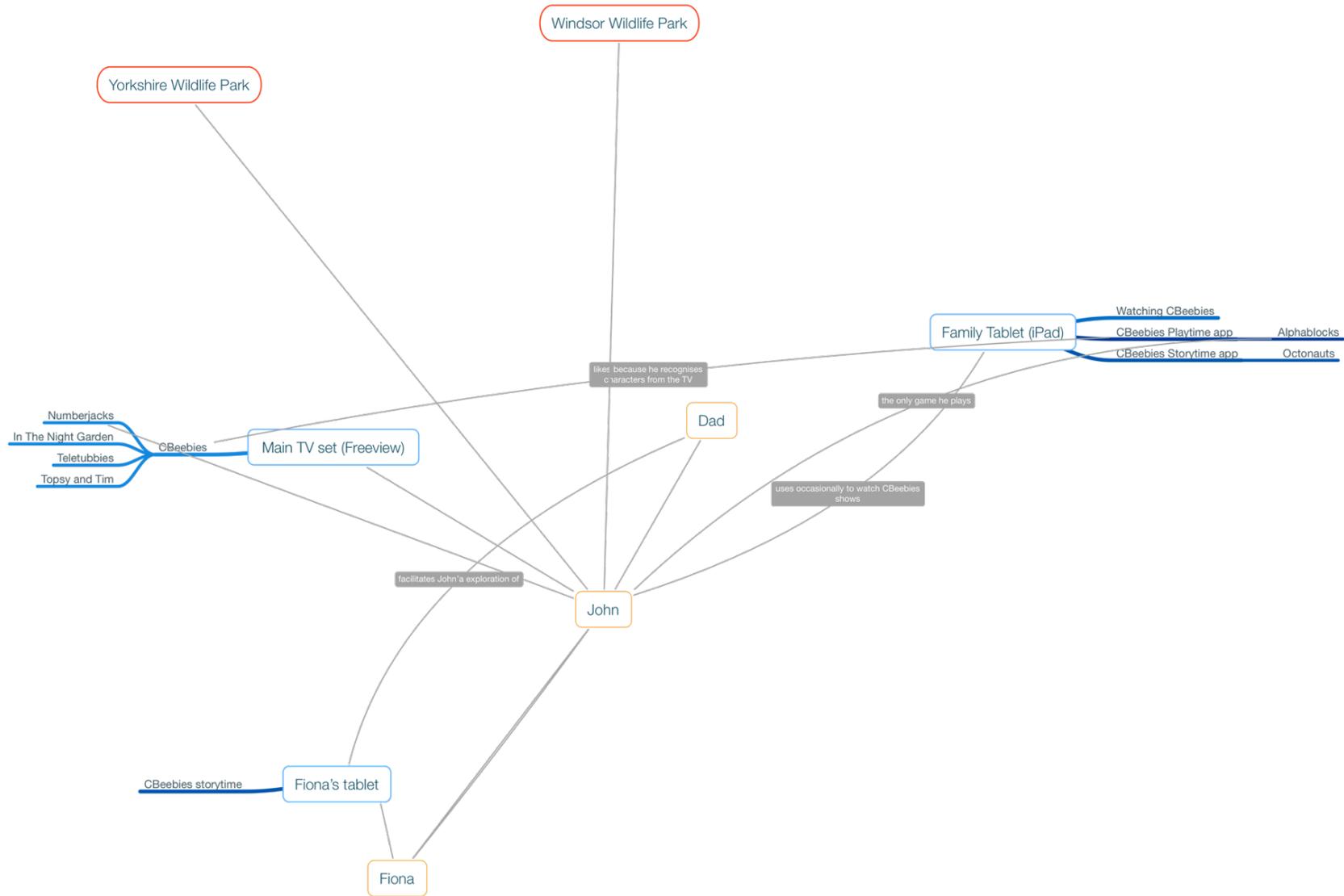


Table 34: John and Dad explore the CBeebies Storytime app (Visit 3) multimodal transcription

Time	Bodies	Things	Intra-action	Discourse in place
17:30	John; Dad	Fiona's tablet; <i>CBeebies</i> <i>Storytime</i> ; <i>Sarah & Duck</i>	John is sitting on Dad's knee. He has his hands held together in front of him, resting lightly on the tablet's stand. Dad's left arm is holding the base of the tablet.	(CBS) Duck points to the left (quack noise)
17:33	-	-	John is slightly rubbing his hands and watching the screen	-
17:36	-	-	-	(CBS) Can you help steer the hot air balloon to the left by tilting your device?
17:41	Dad	-	Dad ever so slightly pulls the tablet closer to himself and to John's hands. John's right hand leaves his left so he has a hand either side of the tablet stand	(D) Gonna tilt it?
17:43	Dad	-	Dad's hands come out to either side, resting very close to John's hands. John leans his left hand back, elbow resting on his dad's left arm. His right arm moves up to meet his dad's right hand.	-
17:44	Dad; John	-	John's right hand index finger is extending towards the screen (around mid way up, right hand side). Dad lifts his right hand index finger a little higher, now also pointing to the top right hand corner of the screen, where an icon has appeared, depicting a book being held up. John's eyes follow his dad's finger to the icon.	(D) Look

19:45	Dad; John	-	Eyes on the icon, John leans his hands forward to grasp the tablet at either side. Dad's arms drop away. John wiggles the tablet up and down, from side to side.	(D) That's it
19:46	-	-	Dad's arms come back in to hold John's, gently steadying them from wiggling side to side-	(D) Just-
19:47	-	-	- and then guiding John's right hand (holding the tablet) upwards, to tilt the tablet left	(D) - turn left
19:48	-	-	Dad guides John's right hand even higher up, taking control of the tablet. John is watching what happens on screen	(D) Which is that way
19:52	-	-	Dad tilts the screen dramatically to the left. John is still watching the screen	-
19:58	-	-	Dad tilts the screen back. John continues to watch.	(CBS) Then he points to the right (quack noise)
18:01	-	-	Dad pulls the screen upwards a little, to return it to a more upright position.	(D) Gonna do it the other way?
18:02	-	-	John is already tilting the device to the right before <i>CBeebies Storytime</i> begins to speak	(CBS) Can you tilt your-
18:03			John is tilting it further right, hands grabbing either side and unassisted by dad this time	(CBS) – device to the right?
18:10	-	-	John tilts the device back to the centre	(CBS) And finally, he points up (quack noise)
18:13			John is studying the screen. John begins to	(CBS) Can you tilt your device up?
18:16	-	-	John lifts it higher	(D) Gonna hold it up?
18:17	-	-	John lifts it even higher. Dad and John are both watching the screen	(D) Hold it up in the air?

18:19	-	-	Brings his hands up to hold the tablet on either side, supporting John to tip it just a little further backwards	(D) Yeah
18:20	-	-	-	(D) That's it
			[...]	
19:16	John; Dad	Fiona's tablet; CBeebies Storytime; Sarah & Duck	John is still on his Dad's knee. He holds the tablet at either side with his hands. Dad's left arm rests on the sofa arm, to John's left.	(CBS) They whoosh down past more clouds
19:20	-	CBeebies Storytime	John is paying close attention to the screen, watching. The hot air balloon on screen is moving left to right and John's eyes follow	(CBS) One looks like Donkey
19:23	-	-	Shallot-shaped clouds appear. The balloon moves left to right again. John's eyes follow.	(CBS) 'Hello, hello, hello, ahoy!'
19:26	-	-	-	(CBS) Says Sarah, as they pass clouds that look like the shallots
19:32	-	-	A finish line appears in the air on screen. A rhino shaped cloud is in the sky beyond the finish line. Dad's left hand gently pats John on the head. John leans his head slightly back then forwards again, still paying attention to the screen. Dad strokes John's hair in a forward motion.	(CBS) They can see the finish line!
19:37	Dad	-	Dad's hand rapidly moves forward and he points his index finger at a rhino-shaped cloud, on screen	(D) What's that one look like?
19:40	John	-	John leans slightly back into his dad's chest	(Jn) Rhino
19:42	Dad	-	Dad's hand rests back towards the left hand sofa arm	(D) Yeah

19:43 - - Dad's left hand moves rapidly in front of the screen, hovering an inch short of the screen to point to the progression button on the bottom left had corner. John's eye is drawn to the spot. Dad draws his hand back to rest on the left hand arm of the sofa again. -

19:44 John - John uses his right hand thumb to tap the progression button. His eyes return to the centre of the screen. -

Analysis: John and Dad explore the CBeebies Storytime app

I am spending time with John and his family on V3. I have brought my own tablet device and John is exploring the *CBeebies Storytime* app. Although he has played on the *CBeebies Playtime* app before, this one is new to him. I have not made any suggestions for how father and son 'should' interact. The moment represents a type of play that is exploratory in both traditional (Hughes, 2002) and digital (Marsh et al., 2016) domains.

In the vignette of exploratory play, various 'things' (John, the tablet, the *Storytime* app and Dad) are coming together to constitute an assemblage (Giugni, 2011). Exploratory play is linking this momentary human-object interaction with a universe of existing social practices (Wohlwend, 2009). Today, John is demonstrating operational digital literacy skills (Green & Beavis, 2012). Dad (Matt), is carefully scaffolding John's operational digital literacy skills with the tablet, providing just enough of a prompt (physical and verbal) to support John in accomplishing tasks. John is taking this support on board quickly and redeploying it. Once dad has physically and verbally supported him in tilting the tablet left, he is able to accomplish the 'tilting right' task with the assistance of the verbal instructions and visual prompts of the *Storytime* game itself. Matt is also supporting John's traditional literacy development by relating the action on the screen to his existing knowledge. When the rhino-shaped cloud appears on the screen, Matt prompts John to relate it to his existing knowledge, creating a very small but educational moment. During my research, Lisa twice mentions recent trips to two different wildlife parks. It is, therefore, very possible that John has encountered a real-life rhino on a family day out. Although I cannot be sure of this, it is notable that Matt is relating an aspect of this new digital game to John's existing life experiences and funds of knowledge. Matt also extends John's understanding of 'tilting up', his hands guiding John's physically and extending his understanding of the command with verbal prompts ('gonna hold it up? Up in the air?').

As in Rosie's case study, despite centring on a digital device the learning that takes place is not quantitatively dissimilar to the kind of traditional literacy scaffolding Cairney and Ruge (1998) observe in some parents at home, closely resembling 'typical classroom interactions' (p. 35). Something particularly noticeable in John's family is how much Dad supports the physical/'making' side of the children's practices. Here, whilst exploring the *CBeebies Storytime* app, he gently shows John which physical movements correspond with the instructions on screen, enabling him to quickly redeploy the movements for himself. 'Making' inspired by media passions is a key practice in John's family. Both boys are becoming skilled in using their bodies to accomplish increasingly sophisticated and constructive tasks through, amongst other things, their media interests.

Summary

This chapter has presented the cases of six Sheffield families individually, drawing out some threads between the cases and connecting them with the findings of the quantitative survey and existing literature. The following chapter ('Discussion') teases out some of these threads further, presenting several new theories for understanding preschool children's engagements with TV&RM.

CHAPTER 6. DISCUSSION

Chapters 4 and 5 of the thesis have presented the quantitative and qualitative analysis, findings and interpretation individually. I have begun to identify some of the connections between the chapters, as well as the data's relationship to wider literature. This chapter presents a joint interpretation of the quantitative and qualitative data, alongside some broader discussion of the combined findings. Some findings are crystallized in relation to multiple pieces of data. Since the quantitative and qualitative data at times address different things, other findings are specific to either the quantitative or the qualitative data. The findings section of the thesis can only hope to address a proportion of the entire findings and implications. It is therefore anticipated that further findings will be reported in future publications. The findings covered here have been prioritised because they address the research questions outlined in the introduction. They have also been identified as important based on their originality and potential to progress the field with regards to the gaps noted in the introduction and literature review.

6.1. Synthesised practices and synthesised texts

The qualitative data support an original finding in terms of children's literacy and digital literacy practices in home and communities. In their everyday engagements with TV&RM, preschool children amalgamate fragments of media texts with other material and/or immaterial 'things' to constitute 'synthesised texts'. This thesis argues for the adoption of the term 'synthesised practices' to represent these practices. Their outputs may be considered synthesised productions or 'texts': written, spoken, embodied or in any other way performed in either a non-digital or digital context.

Although media texts and platforms have been thoroughly mapped, the unit of analysis in the present study is preschool children's home practices with TV&RM. During the analytic process, one of the codes that became important in representing what preschool children *do with* TV&RM was 'synthesising'. 'Synthesis' (Oxford English Dictionary, 2018) is defined as 'the putting together of parts or elements so as to make up a complex whole; the combination of immaterial or abstract things, or of elements into an ideal or abstract whole'. In their everyday practices relating to TV&RM, the preschool children in the study can be seen to be putting together parts or elements of media texts with other parts or elements (some material, some digital and some far more immaterial or abstract) to constitute complex, synthetic wholes. Three examples, drawn from the qualitative case studies, are summarized below:

Table 35: Example synthesised practices and texts

Event/ assemblage	Synthesised practice	Synthesised text
1. Emma bouncing on the trampoline with Fiona, inventing and acting out her own zombies and plants game.	Gaining mastery over spooky and kooky things through digital and physical play.	Emma's bodily and verbal performance of a game/narrative on the theme of zombies and plants.
2. Rosie talking and roleplaying as an astronaut with the Bumbo.	Experimenting on the theme of protection with physical objects and media texts.	Rosie's bodily and verbal performance.
3. Niyat performing traditional Eritrean dance moves while Flo Rida's <i>G.D.F.R.</i> music video plays on the TV.	Exploring aspects of female family members' cultural habitus through music and dance.	Niyat's dance to <i>G.D.F.R.</i>

The ethnography and subsequent practice mapping revealed how preschool children's play, performances and productions synthesise multiple things, including: media texts; non-media texts; histories; digital and non-digital objects; spaces; and affect. These things come together in momentary assemblages, which can be understood in literacy terms as 'events' (Pahl and Rowsell, 2012). Through repetition, these assemblages or 'events' relate to significant practices in the longer term.

The concept of very young children in some way mimicking, amending or even remixing media texts is not new and has precedent in the work of established literacies scholars. Marsh (2006) uses the term 'adaptation' to describe how media products and globalized media narratives are customized by very young children at a micro-local level 'in ways which re-inscribe family narratives and collective memories' (p. 21). Buckingham (2007) uses the term 'bricolage' (p. 20) to describe how children 'appropriate' a range of symbolic resources offered by commercial culture. Carrington and Dowdall (2013) discuss children redesigning and redeploying 'parts and narratives' within a larger script carried in the materiality of a toy (p. 100). In line with the empirical evidence in the present study, the notion of 'synthesised practices' is intended to represent something more than adaptation, appropriation or redesign. To take an example, Emma is not simply 'adapting' *Plants vs. Zombies* in a way that relates to family narratives or collective memories. Rather, she produces something new through a process of synthesis. Fragments of *Plants vs. Zombies* the digital game come together with other things (including Emma's broader emotional investment in 'spooky' and 'kooky' things and the trampoline as a physical object) in a momentary whole. Affect (Tomkins, 1963; Ahmed, 2004) is part of the assemblage. Time, too, is implicated in this assemblage. Emma's micro moment of text-making relates through a historical trajectory to family narratives about 'spooky' and 'kooky' things at the macro level (Pahl, 2007).

Though building on this rich theoretical tradition, then, the proposed concept of 'synthesised practices' is distinct from past terms in several important ways. Media texts are always one part of synthesised practices, but the term is intended to decentre the media text as the primary focus of the practice. The term is also intended to acknowledge the originality of children's synthesised productions, whether written, spoken or in any other way performed. We must, of course, acknowledge that children's readings of media texts are still framed to some extent by the texts themselves (Atkinson and Nixon, 2005). However, combining a text or texts with something else produces something new. The concept is also specific in that the 'texts' produced by these practices can present in a variety of forms (e.g. lettered, digital or embodied). Gutiérrez's (2004) use of the term 'laminated activity' comes closer to this meaning. Gutiérrez describes literacy as:

A laminated activity accomplished in interactions across time and space [...] constituted by the layering or lamination of social events and interactions, of peer and popular culture, of life in the various social spaces that we inhabit, by our history, microgenetically, ontogenetically, and sociohistorically.

(Gutiérrez, 2004, pp. 110-111).

Pahl (2006) notes that practices within homes become 'sedimented' (p. 32) within children's texts. Rowsell and Pahl (2007) develop the idea further in relation to identity, drawing on Bourdieu's practice theory to describe how the 'inherited dispositions of the last generation fall into, or sediment into, the next' (p. 394). In doing so, they also use the term 'layered', drawing on Holland & Leander's (2004) theorisation of identity as 'laminated'. In contrast with Gutiérrez (2004) and Pahl and Rowsell (2007), I have deliberately avoided the terms 'layered' or 'laminated' to emphasise the notion that 'synthesised practices' are not constructions that collect in layers over time. Rather, they are messily constructed, shifting assemblages, expanding and fraying at the edges. Elements can be added and removed. Future events may drop certain fragments over time, or bring in and incorporate new ones. We see Rosie at one time drawing on the Bumbo as part of her synthesis and at other times incorporating her *Mike the Knight* helmet into the practice. Though they are not set down in fixed layers over time, they may combine and intersect with a variety of historical trajectories. Rosie's synthesised practice intersects with several family narratives. Rosie has gained, and is in the process of developing a relationship with, a new baby brother (Oscar). This historical trajectory intersects with, and informs, the assemblage. The Bumbo is on its own historical trajectory, having once been intended for Rosie and now belonging to Oscar. Feeling is sticking to (Ahmed, 2004) the Bumbo.

Potter's (2009) notion of curating the self, with its attention to both anchored and transient forms of identity, is closer to capturing the temporally shifting dimension of synthesised practices. The term synthesised practices, however, is intended as a move towards decentring and troubling straightforward notions of human intentionality. The desire for identity expression may indeed be a motivating factor in children's synthesised text productions (or, indeed, a less intentional by-product). However, self-representation is not necessarily the express purpose of such productions. Rautio's (2013) account of

children's autotelic material practices is a useful starting point for considering how such practices come about, as children encounter the world from day to day and begin to express something of their encounters.

My turn towards sociomaterial theory when interpreting the qualitative data represents something of a paradigmatic shift from the quantitative work of Chapter 4. However, the process of crystallization reveals useful connections between the qualitative and quantitative data. The quantitative data demonstrate that preschool children engage in a broad range of activities whilst watching television, e.g. talking about the programme or film whilst watching it, dancing or singing. The decision to include a line of questioning about what children do 'after' watching television was informed by the TA testing of the questionnaire, in which several parents noted that important activities relating to their children's media engagement took place after their viewing, not just during. Adding this question revealed that a substantial percentage of preschool children engage in various media-related activities after watching television, e.g. singing songs from the programme or film (81%), talking about the programme or film (71%) or using catchphrases or dialogue from it (68%). The idea that children's engagement with TV&RM should be considered to encompass more than the immediate, singular act of watching or playing a singular text using a specific device is an important thread through both sets of data. The quantitative survey only asked about what children do during and after watching television, however the qualitative case studies confirm that a similar pattern is true for other types of media engagement. For example, children talk to others about what they are doing in an *X-Box* game and dance after watching a *YouTube* video on a tablet device. The Sociomaterial Nexus Analysis of the qualitative case study data enabled a deeper consideration of the nature of these practices, leading to the notion of synthesised practices. Although the qualitative case studies attend to the lives of six families only, the wide-scale reporting of media-related activities in the quantitative data also suggests the possibility that synthesised practices are present in the everyday lives of many UK children.

6.2. Family media habitus

Chapter 4 evidences the social nature of children's TV&RM engagement quantitatively. Almost two thirds (62.7%) of parents surveyed indicated that they spent an hour or more watching television with their children every day. The survey data also evidences the importance of other family members in constructing the social contexts of children's media engagement. For example, 49.2% of parents said that their child usually watched a DVD or video with an adult, but an additional 25.7% said their child usually did this with another child. These findings emphasise how important it is to consider whole family involvement with children's media interests, rather than attending primarily to parent mediation. This quantitative finding is important in understanding the qualitative data, too. In Emma's case study, it is important to consider the social role played by Emma's mum and dad. In Archie's case study, however, his similar-age male relatives play important roles in constituting the social contexts of his media engagements.

The qualitative data support the finding that preschool children and their families mutually participate in what this thesis terms ‘family media habitus’. The term draws on Bourdieu’s (1977) notion of habitus, specifically Thompson’s (1992) account of Bourdieusian habitus as ‘a set of *dispositions*’ (p. 12). As Eriksen and Nielsen (2001) note, the term captures the ‘the permanent internalisation of the social order in the human body’ (p.130) whilst simultaneously acknowledging an individual’s practice, or ‘his or her capacity for invention and improvisation’ (Bourdieu 1990, p. 13). The theory of habitus suggests that the world’s structural constraints contribute to the formation of permanent dispositions of perception and thought, as well as embodied ‘postures and stances, ways of standing, sitting, looking, speaking, or walking’ (Bourdieu 1977, p.15). In our everyday intra-actions, then, we demonstrate our embodied habitus (internalized, bodily ways of doing). The notion of media habitus has been previously discussed by researchers. Kommer and Biermann (2012) discuss media-related habitus as a system of consistent media-related dispositions that are the basis for the generation of, and the structuring of, media-related practices. Friedrichs et al. (2015) discuss *parental* media-related habitus as shaping parental ‘media educational habitus’ (p. 58). The authors suggest a link between parental media habitus and parental mediation of their children’s media use.

The case study data offers many examples of young children and members of their families displaying significant and interesting *shared* dispositions in relation to media. In contrast with past studies, then, this thesis draws attention to *shared* family media habitus. Three examples, drawn from the qualitative case studies, are summarized below:

Table 36: Examples of family media habitus

Family members	Media habitus	Associated practices
1. Archie and his young male relatives.	Passion and excitement for action adventure texts.	Physically enacting ‘synthesised’ action adventure texts.
2. Niyat, her mum and sister.	Emotional connection to family-produced song and dance texts.	Making, replaying and sharing videos of singing and dancing.
3. Emma, her mum and dad.	Humorous pleasure in ostensibly scary or ‘odd’ themes and texts.	Seeking out and watching, discussing, spooky and kooky texts (Emma synthesising these in her play).

Some examples include Emma’s disposition(s) to ‘spooky’ and ‘kooky’ media and Archie’s disposition(s) to action adventure media texts. Emma’s ruling passions (Barton and Hamilton, 1998) include things that are spooky, offbeat and humorous: qualities shared by some of the shows her mum and dad love to watch together. The intersection of horror and comedy is important to all three family members and shared humour is also something that allows Emma to connect with her parents on a more mature level than might

be expected of a child her age. Archie, meanwhile, shares in media habitus relating to action adventure texts, including *Powerpuff Girls* and *Spider-man*. At the time of writing, it appears that the term 'family media habitus' has been used only once (briefly) before in scholarly literature. Lealand and Zanker (2008) also draw on Bourdieu's notion of habitus in their use of the term 'family media habitus' (p. 49). The authors consider the role played by contemporary media in the lives of New Zealand children aged 8-13. In conceptualizing habitus, the authors discuss 'taste' and 'learning to consume' (p. 48), drawing on Seiter (1998) and Martens et al. (2004). The definition of 'family media habitus' proposed in this thesis draws intentionally on habitus-as-disposition as opposed to habitus-as-taste alone, because what is important is about more than taste. Emma does not simply 'like' the same (or similar) media texts as her parents: Emma is becoming inculcated into a set of shared dispositions in relation to media texts. These dispositions include enjoying and seeing the funny side of ideas and characters that could otherwise be received as scary or unpleasant (e.g. werewolves or zombies). In the case of a texts like *Annoying Orange*, they also include understanding, and taking humorous pleasure in, something repetitive and awful. In relation to *Chuchu TV YouTube* videos, these dispositions persist even though *Chuchu TV* is not intentionally annoying. Archie and his male relatives have shared tastes in *Powerpuff Girls* and *Spider-man*, but they also share dispositions. These dispositions include valuing knowledge about action adventure texts and physically embodying this knowledge in shared, spontaneous performances.

Bourdieu's theories tend to be critically characterized as deterministic, but Thompson's (1992) account of Bourdieusian habitus as generative, transposable and embodied counters such interpretations:

The habitus also provides individuals with a sense of how to act and respond in the course of their daily lives. It 'orients' their actions and inclinations without strictly determining them. It gives them a 'feel for the same', a sense of what is appropriate in the circumstances and what is not, a 'practical sense' [...] It is because the body has become a repository of ingrained dispositions that certain actions, certain ways of behaving and responding, seem altogether natural.

(Thompson, 1992, p. 13).

As the example of Emma's engagement with *Plants vs. Zombies* demonstrates, the evolution of family media habitus is an iterative process. Emma may be inculcated into a particular set of family dispositions relating to spooky and kooky media texts, but it is Emma's specific passion for *Plants vs. Zombies* that establishes the text as a significant cultural presence in the family. By Visit 5, Emma's mother, Ashleigh, has been playing the game so much that she has started dreaming about it. The family's media habitus is being ever so slightly adjusted to incorporate *Plants vs. Zombies*. Although their reliance on terminology such as 'effects', 'active' and 'passive' remains problematic, Van den Bulck, Custers and Nelissen's (2004) notion of the 'bidirectionality' (p. 31) of family media use influences makes a similar point. As Archie's case exemplifies, however, family media habitus does not necessarily involve only parents and children. Archie is party to

family media habitus that spans across young male relatives in the family (brothers, cousins and nephews). Family media habitus, then, may exist on inter- and intra-generational levels.

