

Intersubjectivity, participation and the moral order in everyday family talk involving young autistic children

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Abstract

Studying real-world, everyday family interactions is valuable for developing our knowledge of how autistic children and their family members participate in and organise social interaction. This thesis examines naturally occurring family interactions involving young autistic children with speech, language and communication needs. It aims to broaden our knowledge of how the autistic children participate in family interaction and how autism becomes relevant to everyday family talk. The thesis focuses on three specific phenomena: initiating and responsive action sequences in parent-child dyadic interaction, how co-participants refer to their autistic child in their presence within multiparty interaction and how parents issue directives to non-autistic siblings about activities related to their autistic sibling. The study employed the methodology of conversation analysis to examine over twelve hours of video-recorded naturalistic interactions produced by four families. Both dyadic and multiparty interactions were analysed. The findings from this study demonstrate how family interactions were vulnerable to a loss of intersubjectivity between interlocutors, how this delayed the progressivity of sequences and how this situation was managed. The analysis also evidences how participants engage in sense-making practices related to the autistic children's communication and how they oriented to communication successes as well as difficulties. Lastly, the findings demonstrate how co-present siblings participate in interactions and how the family moral order is interactionally established in parent-sibling sequences. These findings expand our understanding of the sequential organisation of dyadic and multiparty family interactions involving autistic children.

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1 Introduction

1.1 Motivation for the study

"He's not like this at home you know". This was a phrase I heard frequently while working as a speech and language therapist diagnosing and supporting autistic children in a community health service. Parents would implore me to appreciate that the behaviour of their child in the clinical context of a speech and language therapy appointment, and their interactions with me as their therapist, were not representative of what they experienced at home. Even when conducting home visits, parents or carers would insist that I was never getting a true picture of what the everyday family interactions were like with their child. I understood this and I wished I could know more

I was familiar with the many psychological research studies examining parent-child interaction in autism in controlled conditions, but analysis of ordinary, everyday family interaction outside of controlled settings and without using predefined codes was minimal at the time that I was designing this study. Conversation analysis as a qualitative methodology had long recognised the importance of studying naturalistic interactions and the value of understanding everyday interaction, and there was emerging recognition of the contributions that it could make to the field of autism research. There was a growing body of literature reporting studies of talk-in-interaction involving autistic individuals which had significantly contributed to our understanding of autistic interaction. However, much of this research had focused on verbal autistic children and there was still more to learn about involving younger autistic children with less well-developed spoken language skills. Studies examining interaction with multiple

participants were also infrequent. Hence, I was motivated to carry out this project involving younger children with a range of communication skills and their wider families in order to add to the knowledge and insight related to the naturalistic interaction between autistic children and their families in their ordinary, everyday lives.

1.2 Research aims

The overarching aim of this research project is to examine everyday home interactions of families involving younger autistic children with speech, language and communication needs, in order to further understand the organisation of talk-in-interaction within this population. More specifically, it aims to add new knowledge of how young autistic children with communication difficulties participate in family interaction and to explore the potential impact of autism and communication difficulties on everyday family talk.

This broad research aim is achieved through application of the qualitative approach of conversation analysis to video data produced by four families. Conversation analysis is a method for studying social interaction in naturally occurring contexts. This study sits within the field of applied conversation analysis, and in particular communicational applied conversational analysis. Antaki (2011) conceptualises this type of applied conversation analysis as the complementary or alternative analysis of allegedly disordered talk.

This methodology was implemented with an inductive, data-driven analytic approach within the current project, meaning that there were no a-priori research hypotheses at the outset of the study which the findings aimed to support or contradict. Instead, the

data were approached without preconceived ideas and the analysis was led by noticings of phenomena of interest in the data.

Preliminary viewing of the data led to the development of the following specific research aims which are focused on in this thesis:

- Initiating and responsive sequences between parents and autistic children within dyadic interaction.
- 2. Episodes where co-participants refer to the autistic child in their presence within multiparty interaction to talk about noticeable interactional issues.
- 3. How non-autistic siblings participate in family interaction in sequences where parents issue them directives related to their autistic sibling.

1.3 Organisation of the thesis

This introductory chapter has outlined the motivation for the study and presented the research aims.

Chapter 2 examines the literature related to the focus of the present research. It presents a brief overview of autism, its diagnostic features and prevalence. It then considers contemporary issues in autism research, such as terminology and research approaches. It discusses literature related to family life with an autistic child and the experiences of siblings. Following this, it presents literature related more specifically to the field of interaction research in autism, discussing how a large proportion of this has been quantitative observational studies. It offers a critique of these approaches before considering conversation analysis as an alternative methodology. It then reviews a

range of conversation analytic studies which have been carried out to study interactions involving autistic children.

Chapter 3 reports on the design and methods of the research study. It begins with an overview of some of the challenges experienced while recruiting for this study and how they were overcome. It presents information about the families recruited to the study and provides a communication profile for each of the participating autistic children. It discusses the ethical considerations of collecting video data with children and families. It then outlines the procedures utilised to collect participant-produced data, where the families videoed interactions themselves, without the direct involvement of me as a researcher. This includes information about the equipment used and the advice given to families. The chapter then presents an overview of the resulting data collected for analysis within this project. Following this, the chapter discusses the data analysis procedures, including transcription, identifying data for detailed analysis and building collections.

Chapter 4 is the first of the analysis chapters. It focuses on parent-child dyadic interaction involving the autistic children, analysing both responsive turns and initiating turns from the children. It shows how parents may initiate an interaction with their child, perhaps through a question, suggestion or an offer, and how these can be responded to by children in a variety of ways. Sometimes the children's response is as expected, and the sequence progresses without trouble. However, the analysis also shows that sometimes the children might not respond at all, or they might respond in a way that is unexpected by the parents, which then results in a delay to the parent's original activity. It also shows how children can initiate interaction with their families. Again, sometimes this is in the expected manner and does not cause any disruption to a

sequence or the flow of talk. At other times though, the children produced turns in a way that were not expected and were therefore treated as unusual by the parents and required further interactional work before the sequence could progress. These findings are discussed in terms of what we can learn about the organisation of talk-in-interaction between parents and autistic children.

Chapter 5 is the second of the analysis chapters. It examines multiparty talk of the families, examining instances where the autistic child is talked about while they are present. It describes how the child's communication is focused on by the other participants. One example of this is how parents talk about a child when the child does not provide a response turn to their initiations (a phenomenon identified in chapter 4). It shows how parents and others account for this to explain the child's absent response. The chapter also discusses how parents and other participants make sense of children's talk when it is unclear due to their communication differences. Finally, it considers examples where parents draw attention to communication successes demonstrated by the child.

Chapter 6 is the third and final analysis chapter. It concentrates again on multiparty talk and particularly on sibling-parent interaction when the autistic child is present. It focuses on sequences where the parent is trying to get the sibling to do or not do something in relation to the autistic child e.g., to help them or to leave them alone. It shows how siblings can comply with these instructions from parents or how they might resist them to assert their agency. Examples where siblings do resist their parent telling them what to do are looked at closely to show how parents can pursue compliance by highlighting some aspect of the autistic child's needs as a reason for why they are asking the sibling to act in the way directed.

Chapter 7 is the final chapter of the thesis. This chapter revisits the research aims to demonstrate how these have been achieved. It discusses the findings in the context of existing literature. It also considers the limitations of the study and makes suggestions for future research directions. Finally, it presents the implications of the thesis and its contributions to knowledge.

2 Literature Review

This chapter will review the literature relevant to the thesis. Firstly, it will discuss the concept of autism, including contemporary issues related to autism research. It will then present the research examining the influence of autism on family life, considering both parent and sibling experiences. Following this, it will present an overview of approaches to studying interaction in autism; firstly, looking at observational coding approaches and then conversation analysis, which is the selected methodology of the present project. Finally, an overview of relevant conversation analytic research concerning interactions involving autistic children will be provided.

2.1 Autism

Autism is a lifelong neurodevelopmental condition that affects how people experience and interact with their world around them (Fletcher-Watson & Happé, 2019). It is a behaviourally defined condition, with diagnostic criteria spanning two overarching domains: (i) differences in social communication and social interaction and (ii) restricted, repetitive patterns of behaviour, interests, or activities. The domain of social communication and interaction further consists of three key areas of difficulty or difference. This includes socioemotional reciprocity such as the quality and frequency of initiations and responses to social interaction and also reduced sharing of interests, emotions and affect. It also includes differences in non-verbal communicative behaviours for the purpose of social interaction, such as unusual use of eye-gaze, facial expression or gesture. Finally, this domain includes difficulties with developing, maintaining and understanding relationships. Within the second domain of restricted and repetitive behaviours and interests, differences can present in four areas including:

stereotyped motor movements or speech; insistence of sameness and an inflexible adherence to routines; highly restricted, fixated interests; and finally hypo- or hyperreactivity to the sensory environment (American Psychiatric Association, 2013).

Autism is a spectrum condition with a heterogeneous presentation across individuals. People can present with their own unique collection of features. Presentation within individuals can also vary depending on the current environment and across their lifespan. There is no singular known cause of autism. Current research suggests that a range of genetic, biological and environmental factors are all relevant (Bai et al., 2019; Bölte et al., 2019; Sandin et al., 2016).

Diagnosis is typically made by a multi-disciplinary team based on semi-structured clinical observations and an autism-specific developmental history (Hayes et al., 2018). Diagnosis can be formally made from age 2 years, although in reality it is generally later than this, either due to waiting lists to access diagnostic services (British Medical Association, 2019) or due to later recognition of features (Shattuck et al., 2009). On average in the UK, it takes 3.5 years between parents seeking professional help and obtaining an autism diagnosis (Crane et al., 2016) and the average age of childhood diagnosis is 4.5 years (Brett et al., 2016).

The worldwide estimate of the prevalence of autism is thought to be 62 in 10,000 based on research studies up to 2012 (Elsabbagh et al., 2012), although more recent research emphasises the high variability of prevalence estimates across countries and regions (Chiarotti & Venerosi, 2020). A 2016 population survey of 9-10 year-olds in the South Thames region in the UK estimated a prevalence rate of 1.16% (Baird et al., 2006). A more recent study of the 2017 spring school census from the national pupil database in

England suggests a higher rate of 1.76% (Roman-Urrestarazu et al., 2021). Rising prevalence over the past decades is thought to be due to factors such as the changing and broadening of diagnostic criteria, increases in professional and public awareness and differences in methodologies of prevalence surveys (Fombonne, 2018; Wing & Potter, 2002). Diagnosis is three times more common in boys than in girls, with this discrepancy commonly assumed to be due to diagnostic gender bias (Loomes et al., 2017).

It is common for autism to co-occur alongside other neurodevelopmental conditions such as learning disability, attention deficit hyperactivity disorder and specific learning difficulties such as dyslexia (O'Brien & Pearson, 2004; Russell & Pavelk, 2013). Epilepsy also occurs at a higher rate in autistic children compared to the general population (Ewen et al., 2019). Autistic children also commonly present with mental health difficulties in addition to their autism diagnosis (Leyfer et al., 2006). Sleep problems and feeding difficulties are also frequently reported (Leader et al., 2020; Richdale & Schreck, 2009).

In addition to the social communication and interaction differences directly associated with an autism diagnosis, some children may also present with speech and language difficulties (Boucher, 2012; Kjelgaard & Tager-Flusberg, 2001). This may include a delay in their language development or persisting difficulties with understanding and using language, affecting both language meaning and language structure. A number of children will never develop spoken language or will remain 'minimally verbal', which is commonly defined as lacking speech that is "frequent, communicative, nonimitative, and referential" (Yoder & Stone, 2006, p. 698). Some children may develop language but present as non-speaking in certain contexts (Steffenburg et al., 2018). Children with

significant language difficulties that affect their ability to communicate their basic needs and wants may be supported with alternative or augmentative forms of communication (Sievers et al., 2018). An example of this is the Picture Exchange Communication System (PECS), where children communicate using visual symbols (Bondy & Frost, 1994). Speech difficulties affecting a child's speech sound production and the intelligibility of their speech can also occur with autism. Such difficulties can present in children who have developed verbal language, but may also be an underlying reason for lack of spoken language development in minimally verbal children (Saul & Norbury, 2020).

2.2 Contemporary issues in autism research

The following sections will briefly consider some of the contemporary issues related to conducting autism research. These are discussed to demonstrate awareness of the wider context of autism research.

2.2.1 Neurodiversity

The concept of autism has changed significantly since it was first identified as a distinct profile. In a recent research review, Happé and Frith (2020) outline some of the major changes in how autism is conceptualised. One key change highlighted is the shift in viewing autism as a developmental disorder to appreciating it as neurodivergence. The neurodiversity movement has been driven by the autistic community (Kapp, 2020) and encourages recognition that "variations in neurological development and functioning across humans are a natural and valuable part of human variation" (Leadbitter et al., 2021, p. 2). Historically, autism has been viewed within the medical model, with 'deficits' in social communication and interaction and 'abnormal' behaviours being located purely within the individual and comprising a condition which requires

intervention and cure. In contrast, the neurodiversity movement aligns with the social model of disability (Oliver, 1990), prioritising an understanding of autism as 'difference' rather than deficit. The premise of these viewpoints is that disability is not an individual problem, but that difficulties may occur from autistic individuals' experiences of living in an unaccommodating society. Recent research has endeavoured to illustrate this, reporting findings of improved communication between autistic individuals than between autistic and non-autistic people, suggesting the difficulty does not lie purely within the autistic person (Crompton et al., 2020; Milton, 2012). Milton's (2012) theory of 'the Double Empathy problem' proposes that difficulties with social interaction are not solely due to autistic communication but in fact a breakdown in mutual understanding between people who experience the world in different ways, in this case autistic and non-autistic people.

Although the neurodiversity movement is increasingly influencing academic, clinical and public understanding, it has not been universally accepted. It has resulted in some tension between articulate and intelligent autistic adults and parents or carers of autistic children or adults with co-occurring conditions such as learning disability, language impairments or epilepsy. The latter group are reported to be concerned that the neurodiversity movement does not represent the experiences of individuals with higher support needs and that the 'anti-cure' approach conflicts with their desire to seek treatment for their child's condition (Russell, 2020). This discrepancy of experiences has been acknowledged by autistic adults, but with the response that autistic people are still best placed to advocate for more disabled individuals (over, for example, non-autistic parents) due to their shared diagnoses and mutual experience. There is currently no simple resolution to these differing perspectives, but there are

increasing efforts to recognise the implications of the neurodiversity movement for autism interventions and to promote approaches which develop children's skills while prioritising autonomy and well-being (Leadbitter et al., 2021). The need for improved approaches to eliciting and documenting the views of those with learning disability and communication impairments is also acknowledged as a priority (Happé & Frith, 2020).

2.2.2 Language and terminology

There is an increased awareness of the terminology used in autism research and how it may perpetuate a deficit-focused viewpoint which contrasts with the progress made through the neurodiversity movement. Bottema-Beutel et al. (2021) proposed that it is necessary for researchers to consider their language use, as language choice can reflect an ideological stance and may influence readers' understanding of autism. For example, language aligned with the medical model may be construed as ableist, making assumptions that disabled people are inferior to non-disabled people, whether or not this is the actual belief of researchers. Drawing on scholarships by autistic researchers and writers, they propose strategies for eschewing such ableist language, encouraging researchers to reflect on their choice of language and to audit their language use to avoid ableist ideologies. One example of this is the preference within the autism community for the term 'autism' rather than 'autism spectrum disorder', due to many autistic people disagreeing with the deficit-focused connotation carried by the word 'disorder' (Kenny et al., 2016). A further terminology question is whether to use personfirst language (i.e., person with autism) or identify-first language (i.e., autistic person). A study by Kenny et al. (2016) explored the preferences of autistic people, parents, family members and friends and professionals in relation to such terminology. Responses to an online survey by people based in the UK indicated that the majority of autistic people

preferred identify-first language, with a smaller majority of parents, family members and friends also supporting this. Professionals were more likely to use person-first language. This finding has been echoed in further international studies (e.g., Bury et al., 2020). While it is recognised that there is not full agreement in terminology, and where possible individuals should be asked their preferences, an identify-first approach is now typically adopted in research literature. Accordingly, I shall use identity-first language throughout the thesis, along with the term 'autism'.

2.2.3 Participatory research

A further issue relevant to autism research is the drive to centre the perspectives and experiences of the autistic community (autistic people, parents and family members) and to prioritise meaningful input from autistic people into autism research (Fletcher-Watson et al., 2019). The need for such an approach has arisen from dissatisfaction amongst the autism community about autism research, with a number of problematic issues being identified such as disagreement over research priorities, language used in research reports and the use of findings to support unwanted agendas (Nicolaidis et al., 2019). Neurotypical autism researchers are thus encouraged to familiarise themselves with autistic culture and to partner with autistic people or organisations (Leadbitter et al., 2021). There is an increasing agenda for participatory research, which aims to address power imbalances between researchers and those to whom the research is most relevant, and to achieve collaboration across all research stages: from conceptualising research ideas, to conducting the research and disseminating and implementing findings (Chown et al., 2017; Gowen et al., 2019). Within the present study, there was unfortunately no collaboration with autistic researchers. Participatory involvement was limited to discussions with families prior to recruitment about the

value of studying family interaction. Within these discussions, families reported an enthusiasm for a project focusing on everyday activities at home, in order for research to reflect their real-life experiences of family interaction involving their young autistic children. The families recruited to the study also played a collaborative part in the project through the use of participant-generated video data (discussed more in section 3.5). Families had the control to choose what to record and what data provide for me for analysis. Once the data had been collected, there was no further involvement from families i.e. they did not participate in the analytic process. In Chapter 7 I shall discuss that a lack of a participatory approach is a limitation of the present study.

2.3 Autism and family life

This next section will consider the research examining the impact of autism on family experiences. This literature is reviewed as the present study is situated in family homes and aims to explore everyday family interaction. An understanding of broader family life for families with an autistic child is deemed relevant prior to focusing on more specific interactional details related to the condition, which are discussed later in this chapter. Studies exploring the area of family life have primarily focused on parental perspectives. However, there is a growing body of literature examining sibling experiences. The present study includes interactions involving both parents and siblings and therefore both of these topics will be considered briefly in the following sections.

2.3.1 Parents' experiences

The research exploring parents' experiences documents how some families talk about the positive aspects their children have brought to family life. Examples of reported positive experiences include family closeness (Hastings et al., 2005), increased sensitivity and awareness of people with disabilities, greater acceptance and stronger family bonds and resilience (Kayfitz et al., 2010). However, often studies of parents' perspectives on raising autistic children report challenging experiences.

Parental stress has been extensively studied, and elevated levels compared to parents of typically developing children are frequently reported (Davis & Carter, 2008; Hoffman et al., 2009; Karst & Van Hecke, 2012). While both mothers and fathers report increased stress, the effect seems to be greater for mothers (Davis & Carter, 2008; Tehee et al., 2009). Such parenting stress can be predictive of mental health problems (Bromley et al., 2004; Shepherd et al., 2021). Another impact on parents is higher levels of caregiving burden (Rudelli et al., 2021), referring to the impact of care requirements and commitments on opportunities, finances and leisure (Burke & Heller, 2016). Furthermore, parents report negative effects of increased demands of navigating services and delivering intervention approaches to support their child's development (Brewer, 2018; Kurzrok et al., 2021). Studies have also focused on measuring overall quality of life in parents. A systematic review of the quality of life of parents of autistic children reported consistent lower quality of life scores for this group than parents of typically developing children across the twelve retrieved studies (Vasilopoulou & Nisbet, 2016). In addition to poorer subjective physical and mental health, this review reported parents experienced poorer social functioning and decreased satisfaction with their environment.

The factors associated with parental experiences and quality of life are multifaceted.

Child characteristics include features such as externalising behaviours, adaptive functioning and social interaction skills (Davis & Carter, 2008; Hall & Graff, 2011; Sikora

et al., 2013). Karst and Van Hecke (2012) discuss that it is the combination of emotional, functional and behavioural problems associated with autism which impact on parental stress, rather than the core symptoms of autism itself. This finding is supported by Vasilopoulou and Nisbet (2016), whose results did not identify a relationship between autism symptom severity and parental quality of life. Parent and contextual characteristics associated with parental stress include coping strategies, extent of social support and household income (Dardas & Ahmad, 2014; Lyons et al., 2010; Pottie & Ingram, 2008; Yantzi et al., 2007).