The notion of family media habitus is inter-connected with the notions of synthesised practices and synthesised texts. Schatzki (2001) suggests that most contemporary practice theorists define practices as arrays of activity in which the human body is the nexus. The maintenance of practices over time depends on the successful instilling of 'shared embodied know-how' (Schatzki, 1996, p. 3) as well as on their continued performance. Family media habitus contributes to the sustained performance of synthesised practices over time. To take the example of Emma and her zombie play, Emma is drawing on *Plants vs. Zombies* the digital game and the trampoline, but she is also drawing on family media habitus, i.e. the shared dispositions her family have towards zombies and otherwise spooky characters. Whilst we must acknowledge that children's readings of media texts are still framed to some extent by the direct texts themselves (Atkinson and Nixon, 2005), understanding family media habitus adds nuance to this debate. Family media habitus contributes to the idea that particular media texts can hold specific, local meaning on a micro level (family). That meaning may be unintended by the text's designers. Another example in Emma's life is the family's replaying of *YouTube* videos including *Annoying Orange* and the *ChuChu TV* videos. Through continued play, the videos have developed a reputation for being 'awful' in a darkly humorous way. Despite this, the family continue to play them. Although *Annoying Orange* was undoubtedly designed with this kind of 'awful/funny' dichotomy in mind, *ChuChu TV* was not. In this sense, the notion of family media habitus helps to explain how *ChuChu TV* is being interpreted in a very specific, shared way by the family, beyond what its designers intended. Emma and her parents' dispositions towards these texts are produced by, but also in relation to, them. As additional texts are integrated, family media dispositions may be subtly altered. Media texts and objects, then, can themselves be seen to play a social role in this iterative process.

6.3. Proxy media engagement

The qualitative data support the finding that preschool children have relationships with narrative media texts without ever having engaged with them directly. This is possible through a proxy. Sometimes these proxy media engagements are artifactual (e.g. owning a pair of *Spider-man* pyjamas without having read *Spider-man* books, or seen *Spider-man* on television or film) and sometimes they are social (e.g. discussing *Frozen* with another child at nursery without having seen the film). In most cases, the examples in the qualitative data are *both* artifactual and social (e.g. discussing *Minions* at nursery and owning a *Minions* water bottle). This thesis proposes the term 'proxy media engagement' to represent the phenomenon whereby a child's sole, or initial, engagement with a narrative media text occurs indirectly through a (often socially-mediated) proxy, such as a non-digital material object.

The idea of artifactual ('object') proxy media engagement connects with, and expands, Kinder's (1991) theoretical notion of 'transmedia intertextuality' (p. 1). Kinder's concept theorises how media texts exist within the context of larger cultural discourses and must therefore be read in relationship to other texts – texts which exist across different forms of narrative media. When a child engages with a media text, they read it in the context of other, pre-existing 'textual knowledges' (Fiske, 1987, p. 108). Kinder's seminal work professes to focus primarily on 'intertextual relations across different narrative media' (p. 2). Indeed, the examples Kinder offers tend to explore intertextual relationships, either between narrative media texts (e.g. television, film, television advertisements or video games) or children's engagements with physical objects as secondary to their engagement with narrative media texts (e.g. a child recognizing Bill Cosby on a billboard having first seen him on a TV commercial for Jell-O). Kinder's empirical examples do not extend to children who engage solely (or initially) with material objects in isolation from their associated narrative media texts. Within my own case study data, there are numerous examples of young children engaging with narrative media texts (for example, a film or television series) either exclusively, or in the first instance, through socially-mediated engagements with their associated manifestations as material objects. Two simple examples are Rosie owning *Frozen* character socks despite never having seen *Frozen* the film and Archie discovering *Spider-man* as a media text by seeing *Spider-man* wallpaper in his nephew's bedroom before he begins watching it on the TV.

In proposing this conceptualization, there is a need to interrogate certain terms and assumptions further. The idea that 'proxy media engagement' is a distinct phenomenon worthy of scholarly attention relies on two assumptions: firstly, that there is an implicit relationship between material objects and the narrative media texts that they relate to; and secondly, that there is something quantitatively different between material artifacts/objects relating to media and 'narrative' media texts. With regards to the first point, it can be argued that the material objects in these examples have what Wohlwend (2009) refers to as 'anticipated identities' (p. 59) in relation to specific narrative media texts (texts which a child may or may not actually engage with directly). In relation to the second point, it is important to acknowledge a significant body of work conceptualizing non-digital material objects as texts. Drawing on Latour's (2007) Actor-Network-Theory, Carrington & Dowdall (2013) discuss Lego bricks as texts with scripts embedded in their design. Carrington (2003) and Wohlwend (2009) both discuss dolls as texts. Kinder (1991) also suggests that media trends such as Saturday morning television have contributed to a boundary collapse between what had previously been conceived as *primary* and *secondary* texts. TV series and video games can function as promotional material for movies and toys and vice versa, thus each can equally be a 'primary text' (p. 46). Dispensing with the labels of 'primary' and 'secondary' texts makes sense, not least because there are now multiple examples of material toys pre-dating media narratives, for example in the case of the *My Little Pony*, *Transformers* and *Lego* franchises.

Although material objects relating to narrative media texts can usefully be characterised as texts, they are generally not texts with coherent narratives. They are not without narrative properties; however, they are not designed to relate, nor capable of relating, a coherent narrative *without* reference to other narrative media texts. It is for this reason that this thesis proposes the idea that material objects relating to narrative media texts can be considered to contain ‘narrative fragments’. To take the example of *Spider-Man* socks, a ‘reader’ of this object can discern narrative fragments. Depending on the modality of the socks, the reader may be able to make out that *Spider-man* is muscular and active and that his identity is in some way meaningfully entangled with spiders. Even if the ‘reader’ has not seen or read any narrative *Spider-man* texts (e.g. the television show, a movie or comic), they may be able to connect *Spider-man* to superheroes (if other superhero narrative texts are one of their textual knowledges). Without seeing or reading any narrative *Spider-man* texts, however, they will be unable to decipher the core aspects of *Spider-man* as a coherent narrative – for example, that Peter Parker used to be a regular man and was bitten by a radioactive spider, thus acquiring his super-human abilities. Clearly, there are media texts which blur the boundaries of these characterizations. Some material objects can tell coherent narratives (e.g. a comic) and, conversely, some digital texts can contain only ‘narrative fragments’ (e.g. the results of a search-engine image search). In this sense, thinking about ‘coherent narrative texts’ versus texts containing ‘narrative fragments’ becomes a useful exercise (e.g. a child who has only looked at the results of a search-engine image search for ‘*Frozen*’ without seeing the film would also be engaging in ‘proxy media engagement’). Three examples of proxy media engagement from the data are summarized below:

Table 37: Examples of proxy media engagement

Child(ren)	Proxy media engagement	Coherent narrative text with which a relationship is 'anticipated'
1. Rosie.	Rosie has a <i>Minions</i> water bottle and her friend Liam talks about <i>Minions</i> .	<i>Despicable Me</i> (film).
2. Archie.	Archie’s nephew has <i>Spider-man</i> wallpaper.	<i>Spider-man</i> (comics, films, TV series).
3. John and James.	James has seen the <i>Deadpool</i> trailer and drawn a picture of <i>Deadpool</i> .	<i>Deadpool</i> (film).

This finding is important because these ‘proxy’ media engagements are quantitatively different to ‘direct’ engagements with coherent narrative media. In Kinder’s original concept, she discusses how a child assimilates new information into their understanding of a media text each time they engage with it in narrative form, gradually constructing a ‘semic code’ (p. 31). For example, Victor adds new qualities to the

character, Darth Vader, each time he watches snippets of *The Empire Strikes Back*. The textual resources available to children through non-digital media objects are different to those afforded by narrative media texts. To take an example from the data, Rosie has never seen any of the films in the *Despicable Me* franchise. She has, however, developed a level of knowledge relating to Minions as characters. Rosie has a *Minions* drinking bottle and, when she sees a banana with a *Minions* sticker on it, says she is going to eat it 'because it's a *Minions* banana' (Mary, Transcript, V5). During Visit 5, Rosie brings up *Minions* in conversation with me for the first time. Her answers reveal the extent, but also boundaries, of the *Minions* understanding she has acquired by proxy:

Fiona: *What's it got on it?*

Rosie: *Minions.*

Fiona: *What are Minions? Do you know?*

Rosie: *Yes. There's a lot of things about Minions.*

Fiona: *Can you tell me one thing about Minions? Are they red?*

Rosie: *No.*

Fiona: *Are you sure? Are they purple?*

Rosie: *No. They're yellow with blue dungarees.*

Fiona: *Okay, so that's one thing about Minions. Are they very sensible?*

Rosie: *Yes.*

Fiona: *How do you know they're sensible?*

Rosie: *They are.*

Fiona: *I thought that they did some quite silly things sometimes.*

Rosie: *Have you watched Minions?*

Fiona: *I haven't seen the Minions film, have you watched Minions?*

Rosie: *No.*

Fiona: *So, how do you find out about them?*

Rosie: *There's a friend at nursery of mine that knows about Minions.*

Fiona: *Okay, which friend is that?*

Rosie: *Liam.*

Fiona: *Liam? What did he tell you about Minions?*

Rosie: *He told me that they're gentle.*

Fiona: *They're gentle?*

Rosie: *Sensible.*

Fiona: *Sensible? Does he really like Minions?*

Rosie: *Yes. He's watched all of them.*

Fiona: *I see. Did he tell you what happened in the film?*

Rosie: *No, because he wanted it to be a surprise for me.*

(Transcript, Visit 5).

At this stage, Rosie's visual descriptions of the Minions are correct, but her understanding of their character does not appear to be completely accurate. She is uncertain about which adjectival characteristics can be appropriately applied to the Minions and commits to characterizing them as 'sensible' (which is, arguably, inaccurate – the Minions are small, yellow, comic characters who are very prone to accidents, speak in gibberish, and obsessively pursue bananas). Despite the additional social mediation of speaking to Liam, Rosie's 'proxy' engagement via a physical object has facilitated only a partial understanding of *Despicable Me* as a coherent narrative text.

As such, although non-digital physical objects can also be conceptualized as media 'texts', they are nonetheless texts with different affordances to coherent narrative texts such as television or film. Wohlwend (2009) suggests that *Disney Princess* dolls 'talk' through the film plots, scripts and songs that are sedimented within them, describing commercially produced toys as artifacts with '*anticipated identities: identities that have been projected for consumers and that are sedimented by manufacturers' design practices and distribution processes*' (p. 59). However, a child's existing textual knowledges impact on their reading of an object-as-text. In Rosie's example, then, the material object as text (e.g. the Minions water bottle) is being read in relation to a unique portfolio of textual knowledges that excludes *Despicable Me*. This is perhaps what Wohlwend (2009) alludes to when she suggests that '*anticipated identities in toys and commercial media that children consume interact in tension with sedimented identities in artifacts that children produce through literacy practices*' (p. 59). Rosie reads Minions in relation to what is communicated in the visual mode through their static representations on the bottle (and banana sticker) and in relation to any other texts that she individually relates to *Minions*. We cannot be sure of the full extent of these, but we know that at least some of the textual knowledges that may inform Rosie's reading of *Minions* are her knowledge of other male characters with special costumes, including the *Octonauts* and *Mike the Knight*. Although we cannot be sure of Rosie's 'reading', it is interesting to note that the cast of *Octonauts* and *Mike the Knight* are all, broadly, 'sensible' characters, using their headgear (helmets) for scientific and heroic pursuits. Without knowing *Despicable Me* as a coherent narrative it is not unreasonable to expect that the Minions might use their headgear (goggles) for a similarly sensible purpose.

Similarly, for Archie, the *Spider-man* wallpaper is read in terms of what he can see visually, alongside his textual knowledge of conversations, observations and play with his male relatives. In the case of proxy media engagement, then, micro-level textual knowledges are as (if not more) important to reading texts as the textual relationships designed and projected for consumers by manufacturers. This idea speaks to the

longstanding debate on the complicated relationship between children and popular media, linking with the notion of family media habitus.

John and James' conversations during V4 provide another case of proxy media engagement. Although James has seen the *Deadpool* trailer, John has not. John has been 'reading' the *Deadpool* text as a socially-mediated object (James' hand-drawn picture of *Deadpool*). James has, in turn, produced his own *Deadpool* text (his own drawing). Whilst John says that Deadpool is his 'favourite guy', James has a more sophisticated understanding ('He's a bit crazy. In the *Deadpool* trailer, I saw him with someone's head cut off'). More broadly, John and Archie's case studies provide compelling data relating to the role that artifactual proxy media engagement may play in families with similar-age siblings. In both cases, younger boys in the family are engaging with coherent narrative media texts through artifactual proxies in the first instance, before going on to seek out the coherent narrative media texts themselves.

6.4. The social contexts of preschool children's engagements with TV&RM

The quantitative data suggest that children often engage with TV&RM with someone else. They also demonstrate that children are actively engaging in a variety of activities such as talking, dancing, singing and role-playing both during and after watching television. The quantitative data cannot, however, provide any insight into the role played by other people in these, and other, activities. Parents in the qualitative study shared in a range of different practices related to, and alongside, their children's engagements with TV&RM that contest the current frameworks available in scholarly literature. Some of the social roles played by people, objects and texts in the qualitative data are explored within the theories suggested above.

As noted in the literature review, the roles that parents play in their children's media engagements have historically been framed in terms of 'parental mediation' (Warren, 2001). This focus on parental mediation emerges from the tradition of media effects research (Clark, 2011). Family interactions in relation to TV&TM have historically been studied primarily in terms of how parents control, supervise or interpret children's media use and content access (Warren, 2011). More recent frameworks (e.g. Nikken and Jansz, 2014; Zaman et al., 2016) offer more variety in the roles parents can play, including 'active mediation' (e.g. Gentile et al., 2012); co-use (Nikken & Jansz, 2006); technical safety guidance and supervision (Nikken and Jansz, 2014); and distant mediation and participatory learning (Zaman et al., 2016). However, even more progressive parental mediation frameworks still tend to over-privilege the parent-child dyad as the most important social aspect of preschool children's engagements with TV&RM. Although parents tended to be important, siblings and grandparents were sometimes equally important in the present study. In this sense, considering whole family practices is important. The categories of 'parental mediation' documented to date are also limited and problematic. Zaman et al. (2016) discuss participatory learning as a parental mediation strategy directed towards developing children's digital literacy skills and broad learning through media

(e.g. using a search-engine to research a topic). Each of the families in the present study had different practices in terms of how they engaged with TV&RM. Although some practices map onto existing frameworks, these frameworks are insufficient for understanding the breadth of practices involved. Existing frameworks tend to theorize all familial interaction with children's media engagements as intentional and, furthermore, limit their motivations to a) limiting harm or b) actively developing particular skills. Many family engagements with children's TV&RM practices are not active strategies but simply established family practices. Marsh, Hannon, Lewis and Ritchie (2017) discuss how young children become initiated into family digital literacy practices, pointing out that sometimes parents scaffold digital literacies intentionally, employing 'didactic pedagogies to teach specific skills' (p. 54). Parents, siblings and grandparents may each have different (and complex) motivations for how they engage with preschoolers' TV&RM interests (some of which span beyond a desire to limit harm or even to develop specific skills). Though somewhat progressive, the notion of participatory learning as a parental mediation strategy is thus too narrow a focus. Adopting a much broader focus on how all family members engage with preschoolers' home media practices has given the present study the flexibility to pick up on a wide range of practices and the broad differences between the practices of working-class and middle-class families. These are discussed below.

Parental mediation is a prominent trope in family media engagement literature. Another conspicuous trope in both popular and scholarly discourses is the notion that parents model negative behaviours in their engagements with technology. Critics of digital engagement in early childhood are frequently quick to point out that parents might not be aware of the role that their own digital engagements at home have on influencing their children's fixations on digital devices. Professor Mark Griffiths, for example, is quoted in *The Mirror* as saying: 'if you are the kind of parent who is always sat there on social media there should be no surprise if your kids are copying you' (Minchin & Eyres, 2018). There is surprisingly little scholarly evidence to suggest that this type of modelling takes place. McDaniel and Radesky (2018) suggest that 'technological interruptions' in parent-child interactions are associated with 'child problem behaviors' (p. 100), although the authors acknowledge the need to examine the directionality of this correlation. Instances in the qualitative data support the finding that some parents may be unaware of just how much their own actions have a positive influence in terms of young children's digital competencies. This is certainly true, for example, for both Olivia and Niyat.

Interesting examples of similar phenomena can be found in both recent and older literacy literature. Hannon, Jackson and Weinberger (1986) noted the then-prevalent notion that parents lacked competence in hearing their children read. The Bullock Report (DES, 1975) advocated less direct forms of parental involvement in their children's reading, warning that misguided teaching from parents could be unsuccessful or even harmful. On the contrary, the authors' own study of parents hearing their children

read traditional (print-based) texts in a disadvantaged community in the North of England found little difference between the scaffolding practices of parents and teachers. Marsh et al.'s (2017) study noted that parents' scaffolding of their children's digital literacies across operational, critical and cultural dimensions was such an integral part of everyday life that parents tended not to notice when teaching took place. Post-human and sociomaterial theories add a further dimension to this debate, prompting consideration of the social role played by material objects. Ash (2010) proposes that digital devices work 'teleplastically', pre-shaping human action. Olivia's prolific photo-making practice with her mum's smartphone is an interesting case in point. Teresa suggests that Olivia simply picked up her smartphone one day and began talking pictures. As Rautio (2013) observes of her son's intra-action with a far simpler technology (sewing pins): 'it was as much my son playing with the pins as it was the pins playing with my son, as if asking to be played with' (p. 395). Certainly, material and human actors play a role in such moments, but the source of motivation deserves greater attention. Rautio (2013) might suggest that such practices are internally motivating. However, it is also worth considering how human action in relation to digital devices serves to create fascination in young children. Digital devices may pre-shape the potential for human action, but it may simultaneously be true that Teresa is grossly underestimating her own value as Olivia's digital teacher.

6.5. Socially classed media practices

Each family in the qualitative data is unique. However, the examples presented in this study suggest that digital practices are broadly different in households mapping onto different social classes. As I have begun to develop in previous work (Scott, 2016), these differences relate to: the media and other source texts the children are drawing on; their playful and literate practices with TV&RM; and the social contexts in which they take place. The qualitative data support the finding that children growing up in working-class and middle-class families tend to engage in different TV&RM practices. The qualitative data also support the finding that other members of working-class and middle-class families (especially parents, but also other family members) tend to engage in different practices in relation to preschool children's TV&RM engagement. Since these practices inter-relate, child and family practices are discussed concurrently here.

Middle-class families and 'media practice schoolification'

A key finding of this thesis is that middle-class parents of preschool children tend to engage in practices that this thesis terms 'media practice schoolification' with regards to their children's home engagement with TV&RM. This practice relates to a more knowledgeable 'other' (primarily a parent) engaging with a child's interest in a particular media text or texts and using it/them as the basis for engaging the child in 'school' or 'formal' literacies learning. Four examples from the qualitative data are summarized below:

Table 38: Examples of media practice schoolification

Engagement with TV&RM	Extending activity	Related literacies
1. Rosie exploring the <i>CBeebies Playtime</i> app (<i>Alphablocks</i> game).	Mum discussing the word 'sagging' with Rosie.	Operational literacy (Green, 1988) including word learning and using similes.
2. John watching his dad and brother play <i>Castle Crashers</i> .	Mum and Dad helping John and James design and make knight masks.	Operational maker literacies (Marsh et al., Forthcoming) including making masks.
3. Rosie watching <i>Happy Feet</i> .	Mum relating the character of Mumble to the idea that children have 'different talents'.	Social and emotional literacies including learning about, and tolerating, difference.
4. John becoming interested in <i>Spider-man</i> .	Mum buys John <i>The Amazing Spider-man Busy Book</i> .	Operational literacy (Green, 1988), including reading print-based text.

Marsh (2005) points out that parents accommodate children's media enthusiasms in similar ways, for example by creating designated spaces for their related play, buying them associated gifts or helping them to make props that augment their media-related play. However, the examples in the data suggest that parents are doing more than simply accommodating children's passions. In each case, a more knowledgeable other has engaged with a child's interest in TV&RM to extend their learning into the terrain of 'formal' or 'school' literacies learning. It is important to note that this practice is not unique to parent-child dyads. In the case of John, grandparents are seen to engage in this practice. Though the middle-class children in this study did not have significantly older siblings, it is also possible that older siblings (or other family members) could hypothetically play this role.

It has already been acknowledged that middle-class families experience greater congruence between home and school literacies than working-class families (Lareau, 1989; Gregory and Williams, 2000; Marsh and Millard, 2000). Indeed, Marsh (2003) contends that 'literacy practices which are entrenched within the sociocultural lives of middle-class groups' (p. 370) have historically been the focus in early years education (with the pioneers of the kindergarten movement being relatively privileged). However, it is difficult to conclusively define the qualities of home and school literacies, as scholarly accounts are diverse. Spencer et al. (2013) suggest that there is something of a divide in position. Some scholars (e.g. Cairney and Ruge, 1998) suggest that home literacies are more diverse than school literacies, but are often influenced by school literacies. Others (e.g. Prinsloo & Breier, 1996) suggest that home literacies are explicitly those outside of the scope of literacies as accepted within formal educational institutions. The studies which consider the specifics of home and school literacies tend to discuss parental dispositions and knowledge, family language use and the precise nature of leisure activities at home, in particular how similar and/or related they are to activities in school.

Without mentioning habitus or dispositions, McCarthy (1997) describes literacy practices and values in middle-class and working-class families in the US. In McCarthy's (1997) study, middle-class parents talked about reading for pleasure and information, whilst working-class parents tended to talk about reading as a necessity of their jobs. Middle-class parents in the study also demonstrated more knowledge of school and of classroom activities than working-class parents, who had less contact with school. Again in the US context, Lareau (1989) notes that middle-class parents tend to have more information about the processes of education and to 'reinforce' the curriculum at home more. Lareau (2011) talks about middle-class parents concertedly developing their children through organized leisure activities. McCarthy (1997) observes middle-class parents extending classroom activities at home. For example, Andy's mother takes him to see replicas of Columbus's ships in the harbour when they read about Columbus in class and Mandy's mother supports 'school-type' (p. 186) activities at home, like writing to pen-pals, writing stories, or entering writing contests. In contrast, working-class families in the study reportedly did not mention extending the classroom activities into the home or home activities into the classroom. Cairney and Ruge (1998) discuss a mother questioning children while they are reading in an example that is strikingly like Rosie's interaction with her mother. Lareau (2011) also observes differences in language use between middle-class and working-class families, the former using words for their intrinsic pleasure, discussing different meanings, whilst the latter use language more functionally. Thus, literacies scholars have already established that some parents engage their children in a style of learning imitative of typical classroom interactions during reading and writing at home and that social class makes a difference. However, the notion that middle-class parents are more likely than working-class parent to engage their children in a style of learning imitative of typical classroom interactions in relation to their media engagement at home is an original finding. It is, firstly, original in identifying that some parents use TV&RM as a starting point for activities like school literacy learning. It is, secondly, original in identifying that there is a difference in such practices in between social classes.

In the current study, home literacies are being mapped in relation to several literacy frameworks, including Green's (1988) 3D model, Green and Beavis's (2012) adapted 3D model and Marsh et al.'s maker literacies (Forthcoming). In the middle-class families, the ways that parents extended their children's engagements with TV&RM map onto literacies including school-like, 'traditional' operational literacies (Green, 1988), operational and critical maker literacies (Marsh et al., Forthcoming) and cultural and critical digital literacies (Green and Beavis, 2012). In each case, the literacy practices demonstrated overlap with the literacy practices common in formal educative settings. Some of the instances of media practice schoolification involve so-called 'traditional' literacy, for example parents supporting children's vocabulary learning, spelling or reading written word texts. Rosie's use of the *Alphablocks* app with her mother is a good example. When I return for my fifth visit, Mary describes how the pair have continued to develop Rosie's operational literacy skills by singing the songs from the *Alphablocks* app, meaning that Rosie has

learnt more letters. Media practice schoolification *could* involve parents directing children back to a ‘traditional’ written word text (e.g. John’s mum directing him to *The Amazing Spider-man Busy Book*). However, it could also be the case that a media text such as a game or TV show is used directly as the basis for formal literacy learning (e.g. examples 1 and 3). Rosie’s mother relating the character of Mumble to the idea that children have ‘different talents’ is an interesting case. Mary is turning watching *Happy Feet* into an opportunity to reflect on difference in terms of disability. The example arguably maps onto cultural and critical digital literacies (Green and Beavis, 2012). Social and emotional development is a prime area in the current EYFS statutory framework, so is an important ‘formal educational’ skill for children aged 0-5 years (DfE, 2017). Some of the examples (particularly in John’s family) involve maker literacies. There is an obvious link here to the making and doing activities that feature in early years and key stage 1 STEM provision in formal educational settings. Recent work is beginning to suggest that children’s making activities may be increasingly important in their later lives (e.g. Blikstein, 2013).

The quantitative data suggest that children from professional families are more likely than their counterparts to talk about a programme while they are watching it. They are also more likely to use catchphrases or dialogue from a programme after watching it, or role-play a character. These findings add weight to the notion that children from middle-class families engage in school-like literacy practices as part of their routine engagement with TV&RM.

Working-class families extending preschoolers home engagements with TV&RM

The data supports the finding that working-class parents do not tend to demonstrate ‘media practice schoolification’ to the same extent. This by no means suggests that they do not support the development of their children’s literacies in relation to TV&RM at home. Indeed, the opposite is true. Four examples from the qualitative data are summarized below:

Table 39: Examples of media practices being extended in working-class families

Engagement with TV&RM	Extending activity	Related literacies
1. Archie exploring the <i>CBeebies Playtime</i> app (<i>Nina and the Neurons</i> game).	Mum scaffolding Archie's in-game competence, helping the character go 'little diddy'.	Operational digital literacies; local (family/community) oral literacies.
2. Emma watching the <i>Money Supermarket</i> advert and performing it later.	Mum talking to Emma about what adverts are.	Critical digital literacy.
3. Niyat dancing to Beyoncé's <i>Single Ladies</i> etc.	Rowena scaffolding Niyat's learning of the <i>Single Ladies</i> dance routine; Mum scaffolding Niyat's learning of Eritrean dance.	Cultural digital literacies; local (family/community) literacies; embodied literacies.
4. Olivia exploring the <i>CBeebies Playtime</i> app.	Mum scaffolding Olivia's in-app competence, helping her to make a photo sticker.	Operational digital literacies; operational literacy (Green, 1988) including English-language learning.

In each case, a more knowledgeable other has engaged with a child's interest in TV&RM to extend the learning in relation to literacies. However, unlike the examples taken from middle-class families, the working-class families did not tend to extend the child's interest into the terrain of 'formal' or 'school' literacies.