It is important to note that most research into parents' experiences of raising autistic children has focused on non-autistic parents, or sometimes those with a sub-clinical constellation of traits but not a formal diagnosis. However, there are emerging studies focusing specifically on autistic parents, which highlight the unique experiences of this population and the need for more appropriate autism-specific support (e.g., Dugdale et al., 2021).

2.3.2 Siblings' experiences

Research into siblings' experiences has generally focused on the perspectives of neurotypical siblings. As with the literature on parents, both positive and negative experiences are reported by siblings. Positive experiences include strong sibling connections characterised by affection and enjoyable shared play experiences (Mascha & Boucher, 2006; Petalas et al., 2009). Further positive outcomes of growing up with an autistic sibling are seen in the domains of resilience, compassion and empathy (Chan & Goh, 2014; Ward et al., 2016). A study examining psychosocial adjustment and emotional development in siblings of autistic children compared to siblings of typically

developing children found no significant differences between the groups, although the authors did note that a high proportion of the autistic group had availed of support groups, which may have been a protective factor (Kaminsky & Dewey, 2002). These results were mainly based on parent report measures, rather than capturing the views of the siblings themselves.

Some of the more difficult aspects of childhood sibling experiences in families with autistic children have been captured by two recent review papers (Leedham et al., 2020; Watson et al., 2021). Leedham et al. (2020) reviewed eighteen papers exploring the experiences of typically developing siblings. All studies used a qualitative design with a range of data collection methods, including semi-structured interviews, focus groups and draw and tell techniques. The studies included were critically appraised and met the authors' threshold for high quality qualitative design. Thematic synthesis generated four overarching themes about siblings' experiences: roles and responsibilities, impact of behaviours, process of adjustment and interpersonal experiences. The theme of 'roles and responsibilities' was based on studies showing that non-autistic siblings often adopted caring roles and perceived that they had increased responsibilities and also that siblings were driven by concern and worry about their sibling and their future. The theme of 'impact of behaviours' discussed how non-autistic siblings can sometimes feel embarrassed by their sibling's behaviour when outside the family home and how they have to manage features such as aggression and idiosyncratic behaviours in their siblings. Within the theme of 'process of adjustment', non-autistic siblings were reported to adjust to their situations, accepting and learning about their sibling and their autism and developing strategies to adapt and cope. Finally, in terms of 'interpersonal experiences', non-autistic siblings reported being treated

differently to their siblings within families and studies showed varying experiences of sibling connectedness.

Leedham et al.'s (2020) review included papers which reported on both child and adult sibling participants. In contrast, Watson et al. (2021) limited their search strategy to child sibling participants only (<18years). They reviewed fifteen papers including those of qualitative design and quantitative content analysis. Most studies utilised semi-structured interviews. All papers were critically appraised as being high quality, although one of the studies included was assessed as using an 'unclear' data analysis technique. Many of the papers overlapped with the review by Leedham et al. (2020). The analysis by Watson et al. (2021) resulted in four comparable themes including: the impact on self and personal development for the sibling, their interactions with their autistic sibling, their interactions with others (i.e., the impact on their friendships and social life) and their experiences with coping. Overall, the literature examining siblings' perspectives shows that siblings report a range of experiences encompassing both positive and challenging aspects.

The above discussions have focused on providing an overview of research exploring the impact of autism on family life. Attention will now shift to considering research focusing on studying interactions involving autistic children.

2.4 Studying interaction and autism

Given that social interaction difficulties are a core feature of autism, it is unsurprising that research has been interested in how autistic children interact with others, and how other people interact with autistic children. One domain of such research has focused on the particular communication and interaction profiles of autistic children, examining

isolated features of an individual's presentation, such as verbal communication skills (e.g., Kwok et al., 2015), attention to social stimuli (e.g., Guillon et al., 2014) and gesture use (e.g., Silverman et al., 2010). Such research situates any potential communication and interaction differences as being within the individual alone, rather than acknowledging the context in which language and communication skills are used and the bidirectional influence between communication partners in interactions (O'Reilly et al., 2016). As such, it typically aligns with biomedical or deficit-focused perspectives of autism. Contrastingly, other methodologies have focused on collecting data from autistic children interacting with other people, moving away from a purely isolation approach to understanding communication and interaction in the context in which it is used with others. Within these alternative research designs there is still variation in terms of how much recognition is given to the contribution and influence of the different participants within an interaction.

Two of the prominent research designs for studying interactions involving autistic children will be reviewed in the following section. Firstly, quantitative observational designs will be considered, and then the approach of conversation analysis (the chosen method for the present study) will be introduced.

2.4.1 Quantitative observational designs

One of the frequently utilised and dominant methodological approaches to studying interaction in autism is for researchers to directly observe interaction (usually with video recordings) and to analyse them quantitatively using observational scales or coding schemes. Early studies often relied on data collected from parental reports or case notes (e.g., DeMyer et al., 1972). However, it was recognised these were limited by

observer bias and a lack of reliability and therefore the use of more rigorous methods was subsequently encouraged (Drotar, 1977). Researchers began employing observational methods and this approach has endured as the favoured means for many researchers. Within this overarching methodology, researchers have differed in their focus of interest, the context of interactions and their analytic procedures. Each of these aspects will be briefly considered in turn.

2.4.1.1 Areas of interest

Quantitative observation methods have been used to research various topics such as child behaviours, caregiver talk and sibling interaction, all of which are each considered below.

A range of studies have examined child behaviours in relation to the social communication and social interaction differences associated with an autism diagnosis. It is not possible, nor particularly relevant, to discuss the breadth of this research field within this chapter, but examples of features examined using the methodological approach of direct observation and quantitative coding include exploring interactional features such as joint attention, sharing of affect, and gesture use. Joint attention, referring to the skill of co-ordinating one's attention with a partner in order to share a common experience related to an object or event (Mundy et al., 1986), has frequently been examined in young autistic children. The findings of such research suggest that autistic children present with different joint attention skills when compared to typically developing children or children with other developmental delays. For example, Hurwitz and Watson (2016) proposed that autistic children respond to others' bids for joint attention with less frequency. However, for some autistic children, once they were

engaged in a bid, they used forms of joint attention similar to the non-autistic controls. Other studies report that the quality of autistic children's joint attention is also perceived to be different, in that there is less co-ordination of non-verbal communication (such as gaze and gestures) with vocalisations (Kasari et al., 1990). Furthermore, autistic children are considered to be more skilled in using social-communication gestures to request objects, activities or help, than they are in using similar gestures to initiate joint attention for purely social purposes, for example to share affect (Bruinsma et al., 2004; Mundy, 1995).

In addition to studying child behaviours within social interaction, quantitative observational research has also focused on the child's interaction partner. Parent-child interaction in autism has been of long-standing interest to researchers. Within this field a large amount of studies have focused on how caregivers talk to their children. A systematic review by Bottema-Beutel and Kim (2021) retrieved 65 studies related to caregiver talk and autism. Fifty-four of these studies were correlational, across-group difference or within-group difference designs and 11 were intervention studies. The review identified 294 variables related to caregiver talk which they grouped into five broad types: (i) caregivers' responses to children's attention, (ii) caregivers' responses to children's communication, (iii) speech acts (what the talk does in a social context), (iv) suprasegmental (features of the talk such as intonation or volume), structural/syntactic (how words are put together to form an utterance) and semantic features (the meaning of utterances) and (v) the amount of talk. The authors concluded that the sizeable body of research on caregiver talk demonstrates that caregivers often adapt their talk to encourage interaction with their child. However, the review highlighted that there is variation in how variables are operationalised and further

consensus about how to do this would strengthen future research. For example, followin talk, referring to utterances which are contingent to the children's signals and are relevant to the child's current focus of attention and activity (Bottema-Beutel & Kim, 2021), was identified as the most frequently studied variable. However, researchers varied in how they conceptualised this variable, with some considering only comments as speech acts to be studied (e.g., Perryman et al., 2013) whereas others included both comments and directives (e.g., Bottema-Beutel et al., 2018). Bottema-Beutel and Kim (2021) also concluded that research thus far provides us with crucial information about autistic children learning from interactions with caregivers. For example, longitudinal research shows that follow-in talk, i.e. talk that is related to a child's current focus of attention (Bottema-Beutel et al., 2022), is predictive of autistic children's later language (Woynaroski et al., 2016). Intervention approaches have accordingly been developed to focus on changing caregivers' talk in order to positively influence autistic children's language development. There is evidence to suggest that such intervention approaches are successful in modifying caregivers' talk and increasing parents' verbal responsiveness (Edmunds et al., 2019). However, in terms of the subsequent impact on children's communication, the outcomes are mixed. Individual studies have shown a positive effect (e.g., Carter et al., 2011) but meta-analysis does not yield significant results (Edmunds et al., 2019).

Compared to parent-child interaction, sibling interaction in autism is covered much less frequently in the published literature. Wider developmental research of typically developing children suggests that siblings can play an important role in children's social development (Brody, 1998; Dunn, 1988) and similar positive effects have been seen in families of autistic children (Ben-Itzchak et al., 2016). Researchers have thus been

interested in sibling interaction in autism as a context to examine autistic children's social behaviour and, similar to the studies above, many have employed quantitative observational coding designs. For example, Knott et al. (1995) examined the interaction of children with Down Syndrome or autism in free play with their siblings, specifically looking at initiations and responses. They found that autistic children made fewer initiations than Down Syndrome dyads and had a more limited repertoire of social bids. The autistic children also responded less frequently and imitated their siblings less than the children with Down Syndrome. El-Ghoroury and Romanczyk (1999) also studied the interactions of nine autistic children playing with their siblings. Instead of comparing to a separate participant group, this study compared the play interactions of the autistic children with their siblings to play interactions with their parents. An interesting finding from this study was that the autistic children initiated more with their siblings than with their parents, although the small sample size limits the generalisability of these findings. A more recent study by Rum (2021) used frame-by-frame video analysis to code sibling interactions in the home environment, measuring the social behaviours of both the typically developing children and their autistic siblings and exploring the associations between them. The findings showed that interactions were mostly collaborative and that the amount of prosocial behaviours used by autistic children was significantly associated with the amount displayed by their typically developing siblings. Similar to El-Ghoroury and Romanczyk (1999), Rum et al. (2021) also found that older typically developing children *initiated* more, while the autistic sibling *imitated* more.

2.4.1.2 Procedures

The above discussion highlights how quantitative observational studies have been used to examine topics such as child behaviours, caregiver talk and sibling interaction. The following sections will consider the various data collection and data analysis methods employed within this research design.

The settings of interactions have varied between home environments and research laboratories or clinic playrooms. It has been argued that home-based studies are preferable as lab- or clinic-based studies are not as ecologically valid, yielding data which is not representative of real-life interaction (Gardner, 2000). Indeed, research into parent-child interaction with typically developing children has demonstrated that mothers display differences in their interaction when observed in a laboratory when compared to observations at home (e.g., O'Brien et al., 1989). This is supported by research in autism such as Elder et al. (2002) who compared the interactions of 22 children and their parents in free play, finding differences between the lab and home settings but also noting there was wide variability between participants. Aside from issues of validity, requirements to attend locations outside of the home may restrict participation of some families who may find it difficult to travel with their children.

The type of activities which constitute 'interaction' in studies also varies. Structured tasks have entailed either researchers interacting with children following specific protocols or researchers guiding adult participants in how to interact (e.g., Meek et al., 2012). Others have used semi-naturalistic or semi-structured approaches involving protocols where certain elements are controlled by researchers e.g., a standard set of toys are provided, but otherwise adults are advised to 'interact as usual' (e.g., Bottema-

Beutel et al., 2018). According to Bottema-Beutel and Kim (2021) this is the most prevalent approach in caregiver talk research, with 56 of the 65 studies in their review utilising this approach. A smaller set of studies have favoured a more naturalistic approach, advising families to 'interact as normal' in their own home without specification of what to play with (e.g., Rum et al., 2021), which arguably increases the ecological validity of the studies.

Data analysis procedures also differ in quantitative research. Coding schemes can vary depending on the research aim. For example, some studies have focused only on verbal behaviours (e.g., Crandall et al., 2019) whereas others code for multimodal features (e.g., Murillo et al., 2021). Some studies have generated their own coding schemes for their particular interest (e.g., Bottema-Beutel et al., 2018) while others draw on or adapt existing schemes used in prior research (e.g., Bentenuto et al., 2021).

2.4.1.3 Strengths and limitations of quantitative coding designs

The above section has provided an overview of one of the dominant approaches to studying interaction in autistic children, describing some of the features which have been examined and the procedures for data collection and analysis. Such quantitative coding studies have positively contributed to an increased understanding of how autistic children and their families interact. One particular strength of quantitative coding designs is that they enable statistical analysis to examine the frequency of the features of study, and also the relationship between identified variables e.g., children's responses to particular features of adults' talk. This can be beneficial both for theoretical research but also for intervention studies. A further strength is that once coding frames have been conceptualised, they can be applied to multiple participants,

either within a single or across studies. This increases the number of participants, and subsequently the generalisability of the findings.

Alongside the strengths of these approaches, there are also some limitations to this type of design. One limitation to this research approach is the ability of such studies to capture and report on everyday, naturalistic interaction. While studies have attempted to collect data which is representative of real-world interaction for these families, there are often aspects of the procedures which inhibit the naturalism of interaction, such as providing a standard set of toys for children and families to play with, rather than analysing interaction that occurs without research involvement. Consequently, they lack acknowledgement of how context could differentially affect a child's performance (Sterponi et al., 2015). Another important criticism of this research methodology is that talk is often operationalised at the word, clause or utterance level (Bottema-Beutel & Kim, 2021). As such, there is little information about specific social actions and how these actions are produced in collaboration. Coding schemes also focus on each utterance in turn and thus are limited in their ability to capture how interactions unfold over multiple turns of talk, or how each interlocutor contributes to the trajectory of an interaction. Additionally, such approaches risk being deficit-focused, missing that some features specific to autism, for example echolalia, can achieve functional benefits in an interaction (Sterponi et al., 2015).

As an alternative to quantitative approaches, qualitative methodologies exist which avoid some of the limitations discussed and can further contribute to our knowledge and understanding of interaction in autism. One such qualitative approach is conversation analysis, the method utilised in the current project, which will now be discussed.

2.4.2 Conversation analysis

This section provides a brief overview of the interactional approach of conversation analysis, including its theoretical underpinnings and procedures for data collection and analysis. This is followed by a discussion of the suitability of this approach for the present study.

2.4.2.1 What is conversation analysis?

Conversation analysis was developed as a research methodology in the late 1960s and 70s by Harvey Sacks, Emanuel Schegloff and Gail Jefferson. It arose out of their dissatisfaction with the current theories and methodologies which existed to study social interaction (Stivers & Sidnell, 2013). Sacks was inspired by Erving Goffman's interest in what he called the 'interaction order' (Goffman, 1983), referring to how interactional encounters or situations can be studied as orderly systems, and how the organisation of human interaction constitutes its own social institution (Sidnell, 2010). Sacks also drew inspiration from Harold Garfinkel's developing work of ethnomethodology, focused on "the study of common-sense reasoning and practical theorizing in everyday activities" (ten Have, 1999, p. 6), referring to how participants come to mutual understandings of their actions. Sacks' work, and his collaboration with Schegloff and Jefferson, developed into a distinct empirical research approach and is now a dominant methodology for the study of human social interaction in disciplines such as linguistics, sociology, and communication (Stivers & Sidnell, 2013).

Conversation analysis is the study of talk occurring in everyday situations of human interaction (or 'talk-in-interaction'). As an approach, it enables researchers to systematically and rigorously examine how people interact with each other and create

social order. This study of talk is based on the hypothesis that "ordinary conversation is a deeply ordered, structurally organised phenomenon" (Hutchby & Wooffitt, 2008, p. 15). As such, Heritage and Atkinson (1984) define the central goal of conversation analysis to be "the description and explication of the competences that ordinary speakers use and rely on in participating in intelligible, socially organised interaction" (p. 1). The method allows us to analyse how speakers achieve organised interactions though their talk.

One of the fundamental assumptions within conversation analysis is that talk is action. As such, utterances can be interpreted as objects which speakers use to accomplish things in their interactions with others (Hutchby & Wooffitt, 2008), and language is viewed as a means for people to produce social actions and achieve a common social world (Drew & Heritage, 1992). Within conversation analysis, the structure, semantics, and other aspects of the production of language are of interest primarily in terms of how they form social actions within talk, rather than being an analytic focus in and of themselves (Hutchby & Wooffitt, 2008). Conversation analytic studies have sought to demonstrate how distinct social actions are recognisable in talk, examining actions such as complaints, invitations, news tellings, assessments and directives, to name only a few from a broad range. While actions might be produced by speakers, conversation analysis is not simply focused on the turn produced, but also how the turn is treated by the recipient. Researchers can only ever make observations about a social action by analysing how recipients have treated a turn at talk - how they have made sense of it and taken meaning from it (Sidnell, 2013). Examining how an understanding of preceding turns is displayed by speakers enables analysts to explore how intersubjectivity, or mutual understanding (Heritage, 1997), is achieved in interactions.

Another key assumption within conversation analysis is that action is structurally organised. Thus, research has been concerned with explicating how talk-in-interaction proceeds in an orderly way. Conversation analysts are not interested in single utterances as primary units of analysis, but instead how they are produced within sequences of talk (Heritage & Atkinson, 1984). Schegloff (2007) describes sequences as coherent, orderly, meaningful successions of actions or moves, summarising them as a "vehicle for getting some activity accomplished" (p. 2). The most basic sequence is an adjacency pair (Schegloff & Sacks, 1973). This is a sequence of two turns by different speakers in which the first turn (the 'first pair part'), makes relevant the subsequent turn (the 'second pair part'). Common examples of adjacency pairs include greetinggreeting, request-granting/refusal and invitation-acceptance/declining. Sequences are not limited to this two-part pair-based sequence though. They can expand beyond this minimal structure with features such as pre-expansions (where a two-part unit is expanded on before it occurs), insert sequences (a sequence that intervenes between first and second pair parts) and post-expansions (turns occurring after a second pair part) resulting in extended stretches of talk (Schegloff, 2007). Beyond specific sequences, analysts are also interested in other aspects of the organisation of talk, such as turn-taking and the ordering of speakers. Early seminal conversation analysis research shows that opportunities to speak are distributed in an orderly manner, with parties maintaining a basic rule of 'one-speaker-at-a-time' through various interactional devices (Sacks et al., 1974).

A further contribution of conversation analysis is related to how repair is organised in talk. Repair as a concept refers to efforts to deal with problems of speaking, hearing and understanding which cause trouble for participants (Schegloff et al., 1977).

Conversation analysis has demonstrated the organisational mechanisms which underpin how repair occurs in talk-in-interaction. Repair can either be initiated by the speaker themselves (self-initiated repair) or by another party (other-initiated repair). Once initiated, repair can then be accomplished by 'self' (self-repair) or 'other' (other-repair). Influential work by Schegloff et al. (1977) evidences that in mundane, adult talk, self-initiated self-repair occurs most commonly and is the preferred form of repair. The same study demonstrates how self- and other- initiations occur in regular, but differing, placements relative to the presenting trouble which they are addressing. The authors do note in this early work that adult-child interaction can constitute an exception to the preference for self-repair. This has been explored further in later work, which demonstrates how other-initiated repair can occur frequently in adult-child interaction but also that children develop self-repair skills from a young age (Forrester, 2008; Laakso, 2010).

2.4.2.2 Applied conversation analysis

In addition to conversation analysis being a method for understanding the organisation and structure of interaction as a topic of interest in itself (often described as 'pure' or 'traditional' conversation analysis), it has also been applied to a range of different areas of practice, within the field known as applied conversation analysis. Applied conversation analysis uses the knowledge gained through pure conversation analysis about interaction and applies to understanding its operation in specific contexts or settings (Antaki, 2011). Attention is shifted from focusing only on local practices such as turn-taking, sequential organisation etc., to also considering the relationship between these practices and the contexts in which they are embedded (ten Have, 2007).

Antaki (2011) lists six different types of applied conversation analysis: Foundational; social-problem; diagnostic; institutional; interventionist and communicational applied conversation analysis. This final type, communicational applied conversation analysis, refers to the method of applying conversation analysis as a 'complementary or alternative analysis of 'disordered talk' (Antaki, 2011, p. 5). This approach can be used to understand features of talk associated with particular medical diagnoses (e.g., autism, aphasia, brain injury). It has also been used to support improvement in communication involving such populations, such as conversation partner training for aphasia (Wilkinson, 2011). There is a now a valuable body of within this research realm of 'atypical interaction'1, which refers to conversation analytic studies of social interaction where at least one of the participants has a communication impairment which impacts upon the interaction (Wilkinson et al., 2020). The field of applied conversation analysis and atypical interaction contributes to both the wider field of communication disorders research and to the wider field of conversation analysis (Wilkinson et al., 2020).