In the current study, home literacies are being mapped with several literacy frameworks in mind, including Green's (1988) 3D model, Green and Beavis's (2012) adapted 3D model and Marsh et al.'s maker literacies (Forthcoming). In the working-class families, the ways parents extended their children's engagements with TV&RM map onto literacies including operational, cultural and critical digital literacies (Green and Beavis, 2012) and some operational literacy (Green, 1988). In each case, the literacy practices demonstrated tend not to overlap with the literacy practices common in formal educative settings. It is, however, untrue that 'media practice schoolification' is absent in the case study data relating to working-class families. For example, in Olivia's case, the intra-action with the *CBeebies Playtime* app and her mum has provided an opportunity for 'school literacies' development (English-language learning). However, the qualitative data support the finding that 'media practice schoolification' is *less common* in the case studies of working-class families. Some of the ways parents extend their children's engagements with TV&RM in working-class families involve operational digital literacies, for example Archie and Olivia's mums scaffolding their children's digital competencies to enable them to achieve more with new digital apps. As the case studies reveal, these achievements hold specific and significant relevance in each child's life. For example, Archie is one of the youngest (and potentially least physically capable) in a community of six brothers (and four nephews) who share very similar passions. The 'block' visual format and programming-style tasks of the *Nina and the Neurons* game Archie explores with his mum connect with aspects of *Minecraft*, a game that he has spent significant time watching his brothers play. With his mother's support, *Nina and the Neurons* is affording Archie a different avenue to accomplishment in a digital realm that shares some aesthetic and

conceptual qualities with games that the older boys like. Mastering *Nina and the Neurons*, then, is clearly important and rewarding for Archie in the moment. As Beth's response demonstrates, she is proud of this achievement, too. Children in each of the working-class family case studies demonstrate a desire for mastery over digital devices and spend time with others (both watching and actively being supported) to gain knowledge and skill. Analysis of the audio transcripts reveal that children in working-class families frequently use the phrase 'I can do it' regarding digital devices. The qualitative data suggest that working-class preschool children are highly motivated to develop operational digital literacies in relation to smartphones, tablets and televisions, including game apps and platforms such as *YouTube*. Considering the increasing prevalence of digital devices in everyday life, this is perhaps unsurprising. Working-class families display a range of strategies for scaffolding and fostering the development of these skills. Whilst some have argued for the value of developing digital skills in the early years (Bittman et al., 2011), the early years curriculum in the UK does not place high value on these skills, with some settings actively banning digital devices (Russell, 2018). Plowman, McPake and Stephen (2012) found that early years practitioners valued operational digital literacy skills, but their limited definition of digital media meant that they associated these skills with computers and whiteboards.

Some other ways that parents extend their children's engagements with TV&RM in working-class families involve cultural and critical digital literacies; for example, Niyat's mum and sister scaffolding her learning of the Beyoncé and traditional Eritrean dance routines by replaying the video on smartphones, TV and tablets or Emma learning about what adverts are for. Niyat's dancing practices, extended and enabled by her mother and sister, are deeply intertwined with her identity as a member of a specific family and community, thus representing complex cultural digital literacies. As with the case of Archie and his brothers performing knowledge of *Powerpuff Girls* and other action-adventure media texts, Niyat's knowledge is detailed and sophisticated, but is being expressed as a form of embodied literacy (Mackey, 2011; Thiel, 2015). In relation to critical digital literacies, Emma has developed an understanding of the persuasive intent of television advertising through the intra-actions of herself, her mother and the television adverts. Critical digital literacy is a sophisticated skill and has been identified as an important area of learning for primary age children (Merchant, 2010). Emma demonstrates a level of critical media literacy that many developmental psychologists still argue children under the age of 7 are very unlikely to be capable of (Oates, Blades and Gunter, 2002). Whilst there is clear value in children developing cultural and critical digital literacies, it is unclear whether these literacies will be valued in early years settings and beyond in the form that Archie, Niyat and Emma are expressing them. As discussed in the individual case studies, some of these practices draw on media texts that may be considered inappropriate in formal settings (e.g. adverts and music videos aimed at teenagers and older). Some of the physical practices themselves may also be discouraged. Wohlwend (2013) notes that there is still a tendency to look primarily at printed text as evidence of young children's literacy productions. The qualitative findings echo Thiel's (2015) finding that

children living in a low-income community are engaged in literacy work through superhero play, noting that class bias of all kinds must be eliminated before such practices can begin to be valued. Chesworth's (2016) study found that teachers' interpretations of children's imaginative play (some drawing on home media interests) often focused mainly on how children engaged with the play materials, rather than how children drew on their home interests in combination with classroom resources, ascribing new meanings to objects in their play. Indeed, differences in how children perform their knowledge are particularly problematic in relation to children's transition from home to preschool settings, where practitioner guidance is conflicted. The early years foundation stage (EYFS) statutory framework endorses what is described as a play-based approach. At the same time, practitioners are required to monitor and assess children's progress towards stated learning goals and to prepare children for formal education (Chesworth, 2014). There is a risk, then, that English educational policy undermines teachers' ability to understand or capitalise on play's role in diverse sociocultural practices. Taylor (2014) notes that the National Curriculum in the UK values pupils' face-to-face classroom interaction in terms of standard spoken English only. Children's bodily 'intertextual referencing' (p. 402) in classrooms, therefore, tends to be interpreted as gaps and silences.

What may be viewed by some as working-class preschool children's literacy deficit is in fact the enactment of class bias; children living in working-class families engage in valuable literacy practices, some of which have less congruence with the dominant model of literacy favoured in current education policy than those demonstrated by their middle-class counterparts. Returning to the notion of motivation raised above, Gillies (2006) draws on the notion of emotional capital to show how middle-class and working-class parents tend to engage with their children's education on different emotional levels. The author suggests that middle-class parents tend to experience school in terms of academic success, whilst working-class parents and their children tend to experience school in terms of conflict and stress, requiring them to develop and draw on a different set of 'emotional resources' (p. 285). Parents in Gillies' (2006) study expressed pride in their children in different ways. Those with middle-class cultural capital tended to articulate their pride in terms of their children's academic qualities. Those with working-class cultural capital expressed pride in their children's ability to stay out of trouble, get on with others and work hard. The qualitative data in the present study support the finding that parents across the socioeconomic spectrum express pride in their children's competencies in relation to TV&RM, but that there may be broad differences relating to social class. This phenomenon is perhaps most obvious in relation to Archie's family. Rewarding *effort* in everyday tasks (e.g. eating all his dinner) with positive emotional affirmation is a well-established and highly visible everyday practice between Archie and his mother. Gillies (2006) and McCarthey (1997) demonstrate that middle-class parents tend to be more actively involved in their children's education, visiting settings and talking to practitioners and teachers. The resulting level of insider knowledge about what will be expected at school is likely to contribute to the ways that they engage with their children's home practices with TV&RM. As

noted in Moll, Amanti and Gonzalez's (1992) theory of 'Funds of Knowledge', children of working-class families are highly motivated by things that resonate as important within their own families and communities, developing sophisticated skills accordingly.

The quantitative data suggest that children from manual families are more likely than their counterparts to sing while they are watching TV. They were more likely to use another device to play games or watch videos or clips whilst watching TV. These findings add weight to the notion that children from working-class families engage in less 'school-like' literacy practices as part of their routine engagement with TV&RM.

Social class and child and family media texts

The qualitative data support the finding that *CBeebies* is a very popular choice for preschool children across social class barriers. There is evidence that the working-class children in the present study have begun to transition from *CBeebies* into other channel choices. These findings are crystallized with the quantitative data. Whilst *Peppa Pig* (Channel 5) is the number one 'favourite' choice across the three broad social class groups, 'professional' status parents tended to state *CBeebies* titles as their children's favourites (*Octonauts*, *Topsy and Tim*, *Bing* and *Swashbuckle*). In comparison, 'clerical' and 'manual' status parents tended to state a mixture of *CBeebies* and non-*CBeebies* titles as their children's favourites. There is, nevertheless, a good deal of overlap in media tastes across socioeconomic boundaries in the present study. Two other findings relating to media texts and social class are more striking.

Firstly, the qualitative and quantitative data support the finding that preschool children in working-class families are more likely to engage with media texts that are not explicitly designed for children. The quantitative data show that clerical and manual parents are significantly more likely than professional status parents to spend a moderate amount of time watching non-children's TV with their child. Some examples from the qualitative data include television adverts (e.g. Emma and the moneysupermarket.com advert), music videos (e.g. Niyat with Beyoncé, Flo Rida etc.), grown-up TV shows (e.g. Olivia watching Polish shows) or digital games (e.g. Archie playing Temple Run). Banaji (2010) makes a similar observation, noting middle-class families' increased control over the leisure time of children. Banaji also points out that the greater exposure of working-class children to a range of media may provide greater opportunity for the development of media criticality. Emma's exposure to the moneysupermarket.com advert has provided an opportunity for develop critical literacy skills in discussions with her mother. Niyat's dancing, meanwhile, represents an important form of cultural connection. Although children's readings of media texts are still framed to some extent by the texts themselves (Atkinson and Nixon, 2005), combining a text or texts with something else produces something new. The qualitative data support the notion that when children are

exposed to some texts that are not explicitly designed for children, their synthesised practices lead to something beyond the intended meanings of original texts.

Research has, however, shown that many educators are apprehensive about the problems associated with media texts, from violence to sexism (e.g. Dyson, 1997; Seiter, 1999). Dominant discourses about popular culture outline what is appropriate for young girls (and boys, if to a lesser degree) to consume (and perform). Debates about sexualisation of children through commercial products tend to demonize music videos (Bragg, Buckingham, Russell and Willett, 2011). However, shutting down (or failing to build upon) play that draws on so-called 'inappropriate' media texts runs the risk of increasing the sense of alienation from school that some working-class children feel (Reay, 2006). Many (e.g. Campano & Carpenter, 2005; Heath, 2012; Gee, 2011) point out that the exclusion of children's well-established home literacies from formal settings is likely to have a disproportionate impact on marginalized and disadvantaged groups, including working-class families.

Secondly, the qualitative data suggest a greater prevalence of 'traditional' texts as part of middle-class children's media-related engagement. To exemplify, Rosie goes to see *Paddington* the film at the cinema. Her mother subsequently buys her a *Paddington* audiobook and written *Paddington* book. Olivia watches *Doc McStuffins* the TV show. Her mother subsequently buys her a *Doc McStuffins* doctor play set and *Peppa Pig* doctor play set. In this sense, studying children's choices in TV or film texts without considering other related texts fails to paint the whole picture. Gillies (2006) notes how the generation of emotional capital to boost self-esteem is linked to economic capital in a way that is heavily socially classed. For working-class parents in Gillies' study, material giving was more likely to be associated with a notion of worth and 'deservingness' (p. 288) than moral or educational appropriateness:

Acquiring a high status or much desired item for a child could convey a range of symbolic meanings, heightened by the scarcity of the financial resources that are required to buy it.

(Gillies, 2006, p. 288).

Past debates about media and social class have tended to focus on the issue of unequal access to devices. Although it may be true that working-class and middle-class children have different devices, the qualitative data presented in this study challenge the notion that unequal access determined by financial differences is the most important determinant of device ownership in the UK context. As the individual maps in the case studies demonstrate, multiple digital devices are available in each family. However, it may be true that middle-class and working-class families are motivated by different factors in their purchasing decisions. Gillies (2006) notes that whilst middle-class families may still spend a large amount of money on their children, more emotional significance is associated with the 'values and aspirations associated with middle-class cultural capital' (p. 288). There is evidence to support Gillies' assertions across the qualitative data. The efforts John's mum, dad and grandparents make in 'schoolifying' his media engagement often require

little financial investment (e.g. printing nets for 3D models and masks onto cardboard). Even shop-bought items (e.g. the *Spider-man* busy book) are relatively low-cost. In contrast, Archie's mum Beth, talks several times during my visits about making sure each of the boys has their own tablet device. Archie has the Innotab 3S (arguably, perfectly adequate for a child his age from an 'educational' perspective). When Archie notices that his device is different to those that the other boys have received, however, Beth sacrifices her own iPad for him to have:

Beth: Originally this started off as mine. What happened here, this were mine, and I bought three, er, four Kindles for Nathan, Caleb, Kyle and Ethan and I bought him the Innotab 3S, so it looked like he'd got a tablet, but they, they'd a real tablet, but he hadn't, do you know what I mean, sort of thing, cos he were only two.

Fiona: Is that like a children's version? Like a toy?

Beth: Yeah, he were only two, so I bought him that and so obviously he didn't get left out, but er, soon as he saw theirs, he wanted them, so, he ended up with mine, don't even know where the Innotab is!

(Transcript, V1).

On an emotional level, treating Archie the same as his brothers is more important than providing a device purely on the basis on his educational requirements.

6.6. Ethnicity and nationality

The quantitative survey analysis did not compare aspects of children's engagement with TV&RM by ethnicity. Most respondents described their child's ethnicity as 'White' (92.5%), with just 7.8% of the sample identifying their child as any other ethnicity. This is some way from being a representative sample of the UK population (only 86% 'White') and does not provide enough data to draw meaningful conclusions about difference. However, the qualitative data from this study support several original findings in relation to the ways that ethnicity and nationality are implicated in preschool children's home practices with TV&RM.

Preschoolers in immigrant families reimagining 'home' culture

The data offers another possibility for the role 'home' culture plays in the lives of very young children living in immigrant families. Marsh (2006) describes the role that Hindi films and Indian television programmes play in the life of 4 year old Sameena whilst growing up in the UK. Her viewing is a way to participate in her family's rituals, but is, importantly, distinct from her time watching children's television. In contrast, Niyat engages with specific aspects of Eritrean culture and reimagines and redeploys them in complex ways. She embodies and plays with aspects of her inherited culture whilst exploring UK children's media, as well as more mature UK and US texts, experimenting with the shifting roles that they might each play in her identity

construction. As such, we see Niyat at times performing traditional Eritrean dance moves to 'Tinga Tinga Tales' on *CBeebies* or *Flo Rida's* 'G.D.F.R.' or watching and re-watching videos of her community dancing at church and family gatherings. At others, we see her joyfully shaking her hips in a performance of Beyoncé's *Single Ladies* dance routine. Parents in a study by Elias and Lemish (2008) displayed a level of negotiation with regards to their children's engagement with 'home' media. Combined with parental failure to engage with their children's cultural worlds, the authors argue, this results in a broadening of the intergenerational cultural gap. Niyat's example contests this notion, showing how Niyat's family (especially her mum and sister) delight in her re-mixings of Eritrean and other texts and related cultural practices, tracing the provenance of (for example) her 'perching a baby on your hip' dance move and joining in with her performances. Senait and Rowena celebrate and engage with Niyat's forays into Eritrean culture and support her discovery of it through digital devices (filming things for her on their phones and playing it back, plus helping her to search for videos from their church on *YouTube*). They also venture into her worlds, showing equal interest in, and knowledge of, *Peter Rabbit* or *Bing*.

East to West mass media flows in early childhood media

Emma and her family's engagement with *ChuChu TV* draws attention to the East to West flow of mass media phenomena and their relevance in the lives of very young children. Emma started listening to nursery rhymes on *YouTube* from an early age and would often find and repeatedly play (usually singing along to) some of her favourite ones. During my fieldwork, these were most commonly *ChuChu TV* songs (e.g. Johny Johny Yes Papa or Humpty Dumpty). Emma and her parents' experience is by no means unique. In 2018, Kohli-Khandekar reported that *ChuChu TV* had become the third most subscribed to channel in India, but also within the top 100 worldwide, with 17.5 million subscribers. This finding helps to further existing critiques (Marsh, 2006) of concepts such as Ritzer's (1998) 'McDonaldization' or Bryman's (2004) 'Disneyization' theses, which imply that globalization is a one-way (and culturally imperialistic) process. In 2006, Marsh pointed out the cultural trend towards Japanese culture in children's media. The stratospheric success of South Korean K-Pop star Psy's 'Gangnam Style' song and music video in 2013 and the re-launch of *Pokémon Go* in 2016 certainly highlights the increased popularity of Pacific-Asian media texts. The case of Emma's family and *ChuChu TV* is interesting on several grounds. Firstly, *ChuChu TV* is Indian in origin, but the nursery rhymes included derive from a variety of cultures, including traditional UK songs (e.g. 'Humpty Dumpty' and 'Jack and Jill'). Emma and her family are thus listening to UK nursery rhymes adapted for a global audience by an Indian producer. *ChuChu TV's* founder, Vinoth Chandar, discusses some of the specific adaptations that he made to the rhymes in an interview with Indian advertising, media and marketing portal, afaqs! (Choudhury, 2017), including changing lyrics to mask some of the darker origins of many UK nursery rhymes and adding characters with darker skin tones.

Secondly, the example represents East to West media flows as having a significant role in the lives of very young children. *ChuChu TV* is well established in Emma's media habitus when I begin researching with her aged 4. When I return to Emma's family in early 2017 to undertake fieldwork for a different research project with Emma's new baby sister, Wanda (9 months), Ashleigh and Gary are frequently linking their smartphones with the smart TV to play *ChuChu TV* for Wanda.

6.7. Gender

The quantitative data suggest that male and female children engaged in some shared media texts (e.g. *Peppa Pig*; *Bing*; and *Octonauts*), whilst others seemed more prevalent preferences for one gender or the other (e.g. *Thomas the Tank Engine* and *Fireman Sam* for the boys and *Sofia the First* and *Doc McStuffins* for the girls). Research about gender and young children's engagements with TV&RM already exists (e.g. Walkerdine, 1986; Carrington, 2003; Davies, 1989). However, as Wohlwend (2009) contends, few studies have employed the 'fine-grained lens of microethnographic analysis' (p. 60) to examine gendered media play in early childhood. The qualitative data suggest that 3 and 4 year olds have complex gendered relationships with media texts. All the parents included in the case studies identified their children in terms of binary gender categorizations (i.e. male or female). In line with the quantitative data, the qualitative data supports the finding that male and female children engaged in some shared media texts and genres, whilst others seemed more common for one gender or the other. Superheroes and superhero play were particularly important in the two case studies with a male child as their focus (i.e. Archie and John). Rosie also showed interest in male 'hero' characters, although these tended to be from preschool children's programming (e.g. *Mike the Knight* and *Octonauts*) rather than *Marvel* superheroes. There are multiple vignettes within the qualitative data, however, that contest the notion of highly gendered media-text choices and related play amongst preschool children. Some examples include Archie and his brothers/nephews playing *Powerpuff Girls* and Emma's love of *Plants vs. Zombies*. In both cases, recognisably gendered aspects of play sit alongside other aspects that subvert gendered play. The examples are complex and warrant more attention than can be given in the current thesis. It is therefore anticipated that further findings in relation to gender will be reported in future publications.

Summary

This chapter has attempted to bring together some of the various threads of scholarly argument running through the thesis, to highlight some pertinent findings in relation to the project's research questions and to explore them in greater depth. Several original contributions to theoretical knowledge have been made. Various conceptions of the sociality of preschool children's media engagements have been explored. The theories of synthesised practices, family media habitus and proxy media engagement have been foregrounded and explained. The chapter also brings together the quantitative and qualitative data to

reflect how social class is implicated in preschool children's engagements with TV&RM. The theory of 'media practice schoolification' is proposed. In the next and final chapter, I will attempt to bring the thesis to a close by drawing some broad conclusions based on the discussions of the preceding six chapters. Implications for the field and for other stakeholders are also discussed.

CHAPTER 7. CONCLUSIONS AND RECOMMENDATIONS

This thesis emerged from a collaborative project between the Universities of Sheffield and Leeds and *CBeebies*. It was funded by the Economic and Social Research Council (ESRC) in the United Kingdom. There is a recognised need for more research about very young children's engagements with television and a range of other digital devices at home (Scott & Marsh, 2018). Although literacies scholars have a strong tradition of considering children's diverse range of experiences at home, there are few examples of in-depth, fine-grained empirical research about preschool children's digital literacies in working-class communities in the UK or, indeed, worldwide. Meanwhile, developmental psychological studies attend to preschoolers' use of digital devices, but often employ methodologies that remove children and digital devices from their normal contexts of use, frequently focusing on potential harm and the role of parents in mitigating that harm. There is, then, a need for research that focuses on a diverse range of preschool children (especially those living in working-class communities) using digital devices and engaging with digital and media texts and artifacts in their normal contexts of use, including broader consideration of the social contexts of these engagements.

The need for this research is not simply a matter of academic interest. Firstly, the children's media industry is keen to learn from in-depth academic research about the role of media in children's lives. Secondly, parents and families need good, research-informed advice (Livingstone et al., 2018). Finally, early years practitioners express anxieties about children's digital engagement, both at home and in early years settings. Early years policy makers need information to inform policy. Disparities in how children under 5 engage with digital technologies for play and learning at home and early years settings have led some to suggest there is a need to re-conceptualise young children's learning in early years pedagogy (Palaiologou, 2016).

I have addressed these gaps and needs by undertaking a programme of multi-method research, which included a survey of 1,195 UK parents and six ethnographic case studies with families in Sheffield, UK. The thesis begins with a critical, interdisciplinary literature review. The methodology for the research is then presented in detail, including proposed new methodologies for a.) pilot testing questionnaires in the social sciences and b.) investigating and analysing early childhood literacies. The quantitative survey data are presented, analysed and interpreted in Chapter 4, whilst the six qualitative case studies are presented, analysed and interpreted in Chapter 5. Chapter 6 brings together some of the strands of scholarly argument running through the rest of the thesis, to highlight the most significant findings and discuss them in more depth.

Summary of findings and limitations

The thesis makes several original contributions to knowledge: some methodological; some empirical; and some theoretical. Aspects of the methodology have advanced the field in terms of researching children's engagements with digital devices, texts and artifacts. The most significant methodological contribution is the development of 'Sociomaterial Nexus Analysis' (a methodological approach and framework for analysing early childhood literacies). It extends the work of Scollon and Scollon (2004) and Wohlwend's (2009) mediated discourse analysis. The approach offers anyone researching young children's digital engagements a practical methodology for mapping out and analysing a complex phenomenon. It is also of specific interest to literacies scholars concerned with engaging with a sociomaterial approach. I have already taken part in a variety of dissemination activities and have been approached by academics and students both in the UK and internationally with an interest in using Sociomaterial Nexus Analysis in their work. The thesis also develops a 'Think Aloud' (TA) methodology designed specifically for pilot testing quantitative survey instruments in the social sciences. TA has been widely used to test and validate quantitative instruments within psychological literature (e.g. Gardner & Tang, 2014), however no qualitative TA method explicitly for improving the design and interpretation of quantitative tools in the social sciences had previously been developed or tested. The approach extends Koro-Ljungberg et al.'s (2012) work decentring TA for interrogating problem-solving processes. It could be of interest to a wide range of social scientists looking to pilot test questionnaires, to improve the design of questionnaires, increase understanding of how a quantitative instrument is comprehended and interpreted by a representative group of participants and, ultimately, to provide justification for the validity of a survey instrument. A further methodological contribution relates to the idea of undertaking identity work when researching young children's lives in more-than-human contexts. An expanded version of this work, which draws on post-human discourses, has already been published (Scott & Bird, 2019).

The most significant empirical contributions of the thesis relate to the original research questions, centring on the social contexts of preschool children's engagements with TV&RM and on the way that social class is implicated in these engagements. One empirical contribution is the finding that, in their everyday engagements with TV&RM, preschool children amalgamate fragments of media texts with other material and/or immaterial things to constitute synthesised texts. The related practices can be described as 'synthesised practices'. Literacy scholars have already established that very young children mimic, amend or remix media texts (e.g. Carrington and Dowdall, 2013). However, the case studies suggest that children do something more than adapt, appropriate or redesign texts. Through synthesis, something new is momentarily produced. Through their repetition, these assemblages or 'events' relate to significant social practices in the longer term, although the assemblages and practices themselves are not fixed. Rather, they shift, expanding and fraying at the edges as elements become entangled and disentangled. The finding

continues the work of others (e.g. Marsh, 2006) in contesting the usefulness of researching children's engagements with TV&RM in terms of straightforward, 'cause-and-effect' relationships between a device or text and child. In addition to emphasising the importance of studying the role played by human actors and communities, it points to the need to consider material actors, affect and associated historical trajectories, as well as the intra-actions between all entangled things. As such, it represents a move towards conceptualising preschool children's literacies through a sociomaterial lens. This empirical finding consolidates the value of adopting the Sociomaterial Nexus Analysis approach in research with young children.

A second empirical contribution is the finding that preschool children and their families mutually participate in family media habitus. The term draws on Thompson's (1992) account of Bourdieusian habitus (1977) as 'a set of *dispositions*' (p. 12) and Schatzki's (2001) description of practices as arrays of activity in which the human body is the nexus. Preschool children and their families share specific sets of dispositions in relation to media texts and genres. Family media habitus contributes to the sustained performance of synthesised practices over time. Although others have employed the term 'family media habitus' (Leadland & Zanker, 2008), the theory developed in the present thesis is important because it draws explicitly on the idea of habitus-as-disposition, rather than simply habitus-as-taste. The finding helps to account for the social transmission of media dispositions within families. In turn, it enables deeper understanding of how some media texts may be interpreted locally, at the micro-level of the immediate family. This finding adds nuance to a longstanding media debate about the meanings embedded in media texts and people's processes of interpretation.

A third empirical contribution is the finding that, broadly speaking, there is a relationship between a family's social class and the nature of child and family practices with TV&RM. Middle-class parents of preschool children tend to engage in a practice that this thesis terms 'media practice schoolification', meaning that they engage with a child's interest in a media text and use it as the basis for engaging the child in 'school' or 'formal' literacies learning. In working-class families, the ways parents extend their children's engagements with TV&RM map onto operational, cultural and critical digital literacies (Green and Beavis, 2012) and some traditional operational literacies, but in ways that tend not to overlap with the literacy practices common in formal educative settings. The finding is important in terms of its originality and the need for new knowledge about social class and preschool children's TV&RM engagement, given the shortage of research in this area. However, it is also particularly important due of its wider implications. As Gregory and Williams (2000) have previously suggested, what we typically regard as schooled literacy is in fact based on a 'very narrow definition of literacy' (Gregory & Williams, 200, p. 34). Gregory, Long and Volk (2004) suggest that many of the more diverse literacies which young children bring with them to school are rejected as being of limited value. If there is a broad difference between the literacy and digital literacy

practices being scaffolded in working-class and middle-class households in relation to TV&RM, there is a risk that failure to value, and build on, these practices in formal educative settings may serve to widen inequalities in the academic attainment of children from a very early age.