The above discussion provides a brief outline of conversation analysis as a methodology for studying interaction. The following sections will consider the key principles related to the methods of conducting conversation analysis research, including processes for data collection and analysis.

2.4.2.3 Data collection in conversation analysis studies

As conversation analysis is concerned with studying talk in everyday situations, it is understandable that it prioritises examining interaction in naturally occurring activities.

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¹ Wilkinson et al. (2020) explain that the term 'atypical' is used in this context to refer to the ways that interaction may differ from existing descriptions of interaction which are based primarily on speakers without communication impairments, rather than referring to the talk or the conduct of the speaker as being impaired.

Naturally occurring interactions are considered to be those "situated as far as possible in the ordinary unfolding of people's lives" (Hutchby & Wooffitt, 2008, p. 12), contrasting with data considered to be 'contrived' (Speer, 2002) or 'researcherprovoked' (Silverman, 2011) such as data produced in interaction events 'got up' by researchers such as interviews or focus groups (ten Have, 1999). While such events could perhaps be recorded as a topic of inquiry or interest in conversation analysis, they would not be used as a method for gathering data (Mondada, 2013). Naturally occurring activities can take place in a variety of contexts and settings within people's real and complex social worlds. One focus of conversation analysis work has been on ordinary conversation, conceptualised as "forms of interaction that are not confined to specialized settings or to the execution of particular tasks" (Heritage, 2005, p. 235). A further body of conversation analysis work has centred on talk-in-interaction in a range of formal settings such as courtrooms, classrooms, healthcare settings and more. This body of work sits within the domain of 'institutional interaction', referring to interaction taking place in environments where participants have specific institutional goals and where there may be restrictions on the nature of interactional contributions (Drew & Heritage, 1992). Such interactions are not institutional by the nature of the settings but by how "participants' institutional or professional identities are somehow made relevant to the work activities in which they are engaged" (Drew & Heritage, 1992, pp. 3-4). For example, Sacks' early work focused on suicide prevention hotlines and therapy sessions, but his interest was in ordinary conversation and not the specific institutional tasks of these settings, and therefore this work would be classed as being concerned with ordinary conversation rather than institutional interaction (Heritage, 2005).

In the methodology of conversation analysis, interactions are captured as they occur by audio or video recording, enabling repeated and detailed examination which would not be possible if relying on observations during events or from field notes. Recorded data also allows the data to be made available to other researchers for further scrutiny. Video data in particular supports the analysis of multimodal resources used by participants (e.g., gestures, bodily movements, eye-gaze) which would not be possible with audio data alone. Conversation analysis recognises that the collective organisation of interaction by participants is achieved by "mobilizing a large range of vocal, verbal, visual and embodied resources" (Mondada, 2013, p. 33) and therefore data collection methods strive to capture this range of resources. Recording of multimodal resources is particularly pertinent for studies where interactants have communication difficulties impacting their spoken language skills and who may rely solely, or more heavily, on non-verbal resources (Dickerson & Robins, 2017; Muskett & Body, 2013).

2.4.2.4 Analytic methods

Conversation analysis is an inductive, data-driven method. Phenomena of interest are not predefined and instead researchers are led by features of interest as they are 'noticed' in the data (Schegloff, 1996). As Sacks summarised: "we sit down with a piece of data, make a bunch of observations and see where they will go" (Sacks, 1984, p. 27). While analysis seeks to be 'unmotivated' (Sacks, 1984), ten Have (1999) postulated that a researcher's analysis will inevitably be influenced by the body of conversation analysis research already in existence. Analysis of the data entails the noticing of patterns and recurring features. It also involves the identification of exceptions, as examining 'deviant cases' (Schegloff, 1968) supports the analysis of regularities by highlighting when rules do not apply as expected. Following identification of cases

which are analysed as potentially sharing a distinct interactional phenomenon, researchers create 'collections' of these similar cases for further examination (Psathas, 1995).

Once segments of the data are identified as being of potential analytic interest, they are transcribed sequentially and in detail. The recordings remain the 'data', with transcripts being a "convenient referential tool" (Hutchby & Wooffitt, 2008, p. 70). Transcripts also aid access to the data by others as needed, for example in publications to support analytic claims (ten Have, 1999). Conversation analysis transcription notation was originally developed by Gail Jefferson (Jefferson, 2004) although it has since been adapted and expanded by researchers according to their specific analytic needs (see Hepburn and Bolden (2017) for a comprehensive guide to transcription). Transcription conventions demonstrate the temporal and sequential relationships of talk (such as overlap, latching and pauses) along with features of speech delivery (such as pitch, volume, rate and emphasis). Visible behaviours such as eye-gaze and bodily movements can also be included in transcriptions to fully capture participants' interactional behaviours. However, unlike the transcription of vocal conduct where the Jeffersonian system is widely accepted, there is no agreed singular system to transcribing visible conduct (Hepburn & Bolden, 2017).

2.4.2.5 Suitability of conversation analysis for studying interaction and autism

The value of conversation analysis for studying interaction within the field of autism has long been recognised by researchers utilising this approach, with the first studies of autism emerging in the 1990s (Local & Wootton, 1995; Tarplee & Barrow, 1999) and it continues to gain popularity (O'Reilly et al., 2016). The use of conversation analysis to

examine autistic interaction sits within the broader research field of applied conversation analysis and specifically that focusing on atypical interaction.

One reason for conversation analysis being a suitable approach for studying interaction in autism is that it focuses on naturally occurring interactions, as discussed above. This enables researchers to study communication and interaction in the 'real worlds' of autistic children rather than in interactions influenced by researchers. It expands analysis of the range of activities where talk occurs for children and their communication partners beyond the semi-structured play situations which have dominated prior research. Such an approach is arguably more ecologically valid than alternative methodologies. For example, conversation analysis studies of autistic children have collected data from everyday activities such as bedtimes (e.g., Henderson, 2021b) and play with peers (e.g., Rendle-Short et al., 2014), alongside institutional activities such as classroom learning (e.g., Korkiakangas & Rae, 2013) and medical encounters (e.g., Solomon et al., 2016). The inductive nature of conversation analysis is also advantageous for studying interaction in autism. Rather than setting out with a preconceived idea of what the key findings will be within a study, or being constrained by expectations regarding interaction skills based on diagnostic criteria, it examines phenomena as they become of interest within an interaction, broadening the range of potential findings (Muskett & Body, 2013). A further benefit of conversation analysis as a method for studying autism is that it is interaction-focused and therefore recognises interaction as involving collaborative work by all participants (Wilkinson et al., 2020). This overcomes the limitations of other research designs, such as the coding studies mentioned above, which may focus on individual utterances or only on the communication of one interactant (thus failing to account for the co-constructed nature

of interaction). Finally, conversation analysis as an approach encompasses the analysis of the multimodal features of communication, which is particularly useful for studying interactions involving autistic children who have minimal or less-well developed verbal language abilities and who therefore draw on a range of multimodal resources within interactions (Dindar et al., 2017).

Having highlighted some of the reasons supporting conversation analysis as being a suitable methodology for exploring interactions involving autistic participants, the following section will now provide an overview of existing conversation analytic studies of interaction involving autistic children².

2.5 Conversation analytic studies of autism

Given the increasing recognition of conversation analysis as a valuable methodology for studying interaction in autism and the resultant relatively large number of studies, it is beyond the scope of this thesis to review all the relevant work in this area. Instead, this section will discuss a selection of papers to demonstrate examples of such work and to provide background context to the present study. It will begin by considering studies which have focused on examining interaction to better understand the "particular capacities and challenges" which autistic children might exhibit (Rae & Ramey, 2020b, p. 66) before reviewing studies examining interactions in educational and clinical settings. Finally, it will present an overview of research into everyday interactions of families at home.

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² While there are some conversation analysis studies on interactions with autistic adults (e.g., Dobbinson et al., 2003; Hollin & Pilnick, 2018; Koskinen et al., 2021) the majority of this body of work has focused on child participants and as this is the population relevant to the current thesis, it shall remain the focus of this review.

2.5.1 Distinctive features of autism

One domain of conversation analysis research has focused on the distinctive interactional features of autistic participants and the functionality of such features (Sterponi et al., 2015). Repetitive talk (immediate and delayed echolalia) is one such feature to have been analysed, beginning with some of the early studies applying conversation analysis to autism. Local and Wootton (1995) examined instances of echolalia in an 11-year-old boy as part of a single case study of 3 hours 45 minutes of video recordings of the child both at home with his family and in a classroom environment. Cases of echoing in the child's talk were analysed in terms of what sequential position they occurred in, how they were treated by their interaction partner and for their phonetic properties. This paper identified three subsets of echoes: communicatively appropriate usage, inapposite but systematic moves in a language game, and unusual echoes which did not appear to be moves in a recognisable language game or have a communicative use, although it was acknowledged that this classification system was not always clear-cut (Local & Wootton, 1995, p. 182). Further interactional analysis of echolalia was conducted by Tarplee and Barrow (1999) in their case study of a three-year-old child interacting in routine playtimes with his mother at home. The aim of this study was to explore the interactional work which may be accomplished by delayed echoing. Tarplee and Barrow's (1999) analysis of the child in their case study showed that the child frequently used echolalia to initiate social interaction, which contrasts with Local and Wootton's (1995) report of their participant only using echolalia in response position. Tarplee and Barrow (1999) also identified that their participant initiated with echoes in a way that was designed to elicit a repeat by his mother and that they were effective in generating extended sequences of talk

with his mother, during which he displayed pleasure, and a sense of shared understanding was achieved. Overall, it was concluded that echoing served an important function within parent-child interaction. Further work by Stribling et al. (2006, 2007) has also added to our understanding of the interactional functions of echolalia, by exploring the contexts in which it occurs and the roles of communication partners.

Topic perseveration is another feature of autistic interaction to have been studied using conversation analysis. Diagnostically, a preference for talking about certain topics or interests falls under the domain of 'restricted and repetitive behaviours, interests and activities' (American Psychiatric Association, 2013). Stribling et al. (2009) examined recordings of a school-aged child interacting with a mobile robot and a computer scientist as part of a wider research project. The focus of this study was to examine the organisation and maintenance of topics by considering features of asymmetry of participation and sequential positions of talk. This approach contrasted with content analysis methods typically used in prior research. Recurrent topic utterances were addressed to participants and thus considered to not be merely self-talk, as evidenced by the use of gaze to accompany verbal talk, and the treatment of utterances as response-relevant by the child's adult co-participant. The talk was also shown to have been elicited by environmental events, demonstrating the child's orientation to immediate incidents. The reopening of topics was also considered to be linked to features in the co-participants' talk, such as non or minimal uptake or disagreements with the child's proposals. Where there was 'recycling' of topics by the child, these were not done randomly, and instead they followed the management of other ongoing topics, showing sensitivity to his participant. While the authors recognised that the limited

activities of the robot may have contributed to increased occurrences of certain topics, overall, the findings emphasise the value of conversation analysis approach for studying interactions with children, alongside highlighting the importance of considering the environment and activities in which such interactions take place.

Further conversation analysis work has also shown how other features considered to be pathological characteristics of autism can be understood as interactional resources and how order can be found in children's use of diagnostically-conceived 'disordered' behaviours. For example, Muskett et al. (2010) examined the behaviour of inflexibility or the rigid adherence to routines, which, similar to topic perseveration, is diagnostically classed as a restricted and repetitive behaviour (American Psychiatric Association, 2013). The data for this study were collected from an eight-year-old verbal autistic girl who attended a special school. Recordings were taken of her playing in unstructured free play with one of the researchers. The analysis illustrates how the child participant employed various interactional strategies to prevent her coparticipant influencing the trajectory of the play, and that the co-participant collaborated by not resisting the child's actions. The authors highlight how recipients are accountable for resisting the actions of speakers, even if those actions could be considered unusual, or as in this case considered a 'disordered behaviour'. The authors also draw similar conclusions to previous interactional analysis of interaction involving autistic participants, stating that behaviours which are considered to be symptoms of autism for this child represent "the contingent, dynamic, and emergent product of her behaviour, the behaviour of co-speakers, the interpretation of her behaviour by cospeakers, the local context in which this occurs, and the normative expectations that are associated with that context" (Muskett et al., 2010, p. 14).

Studies have also investigated non-verbal features of interaction with autistic children. Dickerson, Stribling, et al. (2007) examined whether a tapping action used by two 16-year-olds was a deliberate, communicative and interactionally relevant gesture. Their analysis found that the physical actions used by the young people displayed active engagement in the present task, and that it potentially performed similar work to that which gaze might have accomplished. A second conclusion drawn was that the tapping action projected forthcoming talk from the young person. Their co-participants treated the gestures as providing audible and visual signs that a response turn to their first pair part would be produced by the young person, and that repair of their turn or pursuit was not warranted. Through the use of tapping, the young people demonstrated awareness of the normative expectation of the need to respond to a speaker's question.

Eye-gaze is a further non-verbal resource which has been considered by conversation analysis research. Korkiakangas and Rae (2014) investigated the spontaneous gazing practices of three children aged 9-11 years, either in naturally occurring interaction with a teacher, or at home with their mother and a sibling. The study identified various actions which are accomplished by the children gazing at a co-participant, such as addressing a recipient and nominating next speaker, eliciting a response in multiparty talk and for eliciting feedback on intended activities (i.e., completing a particular worksheet task). These findings add to previous interactional analysis of gaze and autism, such as Dickerson, Rae, et al. (2007) who demonstrated that autistic children used gaze for accomplishing addressing and referring, and that they coordinated gaze and pointing with talk, challenging previous observational work which has suggested that joint attention is a core deficit in autistic children (e.g., Siller & Sigman, 2002).

A final feature of autistic interaction to be considered is that of how autistic children manage interactional trouble, as investigated by Dindar et al. (2015). Trouble in this context is defined as problems with speaking, hearing and/or understanding talk which might lead to difficulties with intersubjectivity or mutual understanding of the talk (Schegloff, 2007). Trouble, and in particular how it gets repaired, has been a key concern in conversation analysis literature (Schegloff, 2007; Schegloff et al., 1977) and work in the field of autism builds on prior work of other communication impairments such as the acquired language disorder aphasia (e.g., Wilkinson, 2013). Dindar et al. (2015) used interactional analysis to explore the difficulties with reciprocal communication and socio-cognitive understanding which are considered characteristics of an autism profile (Fletcher-Watson & Happé, 2019). They present data from video recordings of three school-aged boys (aged 8, 11 and 14 years) engaging in technologyenhanced activities in school (a body movement game with eye-tracking glasses and a touch-screen storytelling activity). Their analysis focused on sequences in which participants orient to some interactional trouble, such as a child displaying embodied actions suggesting they are unsure about how to respond to instructions from a coparticipant, or display hesitation suggesting they require assistance. The study explicates the different ways in which autistic children initiate repair to maintain mutual understanding using non-verbal resources such as gaze and bodily actions along with verbal resources such as repeating requests. The sequential analysis also demonstrates how the children and their co-participants collaborate to resolve trouble and restore mutual understanding, such as adults interpreting the children's bodily actions and doing clarification checks (with the latter being a less successful strategy than the former).

In addition to examining features of autism from an interactional perspective, conversation analysis studies have also focused on exploring interactions in a range of institutional contexts, such as education and clinical settings. An overview of such research will now be presented.

2.5.2 Research in education settings

A small number of studies have explored interactions involving autistic children and education staff, adding to the broader set of conversation analysis work investigating pedagogical practice. This section will discuss these studies.

Stribling and Rae (2010) utilised conversation analysis to examine the interactional characteristics of the pedagogical practice of 'scaffolding', where a learner is supported to acquire a skill by another more competent individual. They analysed data from a 16-year-old student with autism and severe learning disabilities interacting during a maths task with a teacher and a learning support assistant (LSA). The findings demonstrated how teaching staff display various supportive actions and that these can occur in differing sequential positions. For example, the analysis illustrated how the teacher tended to use prospective support such as clear instructions and non-verbal gestures to indicate expectations before a response was anticipated from the student, and that if an appropriate response was not forthcoming, the teacher provided support through repair of their instructions. The LSA also provided supportive strategies, such as physical guidance (e.g., using a hand to guide touching of blocks when counting) and these tended to occur in the response phase i.e., after an initiating instruction had been given by the teacher. In addition to considering staff actions, the authors also considered the student's contributions to the successful accomplishment of activities,

such as her displays of understanding of the tasks and actions which indicated her engagement (e.g., echoic talk), responding to invitations of physical guidance and using gestures (e.g., forming a point with her hand when counting). This study highlights the importance of considering both interactional parties when examining how instructional tasks might be achieved and also the necessity of analysing non-verbal strategies and resources when exploring interactions with individuals with additional learning needs.

The important role of non-verbal behaviours is also highlighted in work by Korkiakangas and Rae (2013) who specifically looked at how objects were handled by teachers in a special school as a means of maintaining visual attention and engagement with two autistic pupils (aged 10 and 12 years). The authors describe the teachers handling of objects as "mundane yet skilful" (p. 100), demonstrating how the teachers monitored the children's gaze and bodily actions as the teachers moved objects to transition between tasks, and how they escalated adjustments to objects to make them more obvious if a child was not showing the desired level of engagement. The analysis also illustrated the children's competence in monitoring the teachers' movement of objects, even when subtle, and then responding as sequentially implicated.

In addition to examining specific sequences of learning activities, conversation analysis has also been used to explore how autistic young people participate in interactions such as person-centred planning meetings, where their needs and goals are being discussed by teachers and parents. Barnard-Dadds and Conn (2018) conducted a single case study of a 13-year-old autistic girl which explored how adult participants attempted to elicit responses from the student using strategies such as jokes, compliments and encouragement, but also reports how the student tended to provide minimal and often dispreferred responses. The authors conclude that while the adults employed strategies

to elicit child participation, these were rarely successful. The authors note how conversation analysis can be used to provide evidence of the barriers to participation and the importance of further analysis of such meetings, and consideration of alternative approaches (such as 1:1 visually supported sessions), to ensure that they provide genuine opportunities for children and young people to express their views.

2.5.3 Research in clinical settings

Moving on to consider research in clinical settings, one line of enquiry of conversation analytic work on autism in this context has focused on how autism is diagnosed and talked about in clinical settings, drawing on a large dataset of recordings from a developmental disabilities clinic in the United States (Maynard, 2005; Maynard et al., 2016; Maynard & Turowetz, 2022; Maynard & Turowetz, 2017a, 2019; Turowetz, 2015a, 2015b; Turowetz & Maynard, 2016, 2018, 2019). Some of these studies have focused specifically on talk-in-interaction involving the child being assessed (i.e., their interactions with a clinician) while others focus on talk about the child, but without the child being present in the interaction (i.e., parents and clinicians talking about the child's presentation in an evaluation appointment). For example, Turowetz and Maynard (2019), examine how testing procedures used in diagnostic evaluations can position features of autism as being part of the child rather than a product of the interactional environment in which they might be observed. Autism is behaviourally diagnosed by eliciting potential characteristics through standardised semi-structured interactions. However, Turowetz and Maynard (2019) note that when clinicians talk about their observations with other clinicians, or when they write evaluation reports, they focus solely on features of the child without taking into account their own behaviours, such as their initiations or responses, and how these may have influenced

the interaction. The role that clinicians play in such assessment activities has also been explored further in studies by Maynard and Turowetz (2017b) and Stickle et al. (2017).

Instead of analysing interactions which actively involved the child being assessed, Maynard and Turowetz (2017a) focused on parent and clinician talk and the narrative structures inherent to diagnostic appointments. They considered how ordinary storytelling practices played out in this institutional context and how stories were collaboratively produced by both parents and clinicians. They identified particular characteristics of such interactional storytelling, namely 'instantiation stories' (defined as stories "portraying single episodes of conduct and their particularities", p. 257) and 'tendency stories' (defined as stories which "extend a behaviour beyond the single instance", p. 257). They note that the latter are more frequent in their dataset, and are more frequently used by clinicians than parents. O'Reilly et al. (2017) also utilised conversation analysis to examine institutional interactions where children are talked about by clinicians and parents. In contrast to Maynard and Turowetz (2017a), O'Reilly et al. (2017) describe how it is parents who first raise the possibility of autism as being the potential diagnosis. These authors obtained data from triage appointments, which are an earlier part of the diagnostic pathway than that examined in the studies mentioned above. The focus of a triage appointment is not to deliver confirmation (or not) of a diagnosis (which is typically the role of a clinician) but to discuss whether a referral for further formal diagnostic assessment is warranted, which, as the analysis by O'Reilly et al. (2017) shows, is typically led by parents who build a case for autism through their talk. These verbal cases can be positively evaluated and ratified by clinicians in their response turns or they can be refuted. The analysis demonstrates the differing interactional features of these response options, with affirmative responses

being delivered in succinct and straightforward sequences, whereas responses disagreeing with the potential for an autism diagnosis required more delicate interactional work.