Some of the empirical findings of the thesis have informed the production of new, named theories relating to preschool children's engagements with TV&RM. These constitute the major theoretical contributions of the thesis: the theory of synthesised practices; the theory of family media habitus; and the theory of media practice schoolification.

There are limitations to the present study. Firstly, I have only presented case studies of six families in the present thesis. The number of cases included in an in-depth qualitative study is always limited by a researcher's time and capacity. I do not intend to imply that the classed differences discussed in relation to the families in my thesis are statistically generalisable to all children in the UK. In keeping with the inductive (theory-building) notion of qualitative research and analysis, my findings evidence the specific differences present in the lives of my participants. These specific differences raise questions about universal differences in children's lives in the UK with regards to their practices with TV&RM, as a starting point for further consideration and study. A second limitation is that, in an ideal world, I would like my study to have traversed the home/school boundary and followed my child participants into their preschool settings. Preschool settings are an important aspect of preschool children's social worlds. In the present thesis, I speculate about the potential responses of early childhood practitioners and, later, schoolteachers, with regards to the different home literacy practices of children from diverse socioeconomic backgrounds. Existing research (Chesworth, 2016) suggests that English educational policy does, indeed, undermine teachers' ability to understand or capitalise on play in relation to diverse sociocultural practices. However, it would add richness to the present study to be able to accompany these specific children into early childhood settings and reflect on their experiences. Livingstone and Sefton-Green (2016) accomplish such a feat in their study of older (Year 9) children, drawing useful insights about the digital experiences of children across school and home worlds.

The limitation I feel most personally dissatisfied with is not being able to complete a hoped-for final stage of the qualitative fieldwork. I had hoped to be able to visit each of the families again once the analytic process had begun in earnest. In their original model of Nexus Analysis, Scollon and Scollon (2004) describe discussing findings with participants, to resolve contradictions between what participants say they do and the researcher's own observations. I had envisaged that these follow-up visits might involve watching compilations of the clips used in the micro-analysis and discussing them further with the participants in the context of the evolving findings. These visits would themselves have been recorded and would have informed the final analysis. This additional stage, however, proved difficult to fit into an already complex, multi-method doctoral project. The process described here shares some similarities with the methodology

of the '*A Day in the Digital Lives of Children aged 0-3*' project (Gillen et al., 2018), which I recently worked on with researchers from six countries, and found to be a very productive approach. This suggests the field is embracing this important aspect of the ethnographic process, something I would like to continue to explore in future work.

There are also limitations to the quantitative survey. As with any one-off survey, the quantitative analysis can identify correlations between variables but cannot provide strong evidence of cause and effect. It is one asset of the multi-method approach that the limitations of the qualitative and quantitative methods employed are somewhat mitigated in relation to one another. Crystallization in the multi-method approach has enabled useful insights to be drawn across the two data sets.

Implications and practical applications

The thesis has academic implications, both in terms of research about preschool children and media across disciplinary boundaries and for the field of literacies research specifically. The present thesis examines the social contexts of children's media engagement by moving into the theoretical terrain of post-human and sociomaterial discourses. Whilst this conceptual move may not be the preferred theoretical space for all researchers of children's media engagement, the thesis nevertheless highlights the need to attend to the social contexts of children's engagements. There is a need to extend conceptualisations of the social contexts of TV&RM engagement beyond existing parental mediation literature. There is a need to consider the role that other family members and peers play and there is a need to expand the list of possible roles that human others can play in children's media engagement. My original findings relating to social class difference could not have been envisaged within a paradigm which limits parental roles in their children's media lives to mediators. Sociomaterial Nexus Analysis holds the clearest implications for the field of literacies research, offering literacies researchers a new research methodology.

The present study highlights differences in family practices with TV&RM in relation to social class. The finding has pedagogical implications for early years practitioners. One implication is that, if they want to more effectively and equitably meet the needs of all children, early years practitioners must engage enthusiastically with the diverse Funds of Knowledge (Moll, Amanti, Neff & Gonzalez, 1992) that preschool children bring with them from home. In response to the specific findings of this thesis, this may include engaging with, and constructing learning opportunities around, practices and media texts that may challenge traditional assumptions of what is pedagogically valuable and appropriate in early years settings. For example, children's synthesised practices in the form of dance or fight scene role-play, with source materials such as a television advert, superhero cartoon or teenage music video. In my recent professional role at Sheffield Hallam University, I taught early years practitioners and often took the opportunity to present and discuss my case study data with them. Many commented on the value that they saw in the full

range of practices demonstrated, but noted that their responses may have been different had they encountered such practices in their everyday workplaces, as opposed to the reflective space of the university classroom.

The thesis also has implications for the families of preschool children. Families express a desire for advice (Livingstone et al., 2018), but public discourses currently present conflicting messages. The involvement of family members with preschool children's media interests and use played an important role in helping children develop literacies in every case study. However, the qualitative data also support the finding that parents are not always aware of their positive modelling. It is recommended that families should be encouraged to acknowledge the value of their own involvements with their preschool children's media interests and use. This is not to say that they should reduce time spent reading 'traditional' print texts with their children, only that they should could usefully begin to value and perhaps build on the positive work that many are already doing in scaffolding their children's digital competencies across various domains. It is recommended that future guidelines and advice for parents and families should explain how different types of involvement with preschool children's media interests and use can contribute to the development of different skills.

The thesis has implications for *CBeebies* and the children's media industry. It fundamentally challenges several still-prominent myths about children's media engagement, including the idea that children's media engagement is solitary, or that it is sedentary. An important implication of the thesis is that class difference in children's media engagement must be interpreted in a more complex way. As the notion of family media habitus outlines, understanding classed family media practices necessitates an appreciation of the social transmission of media dispositions. The findings suggest that middle-class parents are actively looking for school literacy learning opportunities that extend their children's media interests, including searching for 'maker' activities such as masks and 3D character models to print and make with their children. Such knowledge could inspire the provision of related resources to enhance the potential educative value of children's media engagements. On the other hand, such moves may simply serve to reinforce unhelpfully reductive notions of what constitutes valuable educative activities for children at home. The working-class families in the present study showed deep knowledge and understanding of their children's media interests and displayed very active strategies for extending their children's activities related to these interests. One outcome I hope for, then, is to present my final framework of child and family practices to a children's media industry audience (possibly using existing connections via *CBeebies* and the Children's Media Conference). I envisage this as a starting point for working with industry more broadly, to think about classed family media practices and how the industry can engage more effectively with a broad socioeconomic spectrum of children and their families.

Recommendations for further research

Though in-depth, the qualitative aspect of the present study was small in scale and still more detailed, qualitative research is needed in relation to preschool children's engagements with TV&RM and social class. It may be important to extend similar research to investigating the lives of children aged 2 and under. It would be useful to conduct research across the home/early year setting boundary by following key children between both worlds. The present study identifies 'media practice schoolification' as an original empirical finding and theoretical contribution of the qualitative study. It is recommended that further research should draw on this notion in relation to other contexts. It would be useful to investigate whether this practice continues as children grow older (i.e. beyond 4 years of age). Quantitative work could usefully be employed to further test and explore the findings of the qualitative work on a larger scale. For example, questions around the media scaffolding practices of parents and other family members could very easily be included in a future questionnaire. It is also recommended that future research should empirically investigate both the attitudes and practices of early years practitioners in relation to children's classed digital literacy practices. Ethnographic work in preschool settings with different socioeconomic catchment areas would be valuable.

The present study highlights how limiting existing parental mediation frameworks are. Firstly, because they exclude important social players who are not parents. Secondly, because they conceptualise parents' practices as 'strategies' driven by specific (rational) motivations a) to limit harm to children and b) to increase the educative benefits of digital media. It is recommended that future research across diverse disciplinary boundaries should consider investigating 'family engagement practices' rather than parental mediation practices.

The methodological framework of Sociomaterial Nexus Analysis offers scholars a useful starting point for mapping out children's literacy practices. Recent dissemination activities suggest a great level of interest in using this methodology. As such, it is recommended that the framework should be used, tested, refined and extended in future research. It would be particularly useful to extend testing of the Sociomaterial Nexus Analysis approach to include a final stage which involves parents and other family members in watching video clips from the data and feeding their own ideas and reflections into the analysis.

Summary

This thesis has identified several gaps in existing scholarly literature relating to preschool children and their engagement with TV&RM and has attempted to advance knowledge in relation to these gaps. Drawing on the work of the preceding six chapters, the final chapter brings the thesis to a close by highlighting some of its most important contributions to the field. The findings of the thesis advance empirical knowledge of very young children's practices with TV&RM at home, and of how these practices relate to social class. The thesis

advances theoretical understanding, particularly in the field of digital literacies. It further provides a new methodology for researching literacies in early childhood. Finally, this chapter lays the groundwork for my next steps, both in terms of informing dissemination activities and highlighting important directions for future research.

8. BIBLIOGRAPHY

- af Wählberg, A. E., & Poom, L. (2015). An empirical test of nonresponse bias in internet surveys. *Basic and Applied Social Psychology*, 37(6), 336-347.
- Aggio, D., Ogunleye, A. A., Voss, C., & Sandercock, G. R. H. (2012). Temporal relationships between screen-time and physical activity with cardiorespiratory fitness in English Schoolchildren: A 2-year longitudinal study. *Preventive medicine*, 55(1), 37-39.
- Ahmed, S. (2004). *The Cultural Politics of Emotion*. Edinburgh: Edinburgh University Press.
- Ainsworth, M. D. S. & Bell, S. M. (1974). The growth of competence in Mother-Infant Interact. In K. L. Connolly & J. Bruner (Eds.). *Develop. Competence* (pp. 97-118), New York: Academic Press.
- Ajzen, I., 1991. The theory of planned behaviour. *Organizational Behavior and Human Decision Processes*, 50(2), 179-211.
- Althusser, L. (1971). Ideology and Ideological State Apparatuses. In L. Althusser (Ed.), *Lenin and Philosophy and other Essays* (pp. 85-126). New York: Monthly Review Press.
- American Academy of Pediatrics. (2016, October 21). *American Academy of Pediatrics Announces New Recommendations for Children's Media Use* [Press release]. Retrived from <https://www.aap.org/en-us/about-the-aap/aap-press-room/Pages/American-Academy-of-Pediatrics-Announces-New-Recommendations-for-Childrens-Media-Use.aspx>
- Arnold, M. (1994). *Culture and Anarchy (1869)*. (Ed. S. Lipman). New Haven: Yale University Press.
- Ash, J., (2010). Teleplastic technologies: charting practices of orientation and navigation in videogaming. *Transactions of the Institute of British Geographers*, 35(3), 414-430.
- Atkin, C. K. (1983). Television and Race Role Socialization. *Journalism Quarterly*, 60(3), 407-14.
- Atkin, C. K., & Gantz, W. (1978). Television news and political socialization. *Public Opinion Quarterly*, 42(2), 183-194.
- Atkin, C. K., & Gantz, W. (1978). Television news and political socialization. *Public Opinion Quarterly*, 42(2), 183-194.
- Atkinson, S., & Nixon, H. (2005). Locating the subject: Teens online@ ninemsn. *Discourse: Studies in the cultural politics of education*, 26(3), 387-409.
- Attride-Stirling, J. (2001). Thematic networks: an analytic tool for qualitative research. *Qualitative Research*, 1(3), 385-405.
- Bakhtin, M. M. (1992). *The Dialogic Imagination: Four Essays*. Austin: University of Texas Press.
- Banaji, S. (2010). 'Adverts make me want to break the television': Indian children and their audiovisual media environment in three contrasting locations. In: S. Banaji (Ed.), *South Asian Media Cultures: Representations, Contexts and Audiences*. (pp. 51-72). London: Anthem Press.

- Bandura, A., & Huston, A. C. (1961). Identification as a process of incidental learning. *The Journal of Abnormal and Social Psychology*, 63(2), 311-318.
- Bandura, A., Ross, D., & Ross, S. A. (1961). Transmission of aggression through imitation of aggressive models. *The Journal of Abnormal and Social Psychology*, 63(3), 575-582.
- 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.
- Barker, M., & Petley, J. (2002). *Ill effects: The media violence debate*. Abingdon: Routledge.
- Barr, R., Lauricella, A., Zack, E., & Calvert, S. L. (2010). Infant and early childhood exposure to adult-directed and child-directed television programming: Relations with cognitive skills at age four. *Merrill-Palmer Quarterly*, 56(1), 21-48.
- Barton, D. and Hamilton, M. (1998). *Local literacies: Reading and writing in one community*. Abingdon: Routledge.
- Baszanger, I. & Dodier, N. (2004). Ethnography: Relating the part to the whole. In D. Silverman (Ed.). *Qualitative research: Theory, method and practice, 2nd Edition* (pp. 9-34). London: Sage.
- Baumgartner, S. E., Weeda, W. D., van der Heijden, L. L., & Huizinga, M. (2014). The relationship between media multitasking and executive function in early adolescents. *The Journal of Early Adolescence*, 34(8), 1120-1144.
- Bazalgette, C. (2018) Researching prior learning: How toddlers study movies. *Film Education Journal*, 1(1), 101-112.
- BBC Trust. (2016). CBeebies Service License. Issued April 2016. Retrieved from http://downloads.bbc.co.uk/bbctrust/assets/files/pdf/regulatory_framework/service_licences/tv/2016/cbeebies_apr16.pdf
- Beck, U., & Willms, J. (2014). *Conversations with Ulrich Beck*. Cambridge: Polity.
- Bennett, T. (1982). Media, 'reality', signification. In T. B. Bennett, J. Curran, M. Gurevitch & J. Wollacott (Eds.). *Culture, Society and the Media* (pp. 285-306). London: Methuen.
- Bernstein, B. (1971). *Class, Codes and Control: Theoretical Studies Towards a Sociology of Language*. London: Routledge & Kegan Paul.
- Bickham, D. S., Kavanaugh, J. R., & Rich, M. (2016). Media effects as health research: How pediatricians have changed the study of media and child development. *Journal of Children and Media*, 10(2), 191-199.
- Bickham, D. S., Kavanaugh, J. R., & Rich, M. (2016). Media effects as health research: How pediatricians have changed the study of media and child development. *Journal of Children and Media*, 10(2), 191-199.
- Bird, J., & Edwards, S. (2015). Children learning to use technologies through play: A Digital Play Framework. *British Journal of Educational Technology*, 46(6), 1149-1160.
- Bittman, M., Rutherford, L., Brown, J. & Unsworth, L. (2011). Digital Natives? New and Old Media and Children's Outcomes. *Australian Journal of Education*, 55(2), 161-175.

- Blades, M., Oates, C. & Li, S. (2013). Children's recognition of advertisements on television and on Web pages. *Appetite* 62, 190-193.
- Blikstein, P. (2013). Digital Fabrication and 'Making' in Education: The Democratization of Invention. In J. Walter-Herrmann & C. Büching (Eds.), *FabLabs: Of Machines, Makers and Inventors*. Bielefeld: Transcript Publishers.
- Blum-Ross, A. & S. Livingstone (2016) *Families and screen time: Current advice and emerging research. Media Policy Brief* 17. Retrieved from <https://www.saferinternet.org.uk/sites/default/files/Research%20Highlights/UKCCIS%20RH10%20Families%20and%20Screen%20Time.pdf>
- Blumenthal, D. (1996). Ethics issues in academic-industry relationships in the life sciences: the continuing debate. *Academic medicine: journal of the Association of American Medical Colleges*, 71(12), 1291-1296.
- Bornstein, M. H., Tamis-LeMonda, C. S., Tal, J., Ludemann, P., Toda, S., Rahn, C. W., & Vardi, D. (1992). Maternal responsiveness to infants in three societies: The United States, France, and Japan, *Child Development*, 63(4), 808-821.
- Bourdieu, P. (1977). *Outline of a Theory of Practice*. Cambridge: Cambridge University Press.
- Bourdieu, P. (1990). *In Other Words*. Cambridge: Polity
- Bragg, S., Buckingham, D., Russell, R., & Willett, R. (2011). Too much, too soon? Children, 'sexualization' and consumer culture. *Sex Education*, 11(3), 279-292.
- Braidotti, R. (2003). Becoming woman: Or sexual difference revisited. *Theory, Culture & Society*, 20(3), 43-64.
- Braidotti, R. (2013). *The Posthuman*. Cambridge: Polity Press.
- Brannen, J. (2005). Mixing methods: The entry of qualitative and quantitative approaches into the research process. *International Journal of Social Research Methodology*, 8(3), 173-184.
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative research in psychology*, 3(2), 77-101.
- Breen, L. J., & Darlaston-Jones, D. (2010). Moving beyond the enduring dominance of positivism in psychological research: Implications for psychology in Australia. *Australian Psychologist*, 45(1), 67-76.
- Bronfenbrenner, U. (1977). Toward an Experimental Ecology of Human Development. *American Psychologist*, 32, 515-531.
- Bruneel, J., d'Este, P., & Salter, A. (2010). Investigating the factors that diminish the barriers to university-industry collaboration. *Research Policy*, 39(7), 858-868.
- Brunsdon, C. (1990). Television: Aesthetics and Audiences. In P. Mellencamp (Ed.). *Logics of Television: Essays in Cultural Criticism*. Bloomington, Indiana: Indiana University Press.

- Bryant, J. & Miron, D. (2004). Theory and Research in Mass Communication. *Journal of Communication*, 54(4), 662-704.
- Bryman, A. (1984). The debate about quantitative and qualitative research: a question of method or epistemology? *British Journal of Sociology*, 35(1), 75-92.
- Bryman, A. (2004). *The Disneyization of Society*. London: Sage.
- Bryman, A. (2008). The end of the paradigm wars? In P. Alasuutari, L. Bickman, & J. Brannen (Eds.). *The SAGE handbook of social research methods* (pp. 13-25). London and New York: Sage.
- Buchbinder, M., Longhofer, J., Barrett, T., Lawson, P., & Floersch, J. (2006). Ethnographic approaches to child care research a review of the literature. *Journal of Early Childhood Research*, 4(1), 45-63.
- Buckingham, D & Tingstad, V. (2010) *Children and Consumer Culture*. Basingstoke: Palgrave Macmillan.
- Buckingham, D. (1995). On the impossibility of children's television: The case of Timmy Mallett. In C. Bazalgette & D. Buckingham (Eds.). *In Front of the Children: Screen Entertainment and Young Audiences*. London: British Film Institute Publishing.
- Buckingham, D. (1996). *Moving images: Understanding children's emotional responses to television*. Manchester: Manchester University Press.
- Buckingham, D. (2004). *The Media Literacy of Children and Young People: A Review of the Research Literature*. London: Ofcom.
- Buckingham, D. (2007). Selling childhood? Children and consumer culture. *Journal of children and media*, 1(1), 15-24.
- Buckingham, D. (2008). Children and Media: A Cultural Studies Approach. In K. Drotner & S. Livingstone (Eds.) *The International Handbook of Children, Media and Culture* (pp. 219-236). London: Sage.
- Buers, C., Triemstra, M., Bloemendal, E., Zwijnenberg, N. C., Hendriks, M., & Delnoij, D. M. (2014). The value of cognitive interviewing for optimizing a patient experience survey. *International Journal of Social Research Methodology*, 17(4), 325-340.
- Buijzen, M. (2009). The effectiveness of parental communication in modifying the relation between food advertising and children's consumption behaviour. *British Journal of Developmental Psychology*, 27(1), 105-121.
- Burman, E. (2008). *Deconstructing Developmental Psychology, 2nd Edition*. London and New York: Routledge.
- Burnett, C. Merchant, G., Parry, B., & Storey, V. (2018). Conceptualising digital technology integration in participatory theatre from a sociomaterialist perspective: ways forward for research. *Research Papers in Education*, 1-21.
- Burnett, C. (2014). Investigating pupils' interactions around digital texts: A spatial perspective on the "classroom-ness" of digital literacy practices in schools. *Educational Review*, 66(2), 192-209.

- Burnett, C., Davies, J., Merchant, G. & Rowsell, J. (Eds.). (2014) *New literacies around the globe: Policy and pedagogy*. New York and London: Routledge
- Butler, J. (1990). *Gender Trouble: Feminism and the Subversion of Identity*. New York: Routledge.
- Butler, J. (2004). *Undoing Gender*. New York: Routledge.
- Cairney, T. and Ruge, J. (1998). Community Literacy Practices and Schooling: Towards effective support for students. Retrieved from https://www.researchgate.net/publication/255583072_Community_Literacy_Practices_and_Schooling_Towards_Effective_Support_for_Students
- Calvert, S. L., Huston, A. C., Watkins, B. A. and Wright, J. C. (1982). The Relation between Selective Attention to Television Forms and Children's Comprehension of Content. *Child Development*, 53(2), 601-610.
- Camitta, M. (1993). 'Vernacular writing: varieties of literacy among Philadelphia high school students'. In B. Street (Ed.). *Cross-Cultural Approaches to Literacy* (pp. 228-248). Cambridge: Cambridge University Press.
- Campano, G. & Carpenter, M. (2005). The second class: providing spaces in the margins. *Language Arts*, 82(3), 186-94.
- Cannon, M. (2018). *Digital Media in Education: Teaching, Learning and Literacy Practices with Young Learners*. London: Palgrave.
- Carrington, V. (2003). 'I'm in a bad mood. Let's go shopping': Interactive dolls, consumer culture and a 'glocalized' model of literacy. *Journal of Early Childhood Literacy*, 3(1), 83-98.
- Carrington, V. (2012). There's no going back. Roxie's iPhone: an object ethnography. *Language and Literacy*, 14, 27-40.
- Carrington, V., & Dowdall, C. (2013). 'This is a Job for Hazmat Guy!': Global Media Cultures and Children's Everyday Lives. In K. Hall, T. Cremin, B. Comber & L. C. Moll (Eds.). *International handbook of research on children's literacy, learning, and culture* (pp. 96-107). New Jersey: Wiley-Blackwell.
- Carter, O. B., Patterson, L. J., Donovan, R. J., Ewing, M. T., & Roberts, C. M. (2011). Children's understanding of the selling versus persuasive intent of junk food advertising: Implications for regulation. *Social science & medicine*, 72(6), 962-968.
- Chaudron, S., Beutel, M.E., Navarrete, V.D., Dreier, M., Fletcher-Watson, B., Heikkilä, A.S., Kontríková, V., Korkeamäki, R.V., Livingstone, S., Marsh, J. & Mascheroni, G. (2015). *Young Children (0-8) and digital technology: A qualitative exploratory study across seven countries*. Retrieved from [http://www.lse.ac.uk/media@lse/research/ToddlersAndTablets/RelevantPublications/Young-Children-\(0-8\)-and-Digital-Technology.pdf](http://www.lse.ac.uk/media@lse/research/ToddlersAndTablets/RelevantPublications/Young-Children-(0-8)-and-Digital-Technology.pdf)
- Chesworth, L. (2014). A deeper understanding of play. In A. Brock (Ed.). *The Early Years Reflective Practice Handbook* (pp. 142-158). Abingdon: Routledge.

- Chesworth, L. (2016). A funds of knowledge approach to examining play interests: listening to children's and parents' perspectives. *International Journal of Early Years Education*, 24(3), 294-308.
- Chesworth, L. (2018). Embracing uncertainty in research with young children. *International Journal of Qualitative Studies in Education*, 1-12.
- Choudhury, A. R., (2017, September). ChuChu TV: Like a diamond in the Sky. *afaqs!* [online]. Retrieved from http://www.afaqs.com/news/story/51268_Chuchu-TV-Like-a-diamond-in-the-Sky
- Christakis, D. A. (2014). Interactive media use at younger than the age of 2 years: time to rethink the American Academy of Pediatrics guideline? *JAMA pediatrics*, 168(5), 399-400.
- Christensen, P. H. (2004). Children's participation in ethnographic research: Issues of power and representation. *Children & society*, 18(2), 165-176.
- Clark, A., & Moss, P. (2001). *Listening to young children: The Mosaic approach*. London: National Children's Bureau and Joseph Rowntree Foundation.
- Clark, Alison (2004). The Mosaic Approach and research with young children. In: V. Lewis, M. Kellett, C. Robinson, S. Fraser & S. Ding (Eds.). *The Reality of Research with Children and Young People* (pp. 142-161). London: Sage.
- Clark, L. S. (2011). Parental mediation theory for the digital age. *Communication Theory*, 21, 323-343.
- Collins, C. & Janning, M. (2010). The Stuff at Mom's House and the Stuff at Dad's House: The Material Consumption of Divorce for Adolescents. In D. Buckingham & V. Tingstad (Eds.). *Children and Consumer Culture*. Basingstoke: Palgrave Macmillan.
- Colvert, A. (2015). *Ludic Authorship: Reframing Literacies through Peer-to-Peer Alternate Reality Game Design in the Primary Classroom*. (Unpublished doctoral dissertation). University College London, London.
- Cook-Gumperz, J. & Keller-Cohen, D. (1993). Alternative literacies in school and beyond: multiple literacies of speaking and writing. *Anthropology and Education Quarterly*, 24(2), 283-7.
- Cook, C., Heath, F., & Thompson, R. L. (2000). A meta-analysis of response rates in web-or internet-based surveys. *Educational and psychological measurement*, 60(6), 821-836.
- Cook, D. T. (2010). Commercial enculturation: Moving beyond consumer socialization. In D. Buckingham & V. Tingstad (Eds.). *Childhood and consumer culture* (pp. 63-79). London: Palgrave Macmillan.
- Cope, B., & Kalantzis, M. (Eds.). (2000). *Multiliteracies: Literacy learning and the design of social futures*. London and New York: Routledge.
- Corsaro, W. A. (1979). We're Friends Right? Children's Use of Access Rituals in a Nursery School. *Language in Society*, 8, 315-336.
- Corsaro, W. A. (1996). Early Education, Children's Lives and the Transition from Home to School in Italy and the United States. *International Journal of Comparative Sociology*, 37, 121-139.
- Corsaro, W. A. (1997). *The Sociology of Childhood*. Pine Forge Press, Thousand Oaks, CA.