Aside from the literature focusing on the diagnostic and associated processes, there are minimal conversation analytic studies of other forms of clinical interactions. Solomon et al. (2016) studied recordings of parents and autistic children visiting their doctor with medical concerns, comparing them to visits involving typically developing children, in order to identify any unique interactional challenges in appointments with autistic participants. The findings identify differences in greeting sequences, with the presented extracts showing how such sequences could play out seamlessly for the non-autistic children and often led to the doctors selecting children to speak about the medical concerns which had brought them to the appointment. For the autistic children, greeting sequences required more interactional work on behalf of both doctors and parents. The findings also show how typically developing children participated in corroborating their parents' problem presentations but that this was more difficult for the autistic children, even when they had access to verbal communication. These findings are clearly important in terms of understanding challenges to meeting the health needs of this population.

Maynard et al. (2016) also analysed recordings from a paediatrician visit of a young child (2 years 9 months) with little verbal language who attended with his parents. The focus of this study was to explore how parents work as a team to achieve the goal of extracting a spinning toy which the child appears to be keenly focused on. The authors explored the parenting styles of both the mother and father of the child by analysing their observable behaviours in interactional routines. They describe the

'accommodating style' of the father, based on noticings of his invitations for the child to play and regular assigning of turns to the child, along with the watching of the child's solitary play actions. The authors also describe the mother's 'conditional style', which is characterised by attempts to elicit linguistic responses, hindering further play until a candidate response is produced from the child. In this study, the mother used this interactional behaviour during a non-institutional task (i.e., it is not relevant to achieving the outcome of the medical appointment), but this type of conditional elicitation of language is also documented in institutional tasks, such as in speech and language therapy sessions (Ekberg et al., 2019). Although these different parental styles are witnessable in the adults' behaviour, the authors emphasised that both parents used both approaches at different times (i.e., the father also used a conditional style and the mother used an accommodating style) but that they tended to display one style more frequently. The analysis also considered extracts where the parents had to work as a team to successfully extract the spinning toy, such as offering alternative objects or directing the child to a different activity, choosing these arguably more supportive strategies over imperatives or "aggravated directives" (p. 417) such as 'give me the toy'. This study adds a unique contribution of exploring interactions involving both parents, rather than single parent-child dyads.

Further to studies in education and clinical settings, conversation analysis research has also been interested in analysing interactions involving autistic children in domestic settings with family members, which shall now be discussed in the following section.

2.5.4 Everyday family interactions

The majority of the conversation analysis research examining everyday family interactions are single case studies of children diagnosed with autism interacting with their family members (e.g., Bottema-Beutel et al., 2020; Geils & Knoetze, 2008; Henderson, 2021b), although a recent paper by Henderson (2021a) includes examples from three families and Ramey and Rae (2015) draw on a dataset involving four children. Many of the interactions analysed are parent-child dyads with a small number of examples featuring extracts involving siblings (Geils & Knoetze, 2008; Rendle-Short et al., 2015). Some studies based in domestic settings also include interactions with other familiar adults e.g., tutors (Rae & Ramey, 2020a; Sterponi & Fasulo, 2010). My literature searches suggest that most of the studies of domestic interaction feature children using verbal language at phrase level or above, although a recent study by da Cruz (2022) focuses on low-verbal children. The majority of studies have monolingual English-speaking participants, although there are some exceptions (e.g., Bottema-Beutel et al., 2020; da Cruz, 2022; Mohamed Zain et al., 2017). A small selection of conversation analysis studies focused on everyday family interaction involving autistic children are discussed below, with the aim of illustrating how such research has contributed to both the understanding of autistic communication and of parent-child interaction.

Geils and Knoetze (2008) conducted one of the early studies of family interaction, based on a dataset of family-produced recordings of everyday interactions involving Barney, a six-year-old diagnosed with autism. This research was interested in how Barney contributed to interactions with his family, how his family interacted with him, and overall how family interactions were co-constructed by participants resulting in either "successful coordinated and synchronous interaction" or "unsuccessful discordant

interaction" (p. 216). Features identified as evidencing synchronous interaction included sustained eye-contact, overlapping positive facial affect (e.g., smiling), construction of shared meaning, fewer longer pauses between turns and frequent contributions (both verbal and non-verbal) by both participants. In contrast, discordant interaction tended to be characterised by Barney's withdrawal from the interaction through physical abandonment or gaze aversion and by echolalia or frequent use of repetitive, apparently inappropriate responses (e.g., the use of 'yes' when unexpected in the interaction). The analysis also indicated that familiar routines and sequences often yielded coordinated interaction.

Henderson (2021b) also presents a case study of a six-year-old child, but rather than considering family interactions in general, this study focused on the household routine of bedtime, and specifically the activity of the mother encouraging her child to use the toilet before going to bed. The analysis draws on previous work of directives, or the action of getting someone to do something (see Goodwin, 2006) and deontics, or the right to determine others' actions (see Stevanovic & Peräkylä, 2012). The analysis demonstrates how parent and child negotiate the child's autonomy, illustrating how the mother at times employed a low deontic stance by designing directives in a way that the child was entitled to refuse (e.g., asking if a child wanted to *try* to use the toilet), and how the child designs their refusals in a way which avoids blame (e.g., accounting for not trying by stating that his body does not need the toilet). Henderson (2021b) also discusses the benefactor/beneficiary relationship constructed through the design of directives. The mother positions herself as the beneficiary of the child's action of using the toilet, which following the child's resistance to directives, means that she can coercively make the child responsible for her negative feelings (i.e., feeling frustrated if

he does not try). The child does eventually complete the activity of going to the bathroom, but he does this in such a way that it is analysed as being on his own terms, and not necessarily compliance with his mum's directive, positioning himself as an "autonomous agent" (p. 184).

Parental use of directives is also examined by Rae and Ramey (2020b) who discussed how a father used them with his ten-year-old son to support him to participate during a play activity at home. The production of the directives was examined, illustrating that multimodal features such as gaze and manipulation of objects were used in addition to verbal language. The sequential position of the directives was also examined, showing that directives could be sequence-initiating to provide an opportunity for the child to co-participate, but they could also be used to stop an undesirable child-initiated activity (such as a self-injurious behaviour like biting). Extracts presented in this study also demonstrated how the father expanded on simple directive-response sequences to facilitate further participation of the child, such as re-presenting an initiating action when the child displays a response which might indicate trouble. The child's actions are also considered in the analysis, exploring how their engagement in extraneous activities (i.e., activities not relevant to the specific task at hand) can create new opportunities for participation, for example, how playful slapping initiated by a child led to joint parentchild play-fighting as a play activity. The authors conclude with a helpful overview of the wide range of supports identified as facilitating the child's co-participation including: getting the child's attention; doing initiating actions (e.g., directives); designing initiating actions in a facilitative way; expanding initiating actions; prompting responsive actions; re-doing initiating actions; not responding to child-initiated

activities; engaging with child-initiated activities and stopping child-initiated activities (p. 86).

The final study to be reviewed is by Mohamed Zain et al. (2017). One of the aims of this study was to contribute to cross-cultural and cross-linguistic interactional research in autism, as their data features Malay-speaking adult-child dyads. In addition, the analysis provides some useful insight into parent-child interaction. The analysis focuses on a frequently occurring phrase 'apa tu' (roughly translated as 'what's that?'), examining how it was used by a six-year-old child and how it was responded to by his mother. Mohamed Zain et al. (2017) show that this phrase was used unconventionally by the child (in terms of it being sequentially ill-fitted) but that his mother did not necessarily treat it is as problematic. It was seen to accomplish actions such as creating an opportunity for joint engagement or to extend a current topic of focus, reflecting similar findings to Rae and Ramey (2020b) that opportunities for participation are coestablished by adult and child participants. At other times though, the use of this phrase was not responded to by the mother and instead was treated as self-talk or examples of delayed echoing such as that described in previous studies (e.g., Wootton, 1999).

The section has considered some of the existing research of interactions involving children with autism, illustrating how it has developed our knowledge of distinctive features of autistic interaction, how competencies can often be found where incompetence may have been assumed, and the various interactional practices employed by both children and their interaction partners.

2.6 The current study

The current study intends to add to the conversation analysis research involving autistic children described above. Although there are a number of conversation analysis studies examining family interactions, the number of participants across these studies is relatively small. Given the heterogeneity of autism as a condition, further studies, and thus more participants, are arguably worthwhile to examine a wider range of ages and profiles. Moreover, the amount of quantitative studies of autistic interaction continues to far outweigh detailed qualitative analysis. Finally, autistic children who have communication needs have often been excluded from research (McKinney et al., 2021; Tager-Flusberg & Kasari, 2013) and therefore the current study purposefully attempted to recruit participants from this underrepresented population.

2.7 Chapter summary

This chapter has reviewed the literature relevant to the current project. It first presented an overview of autism including some contemporary issues related to autism research, such as terminology. It then discussed the literature related to parental and sibling experiences in families with autistic children. Following this, the chapter moved to focus on reviewing studies of interaction in autism. It discussed quantitative observation studies and offered a critical review of their limitations. It then provided an overview of the methodology of conversation analysis, which is utilised in the present study. It considered the advantages of conversation analysis as an approach for studying autistic interaction and reviewed some examples of conversation analytic studies.

The following chapter focuses on the research design and methods employed in the current study.

3 Methods

This chapter provides an overview of how the research was carried out. It includes details of the recruitment process, ethical considerations and a summary of the participants. Some of the challenges encountered with recruitment will also be discussed. The data collection procedures in terms of the practicalities of obtaining video recordings will be outlined and details of the data corpus will be presented. It also reports the analytic methods in terms of data selection, transcription and analysis.

3.1 Design

This qualitative study applied conversation analysis to video data of everyday family interactions. Originally, this research project sought to examine everyday talk and also institutional talk collected from speech and language therapy sessions. This original design shaped the recruitment process, as will be apparent in my reporting of the methods in this chapter. However, as the project progressed, it was decided that this thesis would focus only on the everyday family interaction data, as simultaneous analysis of the clinical data would be too large a project for the time available.

Therefore, this thesis presents only the findings from the everyday family interaction dataset, while the institutional data will be presented in further work beyond the present thesis.

3.2 Recruitment

3.2.1 Selection criteria

The selection criteria for this study were: children were aged between 2-6 years, had a confirmed diagnosis of autism, were attending speech and language therapy and spoke English as their primary language at home.

The age criteria were set due to my interest in interactions involving younger autistic children. This was partly driven by a professional interest through my experience of working with children of this age, but also due to an under-representation of younger (and thus potentially less verbal) autistic children in the conversation analysis literature about this population. An autism diagnosis was to be confirmed by viewing the diagnostic reports with permission from the family. As I was originally collecting institutional data alongside the everyday interaction data, I required children to be attending speech and language therapy at the time of filming. The requirement for families to speak English as their primary language at home was a pragmatic one, in that I am monolingual and would not have been able to translate.

3.2.2 Previous recruitment attempts

Section 3.2.3 will detail the recruitment process for the data that were ultimately collected for the study. However, prior to successful recruitment, there were additional recruitment attempts that did not come to fruition. It is deemed relevant to discuss

these 'false starts'³, as it exemplifies some of the considerations and challenges of collecting the type of data required for the study.

As I had been practising in Ireland as a speech and language therapist prior to commencing my doctoral research, I hypothesised that it would be easier for me to recruit through Irish speech and language therapy services rather than the UK system. as I had a better understanding of the system and I had professional contacts. I initially secured an agreement to recruit through an autism-specific preschool. However, unfortunately by the time I was ready to recruit, the preschool was in the process of closing down. I made links with other preschool services but was unsuccessful in my attempts to recruit through these. I subsequently began the process of recruiting through the Health Service Executive (HSE; Ireland's national health service) as at that time it was possible to recruit to studies with university ethical approval only, rather than an HSE-specific ethics application. However, just before I began recruiting, the HSE implemented a new ethical approval system for community services, which significantly delayed the start of recruitment. Approval for the project was ultimately granted, with an agreed recruitment plan of sending project information to service managers, who would then share the information with their staff, who would self-select to take part and then contact families on their caseload who met the selection criteria. As I was restricted to only sharing information through managers, it is not possible to know how many therapists were aware of the study. Four therapists contacted me for further information about the study, of which three were happy to share the information with families on their caseloads. One family responded to this project call, but they were

³ A term suggested by Bradley (2015) who also encountered unsuccessful attempts at recruiting institutional data of professionals working with children for a conversation analytic study.

soon due to have a change of therapist and their new therapist did not want to participate therefore they could not be included. No other families responded to the invitation to participate. As this recruitment approach was not successful it was necessary to pursue other avenues, this time based in the UK.

3.2.3 Recruitment through the in-house university clinic

Throughout the time I was attempting to recruit through the HSE, an in-house clinic for preschool aged children with speech, language and communication needs was being established at the Department of Human Communication Sciences at the University of Sheffield. As I was involved in this clinic as a therapist, it presented the opportunity to recruit in the UK without having to go through the NHS ethics application system, which would have delayed the project further. A new data collection plan was designed and received ethical approval from the department's ethics committee (appendix 2). This plan also extended the age range of the children from a limit of preschool age (up to and including 5;11 years) to early school-age (up to and including 6;11 years). This was for the purpose of widening the participant pool to include children who attended the preschool group alongside a part-time timetable in primary school.

This recruitment plan comprised the following steps:

- Seek permission from the clinic lead following discussion of the purpose of the research and evidence of consideration of ethical issues.
- II. Send the project information sheet for families (appendix 2) to parents by email via the clinic secretary, who acted as gatekeeper to the project. It was decided that this information would be sent by the clinic secretary rather than by myself to ensure that families did not have to refuse to participate directly to me as the

- researcher, which they may have felt could impact on our ongoing professional relationship in the clinic.
- III. Parents/carers were invited to contact the researcher directly following receipt of the project information if they wished to find out more or express an interest in participation. Parents self-selected to take part in the project and their family's participation/non-participation did not impact on their involvement with the clinic.
- IV. Contact therapists working with children whose parents had expressed an interest in taking part by e-mail. This included sending the project information sheet for therapists (appendix 2) and offering opportunities for further discussion. Therapists were also positioned to self-select and there were no negative consequences for not opting into the study. Only families where both a parent and the child's therapist were willing to participate were recruited to the study.

Initially, student speech and language therapists were recruited to the project.

However, following a change of supervisory team for the research project, it was decided that it was preferable to only include qualified speech and language therapists, as it was felt that the institutional dataset would not be representative of regular practice if sessions were being conducted by student therapists rather than fully qualified and experienced practitioners. This change resulted in a second recruitment process within the clinic which delayed data collection further.

3.3 Informed consent

Informed consent from all adult participants was achieved prior to the commencement of data collection. Particular issues to consider within this study were the use of video data and ethical issues around working with young children.

3.3.1 Parent, family and child consent

Parental consent was collected following reading of project information sheets and opportunities to ask further questions about the study. Consent forms (see appendix 2) were completed in person with attending adults, and copies were sent home with parents to secure consent from other adults who may feature in the home data (e.g., fathers, grandparents). These other adults were also provided with opportunities to discuss the research directly with me if they wished. Consent forms clearly stated the purpose of the research and how the data would be used – principally for the production of this thesis. Parents were also given the opportunity to consent to or refuse further uses of the data such as showing videos at professional conferences and further analysis of the data. An option for anonymising the data for such additional uses was provided. Parents were reminded of filming before each data collection session in the clinic; this acted as a means of securing ongoing consent and multiple opportunities for participants to withdraw if they wished. As parents were recording the everyday footage themselves, they were in control of their consent of this aspect of data collection (i.e., they could choose not to film).

Regarding child consent, it was recognised that the age of the child participants and the nature of their language impairments diminishes their autonomy in research participation. It is good practice when conducting research with children to secure child

assent, for example through the use of accessible information (McIntosh et al., 2000). However, it was felt that comprehending such material was still beyond the abilities of the children recruited to the study and instead children would be shown the equipment and allowed to explore it themselves where appropriate. For example, children were all shown the computer screen housing the clinic recordings (kept in a separate room to where sessions were held) so that they could see how we made the room 'be on TV'. How much they understood of this concept is unknown. For the home data, the cameras were shown to the children when first being given to the family, so that they were aware of their functions. Parents were advised that if they suspected participating in the project was causing their child any stress then they should terminate filming.

Sibling involvement in recorded activities was optional and not a requirement of the study. Formal consent was provided by parents on behalf of all siblings across all families. Parents were advised to discuss the process of filming with their children and to only film if children assented. All families were offered the opportunity of me visiting their home to talk through the filming, but no family took up this offer. A separate child-friendly information sheet was not designed for siblings. This is recognised as a limitation to the consent procedures.

3.3.2 Therapist consent

Therapist consent was also secured following discussion of the project information sheet and an opportunity for queries. A separate therapist consent form (see appendix 2) was completed, again detailing the required activities for participation and optional further uses of the data.

3.4 Participants

Four autistic children and their families, along with two speech and language therapists, ultimately participated in the project. Details of child and family participants are provided in Table 1. Pseudonyms are used for all participants.

Table 1 Participants

Child participant	Gender	Age Years; Months	Parents & other adults	Siblings
Jeff	Male	6;1	Mum Dad (Both no known neurodevelopmental conditions)	Holly (Aged 9, no known neurodevelopmental conditions)
Molly	Female	6;4	Mum Dad (Both no known neurodevelopmental conditions)	Alex (Aged 4, Autism)
Mark	Male	4;5	Mum Dad Grandfather Grandmother (All no known neurodevelopmental conditions)	India (Aged 9, no known neurodevelopmental conditions)
Seth	Male	4;0	Mum Dad (Both no known neurodevelopmental conditions)	Levi (Aged 9, Down's Syndrome)

3.4.1 Children's profiles

The following section outlines details of the children's profiles to provide context to the data.

3.4.2 Jeff

At the time of recording, Jeff was aged 6 years and 1 month. He lived at home with his mother, father and his older sister (Holly, aged 9 years). He had completed his first year in a mainstream school but was due to transition to a special school for the following academic year. Jeff was diagnosed with autism at age 3;6 by a specialist team at his local Child Development Centre; this was confirmed via viewing of his diagnostic report. Jeff has not undergone any cognitive assessment.

Jeff presented with severely impaired speech, language and social communication skills and was classed as minimally verbal as he had fewer than 20 words (Yoder & Stone, 2006). This profile was established through viewing of his NHS speech and language therapy reports and through informal clinical assessment conducted during the speech and language sessions recorded for this project. In terms of expressive language, Jeff communicated primarily through non-verbal behaviour (e.g., pulling an adult to a desired object/ place) and when supported, through handing pictures of desired objects to adults, as part of the alternative augmentative communication (AAC) system, Picture Exchange Communication System (Bondy & Frost, 1994). Jeff also used some non-word vocalisations and a small number of consistent recognisable words (no, more). The term 'vocalisations' within this thesis refer to non-lexical sounds with no clear semantic specification. With regard to language comprehension, Jeff followed single word instructions with context (e.g., where's your drink, get your coat) but could not follow

longer or more complex instructions. Jeff's family used some Makaton⁴ signing with him but he did not use the signs spontaneously himself.

In line with his diagnosis of autism, Jeff presented with social communication and interaction skills which are considered atypical when compared to non-autistic children his age. He showed a preference for playing on his own agenda, although would play alongside others in parallel play. Jeff played with some objects in a functional way but engaged mainly in sensorimotor play and repetitive routines e.g., turning lights on and off. Jeff demonstrated self-injurious behaviours such as biting his hand when distressed.

3.4.2.1 Molly

Molly was aged 6 years and 4 months at the time of her recordings. She lived at home with her mother, father, older sister (aged 17 years, does not feature in recordings) and younger brother who also has a diagnosis of autism (Alex, aged 4 years). Molly was being home-schooled by her parents. Molly was diagnosed with autism at age two by a specialist team at her local Child Development Centre, and cognitive assessments indicated she was functioning within the average range; this was confirmed via viewing of a clinical psychology report.

Molly presented with a mild speech sound difficulty, severely delayed expressive and receptive language skills, and social communication difficulties associated with her autism diagnosis. This profile was established through viewing of her NHS speech and language therapy programmes and through informal clinical assessment conducted during the speech and language sessions recorded for this project. At the time of the

 $^{^{\}rm 4}$ Makaton is a language programme which uses symbols, signs and speech to support communication (The Makaton Charity, n.d.).

recordings, Molly expressively communicated using three-to-four-word sentences, although omitted smaller grammatical units such as 'is' 'the' and 'and'. She had a reluctant or selective communication style in that she showed a preference for non-verbal communication means (e.g., bringing an adult to a desired object) over verbalisations. She was able to follow instructions at a three-key word level and understand who, what, where and when questions. Molly presented with some persisting speech sound production difficulties and spoke with a low volume. Her speech was intelligible to familiar listeners and to unfamiliar listeners when the context was known. Molly would initiate interaction with familiar peers and engaged in some imaginary play. She did not interact with unfamiliar people and would demonstrate anxiety behaviours such as hiding under furniture or absconding.

3.4.2.2 Mark

At the time of participation, Mark was aged 4 years and 5 months. He lived at home with his mother, father and older, typically developing sister (India, aged 9 years). Mark was attending nursery with the transition to mainstream school to occur within two months of data collection finishing. Mark was diagnosed with autism at age 3 years by a specialist team at his local Child Development Centre; this was confirmed via viewing of his diagnostic report. Mark has not undergone any cognitive assessments.

Mark presented with severely impaired language and social communication skills. This profile was established through viewing of speech and language therapy reports written by an independent practitioner and through informal clinical assessment conducted during the speech and language sessions recorded for this project. Mark's expressive language consisted of a range of single words, some stereotyped phrases and emerging

two-word utterances. However, he also relied on non-verbal behaviour such as pulling adults or screaming. His speech was intelligible to most listeners. Mark followed instructions of single and two-key words.

Mark engaged in some functional play with preferred activities such as inset puzzles. He tolerated adult intervention for short periods as long as he directed the activity. Mark had two favoured toys, Buzz and Woody, which he would not separate from. Mark demonstrated physical behaviours such as hitting, kicking or biting when displeased or distressed. Mark did not show interest in interacting with his peers although did play parallel to them. Mark engaged in frequent sensory-seeking behaviours such as playing with his mum's hair.

3.4.2.3 Seth

Seth turned 4 years old during the period of data collection. He lived at home with his mother, father, and older brothers, Levi (aged 9 years, who has Down's Syndrome) and a fifteen-year-old brother who did not feature in the recordings. Seth was diagnosed by a specialist team at his local Child Development Centre at age 3 years; confirmed via viewing the diagnostic report. No formal cognitive assessments have been undertaken.

Seth presented with severely delayed language in addition to the social communication differences associated with his autism diagnosis. Seth used a range of single words and some simple phrases. He exhibited perseveration on certain topics resulting in delayed echolalia and unusual word use. Seth also relied on stereotyped phrases, such as 'I need X' phrases. Seth demonstrated the ability to follow single word and two-word instructions. His speech was intelligible to familiar listeners.

Seth showed a preference for sensorimotor play, particularly physical movements. He engaged in functional play if sufficiently motivated by it. Seth greeted familiar adults but did not show interest in his peers. He engaged in frequent sensory-seeking behaviours such as playing with his mum's hair and splashing with water. Seth demonstrated displeasure and distress though non-verbal behaviours such as hiding or lying on the floor.

3.5 Data collection

The everyday family interaction dataset comprises over 12 hours of video from the four participating families, as shown in Table 2.

Table 2 Recording time per family

Child	Recording length	
Jeff	04:07:04	
Molly	00:38:16	
Mark	07:16:26	
Seth	00:20:26	
Total	12:22:12	

This corpus was generated by the participants using recording equipment provided to them as part of the project. This method of participant-produced video allowed me to access the private worlds of these families' everyday lives without the requirement and potential disturbance of researcher observation or fieldwork. This data collection method has commonly been employed by conversation analytic studies of family interaction (e.g., Bottema-Beutel et al., 2020; Hepburn & Potter, 2011; Kent, 2012a).

Families were provided with a Panasonic HX-DC3 handheld video camera along with a choice of two tripods, a standard fixed tripod and a 'GorillaPod Original' flexible tripod. The cameras recorded to a 16GB SDHC memory card, allowing for approximately two hours of footage to be filmed per card, with cards being replaced at clinical sessions during the filming period as needed. The cameras were relatively low cost (<£100) and families were advised to not be concerned about any damage to equipment in an effort to reduce any apprehension about using the equipment for making recordings. All families were provided with a copy of their recordings upon completion of data collection.

Muir (2008) urges researchers to manage their expectations of participants and to provide them with detailed but straightforward advice regarding how and what to film prior to data collection. Families were shown how to operate the cameras at an induction session held either as part of one of the speech and language therapy sessions (Mark and Seth) or through a home visit (Jeff and Molly). Written instructions were also provided (see appendix 3). The verbal directions and written instructions had been piloted on five previous families (with typically developing children) as part of a previous project and the final versions had been produced with their feedback. Current families were encouraged to contact me during the data collection period if they encountered any difficulties or had any queries about the recording equipment, although no family did in fact make contact.

Families were also provided with guidance on how much to film and what type of activities to film (appendix 3). Families were asked to film approximately an hour a week in as many blocks as they wished; however, this proved unrealistic for some families. As seen in Table 2, two families recorded a large portion of the dataset, with

the other families reporting finding it difficult to remember or to organise themselves to film while juggling family life. Suggestions for activities included mealtimes, free play, book reading etc. In order to ensure that the data generated was at the more natural end of the natural/contrived spectrum suggested by Potter and Wetherell (1987), families were encouraged to make their own decisions of what they felt to be 'everyday family interactions'. Consequently, there was variation in the types of activities recorded by families, ranging from mealtimes to play activities (indoor and outdoor) to story time to television watching.

In addition to the autistic children and their parents, there were also siblings and grandparents who consented and participated in some of the recorded interactions.

Three recordings from Mark's dataset featured people from whom written consent had not been obtained (e.g., hairdresser, healthcare professional) and therefore these were deleted and have not been used in the study. Mark's mother reported that verbal consent had been obtained but this did not constitute the level of informed consent required for inclusion in this project.

There are some distinct advantages of participant-produced video, such as collecting interactional data from situations that may not be suitable to have a researcher present (for example, a number of recordings in this corpus are from a sibling's birthday). The elimination of the researcher as an observer of the interaction event is also considered to minimise reactivity (Hepburn & Potter, 2011) although it should not be assumed that participants can 'forget' that the camera is there. Indeed, there are a number of explicit verbal references to the camera within the everyday interaction corpus suggesting that families were cognisant of being recorded, as shown in the two extracts below:

Extract 3.1 Jeff_HM01_dinner _videoing (00:05:29-00:05:35)

Extract 3.2 Mark_HM06_dinner_film (00:05:23-00:05:26)

```
1 India: can't you film it?
2 Mum: I am filming it sweetheart
```

The use of participant-produced data does also have some disadvantages. I had no control over the amount of data produced per family resulting in variation across the families. As seen in Table 2, Jeff and Mark's families produced the main bulk of the 'home' data (34% and 59% respectively) whereas Molly and Seth's families produced far less (5% and 2% respectively). Both of these latter families reported finding it difficult to both remember to film and make time to film within their busy family lives caring for more than one child with developmental difficulties. This reported stress is in line with literature on how families experience parenting autistic children, as discussed in chapter 2. It was therefore deemed inappropriate to pursue further recordings from these families as this could have added further stress. Additionally, as I did not set up the filming equipment for the families there were a number of occasions where a parent was holding the camera and thus was not in shot. These factors overall affected the amount of data collected and the size and scope of the ultimate dataset limits generalisability, which is discussed further in chapter 7.

3.6 Data management

Video data were stored on two encrypted hard drives (one as a back-up) accessed only by me. It was shared with my supervisory team as part of doctoral supervision and with other researchers as part of data sessions, always with parental consent. The data were labelled using only pseudonyms and this was kept separately to any other information from which the participants could be identified, such as consent forms.

The videos were played using QuickTime player which also enabled trimming of videos to smaller extracts as needed for analysis. The audio editor, Audacity, was used for close listening to extracts where necessary and for timing of pauses and silences in the data.

3.7 Data analysis

The data were analysed using the methodology of conversation analysis. This approach has been outlined in chapter 2.

3.7.1 Data selection

Analysis of the data began with repeated viewings of the recordings to identify potentially interesting phenomena. A data-driven approach was taken, in line with the traditional approach within conversation analysis of examining the data in an unmotivated way (Sacks, 1984). As such, I was not searching for specific features within the data and did not have a preconceived idea of the phenomena which would ultimately form this thesis. Despite this, my viewings of the data would naturally have been informed by my developing knowledge of talk-in-interaction and my knowledge of autism, and it is recognised that this will have played a part in the features that were ultimately 'noticed'.

Following repeated viewings and scrutiny of the recordings, I identified a range of features of interest to the research aim of examining everyday talk of autistic children. This preliminary stage of analysis also highlighted phenomena of interest in the wider multiparty, family interaction. Patterns of these features were noticed and collections were built through viewings of the full dataset. These collections formed the basis of the analysis and were transcribed to enable closer analysis. Extracts from these collections were selected for inclusion in the thesis by nature of being clear examples of the features of interest. Extracts are labelled in the thesis using the system Child pseudonym_ HM(home)week number_ recording title_extract title (start time-end time).

3.7.2 Transcription

Transcription of the selected extracts was considered to be part of the analytic process rather than something to be produced before analysis could start, aligning with the stance of Sidnell (2010) who suggested that researchers should 'do' transcripts rather than just 'have' them. The transcripts of extracts are used within this thesis to exemplify the resulting analysis but the videos themselves remain the primary data; the transcripts are not intended as a replacement. The aim of the transcription was for the reader to have sufficient detail to inform their understanding and evaluation of the presented analysis, while remaining readable.

A key underpinning of transcript production in conversation analysis is to demonstrate not just what is said by the participants, but also how it is said (Hepburn & Bolden, 2012). The aim was to "capture talk as it actually occurs, in all its apparent messiness" (Hutchby & Wooffitt, 2008, p. 71). Accordingly, the video data were transcribed using a

Jeffersonian approach (Jefferson, 2004) which encompasses details such as volume, stress, laughter and pauses, amongst other interactional features. Further guidance for particular features, such as laughter, smiling voice and vocalisations, was sought as necessary from Hepburn and Bolden (2017). A full glossary of conventions is provided in appendix 1.

Given the children's communication difficulties, non-verbal communicative behaviours (such as bodily movement and eye-gaze) were often crucial to understanding sequences of interaction in the recordings. As such, multimodal details have been included in the transcriptions as necessary. While there are various sophisticated approaches to transcribing embodied conduct (e.g., Mondada, 2018), I ultimately chose to present a gloss of behaviours in parentheses, with overlapping brackets used to show at which point in the sequence they occurred, in order to maintain readability of the extracts to a wider audience. In general, I followed the advice of ten Have (2007) of starting with the audio data and then adding visual details as required.

3.7.3 Analysis

I completed analysis of the data individually. However, I also regularly brought data to supervision for viewing and discussion with my supervisors. I also brought my recordings, transcripts and initial findings to data sessions with experienced analysts run within the University and to informal groups with other doctoral students, for the purpose of engaging in critical discussion to strengthen my analysis. I also presented data at university conferences to receive peer feedback. I had the consent of parents and adult participants for this type of use of the data.

3.8 Chapter summary

This chapter has outlined the methods employed by this study. It reported the approaches to recruitment and provided details of the people who ultimately participated. It has also explained how the recordings were collected and how the data were managed. Finally, it has outlined the methods of data selection, transcription and analysis.

The following chapter is the first of the analysis chapters. It focuses on dyadic parentchild interaction. 4 Responses and initiations in dyadic parent-child interaction with young autistic children

This thesis aims to discuss features of talk-in-interaction identified in everyday interactions involving young autistic children and their families. This first analysis chapter focuses on findings related to initiation and responsive action turns in parent-child interactional dyads. Such paired utterances, or adjacency pairs, are a fundamental sequence found in talk and are of important theoretical significance to the study of interaction. The analysis of the present dataset began with examination of adjacency pairs, in order to explore this basic element of sequential organisation in the families' talk. This chapter aims to describe some of the response turns produced by the children in dyadic parent-child interaction, along with as well as looking at when responses are not forthcoming. It also aims to describe some of the first turns produced by the children in the dataset.

The chapter begins with a brief overview of relevant features of sequence organisation from a conversation analysis perspective, specifically the concepts of adjacency pairs and intersubjectivity, in order to provide the reader with an introduction to key concepts related to the analysis. Following this, it will then present the description of children's response turns when an interaction was initiated by a parent. This section will present examples of where children's responses resulted in unproblematic exchanges and when they resulted in interactional trouble. It will then present the description of children's first turns which initiated interaction with their parents, again considering both unproblematic exchanges and those where interactional trouble was observably present.

The following two sections will briefly introduce two conversation analysis concepts which are relevant to the subsequent analysis: adjacency pairs and intersubjectivity.

4.1 Adjacency pairs

Conversation analysis research has demonstrated that conversation is sequentially organised and that the social actions achieved through talk are formed of specific sequences (Stivers, 2013). Adjacency pairs are the most basic sequence found in talk (Schegloff, 2007). Schegloff and Sacks (1973) define adjacency pairs as featuring two utterances, with adjacent positioning of these utterances (i.e., that they follow on from each other) and that each utterance is spoken by different speakers. They also discuss that adjacency pairs have a relative ordering, in that first pair parts (the first utterance) precede second pair parts (the second utterance). A final characteristic of adjacency pairs is that the second pair part is affiliated with the first pair part to form a 'pair-type' (Schegloff & Sacks, 1973, p. 74). Thus, actions performed by first pair parts make relevant a certain response in a second pair part. For example, a greeting as a first pair part is paired with a greeting in a second pair part; an invitation as a first pair part is paired with acceptance or declination as a second pair part; a request for information is paired with an answer providing such information. As Schegloff and Sacks (1973) summarise:

A basic rule of adjacency pair operation is: given the recognizable production of a first pair part, on its first possible completion its speaker should stop and a next speaker should start and produce a second pair part from the pair type of which the first is recognizably a member (Schegloff & Sacks, 1973, p. 74).

Understanding of adjacency pairs as two related utterances enables observations of what happens when the paired action, prompted by the first pair part, is not forthcoming. Schegloff's (1968) work on deviant cases from a summons-answer sequences collection, using police helpline data, led him to consider examples when utterances are identified as being 'officially absent' within a sequence (vs. simply 'not present' in the conversation). He discusses this concept of 'conditional relevance' in adjacency pairs, defining it as follows:

By conditional relevance of one item on another we mean: given the first, the second is expectable; upon its occurrence it can be seen to be a second item to the first; upon its nonoccurrence it can be seen to be officially absent – all this provided by the occurrence of the first item (Schegloff, 1968, p. 1083).

In the case that the 'expectable', or 'accountably due' (Heritage, 1984b, p. 254) action in second turn position is not produced, there is potential for sanctions or other outcomes. For example, a recipient may be sanctioned for not answering a question addressed to them (Stivers & Rossano, 2010) or for not complying with a directive (Kent & Kendrick, 2016). A non-response where a response is expected (i.e., a noticeably absent response) may result in displays of orientation to the absence by speakers, and responses may be pursued through strategies such as restating the original turn (Pomerantz, 1984b). However, it is important to note that the normative expectation of a response varies with the social actions achieved by first pair parts. For example, a request for help makes relevant a response either giving or denying this help. In contrast, social actions such as noticings or assessments commonly result in a response, but this is not necessarily the case (Stivers, 2013). Adjacency pairs are thus considered fundamental to showing that "talk-in-interaction is not just a matter of taking turns but is a matter of

accomplishing actions" (Hutchby & Wooffitt, 2008, p. 46). In addition to a preference for a responsive paired action, research has shown that there is also a preference for certain *forms* of second pair parts, or type-conforming' responses (Raymond, 2003). For example, questions in first turn position project answers in the response turn, but certain question make relevant certain forms of answers e.g., a 'who' question makes relevant a person reference, or a yes/no interrogative constrains a type-conforming answer to the options of 'yes' or 'no' as the first element of the answer. Alternative responses would be considered non-conforming (Raymond, 2003).

The accomplishment of actions, and indeed overall activities, relates to a key organisational feature known as progressivity, which Schegloff (2007) describes as follows: "Moving from some element to a hearably-next-one with nothing intervening is the embodiment of, and the measure of, progressivity" (p. 15). Talk-in-interaction is organised by "nextness" i.e., that one element follows on from another to move the interaction along and accomplish activities through talk. If the contiguous relationship between elements is violated or impeded for any reason, then this can impact on the progressivity of an interaction. Maintaining progressivity relies on co-participants to have a joint understanding of each other's talk in their roles as speakers and hearers and to be able to display this understanding in the nextness of their contributions to an interaction. As such, the concept of progressivity is closely related to another fundamental principle of conversation, that of intersubjectivity (Heritage, 2007)

4.2 Intersubjectivity

Intersubjectivity, or mutual understanding, is achieved and maintained through the structures and sequential organisation of social interaction (Sacks et al., 1974).

Participants display their understanding of each other's talk through their turn design. Through such organisation, "a context of publicly displayed and continuously up-dated intersubjective understandings is systemically sustained" (Heritage, 1984b, p. 259). Inferences can be drawn by a speaker about how well they have been understood, as the 'doer' of a first pair part is positioned to monitor and evaluate whether a recipient has understood and/or accepted the action intended by the first pair part (Schegloff & Sacks, 1973). Analysis of adjacency pairs enables insight into interlocutors' mutual understanding. Sequences can be observable as being completed as normatively expected i.e., a type-fitted second pair is produced by the recipient adjacent to a first pair part by a different speaker, with linked actions demonstrating common understanding. Alternatively, if the expectable response is not forthcoming, then the speaker can recognise that their turn has not been interpreted in the manner intended. While adjacency pairs, as the basic unit, consist of a first pair part and a linked second pair part, they can also be expanded by participants, for example with a third turn. Third turns may be used by original speakers (issuers of the first pair part) to confirm expected treatment of the first pair part or to repair misunderstandings which might have been displayed by recipients through their second pair parts (Heritage, 1984b).

Displays of intersubjectivity by participants, in terms of the actions produced, also provide evidence that participants are orienting to shared social norms and conventions (Heritage, 1987). Variation from these expected norms are typically deemed noticeable and accountable (Wilkinson, 2019). There is an assumption that "the normative conventions as applicable to a situation of action are cognitively available to all concerned" (Heritage, 1987, p. 245). However, researchers in the field of atypical interaction have shown that this assumption of a mutually understood social world is

questioned when participants present with cognitive and communication differences (Wilkinson, 2019).

In summary, adjacency pairs are recognisable paired actions which can display participants' mutual understanding, or intersubjectivity, within an interaction.

Adjacency pairs in parent-child interaction were analysed as part of this research project and the remainder of this chapter presents the findings from this analysis.

4.3 Children's response turns to parents' first pair parts

This section centres on the autistic children's response turns to a first pair part issued by a parent. It will first present findings about unproblematic adjacency pairs, followed by consideration of responses analysed as being non-fitted or as noticeably absent.

4.3.1 Unproblematic adjacency pairs

The initial focus of the analysis of parent-child dyadic interactions was to identify adjacency pairs which most closely fit the normative structure expected i.e., that a type-fitted second pair part was produced by the child adjacent to a first pair part produced by the parent. Analysing the interactions with a focus on straightforward adjacency forms enabled me to identify the children's 'best' examples and to examine what was typical about the autistic children's interaction in the first instance, rather than taking a deficit-based approach, seeking only to identify the atypical. The analysis yielded examples of straightforward, unproblematic adjacency pairs across all of the children's everyday interaction datasets. These are presented child-by-child below, beginning with Molly.

Molly had the most well-developed verbal skills of all the participating children and her dataset contained several adjacency pairs where sequences played out as expected. Three such examples are shown in the extract below. In this extract, Molly and Dad are sitting side by side at a small table in their living room. They are playing with a large plastic toy construction set. Molly gazes at some large blocks and towards a box of blocks while talking. She does not direct her eye-gaze towards her dad at any point during the interaction.