- Corsaro, W. A., & Molinari, L. (2008). Policy and practice in Italian children's transition from preschool to elementary school. *Research in Comparative and International Education*, 3(3), 250-265.
- Cowden, J. E., Bassett, H. T. & Cohen, M. F. (1969). An Analysis of Some Relationships between Fantasy-Aggressive and Aggressive Behavior among Institutionalized Delinquents. *The Journal of Genetic Psychology*, 114(2), 179-183.
- Crain, W. C. (1985). *Theories of Development: Concepts and Applications, 2nd Edition*. London: Prentice-Hall Inc.
- Creswell, J. W. (2011). Controversies in mixed methods research. In N. K. Denzin & Y. S. Lincoln (Eds.). *The Sage handbook of qualitative research 4* (pp. 269-284). London: Sage.
- Crow, G. (2012). "Our work is about trying to create democratic learning spaces": an interview with Angie Hart. *Collaborative Ethnographies*, 5, 125-124.
- Csikszentmihályi, M. (1990). *Flow: The Psychology of Optimal Experience*. New York: Harper and Row.
- Curtin, C. (2001). Eliciting children's voices in qualitative research. *American Journal of Occupational Therapy*, 55(3), 295-302.
- Curtin, R., Presser, S., & Singer, E. (2000). The effects of response rate changes on the index of consumer sentiment. *Public Opinion Quarterly*, 64, 413-428.
- Danby, S., Davidson, C., Ekberg, S., Breathnach, H., & Thorpe, K. (2016). 'Let's see if you can see me': making connections with Google Earth™ in a preschool classroom. *Children's Geographies*, 14(2), 141-157.
- 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 Teaching: Practice & Critique*, 8(3), 36-54.
- Davies, B. (1989). *Frogs and snails and feminist tales: Preschool children and gender*. Boston: Allen & Unwin.
- Davies, H., Buckingham, D. & Kelley, P. (2000). In the worst possible taste: children, television and cultural value. *European Journal of Cultural Studies* 3(1), 5-25.
- Deatrick J.A. & Faux S.A. (1991) Conducting qualitative studies with children and adolescents. J. M. Morse (Ed.). *Qualitative Nursing Research: A Contemporary Dialogue* (pp. 185-203). Newbury Park: Sage.
- Deleuze, G. & Guattari, F. (1987). *A Thousand Plateaus*. Minneapolis: University of Minnesota Press.
- Dennison, B.A., Erb, T.A. & Jenkins, P.L., (2002). Television viewing and television in bedroom associated with overweight risk among low-income preschool children. *Pediatrics*, 109(6), 1028-1035.
- Denzin, N.K. (1978). *The Research Act: A Theoretical Introduction to Sociological Methods*. Englewood Cliffs, NJ: Prentice-Hall.
- Department for Culture, Media and Sports. (2006). *Royal Charter for the continuance of the British Broadcasting Corporation*. Retrieved from http://downloads.bbc.co.uk/bbctrust/assets/files/pdf/about/how_we_govern/charter.pdf

- Department for Education (2017). *Statutory Framework for the Early Years Foundation Stage*. Retrieved from <https://www.gov.uk/government/publications/early-years-foundation-stage-framework--2>
- Department of Education and Science (1975). *A Language for Life (Bullock Report)*. London: HMSO
- Dezuanni, M. (2015). The building blocks of digital media literacy: socio-material participation and the production of media knowledge. *Journal of Curriculum Studies*, 47(3), 416-439.
- Dezuanni, M. L., Beavis, C., & O'Mara, J. (2015). "Redstone is like electricity": Children's performative representations in and around Minecraft. *E-Learning and Digital Media*, 12(2), 147-163.
- Diamond, P. & Giddens, A. (Eds.). (2005). *The new egalitarianism*. Cambridge: Polity Press.
- Dibley, B. (2012). 'The shape of things to come': Seven theses on the Anthropocene and attachment. *Australian Humanities Review*, 52, 139-153.
- Dominick, J. R. & Greenberg, B. S. (1970). Attitudes Towards Violence: The Interaction of TV Exposure, Family Attitudes and Social Class. Retrieved from <https://files.eric.ed.gov/fulltext/ED058748.pdf>
- Dorsey-Gaines, C., & Taylor, D. (1988). *Growing up literate: Learning from inner-city families*. New Hampshire: Heinemann.
- Drotner, K. & Livingstone, S. (Eds.). (2008). *The International Handbook of Children, Media and Culture*. London: Sage.
- Duncan, L. G., & Seymour, P. H. (2000). Socio-economic differences in foundation-level literacy. *British Journal of Psychology*, 91(2), 145-166.
- Dyson, A. H. (1997). Rewriting for, and by, the children: the social and ideological fate of a media miss in an urban classroom. *Written Communication*, 14(3), 275-312.
- Early Education. (2018). Commentary on the draft revised Early Years Foundation Stage Statutory Framework, including the Early Learning Goals and Areas of Learning. Retrieved from <https://www.early-education.org.uk/sites/default/files/Early%20Education%20commentary%20on%20the%20draft%20revised%20ELGs%2023.7.18.pdf>
- Eccles, J. S. (1987). Gender roles and women's achievement-related decisions. *Psychology of women Quarterly*, 11(2), 135-172.
- Elias, N., & Lemish, D. (2008). Media uses in immigrant families: Torn between 'inward' and 'outward' paths of integration. *International Communication Gazette*, 70(1), 21-40.
- Emerson, R. A. (2002). "Where my girls at?" Negotiating black womanhood in music videos. *Gender & Society*, 16(1), 115-135.
- Ericsson, K. A., & Simon, H. A. (1984). *Protocol analysis: Verbal reports as data*. Cambridge, MA: The MIT Press.
- Eriksen, T.H. & Nielsen, F.S. (2001). *A History of Anthropology*. London: Pluto Press.

- Farrell, A., Kagan, S. L., & Tisdall, E. K. M. (Eds.). (2015). *The SAGE handbook of early childhood research*. London: Sage Publications Ltd.
- Fine, G. A., & Sandström, K. L. (1988). *Knowing children. Participant observation with minors*. Newbury Park, CA: Sage.
- Firestone, W. A. (1993). Alternative arguments for generalizing from data as applied to qualitative research. *Educational researcher*, 22(4), 16-23.
- Fisher, M. (2003). Open mics and open minds: spoken word poetry in African diaspora participatory literacy communities. *Harvard Educational Review*, 73(3), 362-89.
- Fiske, J. (1987). *Television Culture*. London: Methuen.
- Fitch, M., Huston, A. C. and Wright, J. C. (1993). Children's Perceptions of Television Reality. In G. L. Berry & J. K. Asamen (Eds.) *Children & Television: Images in a Changing Sociocultural World*. Newbury Park: Sage.
- Flavell, J. (1963). *The developmental psychology of Jean Piaget*. Princeton, NJ: Van Nostrand.
- Flewitt, R. (2011). Bringing ethnography to a multimodal investigation of early literacy in a digital age. *Qualitative Research*, 11(3), 293-310.
- Flewitt, R. (2013). *Early literacy: A broader vision. Association for the Professional Development of Early Years Educators (TACTYC) Occasional Paper no. 3*. Retrieved from http://eprints.ncrm.ac.uk/3132/1/flewitt_occasional-paper3.pdf
- Fontes, L. A., & Piercy, F. P. (2000). Engaging students in qualitative research through experiential class activities. *Teaching of Psychology*, 27(3), 174-179.
- Fowles, B. R. and Voyat, G. (1974). Piaget meets big bird: Is TV a passive teacher? *The Urban Review* 7(1), 69-80.
- French, D. P., & Hevey, D. (2008). What do people think about when answering questionnaires to assess unrealistic optimism about skin cancer? A study. *Psychology, Health and Medicine*, 13(1), 63-74.
- Friedlander, B. Z., Wetstone, H. S., & Scott, C. S. (1974). Suburban preschool children's comprehension of an age-appropriate informational television program. *Child Development*, 45(2), 561-565.
- Friedrichs, H. (2015). Media-educational habitus of future educators in the context of education in day-care centers. *Journal of Media Literacy Education*, 7(1), 18-34.
- Gardner, B., & Tang, V. (2014). Reflecting on non-reflective action: An exploratory think-aloud study of self-report habit measures. *British Journal of Health Psychology*, 19(2), 258-273.
- Gee, J. (2001). *An introduction to discourse analysis: Theory and method*. London and New York: Routledge.
- Gee, J. (2011). *Social Linguistics and Literacies: Ideology in Discourses, 4th Edition*. New York: Routledge.
- Geertz, C. (1973). *The Interpretation of Cultures*. New York: Basic Books.
- Gentile, D. A., Nathanson, A. I., Rasmussen, E. E., Reimer, R. A., & Walsh, D. A. (2012). Do you see what I see? Parent and child reports of parental monitoring of media. *Family Relations*, 61, 470-487.

- Gergen, K. J. (1985). The Social Constructionist Movement in Modern Psychology. *American Psychologist*, 40(3), 266-275.
- Gillen, J. et. al. (2018) *A Day in the Digital Lives of Children aged 0-3. Summary report by DigiLitEY ISCH COST Action IS1410 Working Group 1* "Digital literacy in homes and communities." Retrieved from <http://digilitey.eu/wp-content/uploads/2018/06/DigiLitEY-A-Day-in-the-Digital-Lives-FINAL.pdf>
- Gillen, J., & Hall, N. (2013). The emergence of early childhood literacy. In J. Larson & J. Marsh (Eds.) *The Sage Handbook of Early Childhood Literacy* (pp. 3-17). London: Sage Publications Ltd.
- Gillies, V. (2006). Working class mothers and school life: Exploring the role of emotional capital. *Gender and education*, 18(3), 281-293.
- Giroux, H. A. (2004). Cultural studies, public pedagogy, and the responsibility of intellectuals. *Communication and critical/cultural studies*, 1(1), 59-79.
- Gitlin, T. (1978). Media Sociology: The Dominant Paradigm. *Theory and Society*, 6(2), 205-253.
- Giugni, M. (2011). 'Becoming worldly with': an encounter with the Early Years Learning Framework. *Contemporary Issues in Early Childhood*, 12(1), 11-27.
- Given, L. M., Winkler, D. C., Willson, R., Davidson, C., Danby, S., & Thorpe, K. (2016). Parents as coresearchers at home using an observational method to document young children's use of technology. *International Journal of Qualitative Methods*, 15(1), p. 1.
- Glaser, B., & Strauss, A. (1967). *The Discovery of Grounded Theory: Strategies for Qualitative Research*. Mill Valley, CA: Sociology Press.
- Goldthorpe, J. (1981). The class schema of 'Social Mobility and Class Structure in Modern Britain': a reply to Penn. *Sociology*, 15(2), 272-280.
- González, N., Moll, L. C. and Amanti, C. (2005). *Funds of Knowledge: Theorizing Practices in Households, Communities, and Classrooms*. Mahwah, New Jersey: Lawrence Erlbaum Associates.
- Goodley, D. & Runswick Cole, K. 2010. Emancipating play: dis/abled children, development and deconstruction. *Disability and Society* 25(4), 499-512.
- Goodman, Y. (1986). Children coming to know literacy. In W.H. Teale and E. Sulzby (Eds.). *Emergent literacy* (pp. 1-14). Norwood, N.J.: Ablex.
- Gortmaker, S. L., Must, A., Sobol, A. M., Peterson, K., Colditz, G. A., & Dietz, W. H. (1996). Television viewing as a cause of increasing obesity among children in the United States, 1986-1990. *Archives of pediatrics & adolescent medicine*, 150(4), 356-362.
- Green, B. (1988). Subject-specific literacy and school learning: A focus on writing. *Australian Journal of Education*, 32(2), 156-179.
- Green, B. (1988). Subject-specific literacy and school learning: A focus on writing. *Australian Journal of Education*, 32(2), 156-179.

- Green, B., & Beavis, C. A. (2012). *Literacy in 3D: An integrated perspective in theory and practice*. Australia: ACER Press.
- Green, B., & Beavis, C. A. (2012). *Literacy in 3D: An integrated perspective in theory and practice*. Australia: ACER Press.
- Greene, J.C., Caracelli, V.J. and Graham, W.F. (1989). Toward a Conceptual Framework for Mixed-method Evaluation Designs. *Educational Evaluation and Policy Analysis* 11(3), 255–74.
- Greenwood, J. D. (2004). What happened to the “social” in social psychology? *Journal for the theory of social behaviour*, 34(1), 19-34.
- Gregory, E., Long, S., and Volk, D. (2004). (Eds.). *Many pathways to literacy young children learning with siblings, grandparents, peers and communities*. London: Routledge Falmer.
- Gregory, E. and Williams, A. (2000). *City Literacies: learning to read across generations and cultures*. London: Routledge.
- Groves, R. M., Singer, E., & Corning, A. (2000). Leverage-saliency theory of survey participation: description and an illustration. *Public Opinion Quarterly*, 64(3), 299-308.
- Gurevitch, M., Bennett, T., Curran, J. & Woollacott, J. (Eds.). (1988). *Culture, Society and the Media*. London: Routledge.
- Gutiérrez, K. (2004). Literacy as laminated activity: Rethinking literacy for English learners. In *National Reading Conference Yearbook* (pp. 101-114).
- Hall, S. (1973). *Encoding and decoding in the television discourse (Vol. 7)*. Centre for Cultural Studies, University of Birmingham.
- Hall, S. (1997). *Representation: Cultural Representations and Signifying Practices*. Newbury Park, CA: Sage.
- Hammersley, M. (2011). *Methodology: Who Needs It?* Thousand Oaks, CA: Sage.
- Hancox, R.J., Milne, B.J. & Poulton, R., (2005). Association of television viewing during childhood with poor educational achievement. *Archives of Pediatrics & Adolescent Medicine*, 159(7), 614-618.
- Hannon, P., Jackson, A., & Weinberger, J. (1986). Parents’ and teachers’ strategies in hearing young children read. *Research Papers in Education*, 1(1), 6-25.
- Harcourt, D., & Conroy, H. (2011). Informed consent: Processes and procedures in seeking research partnerships with young children. In D. Harcourt, B. Perry & T. Waller (Eds.). *Researching Young Children’s Perspectives: Debating the ethics and dilemmas of educational research with children* (pp. 38-50). Abington: Routledge.
- Harste, J., Woodward, V., and Burke, C. (1984). *Language stories and literacy lessons*. Portsmouth, N.H.: Heinemann.
- Hawkins, R. P. (1977). The Dimensional Structure of Children’s Perceptions of Television Reality. *Communication Research*, 4, 299-320.

- Heath, S. B. (2012). *Words at work and play: Three decades in family and community life*. Cambridge: Cambridge University Press.
- Heath, S.B. (1983). *Ways with Words: Language, Life, and Work in Communities and Classrooms*. Cambridge: Cambridge University Press.
- Hendrick, H., & Harry, H. (1997). *Children, childhood and English society, 1880-1990 (Vol. 32)*. Cambridge: Cambridge University Press.
- Henrich, J., Heine, S. J., & Norenzayan, A. (2010). The weirdest people in the world?. *Behavioral and brain sciences*, 33(2-3), 61-83.
- Henrich, J., Heine, S. J., & Norenzayan, A. (2010). The weirdest people in the world? *Behavioral and brain sciences*, 33(2-3), 61-83.
- Hess, D. J., & Grant, G. W. (1983). Prime-time television and gender-role behavior. *Teaching Sociology*, 10(3), 371-388.
- Hiebert, E.H. (1978). Preschool children's understanding of written language. *Child Development*, 49, 1231-1234.
- Hodge, R., & Tripp, D. (1986). *Children and television: A semiotic approach*. Bloomington, Indiana: Stanford University Press.
- Holland, D. (2001). *Identity and agency in cultural worlds*. Cambridge, Massachusetts: Harvard University Press.
- Holland, D., & Leander, K. (2004). Ethnographic studies of positioning and subjectivity: An introduction. *Ethos*, 32(2), 127-139.
- Hope, K. (1981). Vertical mobility in Britain: A structured analysis. *Sociology*, 15(1), 19-55.
- Hood, A., & Waters, T. (2017). *Living standards, poverty and inequality in the UK: 2016-2017 to 2021-2022, IFS Reports, Institute for Fiscal Studies, No. R127, ISBN 978-1-911102-35-9*. London: Institute for Fiscal Studies (IFS). Retrieved from, <http://dx.doi.org/10.1920/re.ifs.2017.0127>.
- Horsman, J. (1990). *Something on my Mind Besides the Everyday*. Toronto: Women's Press.
- Horsman, J. (1994). 'The problem of illiteracy and the promise of literacy'. In M. Hamilton, D. Barton and R. Ivanic (Eds.). *Worlds of Literacy*. Clevedon, Avon: Multilingual Matters.
- Horton, J. (2010). 'The best thing ever': how children's popular culture matters. *Social & Cultural Geography*, 11(4), 377-398.
- Hughes, B. (2002). *A Playworker's Taxonomy of Play Types. 2nd Edition*. London: PlayLink.
- Jago, R., Sebire, S. J., Gorely, T., Cillero, I. H., & Biddle, S. J. (2011). "I'm on it 24/7 at the moment": A qualitative examination of multi-screen viewing behaviours among UK 10-11 year olds. *International Journal of Behavioral Nutrition and Physical Activity*, 8, 85.
- Jakes, R. W., Day, N. E., Khaw, K. T., Luben, R., Oakes, S., Welch, A., ... & Wareham, N. J. (2003). Television viewing and low participation in vigorous recreation are independently associated with obesity and

- markers of cardiovascular disease risk: EPIC-Norfolk population-based study. *European journal of clinical nutrition*, 57(9), 1089-1096.
- James, A. & Prout, A. (1997). *Constructing and Reconstructing Childhood: Contemporary Issues in the Sociological Study of Childhood, 2nd Edition*. London: Falmer Press.
- James, A., Jenks, C. & Prout, A. (1998). *Theorizing Childhood*. Cambridge: Polity Press.
- Jenks, C. (1990). *Childhood*, London: Routledge
- Jones, P. E. (2013). Bernstein's 'codes' and the linguistics of 'deficit'. *Language and Education*, 27(2), 161-179.
- Jones, S. (2014). "How people read and write and they don't even notice": everyday lives and literacies on a Midlands council estate. *Literacy*, 48(2), 59-65.
- Kabali, H. K., Irigoyen, M. M., Nunez-Davis, R., Budacki, J. G., Mohanty, S. H., Leister, K. P., & Bonner, R. L. (2015). Exposure and use of mobile media devices by young children. *Pediatrics*, 136(6), 1044-1050.
- Kelley, T. L. (1927). *Interpretation of educational measurements*. New York: World Book.
- Kenner, C., Ruby, M., Jessel, J., Gregory, E. and Arju, T., (2008). Intergenerational learning events around the computer: A site for linguistic and cultural exchange. *Language and Education*, 22(4), 298-319.
- Kinder, M. (1991). *Playing with power in movies, television, and video games: from Muppet Babies to Teenage Mutant Ninja Turtles*. Los Angeles: University of California Press.
- Kirkorian, H. L., Pempek, T. A., Murphy, L. A., Schmidt, M. E., & Anderson, D. R. (2009). The impact of background television on parent-child interaction. *Child development*, 80(5), 1350-1359.
- Kommer, S. and Biermann, R. (2012). Der mediale Habitus von (angehenden) LehrerInnen. Medienbezogene Dispositionen und Medienhandeln von Lehramtsstudierenden. *Jahrbuch der Medienpädagogik*, 9, 81-108.
- Kornhauser, W. (1960). *The Politics of Mass Society*. London: Routledge.
- Kornhauser, W. (1960). *The Politics of Mass Society*. London: Routledge.
- Koro-Ljungberg, M., Douglas, E., McNeill, N., Therriault, D., & Malcolm, Z. (2012). Re-conceptualizing and de-centering think-aloud methodology in qualitative research. *Qualitative Research*, 13(6), 735-753.
- Kress, G. (2003). *Literacy in the new media age*. Abingdon: Routledge.
- Kress, G. & Street, B. (2006). Foreword. In K. Pahl & J. Rowsell (Eds.). *Travel Notes from the New Literacy Studies: Instances of Practice* (pp. vii-x). Clevedon: Multilingual Matters.
- Kumpulainen, K. (Forthcoming). Promoting the Joy of Learning Multiliteracies from Early Years Onwards: An Educational Reform Initiative in Finland. *Media Education Research Journal*.
- Kunkel, D., Wilcox, B. L., Cantor, J., Palmer, E., Linn, S. & Dowrick, P. (2004). Report of the APA task force on advertising and children: Psychological Issues in the Increasing Commercialization of Childhood. Retrieved from <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.459.1736&rep=rep1&type=pdf>

- Kuppens, A. H. (2010). Incidental foreign language acquisition from media exposure. *Learning, Media and Technology*, 35(1), 65-85.
- Kwok, K., Ghrear, S., Li, V., Haddock, T., Coleman, P., & Birch, S. A. (2016). Children can learn new facts equally well from interactive media versus face to face instruction. *Frontiers in Psychology*, 7, 1603.
- LaFreniere, P. (2011). Evolutionary Functions of Social Play: Life Histories, Sex Differences, and Emotion Regulation. *American Journal of Play*, 3(4), 464-488.
- Lareau, A. (1989). *Home advantage: Social class and parental intervention in elementary education*. London: Falmer Press.
- Lareau, A. (2011). *Unequal childhoods: Class, race, and family life*. California: University of California Press.
- Latour, B. (1987). *Science in action: How to follow scientists and engineers through society*. Cambridge, Massachusetts: Harvard University Press.
- Latour, B. (2007). *Reassembling the Social: An Introduction to Actor-Network-Theory*. Oxford: Oxford University Press.
- Lazarsfeld, P. F. & Kendall, P. L. (1948). *Radio Listening in America*. New York: Prentice-Hall.
- Lealand, G., & Zanker, R. (2008). Pleasure, excess and self-monitoring: The media worlds of New Zealand children. *Media International Australia*, 126(1), 43-53.
- Leavitt, R.L. (1991). 'Power and Resistance in Infant-Toddler Day Care Centers', *Sociological Studies of Child Development*, 4, 91-112.
- LeCompte, M. D., & Goetz, J. P. (1982). Problems of reliability and validity in ethnographic research. *Review of educational research*, 52(1), 31-60.
- Lee, J., Lin, L., & Robertson, T. (2012). The impact of media multitasking on learning. *Learning, Media and Technology*, 37(1), 94-104.
- Leontiev, A. N. (1977). Activity and consciousness, philosophy in the USSR, problems of dialectical materialism. Moscow: Progress Publishers.
- Lester, C. (2016). The Children's Horror Film: Characterizing an "Impossible" Subgenre. *The Velvet Light Trap*, 78, 22-37.
- Leung, L. (2015). Validity, reliability, and generalizability in qualitative research. *Journal of Family Medicine and Primary Care*, 4(3), 324-327.
- Levin, D. & Kilbourne, J. (2008). *So Sexy So Soon. The New Sexualized Childhood and What Parents Can Do to Protect their Kids*. New York: Random House.
- Levy, R., & Thompson, P. (2015). Creating 'buddy partnerships' with 5-and 11-year old-boys: a methodological approach to conducting participatory research with young children. *Journal of Early Childhood Research*, 13(2), 137-149.
- Lewis, S., & Cooper, C. L. (1999). The work-family research agenda in changing contexts. *Journal of Occupational Health Psychology*, 4(4), 382.

- Lewis, T. Y. (2011). Intergenerational Meaning-Making Between a Mother and Son in Digital Spaces. In C. Compton-Lilly & S. Greene (Eds.). *Bedtime stories and book reports: Connecting parent involvement and family literacy* (pp. 85-93). New York and London: Teachers College Press.
- Lincoln Y. S., Lynham S. A. & Guba, E.G. (2011). Paradigmatic controversies, contradictions, and emerging confluences, revisited. In: N. K. Denzin & Y. S. Lincoln (Eds.). *The Handbook of Qualitative Research, 4th Edition* (pp. 97-127). Thousand Oaks, CA: Sage.
- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry (Vol. 75)*. London: Sage.
- Livingstone, S. (2002). *Young people and new media: Childhood and the changing media environment*. London: Sage.
- Livingstone, S., & Sefton-Green, J. (2016). *The class: Living and learning in the digital age*. New York: NYU Press.
- Livingstone, S., Blum-Ross, A., Pavlick, J. & Ólafsson, K. (2018). *In the digital home, how do parents support their children and who supports them? Parenting for a Digital Future: Survey Report 1*. Retrieved from <http://www.lse.ac.uk/media-and-communications/assets/documents/research/preparing-for-a-digital-future/P4DF-Survey-Report-1-In-the-digital-home.pdf>
- Livingstone, Sonia and Blum-Ross, Alicia and Pavlick, Jennifer and Ólafsson, Kjartan (2018) *In the digital home, how do parents support their children and who supports them? Parenting for a Digital Future: Survey Report 1*, Department of Media and Communications, The London School of Economics and Political Science, London, UK.
- Luke, A. (1992). The Body Literate: Discourse and Inscription in Early Literacy Training. *Linguistics and Education, 4*(1), 107-129.
- Lynn, I. (2018, June 8) 'Children will copy smartphone obsessed parents', *The Lancashire Evening Post*. Retrieved from <https://www.lep.co.uk/news/health/children-will-copy-smartphone-obsessed-parents-1-9199707>
- Maccoby, E. E. (1954). Why Do Children Watch Television? *Public Opinion Quarterly, 18*(3), 239-244.
- Mackey, M. (2002). *Literacies across media: Playing the text*. London and New York: Routledge Falmer.
- Mackey, M. (2010). Reading from the feet up: The local work of literacy. *Children's Literature in Education, 41*(4), 323-339.
- Mackey, M. (2011). The embedded and embodied literacies of a young reader. *Children's Literature in Education, 42*(4), 289.
- MacLure, M. (2013). The wonder of data. *Cultural Studies? Critical Methodologies, 13*(4), 228-232.
- Mandell, N. (1988). The least-adult role in studying children. *Journal of contemporary ethnography, 16*(4), 433-467.
- Marcuse, H. (1968). *One Dimensional Man*. London: Sphere.