Extract 4.1.Molly_HM07_buildit_my do it (00:10:58-00:11:15)

```
1
     Molly:
            ((holding blocks on table))
 2
            → do you want it to go there like that?=
 3
             = are you gonna have it lie like that?
              ((positioning the pieces next to each other))
 5
     Molly: \rightarrow er les
              [stick it
 6
     Dad:
 7
              [need some more bolts
     Molly:
     Dad: → do you want Daddy to bolt you that or do you want to
 8
 9
              do it?
10
                           L((pointing at joining place))
     Molly: \rightarrow my do it
11
     Dad:
12
              right.
            → that one, you need to bolt that one to that one
13
14
              ((holding blocks in position))
15
     Molly: → \[ yeah. \]
16
              [((holding blocks together))]
17
              [y-
18
     Dad:
              [can you do that?
19
     Molly:
              you get some more bolts for me
```

The adjacency pairs of interest in this extract are found in lines 2-5, lines 8-11 and lines 13-16. In line 2, Dad offers an option for Molly of how the pieces of the construction set should be positioned, followed quickly by a continuation of his turn in line 3, where he seeks confirmation from Molly of how he has laid out the blocks. Dad issues these two turn constructional units (TCUs; Sacks et al., 1974) in quick succession with no pause between them. Following his second TCU, designed to project a 'yes' or 'no' in the relevant next turn, Molly provides the preferred type-conforming response of yes

(produced as "les" due to Molly's speech sound production difficulties). This is an unproblematic adjacency pair of seeking confirmation—confirming and demonstrates Molly's ability to provide an appropriately designed second pair part action to Dad's first pair part. Although Molly makes a small speech sound error here, this does not impact on the social action of her turn.

A further unproblematic adjacency pair is found in lines 8-11. Dad's first pair part in lines 8-9 offers Molly the choice of him attaching the construction pieces or doing it herself. Molly declares her choice in line 11 by selecting to do it herself. There is a grammatical error in her turn design ("my do it" vs. "I'll do it") however, there is no issue with the semantic meaning of her turn as it is received by Dad in line 12 who accepts her choice with "right", in a sequence closing third (Schegloff, 2007), which does not indicate any sign of trouble.

The third adjacency pair in this extract occurs in lines 13-16. Dad's first pair part provides instructions to Molly, directing her in how to attach the pieces. Molly complies with this directive in her second pair part in line 15 and 16, by agreeing with Dad ("yeah") and holding the pieces together as instructed. Overall, this extract demonstrates examples of a normatively expected adjacency pair, with Molly producing second pair parts in the expected sequential position, displaying her understanding of the social actions intended by her father's first pair parts.

Unproblematic adjacency pairs were also identified in Seth's dataset. Seth, like Molly, also communicates using spoken language. In this interaction, Seth and his mum are sitting at a breakfast bar in the kitchen playing with a marble run activity (a toy where you can build a track or a run for a marble to roll down).

Extract 4.2 Seth_HM03_marble01_white (00:00:45-00:00:51)

1 Mum: \[\left(\left(\text{holds up white piece}\right) \right) \]
2 \[\begin{array}{c} \text{tuh what colour's that one?} \end{array}

3 Seth: that white

4 Mum: it is white, good boy

In this extract, Mum's first pair part takes the form of a known-answer question, where she solicits information from Seth about the colour of the marble run piece that she is holding. Known-answer, or test questions, have commonly been documented as a feature of adult-child interaction (Bottema-Beutel et al., 2020; Grosse & Tomasello, 2012). Seth responds with an appropriate second pair part, correctly stating the colour of the piece. There is a grammatical error in Seth's line 3 turn ("that white" instead of "that's white"). However, this does not affect the semantic meaning of the turn and no attention is drawn to it by Mum, who in line 4 confirms Seth's response and praises him in her third turn. These three turns (Mum's first pair part question, Seth's second pair part answer, and Mum's third turn evaluation) represent a straightforward example of an Initiation-Response-Evaluation (IRE) sequence typical of pedagogical adult-child interaction (Mehan, 1979). This example provides evidence of normatively expected adjacency pairs being present in Seth's dataset.

Mark's dataset also had examples of normatively expected adjacency pairs, although these were less common. Mark uses spoken language, some of which is spontaneous and creative, but he also presents with regular echolalia and idiosyncratic language use, which are characteristics of autistic communication (American Psychiatric Association, 2013). One of the few examples of unconventional language use from his dataset is presented below. In this interaction, Mark and his mum are playing on the sofa with a

toy plastic house and some small stuffed animals. Mark is looking for a toy squirrel which Mum subsequently finds and picks up.

Extract 4.3 Mark_HM05_duplo_granny_squirrel (00:04:15-00:04:23)

```
Mark:
           ↑squirrel↑
1
2
           there she is, found her
   Mum:
3
                         ((holds squirrel toy up))
4
5
          → what do you want?
  Mum:
   Mark: → I want squirrel I [want sq-
6
7
                             [come over [here then
   Mum:
8
                                        [((Mark stands and moves
   Mark:
            Towards Mum))
```

The adjacency pair of interest in this extract is in lines 5-6. We can see that Mark has been seeking the squirrel toy in line 1 and that Mum declares that she has found it in line 2. As such, Mum's first pair part information solicit in line 5 is a known-answer question, as she is already aware of what Mark wants. Answering 'what do you want?' questions with an 'I want (item/action)' structure is one of Mark's therapy targets, and this extract exemplifies how Mum is practising this in everyday interaction. Mark provides the preferred response in line 5. He starts to repeat his request but in line 6 Mum overlaps with him to direct him to come over to her to get the squirrel, indicating she has accepted his first TCU ('I want squirrel') as his response. Mum's turn in line 7 closes the sequence as Mark moves to get his squirrel toy (line 8).

The fourth participant, Jeff, has minimal verbal language skills. He communicates using vocalisations (with varying forms and intonation patterns) and non-verbal skills such as pointing, reaching and body positioning. Analysis of Jeff's response turns to his parents' first pair parts included his full range of communicative means and identified some second pair parts resulting in unproblematic adjacency pairs, as shown below. It is breakfast time and Jeff is sitting at the table. At the beginning of the extract, Jeff's Mum

is helping Jeff request cereal with his PECS⁵ book. She then moves out of shot while Jeff stays sitting at the table. Mum then walks towards Jeff, holding two cereal boxes, one red and one blue.

Extract 4.4 Jeff_HM01_breakfast_cereal_this one (00:03:14-00:03:38)

```
1
             I (.) want (.) cereal
    Mum:
 2
             ((moves Jeff's fingers along the picture strip))
 3
             |(14.0)|
 4
             ((sitting at table))
    Jeff:
 5
    Mum:
             ((walks over to Jeff))
 6
    Mum:
            → which cereal do you want Jeff?
 7
             this one?,
 8
              ((moves blue box forward))]]
 9
    Jeff:
             L((touches blue box))]]
10
    Mum:
             or this one?
11
              ((moves red box forward))
12
     Jeff:
              ((touches red box))
              °di [w°]
13
              [((looks at Mum))]
14
15
    Mum:
             this one.
16
             ((moves red box slightly forward))
```

In line 6, Mum solicits Jeff's preference for cereal with a multimodal turn design. She verbally asks Jeff which cereal he wants in line 1, and then immediately (lines 7-8 and 10-11) presents two choices one by one, combining the offer of "this one?" with the motion of moving the relevant box forward. Jeff is observed to touch the nearest box to him (the blue one) briefly in line 9, just as Mum presents it, but he does so without eyegaze. Mum does not treat this as a response, as in line 10 she continues her offering of Jeff's choices, moving the second box forward towards Jeff. Jeff produces a multimodal second pair part to Mum's offer in lines 12-13, selecting the red cereal box by quietly vocalising "di" and mouthing "w" (which could be interpreted as an approximation of 'this one'), gazing at Mum and touching the box. Mum accepts Jeff's response in line 15

⁵ A book with visual symbols as part of the Picture Exchange Communication System (Bondy & Frost, 1994).

and confirms his choice verbally and non-verbally by moving the box slightly forward towards Jeff (and later we see her produce a bowl of the cereal from the red box for Jeff). Although Jeff has severely restricted verbal language skills, this extract shows that the production of a sequentially appropriate second pair part (choice-making), in response to Mum's first pair part (choice-offering), is within his interactional repertoire.

The above section presented extracts of children providing normatively expected sequential second pair parts in response to parents' first turns. Although it was possible to identify such examples across all the children, analysis of the everyday interaction dataset also highlighted many instances of first pair parts from parents which were *not* responded to as expected by the children. This phenomenon has been categorised as 'problematic response turns'. It is crucially important to clarify that the terminology of 'problematic' is used here to refer to interactional trouble, or "any sort of problem that might arise interactionally" (Coupland et al., 1991, p. 1) and is not being used to refer to the child as an individual, or to their communication style, as being 'problematic'. Problematic response turns included non-fitted response turns, where the child's utterance in second turn position was not relevant to the adult's first pair part, in terms of it not being the expected second element or pair type that was projected by the first. A second problematic response turn included noticeably absent response turns, or instances where a child did not produce *any* response to a parent's first pair part. These two phenomena are presented with examples below.

4.3.2 Non-fitted response turns

As discussed earlier, adjacency pairs are sequences in which a first pair part projects a certain range of second pair parts which are type-fitted, or relevant to the first turn.

Analysis of the children's responses to parents' first pair parts showed a number of examples where the expectable second pair part was not forthcoming from the children. Examples of these are presented in this section.

Extract 4.5 below exhibits three examples of non-fitted response turns from Seth (lines 4, 9 and 15). Mum and Seth are sitting at the breakfast bar in their kitchen. On the counter are a box of wind-up animal toys and a marble run activity. Seth had been playing with the marble run earlier in the recording before stopping to eat a snack (strawberry flakes). There has been a pause in talk before Mum speaks in line 3.

Extract 4.5 Seth_HM03_marble01_animals (00:10:11-00:10:37)

```
[(6.0)]
 1
 2
               ((Seth eating strawberry flakes))
 3
             \rightarrow do you want to play with some of the animals?
     Seth: \rightarrow \lceil \langle play \rceil  some ani[mals> ((sing-song voice))
 4
               L((gazing away from Mum))
 5
 6
                       ((puts a strawberry flake in mouth))
 7
     Mum:
                       [do you want marble run or animals?
 8
                (3.4)
     Seth: → animals gokter
 9
10
               (2.0)
11
               say that again
     Mum:
12
               (2.1)
             \rightarrow what do you need?
13
14
               ((draws animal box nearer))
15
     Seth: → doh yeeoh say that 'gain Mum
```

In line 3, Mum proposes the activity of playing with the animals to Seth. A proposal as a first pair part projects an acceptance or rejection response as a second pair part from the recipient (Stivers & Sidnell, 2016), and in this case it could be completed with a type-conforming 'yes/no' turn design by the recipient (Raymond, 2003), or through a non-verbal turn design (e.g., a nod, or reaching for the animals). However, in line 4 Seth repeats a section of Mum's turn "play some animals" rather than a yes/ no response. He does this while gazing away from Mum and in a sing-song voice. Seth's utterance could

be perceived as matching the social action expected in response to a proposal (i.e., acceptance/rejection), in that his turn could potentially be accepting the proposed animal activity. However, Mum overlaps with Seth in line 7 to pursue information about what Seth wants to play (this time designing her turn as offering a choice of the marble run activity or animal activity), suggesting that she is not hearing Seth's turn in line 4 as a response. A speaker's third turn following an adjacency pair gives us insight into how they are assessing the recipient's understanding of the first pair part (Heritage, 1984b). Mum's follow up of a further turn to establish what Seth wants to play with, suggests that she has not interpreted Seth's turn as type-fitted to her first pair part i.e., that Seth is accepting her proposal of playing with the animals.

There is a long pause (3.4 seconds) after Mum's amended offer in line 7. Seth does then take a turn in line 9, but again it is not the second pair part which is expected here (i.e., accepting either the marble run or the animals, as these toys have been offered by Mum). Seth says "animals gokter", an utterance which lacks a clear semantic meaning or an obvious social action. Mum evidences the trouble with Seth's line 9 turn with an other-initiated repair (Schegloff et al., 1977), directing Seth to repeat his utterance (line 11), arguably to resolve the threat to intersubjectivity presented from Seth's neologistic utterance. Mum's request for repair does not receive a response from Seth and there is a pause where a second pair part from Seth as the recipient would be expected. This absent response results in the interactional trouble not being resolved. It also displays continuance of the lack of intersubjectivity between the participants about the interactional activity of agreeing what to play with next, which was initially set up by Mum in line 3.

Mum pursues completion of the activity of selecting something to play with through a further turn in line 13, "what do you need?" along with the embodied action of drawing the box of animals closer to where she and Seth are positioned. As Mum pulls the animals rather than the marble run close, it could be that Mum is treating Seth's utterance in line 9 as a form of acceptance of the animal items based on her offer (given that his turn featured the word 'animals'). Line 15 is the third example of a non-fitted response turn from Seth in this extract, as he does not produce the type of second pair part projected by Mum's information solicit about what he needs in line 13. The social action expected in Seth's turn would be to provide this information to Mum. Instead, we observe Seth produce a second turn which replicates the words from Mum's prior (line 11) utterance "say that (a)gain" and embeds it within a production of creative (i.e., non-echoed) jargon. This echolalic (using the clinical definition of repeating others' speech; Rutter & Lord, 1987) utterance is not an expected nor fitted response to Mum's information solicit in line 11 as it does not work to convey what Seth needs.

Extract 4.5 demonstrates how Seth's non-fitted response turns suggest that he is not aligned with his mother's activity (i.e., choosing what to play next). Disalignment is demonstrated when actions are produced which disrupt the progress of an activity. It contrasts with alignment, where an interactant displays behaviours which support the activity in progress (Stivers, 2008). Seth's non-fitted turns ultimately have an impact on the progressivity of the interaction i.e., the "overall accomplishment of an activity" (Schegloff, 2007, p. 59).

A second example of a non-fitted response turn by Seth is shown in extract 4.6. Again, Seth and his mum are sitting at the breakfast bar in their kitchen. There is no baby present or nearby. Seth has just been given a packet of strawberry flakes.

Extract 4.6 Seth_ HM03_marble run_baby crying (00:06:08-00:06:58)

```
Seth:
              ((pouring strawberry flakes into a bowl))
 2
    Mum:
              wow that's that's lots
 3
              (1.2).
 4
    Mum:
              [isn't it?
 5
              [lot's (.) [Mum
     Seth:
 6
    Mum:
                          [that's lots of strawberries
 7
              m::: delicious [Mum
     Seth:
 8
    Mum:
                              [veah I bet
 9
              (1.8)
10
            → | are you going to help me?
    Mum:
              ((building marble run))
11
12
     Seth: → mummy baby (.) crying Mum
13
              ((eats strawberry flakes))
14
              (0.8)
15
              [mm ((eating strawberry flakes))
     Seth:
16
              [I can't hear a baby crying
    Mum:
              ((18 seconds of talk about baby crying))
17
18
    Mum:
              do you want to help me build this marble run?
19
    Seth:
              yeah
20
    Mum:
              can you help?
21
     Seth:
              yeah
22
     Mum:
              ((takes pieces out of the box))
```

In this extract, Mum issues a first pair part entailing a request for assistance from Seth (line 10). A type-fitted, preferred response turn would be for Seth to comply with a version of 'yes' and a type-fitted but dispreferred answer would be a version of 'no', based on a preference principle of favouring confirmations over disconfirmations (Pomerantz & Heritage, 2012). Instead, Seth produces a non-fitted announcement as his second turn (line 12). Seth's disaligned response turn in line 12 shifts the trajectory of the talk away from Mum's initial opening of the activity of procuring help with building the marble run, and thus, as seen in the extract above, affects the progressivity of the interaction. Although Seth's turn in line 12 is not a complete grammatical sentence, it is hearable by Mum as sharing some information about a baby crying, as evidenced by her turn which contests this assertion in line 16 ("I can't hear a baby crying"). Mum disputes Seth's announcement, orienting to her interpretation of Seth's line 12 utterance as a potential 'confabulation', or false belief (Lindholm, 2015). Mum's third turn here does

not orient to the deviation from the original activity occasioned by her first pair part in line 10 of securing Seth's help. Seth's turn is not the expected second pair part, but unlike the extract above, Mum does not hold Seth accountable for this and she does not pursue a response to her original question at this point, instead providing a turn related to the topic of Seth's turn—a baby crying. This displays that she does not treat Seth's utterance as problematic, although there is a slight pause before she speaks which may allude to some trouble.

Seth clearly does not provide a type-fitted response, but he is not sanctioned for this. Instead, both Mum and Seth progress with talk on the topic of a baby crying, with Mum seemingly abandoning her intended activity of getting Seth to help build the marble run. Eighteen seconds later though, we do see Mum return to her original activity of Seth helping her. In line 18 Mum asks Seth "do you want to help me build this marble run?", this time asking if he wants to help rather than is he going to help (as in line 10). This time Seth responds promptly with the type-fitted and preferred response of "yes" and a complete adjacency pair is formed. Interestingly though, Mum then asks, "can you help?" in a new first pair part, despite Seth agreeing to her previous turn. By re-doing a related first pair part, rather than say a third turn where she accepts Seth's response and closes the sequence (i.e., with 'okay' or 'great'), or another first pair part to progress the activity (e.g., 'you do this bit'), Mum's turn suggests some confirmation-seeking from Seth and further work to ensure that intersubjectivity is established. Seth again completes the adjacency pair with "yes" and Mum begins to take pieces of the marble run out of the box for Seth to help with.

Examples of non-fitted response turns by an autistic child were also identified in the analysis of the other participants' datasets, as shown with an extract from Mark below. Mum and Mark are playing with Duplo on the sofa. One of Mark's learning targets (from his applied behavioural analysis learning programme, not his speech and language therapy programme) is for Mark to state his name in reply to the question 'what's your name?'. We see Mum practise this skill during this extract. Mark does not make eyecontact with Mum at all during this extract and he is playing with the Duplo and a frog toy throughout.

Extract 4.7 Mark_HM07_duplo_name (00:05:50-00:05:59)

Mum's first pair part in this sequence (line 1) is a known-answer question, where Mum asks Mark his name. Instead of saying his name, which would be the projected response, Mark issued an utterance related to his play, directing the frog toy to "get in" (line 2). This utterance appears not to be designed with Mum as the recipient as Mark does not direct his eye-gaze towards Mum and does not use any embodied action to engage her. Although Mum has opened up the interactional project of 'saying your name', this has not been taken up by Mark and instead his response turn is non-fitted and demonstrates an alternative project aim to his mum's, that of playing with the toys.

Following Mark's non-fitted utterance, Mum suspends her project to repeat what Mark has said in a low volume, which Mark in turn repeats (lines 3-4). This shift of trajectory

is similar to that of Seth's Mum in extract 4.6 above, where she also follows her child's topic of talk even when it was produced instead of the expected type of second pair part to her first pair part. Also, similar to Seth in the prior extracts (4.5 and 4.6), Mark is not sanctioned for his non-fitted response. Mark's Mum's shift in trajectory is brief and temporary, as in line 5 she returns to the original known-answer question, pursuing it further in lines 5 and 6. Again, Mum does not receive the projected response as Mark produces a non-linguistic vocalisation without any evident addressing of his turn to Mum and he then continues playing with his toys. Mum pursues this five times in turns following the end of the extract (not presented in the above transcript, but Mark never provides his name in response. This extract provides an example of Mark producing a turn at talk in second turn position resulting in an organised sequence, i.e., one speaker at a time, yet it also displays how Mark's utterances as the recipient were sometimes not paired to his mum's social actions produced by her first turns as speaker and how this therefore disrupted the accomplishment of interactional projects.

Extract 4.8 is an additional example of Mark not participating in his mother's interactional project. In this case, Mum and Mark are playing an activity where Mum holds up an item of clothing for Mark to name and then hang on to a makeshift washing line. Mark has just attached a dress as the extract starts. Mark's sister, India, is sitting on the sofa nearby watching television but not actively participating in the game.

Extract 4.8 Mark_HM03_washingline (00:04:24-00:04:40)

Following Mark's completion of the task of attaching the dress to the washing line, Mum addresses Mark with a verbal compliment in line 2 ("that's it good boy!") followed by further multimodal praise (line 3) entailing a verbal compliment ("high five well done!") and an invite to an embodied action of celebration (positioning her hand for a high-five). Pomerantz (1984) documents that recipients of compliments often minimise them by accepting the support but downgrading the assessment. Whether or not a recipient displays the preferred or dispreferred response, a compliment such as Mum's in line 3 (especially given the embodied action of raising a hand for a high-five) would typically project at least some acknowledgement or receipt from Mark. However, in this next turn position, Mark does not align with Mum's social action and instead states his sister's name. Although the social action of Mark's turn here is not clear, it is evidently deviating from Mum's initiated project and is not the expected response.