- Marsh, J. (2003). Connections between literacy practices at home and in the nursery. *British Education Research Journal*, 29(3), 369-382.
- Marsh, J. (2004). Ritual, performance and identity construction. In J. Marsh, J. (Ed.). *Popular culture, new media and digital literacy in early childhood* (pp. 28-50). London: Psychology Press.
- Marsh, J. (2005). (Ed.), *Popular culture, new media and digital literacy in early childhood*. London and New York: Routledge.
- Marsh, J. (2006). Global, Local/Public, Private: Young Children's Engagement Digital Literacy Practices in the Home. In K. Pahl & J. Rowsell (Eds.). *Travel Notes from the New Literacy Studies: Instances of Practice*. Clevedon: Multilingual Matters.
- Marsh, J. (2014). Media, popular culture and play. In E. Brooker, M. Blaise & S. Edwards (Eds.), *SAGE Handbook of Play and Learning in Early Childhood* (pp. 403-414). London: Sage Publications Ltd.
- Marsh, J. (2017b). Russian Dolls and Three Forms of Capital: Ecological and Sociological Perspectives on Parents' Engagement with Young Children's Tablet Use. In C. Burnett, G. Merchant, A. Simpson & M. Walsh (Eds.). *The Case of the iPad* (pp. 31-47). Singapore: Springer.
- Marsh, J. & Millard, E. (2000). *Literacy and Popular Culture: using children's culture in the classroom*. London: Paul Chapman.
- Marsh, J. A. (2017a). The internet of toys: A posthuman and multimodal analysis of connected play. *Teachers College record*, 119(15), p. 1.
- Marsh, J., Arnseth, H. C. & Kumpulainen, K. (Forthcoming) 'Maker Literacies and Maker Citizenship in the MakeY (Makerspaces in the Early Years) Project'.
- Marsh, J., Brooks, G., Hughes, J., Ritchie, L., Roberts, S., & Wright, K. (2005). *Digital beginnings: Young children's use of popular culture, media and new technologies*. Retrieved from https://www.researchgate.net/profile/Greg_Brooks/publication/265183910_Digital_beginnings_Young_children's_use_of_popular_culture_media_and_new_technologies/links/5473599e0cf2d67fc036d3df/Digital-beginnings-Young-childrens-use-of-popular-culture-media-and-new-technologies.pdf.
- Marsh, J., Hannon, P., Lewis, M., & Ritchie, L. (2017). Young children's initiation into family literacy practices in the digital age. *Journal of Early Childhood Research*, 15(1), 47-60.
- Marsh, J., Hannon, P., Lewis, M., & Ritchie, L. (2017). Young children's initiation into family literacy practices in the digital age. *Journal of Early Childhood Research*, 15(1), 47-60.
- Marsh, J., Kontovourki, S. Tafa, E. & Salomaa, S. (2017). *Developing Digital Literacy in Early Years Settings: Professional Development Needs for Practitioners. A White Paper for COST Action IS1410*. Retrieved from <http://digilitey.eu/wp-content/uploads/2017/01/WG2-LR-jan-2017.pdf>
- Marsh, J., Plowman, L., Yamada-Rice, D., Bishop, J., & Scott, F. (2016). Digital play: a new classification. *Early Years*, 36(3), 242-253.

- Marsh, J., Plowman, L., Yamada-Rice, D., Bishop, J.C., Lahmar, J., Scott, F., Davenport, A., Davis, S., French, K., Piras, M. & Thornhill, S., (2015). *Exploring play and creativity in pre-schoolers' use of apps: Final project report. Technology and Play*. Retrieved from http://www.techandplay.org/reports/TAP_Final_Report.Pdf
- Marsh, J., Plowman, L., Yamada-Rice, D., Bishop, J., Lahmar, J., & Scott, F. (2018). Play and creativity in young children's use of apps. *British Journal of Educational Technology*, 49(5), 870-882.
- Martens, L., Southerton, D. and Scott, S. (2004). Bringing Children (and Parents) into the Sociology of Consumption: Towards a Theoretical and Empirical Agenda. *Journal of Consumer Culture*, 4, 155-82.
- Martin, S. (2010). Co-production of social research: strategies for engaged scholarship. *Public Money & Management*, 30(4), 211-218.
- Mays, N., & Pope, C. (1995). Rigour and qualitative research. *British Medical Journal*, 311(6997), 42-45.
- McCarthy, S. J. (1997). Making the Invisible More Visible: Home Literacy Practices of Middle-Class and Working-Class Families. *Early Child Development and Care*, 127(1), 179-189.
- McPake, J., Plowman, L., & Stephen, C. (2013). Pre-school children creating and communicating with digital technologies in the home. *British Journal of Educational Technology*, 44(3), 421-431.
- Mead, G. H. (1934). *Mind, Self & Society from the Standpoint of a Social Behaviorist* (Ed. C. W. Morris) Chicago: University of Chicago Press.
- Merchant, G. (2006). Identity, Social Networks and Online Communication. *E- Learning*, 3(2), 235-244.
- Merchant, G. (2010). Social Media and Primary School Children. In: C. Bazalgette (Ed.), *Teaching Media in Primary Schools* (pp. 102-113). London: SAGE publications.
- Merriam, S. B. (1998). *Qualitative Research and Case Study Applications in Education. Revised and Expanded from Case Study Research in Education*. San Francisco, CA: Jossey-Bass Publishers.
- Messenger Davies, M. (1997). *Fake, Fact, and Fantasy: Children's Interpretations of Television Reality*. New Jersey: Lawrence Erlbaum Associates.
- Miller, D. (2008). *The comfort of things*. Cambridge: Polity Press.
- Minchin, R. & Eyres, Z. (2018, June). Parents glued to their smartphones should beware children copying them, addiction expert warns. *The Mirror*. Retrieved from <https://www.mirror.co.uk/news/uk-news/parents-glued-smartphones-should-beware-12667490>
- Mitchell, S. (2011, November) How much tech can children take?: Are today's children facing technology overload, or simply gearing themselves up for life in a digital world? Stewart Mitchell investigates. *Alphr*. Retrieved from <http://www.alphr.com/features/371287/how-much-tech-can-children-take>.
- Moll, L. C., Amanti, C., Neff, D., & Gonzalez, N. (1992). Funds of knowledge for teaching: Using a qualitative approach to connect homes and classrooms. *Theory into practice*, 31(2), 132-141.

- Moore, D. L., & Tarnai, J. (2002). Evaluating nonresponse error in mail surveys. In: R. M. Groves, D. A. Dillman, J. L. Eltinge, & R. J. A. Little (Eds.). *Survey Nonresponse* (pp. 197–211). New York: John Wiley & Sons.
- Morrow, R. W., & Morrow, R. W. (2006). *"Sesame Street" and the Reform of Children's Television*. Baltimore: John Hopkins University Press.
- Muijs, D. (2010). *Doing quantitative research in education with SPSS, 2nd Edition*. London: Sage Publications Ltd.
- Nava, M. (1992). *Changing Cultures: Feminism, Youth and Consumerism*. London: Sage Publications Ltd.
- Nevski, E., & Siibak, A. (2016). The role of parents and parental mediation on 0–3-year olds' digital play with smart devices: Estonian parents' attitudes and practices. *Early Years*, 36(3), 227-241.
- Nikken, P., & Jansz, J. (2006). Parental mediation of children's videogame playing: A comparison of the reports by parents and children. *Learning, Media and Technology*, 31, 181–202.
- Nikken, P., & Jansz, J. (2014). Developing scales to measure parental mediation of young children's Internet use. *Learning, Media and Technology*, 39, 250–266.
- Noble, G. (1983). Social Learning from Everyday Television, In M. J. A. Howe (Ed.). *Learning from Television: Psychological and Educational Research* (pp. 1-2). London: Academic Press.
- Oates, C., Blades, M., & Gunter, B. (2002). Children and television advertising: when do they understand persuasive intent? *Journal of Consumer Behaviour*, 1(3), 238-245.
- Ofcom. (2012). Children and Parents: Media use and Attitudes report 2012. Retrieved from <https://www.ofcom.org.uk/research-and-data/media-literacy-research/childrens/october-2012>
- Ofcom. (2016). Children and Parents: Media use and Attitudes report 2016. Retrieved from <https://www.ofcom.org.uk/research-and-data/media-literacy-research/childrens/children-parents-nov16>
- Ofcom. (2017). Children and Parents: Media use and Attitudes report 2017. Retrieved from <https://www.ofcom.org.uk/research-and-data/media-literacy-research/childrens/children-parents-2017>
- Onwuegbuzie, A. J., & Leech, N. L. (2005). On becoming a pragmatic researcher: The importance of combining quantitative and qualitative research methodologies. *International Journal of Social Research Methodology*, 8(5), 375-387.
- Oppliger, P. (2008). *Girls Gone Skank: The Sexualization of Girls in American Culture*. Jefferson, NC: McFarland and Company.
- Packard, V., & Miller, M. C. (1957). *The hidden persuaders*. Harmondsworth: Penguin.
- Pahl, K. (2006). Children's popular culture in the home: tracing cultural practices in texts. In: J. Marsh & E. Millard (Eds.). *Popular literacies, Childhood and Schooling*. London: Routledge.

- Pahl, K. (2007). Timescales and ethnography: understanding a child's meaning-making across three sites, a home, a classroom and a family literacy class. *Ethnography and Education*, 2(2), 175-190.
- Pahl, K., & Rowsell, J. (2012). *Literacy and education*. London: SAGE Publications Ltd.
- Palaiologou, I. (2016). Children under five and digital technologies: implications for early years pedagogy. *European Early Childhood Education Research Journal*, 24(1), 5-24.
- Palaiologou, I. (2016). Children under five and digital technologies: implications for early years pedagogy. *European Early Childhood Education Research Journal*, 24(1), 5-24.
- Palmer, P. (1986). *The lively audience: A study of children around the TV set*. Sydney: Allen & Unwin.
- Palmer, S. (2006). *Toxic childhood: How the modern world is damaging our children and what we can do about it*. London: Orion.
- Park, C., & Park, Y. R. (2014). The conceptual model on smart phone addiction among early childhood. *International Journal of Social Science and Humanity*, 4(2), 147.
- Park, H., Sha, M. M., & Pan, Y. (2014). Investigating validity and effectiveness of cognitive interviewing as a pretesting method for non-English questionnaires: Findings from Korean cognitive interviews. *International Journal of Social Research Methodology*, 17(6), 643-658.
- Parker, W. C. (1984). Interviewing children: Problems and promise. *The Journal of Negro Education*, 53(1), 18-28.
- Parry, B. (2009). Reading and rereading 'Shrek'. *English in Education*, 43(2), 148-161.
- Parry, B. (2016). Reading ads, reading the world. *Education 3-13*, 44(3), 325-338.
- Parry, B. & Scott, F. (Forthcoming). New Lamps for Old: Researching children's play and identity in the digital age. In O. Erstad, R. Flewitt, B. Kümmerling-Meibauer & I. Pereira (Eds.), *Routledge Handbook on Digital Literacies in Early Childhood*. London: Routledge.
- Patton, M. Q. (1987). *How to Use Qualitative Methods in Evaluation*. London: Sage Publications Ltd.
- Payne, A. C., Whitehurst, G. J., & Angell, A. L. (1994). The role of home literacy environment in the development of language ability in preschool children from low-income families. *Early Childhood Research Quarterly*, 9(3), 427-440.
- Payton, S. (1984). Developing awareness of print: a young child's first steps towards literacy. *Educational Review*. Occasional Publications No. 2. Birmingham: University of Birmingham.
- Peräkylä, A. (2011). Validity in research on naturally occurring social interaction. In D. Silverman (Ed.) *Qualitative research: 3rd Edition* (pp. 365-382). London: Sage.
- Perry, K. and Moses, A. (2011). Television, language and literacy practices in Sudanese refugee families: "I learned how to spell English on Channel 18". *Research in Teaching of English*, 45(3), 278-305.
- Philip, L. J. (1998). Combining quantitative and qualitative approaches to social research in human geography—an impossible mixture? *Environment and planning A*, 30(2), 261-276.
- Piaget, J. (1962). *Play, Dreams and Imitation in Childhood*. New York: Norton.

- Pietikäinen, S., Lane, P., Salo, H., & Laihiala-Kankainen, S. (2011). Frozen actions in the Arctic linguistic landscape: A nexus analysis of language processes in visual space. *International Journal of Multilingualism*, 8(4), 277-298.
- Plowman, L. (2016). Rethinking context: Digital technologies and children's everyday lives. *Children's Geographies*, 14(2), 190-202.
- Plowman, L. McPake, J. & Stephen, C. (2012). Extending opportunities for learning: the role of digital media in early education. In: S. Suggate & E. Reese (Eds.). *Contemporary debates in childhood education and development* (pp. 95-104). Abingdon: Routledge.
- Plowman, L., & Stevenson, O. (2013). Exploring the Quotidian in Young Children's Lives at Home. *Home Cultures*, 10(3), 329-347.
- Plowman, L., McPake, J., & Stephen, C. (2010). The technologisation of childhood? Young children and technologies at home. *Children and Society*, 24(1), 63-74.
- Plowman, L., Stevenson, O., Stephen, C., & McPake, J. (2012). Preschool children's learning with technology at home. *Computers & Education*, 59(1), 30-37.
- Postill, J. (2010). Introduction: Theorising media and practice. In B. Bräuchler, & J. Postill (Eds.). *Theorising Media and Practice*. Oxford and New York: Berghahn.
- Potter, J. (2009). *Curating the self: Media literacy and identity in digital video production by young learners*. (Unpublished doctoral dissertation). University College London, London.
- Potter, J., & McDougall, J. (2017). *Digital media, culture and education: theorising third space literacies*. London: Palgrave Macmillan.
- Potter, J. (2018). Problematizing learning in the age of data 'acquisition': issues in research, teaching and learning with digital media and technology. *Learning, Media and Technology*, 43(2), pp. 117-118.
- Prensky, M. (2006). *Don't bother me, Mom, I'm learning!: How computer and video games are preparing your kids for 21st century success and how you can help!* St. Paul, MN: Paragon house.
- Priede, C., & Farrall, S. (2011). Comparing results from different styles of cognitive interviewing: 'Verbal probing' vs. 'thinking aloud'. *International Journal of Social Research Methodology*, 14(4), 271-287.
- Prinsloo, M. & Breier, M. (1996). *The Social Uses of Literacy: Theory and Practice in Contemporary South Africa*. Amsterdam: John Benjamins Publishing Company.
- Prout, A. (2005). *The Future of Childhood*. London and New York: Routledge.
- Public Health England (2013). *How healthy behaviour supports children's wellbeing*. Retrieved from <https://www.gov.uk/government/publications/how-healthy-behaviour-supports-childrens-wellbeing>
- Qvortrup, J., Bardy, M., Sgritta, G., & Wintersberger, H. (1994). *Childhood matters: Social theory, practice and politics*. Aldershot: Avebury.

- Rautio, P. (2013). Children who carry stones in their pockets: On autotelic material practices in everyday life. *Children's Geographies*, 11(4), 394-408.
- Rautio, P., & Jokinen, P. (2016). Children's Relations to the More-than-Human World Beyond Developmental Views. In B. Evans, J. Horton, & T. Skelton (Eds.). *Play and Recreation, Health and Wellbeing* (pp. 35-49). Singapore: Springer.
- Reay, D. (2006). The zombie stalking English schools: Social class and educational inequality. *British Journal of Educational Studies*, 54(3), 288-307.
- Reckwitz, A. (2002). Toward a theory of social practices: A development in culturalist theorizing. *European Journal of Social Theory*, 5(2), 243-263.
- Richardson, L. (1998). Writing a method of inquiry. In N. K. Denzin & Y. S. Lincoln (Eds.). *Collecting and Interpreting Qualitative Materials* (pp. 345-71). Thousand Oaks, CA: Sage.
- Rideout, V. (2011). *Zero to Eight: Children's Media Use in America*. San Francisco: Common Sense Media.
- Ritzer, G. (1998). *The McDonaldization thesis: Explorations and extensions*. London: Sage.
- Robinson, M. (1997). *Children Reading Print and Television*. London: Routledge Falmer.
- Rockhill, K. (1987) 'Literacy as threat/desire: longing to be somebody'. In J. S. Gaskill & A. T. McLaren (Eds.). *Women and Education: A Canadian Perspective*. Calgary: Deselig.
- Rockhill, K. (1993). 'Gender, language and the politics of literacy'. In B. Street (Ed.). *Cross-cultural Approaches to Literacy*. Cambridge: Cambridge University Press.
- Rooney, T. (2016). Putting time aside: Navigating the flow of becoming in a posthuman world. *Global Studies of Childhood*, 6(2), 190-198.
- Rowell, J. & Pahl, K. (2007). Sedimented identities in texts: Instances of practice. *Reading Research Quarterly*, 42(3), 388-401.
- Ruppert, E., J. Law, & M. Savage. 2013. Reassembling Social Science Methods: The Challenge of Digital Devices. *Theory, Culture and Society*, 30(4), 22-46.
- Russell, M. J. (2018, April). Digital Technology: Take control. Nursery World. Retrieved from https://www.nurseryworld.co.uk/nursery-world/feature/1164270/digital-technology-take-control?_llca=transfer%3A5792bfe657ac3bc1455355541a8bdd4&_llch=59d37bc6ffe73243315b7a8a41a82dda2062af4c47761ff3b2e2c0c5583bbd78
- Ryberg, T., & Larsen, M. C. (2008). Networked identities: understanding relationships between strong and weak ties in networked environments. *Journal of Computer Assisted Learning*, 24(2), 103-115.
- Sacks, H. (1992). Notes on methodology. In J. Maxwell Atkinson & J. Heritage (Eds.). *Structures of Social Action: Studies in Conversation Analysis* (pp. 21-27). Cambridge: Cambridge University Press.
- Sahlberg, P. (2011). *Finnish Lessons: What can the world learn from educational change in Finland?* New York: Teachers College Press.

- Sale, J. E., Lohfeld, L. H., & Brazil, K. (2002). Revisiting the quantitative-qualitative debate: Implications for mixed-methods research. *Quality and quantity*, 36(1), 43-53.
- Salomon, G. (1991). Transcending the qualitative-quantitative debate: The analytic and systemic approaches to educational research. *Educational Researcher*, 20(6), 10-18.
- Samuels, A. & Taylor, M. (1994). Children's ability to distinguish fantasy events from real-life events. *British Journal of Developmental Psychology*, 12(4), 417-427.
- Schatzki, T. (1996). *Social Practices. A Wittgensteinian Approach to Human Activity and the Social*. Cambridge: Cambridge University Press.
- Schatzki, T. (2001). Introduction: Practice Theory. In: T. Schatzki, K. Knorr Cetina & E. von Savigny (Eds.). *The Practice Turn in Contemporary Theory* (pp. 1-14). London: Routledge.
- Schatzman, L., & Strauss, A. L. (1973). *Field research: Strategies for a natural sociology*. Englewood Cliffs, N.J.: Prentice Hall.
- Scheibe, C. (2007). Piaget and Power Rangers: What can theories of developmental psychology tell us about children and media? In S. R. Mazzarella (Ed.), *20 Questions about Youth and the Media* (pp. 61-72). New York: Peter Lang.
- Schmidt, M. E., Pempek, T. A., Kirkorian, H. L., Lund, A. F., & Anderson, D. R. (2008). The effects of background television on the toy play behavior of very young children. *Child development*, 79(4), 1137-1151.
- Scollon, R. (2001). Action and Text: Towards an integrated understanding of the place of text in social (inter) action, mediated discourse analysis and the problem of social action. In R. Wodak and M. Meyer (Eds.) *Methods of Critical Discourse Analysis* (pp. 139-183). London: Sage.
- Scollon, R. and Scollon, S. W. (2004). *Nexus analysis: Discourse and the emerging internet*. New York: Routledge.
- Scott, F. L. (2016). Young children's digital literacy practices at home: Social, physical and classed. In I. Pererira, A. Ramos & J. Marsh (Eds.), *The digital literacy and multimodal practices of young children: Engaging with emergent research. Proceedings of the first training school of COST action IS1410. Braga, Portugal: University of Minho 6th-8th June, 2016*. Retrieved from <http://digitlity.eu>
- Scott, F. L. (2018). Troublesome binaries: Play and learning on screen and of. In P. K. Smith & J. Roopnarine (Eds.) *The Cambridge Handbook of Play: Developmental and Disciplinary Perspectives*. Cambridge: Cambridge University Press.
- Scott, F. L. & Marsh, J. A. (2018). Digital Literacies in Early Childhood. In G. Noblit et al. (Eds.), *The Oxford Research Encyclopedia of Education*. USA: Oxford University Press.
- Scott, F. L. and Bird, J. (2019). Adults researching preschoolers in more-than-human contexts: rethinking ethnographer roles in the age of the Anthropocene. In V. Reyes, A. Nye, J. Charteris & S. Mavropoulou (Eds.). *Educational Research in the Age of the Anthropocene*. Pennsylvania: I.G.I. Global.

- Scott, F. L., Jones, C. R., & Webb, T. L. (2014). What do people living in deprived communities in the UK think about household energy efficiency interventions? *Energy Policy*, 66, 335-349.
- Sefton-Green, J., Marsh, J., Erstad, O., & Flewitt, R. (2016). *Establishing a research agenda for the digital literacy practices of young children: A White Paper for COST Action IS1410*. Retrieved from <http://digilitey.eu/wp-content/uploads/2015/09/DigiLitEYWP.pdf>
- Seiter, E. (1993). *Sold Separately: Children and Parents in Consumer Culture*. New Brunswick, New Jersey: Rutgers University Press.
- Seiter, E. (1998). Children's Desires/ Mothers Dilemmas: The Social Contexts of Consumption. In H. Jenkins (Ed.), *The Children's Culture Reader* (pp. 297-317). New York: New York University Press.
- Seiter, E. (1999). *Television and new media audiences*. Oxford: Clarendon Press.
- Seyd, S. G. (2002). *A Citizen Audit for Britain Full Research Report*. Retrieved from <http://www.researchcatalogue.esrc.ac.uk/grants/L215252025/outputs/read/f14368a1-2896-4e4e-8c0c-ab8ddbdf8dab>
- Signorielli, N. (1990). Children, television, and gender roles: Messages and impact. *Journal of Adolescent Health*, 11(1), 50-58.
- Silverman, D. (2015). *Interpreting qualitative data, 5th Edition*. London: Sage.
- Simons, H. (1996). The paradox of case study. *Cambridge Journal of Education*, 26(2), 225-240.
- Singer, J. L. & Singer, D. G. (1983). Psychologists Look at Television. *American Psychologist* 38(7), 826-834.
- Slonim, R., Wang, C., Garbarino, E., & Merrett, D. (2013). Opting-in: Participation bias in economic experiments. *Journal of Economic Behavior & Organization*, 90, 43-70.
- Spencer, T., Knobel, M., & Lankshear, C. (2013). Researching young children's out-of-school literacy practices. In J. Larson, & J. Marsh (Eds.), *The SAGE handbook of early childhood literacy, 2nd Edition*. (pp. 133-161). London: SAGE Publications Ltd.
- Squire, C. (2010). Press replay–Introduction to special section on rereading Valerie Walkerdine's 'Video replay: Families, films and fantasy'. *Psychoanalysis, Culture & Society*, 15(4), 376-384.
- Stephen, C. & Plowman, L. (2014). Digital Play. In: L. Brooker, M. Blaise & S. Edwards (Eds.). *SAGE Handbook of Play and Learning in Early Childhood*. London: SAGE.
- Street, B. (1993). *Introductory paper for Conference on Sustaining Local Literacies: People, Language and Power*, Reading University, 19-20 March, 1993. Published online. Retrieved from <https://files.eric.ed.gov/fulltext/ED359842.pdf>
- Street, B. (1997). The implications of the new literacy studies for education. *English in Education*, 31(3), 45-59.
- Sutton-Smith, B. (1994). Paradigms of intervention. In J. Hellendoorn, R. van der Kooij & B. Sutton-Smith (Eds.). *Play and intervention*. New York: SUNY Press.

- Sweney, M. (2017, July 7) Ofcom: young people watch a third less TV on sets as they move online. *The Guardian*. Retrieved from <https://www.theguardian.com/tv-and-radio/2017/jul/07/ofcom-young-people-watch-a-third-less-broadcast-tv-as-they-move-online>
- Synthesis, n. (2018). In *Oxford English Dictionary Online*. Oxford: Oxford University Press. Retrieved from: <http://www.oed.com/view/Entry/196574?redirectedFrom=synthesis>
- Tamis-LeMonda, C. S. & Bornstein, M. H. (2002). Maternal responsiveness and early language acquisition. *Adv. Child Develop. Behaviour*, 29, 89–127.
- Tammivaara, J., & Enright, D. S. (1986). On eliciting information: Dialogues with child informants. *Anthropology & Education Quarterly*, 17(4), 218-238.
- Tangney, J. P. & Feshbach, S. (1988). Children's Television-Viewing Frequency: Individual Differences and Demographic Correlates. *Personality and Social Psychology Bulletin*, 14(1), 145-158.
- Tartari, V., & Breschi, S. (2012). Set them free: scientists' evaluations of the benefits and costs of university–industry research collaboration. *Industrial and Corporate Change*, 21(5), 1117-1147.
- Taylor, R. (2014). Meaning between, in and around words, gestures and postures–multimodal meaning-making in children's classroom discourse. *Language and education*, 28(5), 401-420.
- Thiel, J. J. (2015). " Bumblebee's in Trouble!" Embodied Literacies during Imaginative Superhero Play. *Language Arts*, 93(1), 38-49.
- Thompson, J. (1992). Editor's Introduction. In P. Bourdieu. (Ed. J. Thompson). *Language and Symbolic Power* (pp. 1-31). Cambridge, MA: Harvard University Press.
- Thomson, P., & Gunter, H. (2011). Inside, outside, upside down: the fluidity of academic researcher 'identity' in working with/in school. *International Journal of Research & Method in Education*, 34(1), 17-30.
- Thomson, R., Bell, R., Holland, J., Henderson, S., McGrellis, S., & Sharpe, S. (2002). Critical moments: choice, chance and opportunity in young people's narratives of transition. *Sociology*, 36(2), 335-354.
- Thorpe, K., Hansen, J., Danby, S., Zaki, F. M., Grant, S., Houen, S., ... & Given, L. M. (2015). Digital access to knowledge in the preschool classroom: Reports from Australia. *Early Childhood Research Quarterly*, 32, 174-182.
- Tobin, J. (2000). *"Good Guys Don't Wear Hats": Children's Talk about the Media*. Williston, VT: Teachers College Press.
- Tomkins, S. (1963). *Affect imagery consciousness, Vol. II. The negative affects*. New York: Springer.
- Van den Bulck, J., Custers, K., & Nelissen, S. (2016). The child-effect in the new media environment: Challenges and opportunities for communication research. *Journal of Children and Media*, 10(1), 30-38.
- Van Maanen, J. (1995). An end to innocence: the ethnography of ethnography. In J. Van Maanen (Ed.). *Representation in Ethnography* (pp. 1-35). Thousand Oaks: Sage Publications Ltd.