In contrast to the sequence in extract 4.7 where Mum does follow a new trajectory introduced by Mark, in this extract we see Mum not follow his new trajectory. It could be analysed that in line 7 she begins to respond to Mark with "it's-", potentially as if she is going to follow his topic (this cannot be known for certain though), but she then cuts this off and instead pursues the completion of the high five from Mark, this time adding his name to remove any ambiguity that her first pair part assigns the next turn to him. Mark produces another arguably non-fitted turn in response to this pursuit by Mum (his unintelligible vocalisation in line 8). Mum latches another pursuit of the paired hand movement for her high-five celebration onto Mark's turn. This action makes Mark

accountable for his lack of relevant response so far, but Mum's effort still does not yield the anticipated response. After a short pause in line 10 we see Mum abandon her first pair part, and thus the activity of celebrating with Mark, and proceed to a new project of tidying away the washing line game. As such, Mark's non-fitted response has disrupted the progressivity of Mum's initial action of celebration, resulting in it never being accomplished. It also shows how Mark did not produce displays to evidence that intersubjectivity about celebrating/praising his success had been established between him and his mum. When Mum moves onto the activity of removing the pegs though, we see Mark produce a fitted second pair part in line 13 to Mum's suggestion in line 12. This emphasises that the problematic features of talk observed in the children were not consistent across their talk and that there is also plentiful evidence of the children's interactional strengths.

So far, this chapter has presented analysis of normatively expected adjacency pairs, showing how 'typical' interaction is found within 'atypical' interaction. It then offered examination of one form of problematic response turns; non-fitted responses by children, highlighting how displays of intersubjectivity were lacking and how this could disrupt the progressivity of activities initiated by parents. A second feature of interactionally problematic talk in the child-parent dyads will now be described: noticeably absent response turns.

4.3.3 Noticeably absent response turns

The above section has discussed the feature of a child producing a second turn, but not the expectable action. An observable feature arising from the analysis was that it was a frequent occurrence for parents to produce a first pair part, but for the projected second turn from the child to not be forthcoming. As discussed previously, "given the first, the second is expectable" (Schegloff, 1968, p. 1083) and thus the lack of the projected second pair part from the child is considered 'noticeably absent' (Schegloff, 1968) in the talk. This phenomenon of noticeably absent responses was identified in all the participants' datasets and is examined in the extracts below.

In extract 4.9, taken from Molly's dataset, Molly is sitting at a small table playing with Lego. Mum is sitting perpendicular to her on the sofa, leaning towards Molly and looking through a box of Lego. Molly does not make eye-contact with Mum at any point during this interaction.

Extract 4.9 Molly_HM07_feelings_give you anymore (00:17:24-00:18:24)

```
(44.0)
 1
 2
     Molly:
              ((playing with Lego))
 3
    Mum:
              ((watching Molly play))
 4
    Mum:
              would you like me to give you anymore?
 5
            \rightarrow (1.5)
 6
    Mum:
              ey?
 7
            \rightarrow \Gamma(15.0)
 8
              ((Molly playing with Lego))
 9
              would you like me to have a look for something [else?
    Mum:
10
    Molly:
            without looking at Mum))
11
              what you would you like me to have a look for?
12
13
            \rightarrow \lceil (25.0) \rceil
14 Molly: L((playing with Lego))
15
              what else would you like me to get?
    Mum:
            \rightarrow (1.6)
16
17
    Mum:
            ey?
18 Molly: more
19
   Mum:
             more what?
    Molly: the tiny ones
20
```

Mum's first turn in this extract is an offer of assistance to Molly (line 4). An expected second pair part to an offer would be acceptance or refusal. However, neither is received from Molly, who does not produce a verbal or non-verbal turn in the space following Mum's completed TCU where a change in speaker is possible (i.e., the

transition-relevance place; Sacks, Schegloff, & Jefferson, 1974), and in this case where it is expected (as Mum had selected Molly as the next speaker with the "you" address). This is the first noticeably absent response turn in the sequence.

Following the transition-relevance place, there is a pause of 1.5 seconds, after which Mum resumes her turn (line 6), adding a tag question "ey?" to her original TCU. The use of "ey" at the end of a question is a dialectical tag which was frequently observed in Molly's parents' talk. In this sequential context, it orients to the absence of a response to Mum's offer of help and pursues a response from Molly. A response from Molly is not forthcoming and she continues to play with the Lego. It could be argued that Molly's lack of response is legitimate as she is otherwise engaged with her toys; but the close proximity of Mum to Molly, the clear addressing of her turn to Molly and her pursuit with the tag "ey?" challenges this analysis. After another very long pause (15.0 seconds) where Molly is playing, Mum restates her offer of help (line 9), slightly changing the word selection as this time she offers to "look for something else" rather than "give you anymore". This time it does receive a fitted response from Molly, in the form of a nonverbal head nod (line 10), which accepts Mum's offer of help. We observe Mum accept this response as she then utters a follow-up question (line 12) to ascertain which piece Molly would like her to look for. Again though, Mum's first pair part does not result in a second pair part from Molly, and there is a noticeably absent turn where we would be expecting Molly's response. This is the third noticeably absent second pair part in the extract so far.

After another extended period (25 seconds), Mum reissues an information solicit to Molly, who again does not respond in the second turn position (line 15). This is once again pursued by Mum with the tag "ey?" (line 17). This time the pursuit does result in

a response from Molly ("more", line 18), but its design of minimal information does not fully answer Mum's question, resulting in Mum having to pursue this more specific information with another information solicit in line 19 (which does yield the projected second pair part from Molly in line 20). This extract shows that there are multiple transition-relevance places (lines 5, 7, 13, 16) where Molly would be expected to provide a second pair part to fit Mum's first pair part but does not. Mum displays that Molly is accountable for producing a response as she pursues second turns from Molly.

The phenomenon of noticeably absent turns was also identified in Seth's interaction, as shown below. This extract is from the interaction which occurred in the portion of talk not transcribed from extract 4.6 (see line 17 in extract 4.6 which refers to 18 seconds of talk) where Seth had introduced the topic of a baby crying. Seth and Mum are sitting at the breakfast bar playing with a marble run activity. There has been a pause in play while Seth was eating a snack, but they have both remained at the counter. Seth does not make eye-contact with Mum at any point in this extract.

Extract 4.10 Seth HM03 marble baby crying (00:06:37-00:06:55)

```
1
     Seth:
                mummy baby (.) crying Mum
 2
               ((eats strawberry flakes))
 3
 4
     Seth:
               [mm ((eating strawberry flakes))
 5
               [I can't hear a baby crying
     Mum:
 6
               (2.1)
 7
     Seth:
               mummy hear baby crying ( ) doc Mum
 8
               when we went to the doctors was there a baby crying in
     Mum:
 9
               the doctors'?
             \rightarrow \Gamma(3.0)
10
11
     Seth:
              ((looking down, then at camera, then eats a sweet))
12
               I think there was.
     Mum:
13
               I think the baby had had an injection
14
            \rightarrow (1.6)
15
               and the baby was crying
     Miim:
16
            \rightarrow (1.2)
17
     Mum:
               yeah?
18
            \rightarrow (1.4)
19
     Mum:
             do you want to help me build this marble run?
20
     Seth:
```

Noticeably absent response turns in this extract are identified in lines 10 and 18. In line 8, Mum asks Seth a known-answer question about their shared experience of being in the doctors' office and there being a crying baby. The projected second pair part would be some form of confirming or rejecting Mum's recall. However, Seth does not supply any response. In contrast to the example of Molly above (extract 4.9), Seth is not engaged in any obvious other activity, and therefore his non-response cannot be legitimised by this. Also distinctive to Molly's example is that Seth's Mum does not indicate any interactional trouble; she does not pursue an answer from Seth and does not hold him accountable for his absent response. Instead, she verbalises (line 12) her individual stance regarding her recollection of the experience of the doctors', denoting her preference for a confirmatory response to her original question in line 8. Mum provides an account for her stance in line 13, explaining that she recalled the baby as having an injection (and as such, this might cause crying). This utterance by Mum does not explicitly make relevant a next turn from Seth, although there is a transitionrelevance place where Seth could now provide a confirmation or disconfirmation, and the long pause (1.6 seconds) arguably suggests Mum was waiting for Seth to take the next speaking turn. In line 15, Mum adds a further TCU to her explanatory account, which again does not explicitly make relevant a response turn. However, following another relatively long pause (1.2 seconds, in which Seth was not otherwise occupied) she then does a confirmation check of "yeah?" (line 17) which makes Seth accountable for agreeing or disagreeing. This again does not receive a response from Seth and another extended pause follows. At this point (line 19), Mum abandons the project of establishing the context of Seth talking about the baby crying and seeking confirmation that there was a baby when they went to the doctors'. She shifts trajectory and requests Seth's help in building the marble run toy, which this time results in an appropriately timed and fitted preferred response from Seth (line 20). Seth's fitted response here demonstrates that he does have the skill of timely, relevant responses within his interactional repertoire, but he is not consistently forthcoming with them. He, similar to the other children, does not provide an account for his absent response turns. Seth had initiated the activity of talking about the crying baby in extract 4.6 but in extract 4.10 we see that it is Mum who does the interactional work of attempting to establish intersubjectivity and to clarify the meaning of Seth's original utterance, but this proves difficult to accomplish with Seth's noticeably absent turns.

The impact of the children's absent second turns on parents' attempts to accomplish specific activities is also seen in Jeff's dataset, as shown below. In this extract, Jeff and Mum are sitting on the floor. In front of them is a playmat with a road scene on it and some toy cars. Jeff is facing away from Mum holding a real, but non-working, camera. The velar plosive /k/ is a sound that Jeff is targeting in therapy, with the aim that he produces the sound /k/ to request or label objects beginning with this phoneme. Mum has also been advised to use a prompting method called 'cued articulation' (seen in line 15), which is a simple signing system using hand cues to show how sounds of English are made (Passy, 2010).

Extract 4.11 Jeff_HM03_cars_camera (00:08:09-00:09:00)

```
1
     Jeff:
               ((holding camera))
     Mum:
               Jeff?
 3
               what's that?
 4
              L((crawls across to Jeff))
 5
             \rightarrow (4.1)
 6
               ((takes camera from Jeff))
    Mum:
 7
               mv turn
 8
               what's this?
 9
10
              [((looks at Jeff, opens her mouth))]
     Mum:
```

```
11
               ((looks at Mum then looks down towards floor))
     Jeff:
12
     Miim:
              it's a?
13
            \rightarrow (1.0)
14
     Mum:
              camera.
15
              k. camera.
16
              \lfloor ((cued\ articulation\ for\ /k/))
17
              ((rolls onto back on floor))
     Jeff:
              do you want to take your picture?
18
    Mum:
19
     Jeff:
             ((rolls away from Mum))
              Jeff would you like to play with the camera?
20
     Mum:
21
                                            ((leans towards Jeff))
            \rightarrow [(3.3)]
22
23
               ((kneels up, facing away from Mum))
     Jeff:
24
     Jeff:
               ((vocalisation))
25
               (6.6)
26
     Jeff:
               ((approaches and kneels at toy box))
27
               ((looks at Jeff then puts camera down))
     Mum:
28
     Mum:
               ((sighs))
```

The extract starts with Mum seeking Jeff's attention by calling his name and asking him a known-answer question as she approaches him (lines 2-4). Jeff does not respond and continues to examine the camera that he is holding. Mum makes a more explicit entry into the play by taking the camera from Jeff, declaring her turn to play and then reasking the known-answer question. Based on my knowledge of Jeff's therapy targets, it is suggested that Mum has taken the camera off Jeff at this point in order to mobilise him to request it back using the target sound. This would make his production of the sound a functional communication action of requesting, rather than just labelling an object that he already has. This method of making motivating actions contingent on a verbal response is often used in language activities (Ekberg et al., 2019; Roulstone et al., 2004).

There is a pause following her first pair part, during which Mum opens her mouth to silently begin making a /k/ sound. This is analysed as the action of Mum mobilising a relevant response from Jeff, as this technique has been modelled in speech and language therapy sessions by the therapist. Jeff gazes at Mum, but again does not respond to Mum's pursuit. Mum attempts another approach to pursue a response, this time using a

designedly incomplete utterance with phrase-final raise of pitch (Koshik, 2002). Again, there is no response from Jeff, and following a slightly shorter pause than previous ones, Mum continues her turn and completes the utterance herself (line 14), further adding the target sound /k/ along with its cued articulation gesture (in this case the index finger being flicked away from the neck), presumably to draw attention to this particular speech sound. This is followed by a restating of 'camera' (line 15). Jeff does not acknowledge receipt of Mum's utterance and at this point rolls away from Mum to lie on his back on the floor.

In her next turn (line 18), Mum shifts her focus from asking Jeff to name the camera (by producing the /k/ sound) to offering him the camera, arguably to re-engage him in the interaction and establish shared attention to the object. Jeff rolls further away from Mum at this point. This could be conceived as a physical response i.e., his embodied action rejects Mum's offer, but Mum remakes her offer, demonstrating her pursuit of the preferred response. A relevant response is not received, as Jeff moves to look at other items in the toy box. He does make a short non-linguistic vocalisation in line 24, but this does not appear to be addressed to Mum as he is not looking at her. Subsequently, following a lengthy pause where Jeff is kneeling at the toy box, Mum abandons her offer of the camera and her broader project of engaging Jeff as a participant in an interaction. She concludes with an audible sigh (line 28), displaying her affective assessment of the prior interaction and demonstrating the potential impact of children's noticeably absent response turns to parents within dyadic interaction. Jeff is not observed to react to Mum's sigh, and it appears to close the sequence of: Mum's first pair parts-Jeff's absent response-Mum's assessment. Although Jeff's Mum does display potential frustration (with her sigh), she has not sanctioned Jeff for any of his absent turns during the

interaction. This lack of sanctioning is a pattern seen across all the extracts of the phenomenon of noticeably absent response turns.

Mark's mother was also observed to make attempts to engage her child in pedagogical activities without success, as examined in extract 4.12. Mark and Mum are sitting on the floor in their living room. In front of them are a selection of toy objects e.g., cup, jug, brush and the toy characters George Pig, Stickman, and Buzz Lightyear. Mum is trying to encourage Mark to play with the toys e.g., giving George Pig, who is on the floor next to Mum, some juice. At the start of the extract Mark is trying to hang Buzz Lightyear and Woody onto Stickman. Mark does not look at Mum at any point during the interaction.

Extract 4.12 Mark_HM06_woodybuzz_juice (00:03:16-00:05:07)

```
1
              ((hanging Buzz Lightyear and Woody onto Stickman))
    Mark:
 2
    Mum:
              ((picks up a toy jug and cup))
 3
              shall we- does George Pig want some juice?
 4
           \rightarrow (1.5)
 5
             ((swinging Stickman))
    Mark:
 6
             Mark?
    Mum:
 7
           \rightarrow (0.4)
 8
    Mum:
             does George Pig want some juice?
 9
          → (1.9)
             shall we pour some juice?
10
    Mum:
11
             shhhhhhh
12
             ((pretends to pour from jug into cup))
             pour some juice
13
    Mum:
14
             shhhhhhh
15
             ((pretends to pour from jug into cup))
16
            ((turns to look at the jug))
17
             ((takes jug from Mum))
18
            that's it pour some juice
    Mum:
19
    Mark:
            ((puts jug on Stickman's head))
            no don't wear it as a hat
20
21
             no. no, it's a jug [it's a jug
22
                                 L((takes the jug))
23
             ((reaches for the jug))
    Mark:
24
             ((vocalisation))
```

Mum starts as if she is going to make a suggestion for what she and Mark should do ("shall we-") but then initiates a self-repair, restarting her turn with an offer of juice for

one of the toys, George Pig (line 3). Overall, this turn serves as a proposal for how to play with the toys. As Mark is the only available recipient, this proposal makes him accountably due to accept or reject (either verbally or using non-verbal communication or with physical movement of the toys), yet he does not respond in any form, instead continuing to play with his own activity. Mum treats this absent response as interactional trouble and uses Mark's name as an attention-getting device before reiterating her first part from line 3 again in line 8. Again, no response is forthcoming, and a long pause follows the transition-relevance place.

In her next pursuit of a turn from Mark (line 10), Mum upgrades her proposal, specifying that they could "pour" the juice (rather than the more indirect/less overt proposal of George Pig 'wanting' the juice) and also using the plural 'we' to reference Mark as an active participant in the action of pouring, making it more explicit that her preference is for Mark to play with the jug and the cup, and as such, making Mark more accountable for responding (Stivers & Rossano, 2010). Alongside this, she models the desired physical action and makes the onomatopoeic noise of water pouring (lines 11 and 12). She repeats this again in lines 13-14, partially repeating her description of the action. As Mum is completing the action simultaneously to her utterance, her turn is not analysed as being a directive, but instead a commentary on her modelling of the preferred action with the toy. This time Mark shows interest in Mum's play and turns to watch her hand movements. He then takes the jug from Mum, which Mum treats as him providing a physical, visible fitted second pair part to her suggestion of pouring the juice, as in line 18 she does a third turn positive assessment ('that's it'). However, Mark's action turns out not to be in alignment with Mum's projected activity, as he deviates from her project to put the jug on his toy's head, rather than use it functionally

or in the manner intended (line 19). Mum corrects Mark's use of the object and clarifies that it is a jug, not a hat (lines 20-21). This extract demonstrates how Mark's absent responses, and Mum's pursuit of them, impede progressivity within this sequence. It also demonstrates how his disalignment with Mum's first pair parts when he does eventually respond does not display intersubjectivity of the joint play activity that his mum is trying to achieve.

So far, this chapter has presented analysis of distinct interactional characteristics of the participating children in second turn position; covering both unproblematic and problematic turns. The focus will now shift to the children's performance in first turn position.

4.4 Children's first turns

Reviewing the everyday interaction datasets revealed that, while the participating children did initiate encounters with their parents, their initiations were far less commonly identified compared to adult initiations⁶. This was immediately noticeable upon watching the data. Examining children's first pair parts as part of this study was deemed important to explore how autistic children participate in interaction with their parents as the initiators of social contact rather than simply as the respondent to other's

-

⁶ Systematic counting was not conducted on the dataset as this was beyond the scope of the research aim, which was focused on qualitative analysis of the data, rather than quantitative analysis. Furthermore, the process of counting when employing a conversation analysis approach requires thoughtful consideration of theoretical and procedural issues such as selecting a denominator (i.e., the possible relevant opportunities for an occurrence of a phenomena in a given dataset) and the numerator (i.e., what counts as an occurrence of what I would potentially be counting) (cf. Schegloff, 1993), which were not built into the research design of the current project.

initiations. Analysis of adjacency pairs in the dataset where the children produced the first turn indicated that children's first pair parts resulted in both unproblematic and problematic exchanges. Examples of both are explored within the following sections.

4.4.1 Unproblematic adjacency pairs

Unproblematic first pair parts were conceptualised as children's verbal or non-verbal communication which made relevant a response from the recipient, and which did not result in any interactional trouble that was oriented to by either the recipient or the speaker. Unproblematic exchanges were those which displayed intersubjectivity by the participants and where there was no impact on progressivity. Unproblematic adjacency pairs where children produced the first pair part were identified in all the children's datasets, although they were infrequent. Examples from each child are presented below, beginning with Molly.

As we join extract 4.13, Molly's Dad is sitting on the sofa with toys on the table in front of him. Molly comes in from the kitchen where she has been with her mum. The children's first pair parts are denoted by the symbol '→' and the adult's second pair parts are denoted by the symbol '->' in the following transcripts.

Extract 4.13 Molly_HM07_feelings_tooth (00:07:02-00:07:13)

```
1
              ((sitting on sofa on his own))
              ((runs in from kitchen, stands in front of Dad with
 3
               mouth open, gazes at Dad then sits down))
 4
             → Daddy wobble tooth
    Molly: \lceil ((sits down)) \rceil
 5
              ((coming in from kitchen))
 7
              Lshe's got a wobble tooth
 8
   Dad: -> wibble wobble
 9
          ( ) one
    Mum:
10
              let's put these all away then
```

Molly approaches Dad from another room and does an announcement, verbally informing and physically showing Dad her wobbly tooth (lines 1-3). Following an expanded repetition of Molly's turn by Mum, Molly's Dad provides a second pair part acknowledging Molly's news ("wibble wobble" - line 7). Molly does not follow this up with a third turn and, following Dad's response, the sequence moves on to Mum talking about the play activity that she has brought in with her. This example shows how Molly produced a first pair part which made relevant a response turn from her dad, and how intersubjectivity was evidenced between interlocutors.