- Van Someren, M. W., Barnard, Y. F., & Sandberg, J. A. (1994). *The think aloud method: A practical guide to modelling cognitive processes (Vol. 2)*. London: Academic Press.
- Vandewater, E. A., Seoung-Eun, P., Huang, X., & Wartella, E. A. (2005). "No -- you can't watch that': Parental rules and young children's media use. *American Behavioral Scientist*, 48(5), 608-623.
- Voigt, L. F., Koepsell, T. D., & Daling, J. R. (2003). Characteristics of telephone survey respondents according to willingness to participate. *American Journal of Epidemiology*, 157(1), 66-73.
- Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Cambridge, MA: Harvard University Press.
- Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Cambridge, MA: Harvard University Press.
- Walkerdine, V. (1986). Video Replay: Families, films and fantasy. In V. Burgin, J. Donald, & C. Kaplan (Eds.). *Formations of Fantasy* (pp. 167-199). London: Methuen.
- Ward, L. M., Hansbrough, E., & Walker, E. (2005). Contributions of music video exposure to black adolescents' gender and sexual schemas. *Journal of Adolescent Research*, 20(2), 143-166.
- Warde, A. (2005). Consumption and theories of practice. *Journal of Consumer Culture*, 5, 131-53.
- Wargo, J. M. (2017). Rhythmic rituals and emergent listening: Intra-activity, sonic sounds and digital composing with young children, *Journal of Early Childhood Literacy*, 17(3), 392-408.
- Warren, R. (2001). In words and deeds: Parental involvement and mediation of children's television viewing. *Journal of Family Communication*, 1, 211-231.
- Warren, R. (2003). Parental mediation of preschool children's viewing. *Journal of Broadcasting & Electronic Media*, 48, 87-111.
- Wartella, E., Beaudoin-Ryan, L., Blackwell, C. K., Cingel, D. P., Hurwitz, L. B., & Lauricella, A. R. (2016). What kind of adults will our children become? The impact of growing up in a media-saturated world. *Journal of Children and Media*, 10(1), 13-20.
- Weinberger, J. (1993). *A longitudinal study of literacy experiences, the role of parents, and children's literacy development*. (Unpublished doctoral dissertation). The University of Sheffield, Sheffield.
- Wells, G. (1985). Pre-school literacy-related activities and success in school. In D. R. Olson, N. Torrance & A. Hildyard (Eds.). *Literacy, language and learning*. Cambridge: Cambridge University Press.
- Wells, G. (1987). *The meaning makers: children learning language and using language to learn*. London: Hodder and Stoughton.
- Wertsch, J. V. (1991). *Voices of the mind: A sociocultural approach to mediated action*. Cambridge, MA: Harvard University Press.
- Wiecha, J. L., Sobol, A. M., Peterson, K. E., & Gortmaker, S. L. (2001). Household television access: associations with screen time, reading, and homework among youth. *Ambulatory Pediatrics*, 1(5), 244-251.

- Willett, R. (2011). An ethnographic study of preteen girls' play with popular music on a school playground in the UK. *Journal of Children and Media*, 5(4), 341-357.
- Williams, P. A., Haertel, E. H., Haertel, G. D., & Walberg, H. J. (1982). The impact of leisure-time television on school learning: A research synthesis. *American educational research journal*, 19(1), 19-50.
- Williams, R. (1967). *Communications*. London: Pelican.
- Winn, M. (2002). *The Plug-In Drug: Television, Computers, and Family Life*. New York: Penguin Books.
- Wohlwend, K. (2013). Playing Star Wars under the teacher's radar: Detecting kindergartner's action texts and embodied literacies. In V. Vasquez & J. Wood (Eds.), *Perspectives and provocations in early childhood education* (pp. 105–116). Charlotte, NC: Information Age.
- Wohlwend, K. E. (2009). Mediated discourse analysis: Researching young children's non-verbal interactions as social practice. *Journal of Early Childhood Research*, 7(3), 228-243.
- Wohlwend, K. E. (2012). *Constructing the child at play: From the schooled child to technotoddlers and back again*. [Webinar]. Retrieved from https://www.youtube.com/watch?v=M_FEOZBt_Mg
- Wohlwend, K. E., Peppler, K. A., Keune, A., & Thompson, N. (2017). Making sense and nonsense: Comparing mediated discourse and agential realist approaches to materiality in a preschool makerspace. *Journal of Early Childhood Literacy*, 17(3), 444-462.
- Wolgemuth, J. R., Erdil-Moody, Z., Opsal, T., Cross, J. E., Kaanta, T., Dickmann, E. M., & Colomer, S. (2014). Participants' experiences of the qualitative interview: considering the importance of research paradigms. *Qualitative Research*, 15(3), 351-372.
- Woodfall, A., & Zezulcova, M. (2016). What 'children' experience and 'adults' may overlook: phenomenological approaches to media practice, education and research. *Journal of Children and Media*, 10(1), 98-106.
- Yamada-Rice, D. et al. (2017). *Children and Virtual Reality: Emerging Possibilities and Challenges*. Retrieved from <http://researchonline.rca.ac.uk/3553/1/Yamada-Rice%20CVR%202017.pdf>
- Zack, E., Barr, R., Gerhardstein, P., Dickerson, K., & Meltzoff, A. N. (2009). Infant imitation from television using novel touch screen technology. *British Journal of Developmental Psychology*, 27(1), 13-26.
- Zaman, B., Nouwen, M., Vanattenhoven, J., De Ferrerre, E., & Looy, J. V. (2016). A qualitative inquiry into the contextualized parental mediation practices of young children's digital media use at home. *Journal of Broadcasting & Electronic Media*, 60(1), 1-22.

9. APPENDICES

Appendix A: Original Project proposal

Prospective Postgraduates

ESRC PhD Collaborative Studentship



Young children's engagement with television and related media in the digital age

Principal Supervisor: Professor Jackie Marsh (<http://www.shef.ac.uk/education/staff/academic/marshj>), School of Education, University of Sheffield

Co-supervisor: Dr Rebecca Parry (<http://www.education.leeds.ac.uk/people/staff/academic/parry>), School of Education, University of Leeds

The student will be registered at the University of Sheffield.

This three year ESRC-funded studentship is a collaboration between CBeebies and the Universities of Sheffield and Leeds. The proposed study will focus on young children's engagement with television in the digital age. In recent years, children's television consumption has become firmly embedded in an intertextual, multimedia network in which programmes can be watched on demand across a range of media platforms, some transportable, and children can engage in play with products/ artefacts/ sites related to the programmes in offline and online contexts. There is a need to understand how children's television viewing is undertaken in this complex media landscape. In addition, there is a need to identify what factors influence children's choices as they move across channels and platforms and how their viewing patterns change at key transition points in their lives e.g. starting nursery or school. The objectives of the study are to:

- (i) identify television-viewing patterns of 3-6 year-olds;
- (ii) examine the relationship between children's television viewing and their engagement with other media, digital technologies and related texts and artefacts;
- (iii) analyse the transitions in children's programme and channel choices and related activities over time and at key points e.g. the move from nursery to primary school;
- (iv) identify the implications of the findings for CBeebies programme development, the children's media industry, parents and early years educators.

The project will involve a mixed-methods study involving a large-scale survey of parents of children aged from 3 to 6 and qualitative case studies of a small group of children across this age group as they consume television and related media in the home over an extended period of time. The study will focus on families from economically and socially disadvantaged communities, given the lack of research in this area.

The successful student will have an opportunity to undertake a two-week internship at CBeebies at MediaCityUK, Salford in order to develop knowledge about the children's television industry.

How to apply

Applicants must have an upper second class UK honours degree or equivalent and a Masters degree in a relevant subject area.

Applicants should submit the following documents to: MPhil-PhD@sheffield.ac.uk (mailto:MPhil-PhD@sheffield.ac.uk)

- A CV.
- A personal statement indicating how your qualifications, experience and research interests make you a suitable candidate for this scholarship.
- Full transcripts of previous undergraduate and postgraduate qualifications including Grading System and IELTS/TOEFL Certificate.
- A piece of academic writing, such as an essay, dissertation or article.
- Two academic references.

Closing date: Friday, March 15th, 2013

Interviews will be held on Monday April 8th at CBeebies, MediaCityUK, Salford (any travel costs incurred to be met by applicant).

Further information

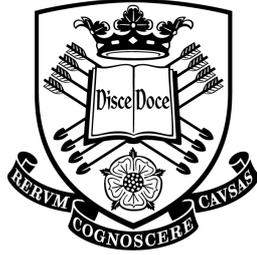
The School of Education at the University of Sheffield is part of the ESRC White Rose Doctoral Training Centre (<http://wrdoc.ac.uk/>). The successful applicant will be a member of the Centre for the Study of Literacies (<http://www.sheffield.ac.uk/education/research/groups/csnl>) (<http://www.sheffield.ac.uk/education/research/groups/csnl>).

The successful applicant will have their PhD fees paid at the appropriate level for three years and will also receive an annual stipend equal in value to the ESRC standard maintenance award (£13,726 in 2013-14) over this period. The studentship is subject to normal ESRC eligibility criteria (<http://esrc.ac.uk/funding-and-guidance/guidance/postgraduates/prospective-students/eligibility/index.aspx>) and is available on a full-time basis only.

Any queries should be directed to Professor Jackie Marsh (email: j.a.marsh@sheffield.ac.uk) (<mailto:j.a.marsh@sheffield.ac.uk>). Successful candidates will be notified by the end of April at the latest.

Appendix B: Changes to the survey following pilot testing

Change	Source
In question on time spent watching, splitting response about watching TV on demand or catch up into three options: Watching 'catch-up' or 'on demand' TV on the TV set (e.g. Sky Plus, BBC iPlayer); Watching 'catch-up' or 'on-demand' TV on a computer or laptop (e.g. 4oD, BBC iPlayer); and Watching 'catch-up' or 'on-demand' TV on a tablet device or mobile phone	CBeebies
Added question about CBeebies sub-brands (Octonauts, Mike the Knight etc.) in addition to question about CBeebies as a brand	CBeebies
Tree Fu Tom added to CBeebies show question	CBeebies / supervisor
Corrected typo: 'handheld hand'	CBeebies/ Children's Media Foundation
BBC iPlayer added to question on catch up TV	Children's Media Foundation
In question on catch up TV, <i>YouTube</i> was described as 'user-made clips'. Edited to 'short-form videos and clips' as <i>YouTube</i> no longer perceived in this way	Children's Media Foundation
In question on how often the TV is on, 'the' TV edited to 'any TV' as there may be several	Children's Media Foundation
In question on what children use devices for, 'Video game like play station or x box' changed to 'consoles like play station or xbox'. The question leads the mind to 'games', whilst children might watch TV or socialise on these devices	Children's Media Foundation
First question on time spent watching with children changed from portions of time to hours specifically	Children's Media Foundation
Questions on time spent watching with children changed from 'their programmes' and 'your programmes' to 'children's programmes' and 'non-children's programmes'	Children's Media Foundation
Moved position of CBeebies logo after the question header for clarity	Children's Media Foundation
'Arab' added as an ethnicity option	Think Aloud
'How many other children do you have' edited to 'how many other children live with you?'	Think Aloud
'Prefer not to say' added as a gender option in 'how many other children live with you?' question for consistency	Think Aloud
'Years and months' added to 'what are their ages' question for consistency	Think Aloud
'On an average day' edited to 'on an average weekday' in question on time spent on activities question	Think Aloud
'Never' edited to 'rarely or never' for time spent on activities question	Think Aloud
The following question edited down (too long, impacts on comprehension): 'In general, do the media in your home—TVs, computers, video games, and mobile devices—cause your family to spend more time together with other family members, less time together with other family members, or don't they make much difference one way or the other?'	Think Aloud reflection
1-2 hours box added as was previously missing	Think Aloud
How often do you (or another parent/carer) watch children's TV with your child?' edited to 'How much time <i>per day</i> '	Think Aloud
The questionnaire already had a question about what children during the time they watch TV. A second question was added to investigate what they do after watching TV	Think Aloud
The following question: edited from: 'How often does your child watch non-children's TV with you' to: 'How often does your child watch TV not specifically targeted at children'	Think Aloud
The following question: edited from: 'What do you think your child mainly uses the following FOR?' to: 'What is the main purpose you let or encourage your child to use the following FOR?'	Think Aloud
Added 'leave row blank if they never use' to question about using devices/ platforms for purposes	Think Aloud
Open ended comment box added to end of questionnaire	Think Aloud reflection
Question added: how many hours does your child spend in school or nursery a week	Think Aloud reflection



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Young Children's Engagement with Television and Related Media in the Digital Age

Questionnaire for Parents/ Carers

This research is funded by the Economic and Social Research Council



Please read the following notes before beginning the questionnaire

This questionnaire will ask you about your child and television. **Please answer only about the child who attends the nursery/ early years setting which gave you this form** and return it to them once you have completed it.

There are no right or wrong answers to the questions; we are just interested in your family's experiences. Your responses will remain **confidential** and we will not identify any individual in our future reporting. Please be aware that you are not obliged to participate in this research. If you do not want to answer a particular question, you can leave it blank.

Our hope is that your answers will help us understand how children engage with television today. If you have any questions relating to this questionnaire, you can contact: **Fiona Scott** – email: flscott1@sheffield.ac.uk

Section 1: About you and your family

1.1 Which of these best describes the sort of work YOU do and your PARTNER does. (If not working now, please say what you did in your last job). *Put a tick in ONE box for you and ONE box for your partner. Leave second column blank if you do not have a partner.*

	You	Your partner
Professional or technical work (e.g. doctor, accountant, schoolteacher, social worker, computer programmer)	<input type="checkbox"/>	<input type="checkbox"/>
Manager or administrator (e.g. company director, manager, executive officer, local authority officer)	<input type="checkbox"/>	<input type="checkbox"/>
Clerical (e.g. clerk, secretary, telephone operator)	<input type="checkbox"/>	<input type="checkbox"/>
Sales (e.g. commercial traveller, shop assistant)	<input type="checkbox"/>	<input type="checkbox"/>
Supervisor (e.g. construction supervisor, plant foreman/woman)	<input type="checkbox"/>	<input type="checkbox"/>
Skilled manual work (e.g. plumber, electrician, fitter, train driver, cook, hairdresser)	<input type="checkbox"/>	<input type="checkbox"/>
Semi-skilled or unskilled manual work (e.g. machine operator, assembler, postman, waitress, cleaner, labourer)	<input type="checkbox"/>	<input type="checkbox"/>
Full time parent	<input type="checkbox"/>	<input type="checkbox"/>
Never worked	<input type="checkbox"/>	<input type="checkbox"/>

Other (please describe)

1.2 What is your HIGHEST educational qualification? *Put a tick in ONE box*

Higher Education or Vocational Level 4 and above

A Level or Vocational Level 3

GCSE or O Level grades A*-C or Vocational Level 2

GCSE or O Level grades D-G or Vocational Level 1

Other qualifications: level unknown

No qualifications

1.3 How would you describe your own gender? *Put a tick in ONE box*

Female

Male

Other

Prefer not to say

1.4 What is your child's age (in years and months)?

Write the numbers in the boxes below

years

months

1.5 How many hours does your child

spend in nursery or school per week?

hours

1.6 How would you describe your child's gender? *Put a tick in ONE box*

Girl

Boy

Other

Prefer not to say

1.7 Please choose the term below that you feel most accurately describes your child's ethnic group. *Put a tick in ONE box*

White – British

Asian/Asian British - Chinese

White – Irish

Asian – Other background

White – Other background

Arab

Black/Black British – Caribbean

Mixed – White & Black (Caribbean)

- | | |
|--|--|
| <input type="checkbox"/> Black/Black British – African | <input type="checkbox"/> Mixed – White & Black (African) |
| <input type="checkbox"/> Black – Other background | <input type="checkbox"/> Mixed – White & Asian |
| <input type="checkbox"/> Asian/Asian British – Indian | <input type="checkbox"/> Mixed – Other background |
| <input type="checkbox"/> Asian/Asian British – Pakistani | <input type="checkbox"/> Other ethnic background |
| <input type="checkbox"/> Asian/Asian British – Bangladeshi | <input type="checkbox"/> I would prefer not to answer |

1.8 What is your relationship to this child (e.g. mother/ father/ carer)

.....

1.9 How many other children live with you? Write the total numbers in the boxes (leave blank if you have no other children)

Girls	<input type="text"/>	Boys	<input type="text"/>	Other	<input type="text"/>	Prefer not to say	<input type="text"/>
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1.10 What are their ages (in years and months)? Write ALL their ages below

.....

Section 2: About your child’s engagement television and related media

2.1 What are your child’s favourite TV programmes?

- | | | |
|----|----|----|
| 1. | 2. | 3. |
|----|----|----|

2.2 What are your child’s favourite TV channels?

- | | | |
|----|----|----|
| 1. | 2. | 3. |
|----|----|----|

2.3 Who does your child do the following WITH, most of the time? Put a tick in ONE box on each row.

Usually on own	Usually on own, but has help occasionally	Usually with another e.g. sibling or friend	Usually with child with an adult	Usually with an adult	Rarely or never does this
----------------	---	---	----------------------------------	-----------------------	---------------------------

Watching live TV	<input type="checkbox"/>				
Watching a video or DVD	<input type="checkbox"/>				
Watching 'catch-up' TV on the TV set	<input type="checkbox"/>				
Watching 'on-demand' TV on a computer or laptop	<input type="checkbox"/>				
Watching user-made clips online (e.g. YouTube)	<input type="checkbox"/>				
Using the family computer or laptop	<input type="checkbox"/>				
Using a tablet device	<input type="checkbox"/>				
Using a mobile phone	<input type="checkbox"/>				
Playing video games like PlayStati	<input type="checkbox"/>				

on or
XBox

Using
books

2.4 On an average weekday, how much TIME would your child spend on these activities? *Put a tick in ONE box on each row.*

	Rarely or never	Less than 1 hour	1-2 hours	3-4 hours	4 hours +
Watching live TV on a TV set	<input type="checkbox"/>				
Watching live TV on another device (e.g. laptop or tablet)	<input type="checkbox"/>				
Watching a video or DVD	<input type="checkbox"/>				
Watching 'catch-up' or 'on demand' TV on the TV set (e.g. Sky Plus, BBC iPlayer)	<input type="checkbox"/>				
Watching 'catch-up' or 'on-demand' TV on a computer or laptop (e.g. 4oD, BBC iPlayer)	<input type="checkbox"/>				
Watching 'catch-up' or 'on-demand' TV on a tablet device or mobile phone	<input type="checkbox"/>				
Watching paid 'on-demand' services such as Amazon Prime or Netflix	<input type="checkbox"/>				
Watching short-form videos or clips online (e.g. YouTube, Vine)	<input type="checkbox"/>				
Playing digital games on a tablet device or mobile phone	<input type="checkbox"/>				
Playing video games like PlayStation or XBox	<input type="checkbox"/>				
Playing outside	<input type="checkbox"/>				
Reading/ 'pretending' to read	<input type="checkbox"/>				

Being read to by someone else

2.5 In general, do the media in your home—TVs, computers, video games, and mobile devices—cause your family to spend more time together, less time together, or don't they make much difference one way or the other? *Put a tick in ONE box*

More time together Less time together It doesn't make much difference

2.6 How often, if ever, does your child use more than one type of media at a time, for example, play a handheld device while watching TV or listening to music? *Put a tick in ONE box*

Always Most of the time Some of the time Hardly ever Never

2.7 Which of these best describes your television subscription? *Tick ALL that apply.*

Freeview or Freesat (no monthly subscription charge)
Satellite or Cable (e.g. Sky, BT or Virgin Media)
On-demand streaming subscription (e.g. Netflix or Amazon Prime)

2.8 When someone is at home, how often is any TV on, even if no one is actually watching it? *Put a tick in ONE box*

Always Most of the time Some of the time Hardly ever Never

2.9 How much time per day do you (or another parent or carer) watch children's TV with your child? *Put a tick in ONE box*

Less than 1 hour 1-2 hours 3-4 hours 4 hours + Never

2.10 Which of the following does your child do when they watch TV? *Tick ALL that apply.*

Sings Talks about programme/film Sits quietly and concentrates on TV

Consoles like PlayStation or Xbox	<input type="checkbox"/>				
Books	<input type="checkbox"/>				
Toys	<input type="checkbox"/>				

2.15 How often does your child engage with CBeebies in ANY of these ways? *Put a tick in ONE box*



CBeebies is the BBC's brand for children aged 6 and under. Their provision includes the CBeebies television channel, website, tablet and smartphone app, as well as a variety of physical books, toys and games.

Always Most of the time Some of the time Hardly ever Never

2.16 How often does your child engage with the following in ANY way (e.g. television show, website, physical book, toy or game)? *Put a tick in ONE box on each row*

	Always	Most of the time	Some of the time	Hardly ever	Never
Mike the Knight	<input type="checkbox"/>				
Octonauts	<input type="checkbox"/>				
Tree Fu Tom	<input type="checkbox"/>				

2.17 Finally, is there anything more you'd like to tell us about your family and television that we didn't give you a chance to talk about in this survey? *Please write below.*

3: PRIZE DRAW

3.1 We would like to enter you into a prize draw for the chance to win a **£50 shopping voucher**. *If you would like to be entered into our prize draw, please leave your contact details below.*

Name: _____

Contact (telephone number or email address): _____

3.2 We are planning to do some further research about children and television and will offer **TV goodie bags** to the families involved. Are you happy for us to contact you with more information about taking part?

Yes No

THANK YOU FOR TAKING THE TIME TO ANSWER OUR QUESTIONS! PLEASE RETURN THIS FORM TO YOUR CHILD'S NURSERY/ SETTING.

Please remember: All responses to this questionnaire will be treated in confidence. If you have any questions relating to this questionnaire, you can contact:

Fiona Scott – email: flscott1@sheffield.ac.uk



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Appendix D: Survey distribution methods and responses

Source	Method	Dates	Responses received	Additional methodological detail	Est. target
<i>CBeebies</i> channels	Online survey	Nov 2014	974	N/A.	N/A.
Setting 1	Manual completion	Dec 2014	31	The children were taking part in a Nativity Play on the 16 th (Foundation Stage) and 17 th (KS1) December 2014. Researcher arrived in advance of the parents and handed out surveys face to face across the classrooms and in the hall where the nativity was taking place, asking them to complete the survey there and then or take it home and hand it back to a teacher in the next few days. Collection box then left at school for late returns. Researcher targeted parents across 3 Foundation Stage classes (total of 71 children) and a Key Stage 1 class (unknown how many children of appropriate age).	100
Setting 2	Manual completion	Nov 2014	33	Researcher dropped questionnaires off with a Foundation Stage teacher to distribute to the parents (27 th November, 2014). Researcher had no personal contact with parents. Collection box left at school for late returns. Researcher targeted parents of 170 children in total.	170
Setting 3	Online survey	Nov 2014	25	Parents were sent an email with a link to the survey and a second reminder email (18 th November, 2014). A number of paper surveys were also dropped off at the Union Nursery for any parents who preferred to complete the questionnaire face to face. 34 parents had a child aged 3-6 at the nursery. However, the email was sent to all 90 parents using the nursery, in case they had a child of this age not currently in nursery.	90
Setting 4	Manual completion	Nov – Dec 2014	17	Questionnaire placed in every relevant child's pigeonhole. Researcher also visited to speak to parent face to face on 2 days (morning drop off and lunchtime drop off, 25 th and 26 th November, 2014). Parents were asked to complete the survey there and then or take it home and hand it back to a teacher in the next few days. Box then left for late returns (collected 16 th December). A contact at the nursery school suggested that approximately 75 parents had a child of the appropriate age.	75

Setting 5	Manual completion	Nov – Dec 2014	25	Researcher attended a coffee morning with parents (28 th November, 2014) and asked them to complete the survey there and then or take it home and hand it back to a teacher in the next few days. Same method used at morning drop-off for a further two days (1 st and 2 nd December, 2014). Box then left for late returns. A contact at the nursery school suggested that the nursery had approximately 61 children of an appropriate age (51 x 3 ¼ to 4 ½ year olds; 10 x children in the 'transition group' who had recently turned 3).	61
Setting 6	Manual completion	Dec 2014	28	Researcher attended at drop offs for various classes and handed out surveys face to face across the classrooms, asking parents to complete the survey there and then or take it home and hand it back to a teacher in the next few days (3 rd , 4 th , 9 th , 10 th and 11 th December). Box then left for late returns. A contact at the nursery school suggested that the nursery had approximately 160 children of an appropriate age across nursery, two Foundation Stage classes and Year One.	160
Setting 7	Manual completion	Jan 2015	32	No observations made.	N/A
Setting 8	Manual completion	March 2015	25	Researcher attended a primary school parents' evening (3 rd March), targeting parents who had children aged 0-6 and were waiting to be seen. Researcher was present and able to assist parents with assisted completed where desired. This was particularly useful as there were many parents for whom English was not a first language. A collection box was left at the school for any late returns (collected 10 th March).	N/A
Setting 9	Manual completion	March 2015	5	Researcher attended the nursery in the morning to catch parents as they dropped their children off (2 nd March). A collection box was left at the school for any late returns (collected 10 th March).	N/A
TOTALS:		Nov 2014 – March 2015	1195	Multi-method recruitment (online, face to face and drop-off at schools and nurseries).	

Appendix E: Original visits framework

Visit	Purpose	Methods	To do
One	Information-giving; Obtaining informed consent; Getting to know families; Data generation; Forward planning.	Toy tour with primary focus child, following Plowman and Stevenson (2013), includes child taking photographs and discussion; Parent interview.	Explain project nature and focus; Explain all likely activities (including filming); Discuss what works for the parents; Complete information sheets and consent forms for parents and on child's behalf; Discuss with child with regards to who I am ('consent'); Check consent to continue; Explain what we will do next time; Arrange date and time; Confirm most convenient means of communicating.
Two	Getting to know families; Data generation; Forward planning.	Chat with child using photos from tour as stimulus; Parent timeline interview.	Check consent to continue; Explain what we will do next time; Arrange date and time; Brief with photo diary task in interim.
Three	Data generation; Forward planning.	Observation, possibility of introducing filming; Potential activities, e.g. drawing, puppets (TBC).	
Four	Data generation; Forward planning.	Storyboard family interview.	
Five	Data generation; Forward planning.	TBC.	
Six	Information-giving; Data generation; Reflection; Forward planning.	Visual keepsakes; Reflective interview.	Share goody bags; Discuss what will happen next.

Appendix F: Detailed summary of qualitative data

	Family A	Family B	Family C	Family D	Family E	Family F	Family G	Family H
VISIT ONE	Tuesday 3 rd March, 2015 (9am)	Wednesday 11 th March, 2015 (11am)	Wednesday 15 th April, 2015 (10am)	Tuesday 28 th April, 2015 (9am)	Tuesday 26 th May, 2015 (12 noon)	Thursday 25 th June, 2015 (11am)	Wednesday 1 st July, 2015 (1pm)	Wednesday 8 th July, 2015 (1pm)
Data collection methods	Face to face interview with family, introduction to child(ren)	Face to face interview with family, introduction to child(ren)	Face to face interview with family, introduction to child	Face to face interview with family, introduction to child(ren)	Face to face interview with family, introduction to child(ren)	Face to face interview with family, introduction to child(ren)	Face to face interview with family, introduction to child(ren)	Face to face interview with family, introduction to child(ren)
Associated data	1 audio file, lasting total 27 mins; fieldnotes	1 audio files, lasting total 37 mins; fieldnotes	1 audio files, lasting total 34 mins; researcher's fieldnotes.	1 audio files, lasting total 62 mins; fieldnotes	1 audio files, lasting total 56 mins; fieldnotes	1 audio files, lasting total 84 mins; fieldnotes	1 audio files, lasting total 34 mins; fieldnotes	1 audio files, lasting total 34 mins; fieldnotes
VISIT TWO	Wednesday 8 th April, 2015 (10am)	Friday 10 th April, 2015 (12 noon)	11 th June, 2015	Tuesday 26 th May, 2015 (9am)	Tuesday 16 th June, 2015 (10am)	8 th July, 2015 (time unknown)	Thursday 30 th July, 2015 (10am)	Wednesday 5 th August, 2015 (1pm)
Data collection methods	Ethnographic interviewing, timeline interview, observation, toy tour and photo taking	Ethnographic interviewing, timeline interview, observation, toy tour and photo taking	Ethnographic interviewing, timeline interview, observation, toy tour and photo taking	Ethnographic interviewing, timeline interview, observation, toy tour and photo taking	Ethnographic interviewing, timeline interview, observation, toy tour and photo taking	Ethnographic interviewing, timeline interview, observation, toy tour and photo taking	Ethnographic interviewing, timeline interview, observation, toy tour and photo taking	Ethnographic interviewing, timeline interview, observation, toy tour and photo taking
Data collected	2 audio files, lasting total 84 mins; 3 video files, lasting total 4 mins; 1 timeline; 145 photos; fieldnotes	2 audio files, lasting total 85 mins; 23 video files, lasting total 16 mins; 1 timeline; 32 photos; fieldnotes	2 audio files, lasting total 72 mins; 1 video file, lasting total 38 mins; 1 hand-drawn timeline; 51 photos; researcher's fieldnotes.	1 audio file, lasting total 120 mins; 3 video files, lasting total 7 mins; 1 timeline; 44 photos; fieldnotes	1 audio file, lasting total 56 mins; 2 video files, lasting total 17 mins; 1 timeline; 44 photos; fieldnotes	1 audio file, (missing) 3 video files, lasting total 34 mins; 1 timeline; 25 photos; fieldnotes	1 audio file, lasting total 79 mins; 5 video files, lasting total 75 mins; 1 timeline; photos (missing); fieldnotes	8 audio files, lasting total 106 mins; 10 video files, lasting total 81 mins; 1 timeline; 18 photos; fieldnotes

VISIT THREE	Thursday 11 th June, 2015 (1pm)	Wednesday 10 th June, 2015 (10am)	Wednesday 19 th August, 2015 (6pm)	Monday 15 th June, 2015 (4pm)	Tuesday 21 st July, 2015 (10am)	Thursday 13 th August, 2015 (10am)	Wednesday 19 th August, 2015 (10am)	Wednesday 19 th August, 2015 (12.30)
Data collection methods	Tablet activity, ethnographic interviewing, observation	Tablet activity, ethnographic interviewing, observation	Tablet activity, ethnographic interviewing, observation	Tablet activity, ethnographic interviewing, observation	Tablet activity, ethnographic interviewing, observation	Tablet activity, ethnographic interviewing, observation	Tablet activity, ethnographic interviewing, observation	Tablet activity, ethnographic interviewing, observation
Data collected	1 audio file, lasting total 118 mins; 1 video files, lasting total 84 mins; 37 photos; fieldnotes	4 audio files, lasting total 198 mins; 6 video files, lasting total 170 mins; fieldnotes	1 audio files, lasting total 114 mins; 7 video files, lasting total 110 mins; researcher's fieldnotes.	1 audio file, lasting total 100 mins; 3 videos, lasting total 84 mins; fieldnotes	1 audio file, lasting total 154 mins; 9 videos, lasting total 148 mins; fieldnotes	4 audio files, lasting total 123 mins; 8 videos lasting total 109 mins; fieldnotes	1 audio file, lasting total 116 mins; 7 video files, lasting total 114 mins; fieldnotes	6 audio files, lasting total 117 mins; 15 video files, lasting total 109 mins; fieldnotes
VISIT FOUR	Thursday 30 th July, 2015 (1pm)	Saturday 25 th July, 2015 (10.30am)		Wednesday 22 nd July, 2015 (9am)	Tuesday 4 th August, 2015 (10am)	Monday 7 th September, 2015 (1pm)	Sunday 6 th September, 2015 (10am)	
Data collection methods	Ethnographic interviewing, observation	Ethnographic interviewing, observation		Ethnographic interviewing, observation	Ethnographic interviewing, observation	'Close' parent, interview, ethnographic interviewing, observation	'Close' parent, interview, ethnographic interviewing, observation	
Data collected	20 audio files, lasting total 90 mins; 7 video files, lasting total 64 mins; fieldnotes	3 audio files, lasting total 56 mins; 12 video files, lasting total 42 mins; 3 photos; fieldnotes		2 audio files, lasting total 145 mins; 5 videos lasting total 78 mins; fieldnotes	9 audio files, lasting total 123 mins; 6 video files, lasting total 111 mins; fieldnotes	1 audio file, lasting total 99 mins; 4 video files, lasting total 99 mins; fieldnotes	1 audio file, lasting total 114 mins; 4 video files, lasting total 85 mins; fieldnotes	
VISIT FIVE	Friday 14 th August, 2015 (1pm)	Thursday 13 th August, 2015 (1pm)		Monday 17 th August, 2015 (3pm)	Wednesday 19 th August, 2015 (3.30pm)			
Data collection methods	Ethnographic interviewing, observation	Ethnographic interviewing, observation		Ethnographic interviewing, observation	Ethnographic interviewing, observation			
Data collected	43 audio files, lasting total 100 mins; 12 videos,	3 audio files, lasting total 214 mins; 14 video files, lasting total		1 audio file, lasting total 140 mins; 7 video files,	1 audio file, lasting total 64 mins; 4 video files,			

	lasting total 90 mins; fieldnotes	187 mins; fieldnotes		lasting total 120 mins; fieldnotes	lasting total 62 mins; fieldnotes			
VISIT SIX	Tuesday 8 th September, 2015 (3pm)			Tuesday 8 th September, 2015 (11am)	Monday 7 th September, 2015 (3.30pm)			
Data collection methods	'Close' parent, interview, ethnographic interviewing, observation			'Close' parent, interview, ethnographic interviewing, observation	'Close' parent, interview, ethnographic interviewing, observation			
Data collected	2 audio files, lasting total 77 mins; 1 video file, lasting total 18 mins; fieldnotes			1 audio file, lasting total 84 mins; 4 videos, lasting total 56 mins; fieldnotes	6 audio files, lasting total 96 mins; video (missing)			
VISIT SEVEN	Monday 22 nd February, 2016 (3.30pm)				Wednesday 24 th February, 2016 (4pm)			
Data collection methods	Catch-up, ethnographic interviewing, observation				Catch-up, ethnographic interviewing, observation			
Data collected	15 audio files, lasting total 55 mins; 28 video files, lasting 92 mins; fieldnotes				1 audio file, lasting total 58 mins; 13 video files, lasting total 42 mins; fieldnotes			
Any additional data?	17 photo diary entries from June 2015	1 video file from mum			1 video file from mum			

Appendix G: The eight families

		Gender	Age (Visit 1)	Ethnicity	Parent(s) SES
Family A	Archie	Male	3 years, 8 months	White British	Full time parent (M) Skilled manual (D)
Family B	Niyat	Female	3 years, 3 months	Black / Black British	Full time parent (M) Other (D)
Family C	Olivia	Female	3 years, 5 months	Mixed - White & Asian	Unskilled manual (M)
Family D	Rosie	Female	4 years, 7 months	White British	Professional or technical (M) Professional or technical (D)
Family E	Emma	Female	4 years, 6 months	White British	Skilled manual (M) Unskilled manual (D)
Family F	John	Male	4 years, 7 months	White British	Professional or technical (M) Professional or technical (D)
Family G	Max	Male	4 years, 8 months	White British	Full time parent (M) Professional or technical (D)
Family H	Nora	Female	4 years, 0 months	White British	Full time parent (M) Unskilled manual work (D)

Appendix H: Excerpt of full multimodal transcription

Family 4 Visit 5, 14th August, 2015

[...]

(Television: Miss Nettle: "If you must know, I'm looking for your spell book". Kyle appears in frame holding the Dictaphone to his face and looking at Sofia the First on the television. Kyle presses the play button on the Dictaphone to listen back to a recording. Television: Miss Nettle: "Oh, but you didn't. You three think you're so much more clever and powerful". Archie looks over from the television to see what Kyle is doing. He smiles and laughs, then looks back at the television to watch Sofia the First. The Dictaphone makes beeping sounds as Kyle plays about with it. Archie is watching attentively as music begins to play on Sofia the First. Miss Nettle (sings): Oh, it was many years ago that I served as your apprentice. Taking his cue from the television, Kyle begins to dance in a pseudo-classical style inspired by the mystical music, part tongue in cheek, he is smiling, entertained. He presses the buttons on the Dictaphone and stops dancing to listen to a recording, still watching Sofia. Archie is resting tummy-first on the pouffe and watching Sofia)



Archie: (stands up) Kyle, let me!

(Kyle keeps a hold of the Dictaphone and turns his back slightly to Archie. Archie continues to watch Sofia, Kyle begins his dance again, watching Sofia. Kyle continues to play with the buttons on the Dictaphone and bends down to show something on it to Archie. Kyle puts his arm around Archie as he plays back a recording, showing it to Archie)

Archie: (...) dat?

(Kyle steps back and continues his dance to the music on the television whilst listening to the Dictaphone recordings being played back. Seeing Fiona, he smiles and starts dancing towards her)

Fiona: That's a very nice dance

(Kyle dances away and stops momentarily to press a button on the Dictaphone. Archie is still watching Sofia attentively. Kyle is having trouble getting the Dictaphone to do what he wants. He turns around, grunts and walks towards Fiona, who puts her arm out to take the Dictaphone. Kyle hands it over)

Fiona: What happened?

Kyle: (shrugs) I was pressing that red button

Fiona: It's gone onto the calendar. Mmm...

(Dictaphone beeping. Fiona hands it back to Kyle. Kyle heads back over towards the television with the Dictaphone)

Kyle: Wha- (looks at Fiona, shrugs his shoulders, shaking his head)

[...]

Appendix I: Highest status work of parent or carer in household

Category	Number of parents/carers	% of total	Breakdown	Number of parents/carers	% of total
Professional	837	70.1	1. Professional or technical work	605	50.7
			2. Manager or administrator	232	19.4
Clerical	128	10.7	3. Clerical	72	6.0
			4. Sales	56	4.7
Manual	149	12.5	5. Supervisor	20	1.7
			6. Skilled manual work	76	6.4
			7. Semi-skilled or unskilled manual work	53	4.4
Other	80	6.7	Full time parent	47	3.9
			Never worked	6	0.5
			Other	23	1.9
			Missing	4	0.3
Total	1194	100.0	Total	1198	100.0

Appendix J: Respondent educational attainment

	Number of survey responses	% of total	CBeebies survey responses	% of total	ECE setting responses	% of total
Higher Education or Vocational Level 4 and above	731	61.5	639	65.6	92	42.8
A Level or Vocational Level 3	225	18.9	188	19.3	37	17.2
GCSE or O Level grades A*-C or Vocational Level 2	141	11.9	100	10.3	41	19.1
GCSE or O Level grades D-G or Vocational Level 1	42	3.5	26	2.7	16	7.4
Other qualifications: level unknown	30	2.5	17	1.7	13	6.0
No qualifications	20	1.7	4	0.4	16	7.4
Total	1189	100.0	974	100.0	215	100.0

Appendix K: Child's age

	Number of survey responses	% of total	CBeebies survey responses	% of total	ECE setting responses	% of total
6 months to 1 year	1	0.1	1	0.1	0	0.0
1 year to 1½ years	1	0.1	0	0.0	1	0.5
1½ years to 2 years	7	0.6	4	0.4	3	1.4
2 years to 2½ years	7	0.6	3	0.3	4	1.8
2½ years to 3 years	60	5.0	50	5.1	10	4.5
3 years to 3½ years	250	20.9	224	23.0	26	11.8
3½ years to 4 years	230	19.3	187	19.2	43	19.5
4 years to 4½ years	212	17.8	167	17.1	45	20.5
4½ years to 5 years	159	13.3	127	13.0	32	14.5
5 years to 5½ years	118	9.9	98	10.1	20	9.1
5½ years to 6 years	85	7.1	68	7.0	17	7.7
6 years to 6½ years	35	2.9	28	2.9	7	3.2
6½ years to 7 years	16	1.3	10	1.0	6	2.7
7 years +	13	1.1	7	0.7	6	2.7
Total	1194	100.0	974	100.0	220	100.0

Appendix L: Child's hours spent in nursery or school per week by age

	Mean hours in nursery or school per week	N	SD
3 years to 3½ years	16.25	250	9.348
3½ years to 4 years	17.40	228	6.808
4 years to 4½ years	23.92	208	9.678
4½ years to 5 years	29.21	156	7.959
5 years to 5½ years	30.23	116	7.276
5½ years to 6 years	30.07	81	6.394
Whole dataset	22.30	1172	10.497

Appendix M: Child's gender by sample source

	Number of survey responses	% of total	CBeebies survey responses	% of total	ECE setting responses	% of total
Girl	597	50.2	483	49.6	114	52.8
Boy	592	49.7	490	50.3	102	47.2
Prefer not to say	1	0.1	1	0.1	0	0.0
Total	1990	100.0	974	100.0	216	0.0

Appendix N: Child's ethnicity by sample source

	All responses	% of total	CBeebies responses	% of total	ECE setting responses	% of total
White British	1061	89.2	901	92.5	160	74.4
White Irish	9	0.8	9	0.9	0	0.0
White (Other Background)	21	1.8	15	1.5	6	2.8
Black/Black British-African	17	1.4	0	0.0	17	7.9
Black (Other Background)	2	0.2	1	0.1	1	0.5
Asian/Asian British-Indian	4	0.3	1	0.1	3	1.4
Asian/Asian British-Pakistani	6	0.5	1	0.1	5	2.3
Asian/Asian British-Bangladeshi	1	0.1	1	0.1	0	0.0
Asian/Asian British-Chinese	2	0.2	0	0.0	2	0.9
Asian (Other Background)	4	0.3	3	0.3	1	0.5
Arab	2	0.2	0	0.0	2	0.9
Mixed White & Black (Caribbean)	8	0.7	4	0.4	4	1.9
Mixed White & Black (African)	10	0.8	7	0.7	3	1.4
Mixed White & Asian	20	1.7	16	1.6	4	1.9
Mixed (Other Background)	10	0.8	7	0.7	3	1.4
Other ethnic background	7	0.6	5	0.5	2	0.9
I would prefer not to answer	5	0.4	3	0.3	2	0.9
Total	1189	100.0	974	100.0	215	100.0

Appendix O: Favourite programmes, by gender

Girls' favourite TV programmes	Boys' favourite TV programmes
(n = 578)	(n = 571)
1. Peppa Pig (Channel 5/ Nick Jr.)	1. Peppa Pig (Channel 5/ Nick Jr.)
2. Topsy and Tim (CBeebies)	2. Octonauts (CBeebies)
3. Sofia the First (Disney Jr.)	3. Thomas and Friends (Channel 5)
4. Bing (CBeebies)	4. Bing (CBeebies)
5. Doc McStuffins (Disney Jr.)	5. Fireman Sam (Channel 5)
6. Octonauts (CBeebies)	6. Swashbuckle (CBeebies)
7. Ben and Holly (Nick Jr.)	7. Andy's Dinosaur/ Wild Adventures (CBeebies)
8. Swashbuckle (CBeebies)	8. Paw Patrol (Nick Jr.)
9. My Little Pony (Tiny Pop)	9. Jake and the Neverland Pirates (Disney Jr. /Boomerang)
10. Peter Rabbit (CBeebies)	10. Scooby Doo (Boomerang)

Appendix P: Favourite programmes, by age

3 - 3½ year olds (n=244)	3½ - 4 year olds (n=222)	4 – 4½ year olds (n=201)	4½ - 5 year olds (n=156)	5 to 5½ year olds (n=114)	5½ - 6 year olds (n=82)
1. Peppa Pig	1. Peppa Pig	1. Peppa Pig	=1. Peppa Pig	1. Octonauts	=1. My Little Pony
2. Bing	2. Bing	2. Topsy & Tim	=1. Topsy & Tim	2. Peppa Pig	=1. Scooby Doo
3. Thomas & Friends	3. Octonauts	3. Peter Rabbit	2. Various	=3. Swashbuckle	=3. Topsy & Tim
4. Octonauts	4. Topsy & Tim	4. Octonauts		=3. Tom & Jerry	=3. Jake & the Neverland Pirates
=5. Topsy & Tim	=5. Peter Rabbit	= 5. Various		= 5. Sofia the First	=5. <i>Various</i>
=5. Sofia the First	=5. Fireman Sam			=5. My Little Pony	

Appendix Q: Favourite programmes, by social class

Professional (n = 810)	Clerical (n = 126)	Manual (n = 144)
1. Peppa Pig	1. Peppa Pig	1. Peppa Pig
2. Octonauts	2. Thomas the Tank Engine	2. Doc McStuffins
3. Topsy & Tim	3. Doc McStuffins	3. Bing
4. Bing	=4. Bing	=4. Topsy & Tim
5. Swashbuckle	=4. Spongebob Squarepants	=4. Thomas the Tank Engine
	=4. Peter Rabbit	
	=4. Mickey Mouse / Clubhouse	

Appendix R: Favourite channels, by gender

Girls' favourite channels (n=565)	Boys' favourite channels (n=569)
1. CBeebies (61.2%)	1. CBeebies (59.2%)
2. Disney Junior/Disney channels (12.7%)	2. Nickelodeon Junior/Nickelodeon channels (12.0%)
3. Nickelodeon Junior/Nickelodeon channels (11.7%)	3. Disney Junior/Disney channels (9.1%)
4. Milkshake/Channel 5 (3.7%)	4. Cartoon Network/Cartoonito/Boomerang (4.2%)
5. CBBC/BBC channels (3.4%)	5. CBBC/BBC channels (3.7%)

Appendix S: Favourite channels, by age

3 – 3 ½ year olds (n=243)	3 ½ - 4 year olds (n=221)	4 – 4 ½ year olds (n=203)	4 ½ - 5 year olds (n=150)	5 - 5½ year olds (n=117)	5½ - 6 year olds (n=79)
1. CBeebies					
2. Nickelodeon Junior/Nickelodeon channels	2. Nickelodeon Junior/Nickelodeon channels	2. Disney Junior/Disney channels	2. Disney Junior/Disney channels	2. Disney Junior/Disney channels	2. Disney Junior/Disney channels
3. Disney Junior/Disney channels	3. Disney Junior/Disney channels	3. Nickelodeon Junior/Nickelodeon channels	3. Nickelodeon Junior/Nickelodeon channels	3. Nickelodeon Junior/Nickelodeon channels	3. Nickelodeon Junior/Nickelodeon channels
4. Milkshake/Channel 5	4. Milkshake/Channel 5	4. CBBC/BBC channels	=4. Milkshake/Channel 5	4. CBBC/BBC channels	4. CBBC/BBC channels
5. Cartoon Network/Cartoonito/Boomerang	5. Cartoon Network/Cartoonito/Boomerang	5. CITV/ITV	=4. Tiny Pop/Pop	5. Tiny Pop/Pop	5. Tiny Pop/Pop

Appendix T: Favourite channels, by social class

Professional (n=806)	Clerical (n=121)	Manual (n=143)
1. CBeebies (63.5%)	1. CBeebies (49.6%)	1. CBeebies (54.5%)
2. Nickelodeon Junior/Nickelodeon channels (11.4%)	2. Nickelodeon Junior/Nickelodeon channels (15.7%)	2. Disney Junior/Disney channels (16.8%)
3. Disney Junior/Disney channels (9.4%)	3. Disney Junior/Disney channels (14.9%)	3. Nickelodeon Junior/Nickelodeon channels (9.8%)
4. Milkshake/Channel 5 (3.5%)	4. Milkshake/Channel 5 (8.3%)	4. CBBC/BBC channels (5.6%)
=5. CBBC/BBC channels (2.7%)	5. CBBC/BBC channels (5.0%)	5. Cartoon Network/Cartoonito/Boomerang (3.5%)
=5. Cartoon Network/Cartoonito/Boomerang (2.7%)		

Appendix U: Top 5 non-children’s programmes, by social class

Professional (n = 445)	Clerical (n = 85)	Manual (n = 93)
1. Strictly Come Dancing	1. Emmerdale	1. Eastenders
2. News	2. Strictly Come Dancing	=2. The Chase
3. You’ve Been Framed	=3. The Chase	=2. Pointless
=4. Pointless	=3. The Simpsons	4. Strictly Come Dancing
=4. X Factor	=3. Eastenders	=5. The Simpsons
		=5. Hollyoaks

Appendix V: Rosie role-plays as an astronaut (V2) description of photos

<i>Reference file</i>	<i>Original file name</i>	<i>Description</i>
Rosie_Photo1.JPG	<i>100_0236.JPG</i>	Blurred image. Rosie in her bedroom, holding Fiona’s digital camera as she takes a photo. Mum’s leg can be seen in the background. Behind is a wooden wardrobe and chest of drawers.
Rosie_Photo2.JPG	<i>100_0237.JPG</i>	As above, minus mum (and not blurred).
Rosie_Photo3.JPG	<i>100_0238.JPG</i>	As above (different angle).
Rosie_Photo4.JPG	<i>100_0249.JPG</i>	Blurred image. Rosie in her cupboard (‘secret room’).
Rosie_Photo5.JPG	<i>100_0250.JPG</i>	Rosie is standing up and holding the Bumbo upside down on her head like a helmet with both hands.
Rosie_Photo6.JPG	<i>100_0251.JPG</i>	As above, holding with right hand only.
Rosie_Photo7.JPG	<i>100_0252.JPG</i>	As above, with two hands holding the Bumbo in front of face.
Rosie_Photo8.JPG	<i>100_0253.JPG</i>	As above, reaching both hands round to the sides of the Bumbo.
Rosie_Photo9.JPG	<i>100_0254.JPG</i>	Blurred image. Rosie’s ankle in a sock.
Rosie_Photo10.JPG	<i>100_0255.JPG</i>	Clearer image of above. Rosie’s leg in a shin-high <i>Batman</i> sock.
Rosie_Photo11.JPG	<i>100_0256.JPG</i>	Rosie’s <i>Mike the Knight</i> helmet.
Rosie_Photo12.JPG	<i>100_0257.JPG</i>	As above.
Rosie_Photo13.JPG	<i>100_0258.JPG</i>	Blurred image. Rosie sorting through toys and clothes in a wicker hamper.

Rosie_Photo14.JPG	<i>100_0259.JPG</i>	Rosie is leaning against her bed, wearing her <i>Batman</i> socks, <i>Mike the Knight</i> costume (soft top and trousers printed as grey knight's armour) and <i>Mike the Knight</i> helmet. She is holding her toy sword in front of her face.
Rosie_Photo15.JPG	<i>100_0260.JPG</i>	Blurred image. As above, but Rosie is taking off her <i>Mike the Knight</i> helmet.
Rosie_Photo16.JPG	<i>100_0261.JPG</i>	Blurred image. Rosie is wearing the Bumbo on her head again, along with the <i>Mike the Knight</i> costume. The space rocket tent can be seen in the background.
Rosie_Photo17.JPG	<i>100_0262.JPG</i>	Rosie is sitting on her Bumbo on the floor. She is slightly too big to sit comfortably in it. She is wearing her <i>Mike the Knight</i> helmet and <i>Mike the Knight</i> costume and resting her hand (holding toy sword) on her knee.
Rosie_Photo18.JPG	<i>100_0263.JPG</i>	Blurred image. As above, but Rosie is sitting on the floor in front of her Bumbo now. She is pushing her helmet up with her left hand.
Rosie_Photo19.JPG	<i>100_0264.JPG</i>	Blurred image. As above, but Rosie is smiling up at the camera, helmet raised off her forehead.
Rosie_Photo20.JPG	<i>100_0265.JPG</i>	Rosie is wearing her <i>Mike the Knight</i> helmet and <i>Mike the Knight</i> costume and retreating backwards into her cupboard ('secret room').
Rosie_Photo21.JPG	<i>100_0266.JPG</i>	Rosie is wearing her <i>Mike the Knight</i> helmet and <i>Mike the Knight</i> costume and sitting on the floor.