There were also examples of unproblematic first pair parts in Mark's dataset, even though his language was less well-developed than Molly's. In extract 4.14, Mark is kneeling on his living room floor building a tower with wooden blocks. As he places the sixth block on top, the tower begins to wobble and eventually falls. Mark summons his mother for her help with fixing the tower.

Extract 4.14 Mark_HM05_blocks_fix (00:01:22-00:01:30)

```
1
    Mark:
              ((places block on tower))
 2
              (vocalisation)
 3
              ((tower falls))
 4
              lah!
 5
             → Mummy.
             → [k'fix k'fix
 6
 7
              ((gazes up towards Mum))
 8
           -> why don't we try a different type of [tower?
    Mum:
 9
              ((kneels in front of Mark, picks up some blocks))
10
    Mark:
             Twhy don't we tr[y
11
    Mum:
12
             L((starts building))
                              Ttower
13
    Mark:
14
                              ((reaches for some fallen blocks))
15
             tower
16
             another tower
    Mum:
```

In line 3, the tower which Mark has built begins to fall and he simultaneously exclaims with "ah" (line 4). Following this, he issues a first pair part which summons his mother

(lines 5-7) and requests her assistance. He uses her name and eye-gaze and verbally utters what are considered to be approximations of 'come fix' ("k'fix k'fix"). The design features in this turn make relevant a second pair part from Mum, as he has clearly addressed his turn to Mum, and requests for help would typically project compliance or refusal from the listener. At this point, Mum kneels down in front of Mark and begins to collect some of the pieces, suggesting through her embodied action that she is going to provide the help with fixing the tower as Mark requested. As she is doing so, she makes a suggestion that they build a different type of tower (the video images show that she means a tower with a wider base to prevent likelihood of collapse). Mum's embodied actions and her verbal response form a second pair part relevant to Mark's first pair part. This suggests intersubjectivity has been established and Mark's first pair part as unproblematic, despite his morphosyntactic errors and atypical turn design of "k'fix". Progressivity is maintained as Mum continues with Mark's desired project of fixing the tower.

Extract 4.15 below presents an unproblematic first pair part by Seth. In this extract, Seth and his mum are sitting at their breakfast bar playing with the marble run set. This is a toy which Seth had previously played with in the clinic setting in his sessions with his speech and language therapist (Helen) and now has at home. His mum was just opening the box as the extract begins.

Extract 4.15 Seth_HM03_marble01_helen marble (00:00:12-00:00:37)

```
shall we look?
   Mum:
1
2
            L((opening box))
3
   Seth:
            (go do this)
4
            ((reaching into the box))
5
   Mum:
             wo:w!
   Seth: → [Helen marble run Mum
6
            L((holding yellow piece))
```

```
8 Mum: -> it's Helen's marble run
9 (3.9)
```

The example of a first pair part from Seth is seen in line 6. He holds up an item to show his mum and informs her that the marble run toy is associated with Helen. Similar to the extract involving Mark above, Seth's turn is not normatively designed in terms of morphosyntactic features. He does not use any grammatical markers when stating "Helen marble run Mum". However, this is not treated as problematic by Mum. She repeats back his turn and adds the grammatical markers (the article 'it's' and the possessive 's'), doing an embedded correction. Her turn functions to accept the information shared by Seth and she does not indicate any uncertainty about its meaning or any need for further repair by Seth. The linguistic errors in Seth's turn do not impact on the intersubjectivity or the progressivity of the interaction.

The final example of an unproblematic first pair part is from Jeff's dataset. In extract 4.16, the family are sitting at their dinner table eating a meal which includes chips. It is Holly's (his sister's) birthday today and she is talking about how she has been counting down until the day.

Extract 4.16 Jeff_HM01_dinner_curly chip (00:01:57-00:02:10)

```
1
              I count down since the start of the year
     Holly:
 2
     Dad:
              I've noticed
 3
               (4.3)
 4
     Holly:
              five months
 5
     Dad:
              [((laughs))
 6
               [((laughs))
     Mum:
 7
     Jeff: \rightarrow \lceil \text{(vocalisation)} \rceil
              ((turns towards Dad, holds up chip))
     Dad: -> 1chip
 9
              [(1.7)]
10
             ((looks down at his chip))
11
     Jeff:
12
    Dad:
              cur[ly chip Jeff
13
    Jeff:
             [((looks up at Dad))
     Jeff:
             ((turns back to look at own plate))
```

15 Dad: curly chip

Jeff's first pair part occurs in line 7. He holds up a chip towards Dad, looking at him, and he makes a non-verbal vocalisation. We can see that Dad treats this non-verbal turn by Jeff as an initiation (i.e., that it requires a response) as in line 9 he responds to Jeff by naming the item which Jeff has shown him. A pause follows Dad's second pair part, during which Jeff looks down at the chip. He does not indicate that he perceives any trouble with Dad's second pair part, and therefore this is considered to be an unproblematic exchange. Despite Jeff's turn lacking a clear semantic meaning, it has functioned to initiate an interaction with Dad, and Jeff appears satisfied with Dad's second pair part of naming the item in response to his first turn. In line 12 Dad then offers more information about the item (i.e., that it is a "curly chip") to which Jeff responds by looking up briefly, before returning to look at his plate again. Dad closes the interaction with a final labelling of the item that Jeff used to initiate the exchange, "curly chip" (line 15).

These examples of unproblematic interactions provide evidence that successful initiation of joint engagement was within the children's interactional competence. The extracts have demonstrated how children can produce first pair parts which were not treated as problematic by their recipients, despite their speech and language difficulties which meant that their first turns were not lexically or morphosyntactically designed as normatively expected for their ages. None of the examples above resulted in displays of uncertainty or other-initiated repair from the children's recipients. The parents responded to the children's turns in a way that suggested that intersubjectivity was established and the interaction was not problematic to the participants.

However, the analysis identified that not all interactions initiated by the children resulted in unproblematic exchanges. This is explored in the next section.

4.4.2 Ambiguous first pair parts

This section presents the analysis of examples in the data where the children produced first pair parts which resulted in some form of interactional trouble, and thus were considered to be problematic. Difficulties arose in interactions due to ambiguity in the meaning of a child's first pair part. In the section above I presented examples where children's first pair parts feature morphosyntactic errors or lacked clear semantic meaning and yet this did not seem to result in problematic interactions. However, such success was not consistent, as the analysis also identified interactions where the child's turn constructions did result in trouble and there was a consequent impact on intersubjectivity and progressivity.

An example of this is shown in extract 4.17 taken from Jeff's dataset. Jeff and his mum are standing in the kitchen.

Extract 4.17 Jeff_HM02_biscuit_hole (00:01:14-00:01:43)

```
1
              ((takes biscuit out of tin))
    Mum:
 2
              There you go
 3
             ((hands Jeff a biscuit))
 4
              ((vocalisation))
    Jeff:
 5
    Mum:
              biscuit
 6
              (1.5)
 7
     Jeff: → \[doh doh\]
 8
              ((touches top of biscuit, gazes at Mum))
 9
              chocolate bisc[uit°
    Mum:
              ((signs chocolate, gazes at Jeff))
10
11
    Jeff:
                              eh doh doh
                              ((points at biscuit, gazing at Mum))
12
              [°chocolate°
13
    Mum:
14
              ((signs chocolate, gazes at Jeff))
15
    Jeff:
16
              ((points at biscuit, gazing at Mum))
```

```
17 Mum: ((leans in, gazes at biscuit then gazes at Jeff))
18 is there a hole?
19 Jeff: ((eats biscuit, no eye-gaze))
20 Mum: a hole
```

Jeff's Mum gives him a biscuit from a tin. In line 7, Jeff utters a multimodal turn. He vocalises two syllables, points at his biscuit and gazes at Mum. The social action of his turn, and thus the expected second pair part, is not obviously recognisable due to the ambiguity in Jeff's turn. In second turn position, Mum names the object that Jeff is holding, providing both the verbal word and the Makaton⁷ sign (lines 9-10). Mum's turn here works to both name the item, but also acknowledge Jeff's initiation and establish an interactional exchange. Mum's treatment of Jeff's turn (i.e., naming an object) is also similar to that in extract 4.16, where Jeff had held up an object to Dad, and his Dad had named it. In extract 4.16 when Dad had labelled the item for Jeff, Jeff did not pursue any further interaction. However, in this extract, Jeff produces another utterance (line 11). He adds another syllable to the start of the original utterance turn ("eh doh doh") and points again at the biscuit. This suggests that Mum's second pair part was not a satisfactory response for Jeff, as he pursues something further from Mum using a similar turn design as his first initiation. Mum again names the object (line 13) but this time with the shortened version of "chocolate" rather than "chocolate biscuit", potentially re-interpreting Jeff's first pair part as projecting a naming of the topping rather than the whole biscuit. Jeff's response to this again suggests some trouble in the interaction, as he repeats his non-verbal pointing to the biscuit and looks at Mum, but this time he modifies his two-syllable utterance ("doo goo"). At this point Mum leans in to look more closely at the biscuit which Jeff is pointing to. She apparently realises there

 $^{^{7}}$ Makaton is a language programme which uses symbols, signs and speech to support communication (The Makaton Charity, n.d.).

is a bit of chocolate missing from the top. Instead of labelling the item like her two previous second pair parts, she asks Jeff if there is a hole in his biscuit. Following this, Jeff moves on to the activity of eating the biscuit and does not pursue any further interaction with his mum. Mum's interpretation of his first pair part appears to have accomplished Jeff's original activity. Mum closes the interaction by restating "a hole", similar to how Jeff's Dad closed the interaction in extract 4.17 with "a curly chip" statement once Jeff appeared to have accomplished his action of getting a parent to name what he is holding.

Although Jeff's first pair part was ambiguous and thus required interactional work by both him and Mum to establish intersubjectivity, this was quite a straightforward managing of the ambiguous turn constructions. It was not always resolved this easily, as shown in the following extract also taken from Seth's dataset, where accomplishing the activity initiated in his first pair part is only achieved after a protracted interactional sequence.

In this extract, Seth is sitting at the table and has been eating his dinner. Dinner was meatballs and pasta, but now there is only pasta left of his meal. His brother, Levi, has just sat down in front of his full bowl of meatballs and pasta.

Extract 4.18 Seth_HM03_dinner03_fork (00:00:21-00:01:26)

```
1
    Mum:
              now you've got a fork, do you want a spoon as well?
 2
              ((rolling up Levi's sleeves))
 3
              ((nods))
    Levi:
 4
              (1.0)
 5
    Mum:
              yes?
 6
              (3.0)
 7
    Levi:
              mmmm
 8
              (2.0)
 9
     Seth: → more got in a fork
10
              you've got a fork as well, are you using your [fork?
    Mum:
11
              ((walks off shot))
```

```
12
     Seth:
                                                               [more got
13
              it
14
              ((background talk))
15
     Seth:
              ((stands up in chair facing towards Levi and away from
16
              others off screen))
17
              more (g) got (.) fork
18
             (1.0)
19
     Seth:
              more
20
             (2.5)
21
             get one
     Seth:
22
              L((looks at table))
23
             (2.2)
              more
24
     Seth:
25
              ((looking towards others off screen))
26
              MORE
     Seth:
27
    Mum:
              oh in the (.) salad thing in there I [think
28
              ((off screen, talking to Dad))
29
    Seth:
                                                     [more please
30
              need the more
31
    Mum:
              more meatballs?
32
    Seth:
              more meat balls
33
    Mum:
              okay ((puts spoon down next to Levi))
34
    Seth:
              no!
35
    Mum:
              or more pasta?
36
    Seth:
              more pa°s°
37
    Mum:
              |more pasta? you've got (.) [pasta in here look
38
              L((mixes Seth's bowl))
39
    Seth:
                                          [need more
40
    Seth:
             more
41
              [more:?
    Mum:
42
              [meatballs
    Seth:
              more meatballs?
43
    Mum:
44
    Seth:
              more meat
45
              ((reaches towards kitchen))
46
    Mum:
              okay ((goes into kitchen))
```

The extract starts with Mum helping Seth's brother, Levi, get ready to eat. Mum has commented on Levi's fork and offered him a spoon as well, which he accepts, and Mum walks out of shot (presumably to get him said spoon). Seth self-selects as the next speaker and utters a first pair part to launch a new activity in line 9, the first line of interest in the analysis. Seth's turn design is syntactically incorrect, but Mum does not indicate any trouble and she treats it as Seth making an announcement that he also has a fork (in addition to his brother, who had previously chosen a fork when offered by Mum). Mum asks Seth whether he is using his fork, but before she can complete this turn, Seth overlaps with a restating of his first pair part, suggesting that Mum's

treatment of his turn and her response was not as he projected or preferred. He does not receive a response from Mum at this point as she has left the immediate scene. Seth attempts to mobilise a response from Mum through repetition, embodied action (standing up), prosodic emphasis and volume raising (lines 12-30). His pursuit of a response is successful, as Mum returns to the table and responds with a candidate understanding of what Seth is referring to with "more" - offering him more meatballs (line 31). Seth responds with a repetition of Mum's utterance which Mum treats as acceptance of her offer, and she does a sequence-closing third with "okay" in line 33. However, Seth follows with an objection (line 34), indicating his disagreement with the outcome of the previous exchange (and potentially indicating his turn in line 30 was echolalia of Mum's talk rather than designed as an utterance conveying his choice).

Mum's response to this (line 35) suggests that she was perhaps expecting this, as she designs her response as a continuation of the choice-offering from line 29 (i.e., more meatballs or more pasta?). Seth again seems to make a choice by approximately repeating Mum's turn ("more pas") but Mum challenges this selection by drawing Seth's attention to the remaining pasta in his bowl. Seth returns to his prior more ambiguous requests, "need more", "more" (lines 39 and 40), before adding the necessary detail of "meatballs" in line 40, just as Mum pursues this (line 42). Mum does a candidate understanding in line 43, before ultimately closing the sequence with an affirmative indication that she will grant Seth's request. This time there is no objection from Seth, and mutual understanding by both parties appears to have been reached. This extract shows that while Seth's first pair part in line 9 was sufficient in launching a new activity, it was not sufficiently designed to successfully project his ultimate desired response from Mum, i.e., being given more meatballs. Seth did show verbal and non-verbal

interactional skills in pursuing his anticipated response from Mum, but his atypical interaction resulted in a substantial amount of further interactional work needed from both him and Mum before intersubjectivity was established.

In both of the above examples, there was interactional trouble due to the recipient not understanding the precise meaning of the child's talk. However, there were no problems in the parents recognising the social action of the children's turns i.e., a showing and telling in extracts 4.16 and 4.17 and a request in extract 4.18. Other examples from the dataset demonstrated that the children's first turns did not always have recognisable actions, and that recipients attributed different actions to children's turns, or presented candidate understandings before ultimately establishing a mutual understanding. This is demonstrated below.

In extract 4.19 Jeff has been watching In the Night Garden', a cartoon, on TV. Mum is in the room with him, initially off camera but then moving to be on screen when Jeff appears upset.

Extract 4.19 Jeff_HM07_TV2_going to bed (00:00:00-00:00:36)

```
[(5.0)]
1
2
    Jeff:
             ((standing and watching at the TV))
3
    Jeff: \rightarrow ((jumps up and down, cries, [looks at mum))
4
    Mum:
                                         [what's the matter- what's the
5
              matter Jeff?
6
            ((points at TV, cries))
    Jeff:
7
            they're going to bed
    Mum:
8
    Jeff:
             ((vocalises, points at TV, looks at Mum))
9
             they're going to [sleep
    Mum:
10
    Jeff:
                              [((cries))
            they're going to sleep aren't they?
11
    Mum:
             ((sits down next to TV))
12
    Jeff:
             ((cries, points at TV, looks at Mum))
13
    Mum:
             they're going to slee:p
14
15
                              L((gestures sleeping))
16
    Jeff: maw maw ((points at TV, looks at Mum))
    Mum:
17
             more?
18
    Jeff:
             ((cries, looks at Mum)) maw
19
    Mum:
             what do you want Jeff?
```

```
20
              [(2.0)]
              ((alternating gaze between Mum and TV))
21
     Jeff:
22
    Mum:
              what do you want?
23
     Jeff:
              ((°vocalisation°))
24
              can you show me with your book?
25
              what do you want?
26
              ((moves to get Jeff's PECS book))
```

In line 3 Jeff displays distress through embodied action and crying, directing this towards Mum with eye-gaze. In response, Mum seeks information about what is upsetting him in line 4, suggesting that there is ambiguity about the cause of his distress. Jeff responds to Mum's information solicit by pointing at the TV and continuing to cry. Mum then comments on what is happening on the TV, suggesting that she is attributing the action of showing to Jeff's prior turn. Jeff's next turn on line 8 suggests that this is not a correct attribution, as he points again and vocalises with a non-speech vocalisation. Mum restates her prior comment, adding the tag question "aren't they?" (line 11). This is clearly not a preferred response, as Jeff again cries and points at the TV, directing his turn to his mum with eye-gaze. For a fourth time, Mum comments on what is happening on the TV with "they're going to sleep" (line 14), but this time Jeff produces an utterance which is more recognisable as a word "maw maw". Mum offers a candidate understanding of "more?", showing that she is recognising Jeff's turn as a potential request, which is different to her responses so far, when she was commenting on the TV show. Jeff cries and repeats his utterances in response to Mum. Mum appears to treat this as a rejection of her candidate understanding as she does another information solicit ("what do you want?") in order to establish what it is that Jeff wants, continuing with her treatment of Jeff's turn as him requesting something from her, rather than simply telling her something. It could also be argued that this is a knownanswer question to prompt a more specific turn design, as Jeff has now pointed at the

television, made eye-contact with Mum and vocalised an approximation of 'more'. However, we cannot be sure of this based on the analysis. What we can see though is that Mum has transitioned from providing a commentary on the TV in response to Jeff's non-verbal communication efforts, to treating his efforts as a request. She then collaborates with him in order to identify the nature of the request by asking him to show her with his PECS book. The interaction continues for a further 2 minutes 50 seconds before it concludes with Jeff requesting a biscuit from his mum using PECS and her leaving the scene to get this for him.

A further example of ambiguity in the social actions of first pair parts can be seen in extract 4.20. In this recording Mark comes in from the kitchen eating a piece of red pepper and sits down on the sofa. Mum is positioning the camera and then comes out from behind it to sit next to Mark on the sofa.

Extract 4.20 Mark HM06_TV_pepper (00:00:50-00:01:48)

```
1
    Mum:
              ((setting up the camera))
 2
    Mark:
              ((enters the room and sit on the sofa))
 3
              it's carrots
    Mark:
 4
              ((holding up pepper, looking at Mum))
 5
    Mum:
              it's not a carrot it's a pepper
 6
              but that's a good try
 7
 8
              pepper, it's a (.) red pepper. isn't it? (.)
 9
              but good boy ((moves to turn the TV on))
10
    Mark: → George George
              [((looking at his pepper))
11
              it's a pepper (.) isn't it? pepper
12
    Mum:
13
              ((sits beside Mark on sofa holding TV remote))
14
    Mark:
              George
15
    Mum:
              it's not George
16
              (1.4)
17
    Mum:
              do you want to watch George?
18
              (0.9)
              do you want to w- \[ \text{oh!} \]
19
    Mum:
20
                                 L((taps Mark on shoulder))
              \'cause it's a pepper
21
22
              [ ((points at pepper))
              | ↑ mmm ↑
23
    Mark:
              L((looking at TV
2.4
```

Lines 1-9 of this extract display an example of trouble arising from a first pair part from Mark which is relatively straightforwardly resolved. In line 3, Mark does a showing to Mum, holding up a piece of pepper that he has brought in from the kitchen, gazing at her and naming the item. Mark incorrectly labels the food item that he is holding "carrots", which prompts an other-initiated other-repair from Mum, who states his error and provides the correct noun ("it's not a carrot it's a pepper"). Mum's repair is immediately followed by praise for Mark for his labelling attempt ("but that's a good try", line 6). She also then provides reinforcement of the correct word, along with an additional detail ("it's a red pepper", line 8) and another praise-giving (line 9), recognisable as a pedagogical activity (i.e., word teaching).

Mark's next turn in line 10 is the turn of interest within this section. In this line Mark utters "George George" while looking at his pepper. While his turn carries linguistic meaning (i.e., "George" as a person's name), it does not convey an immediately recognisable action. It is also not clearly addressed to his mother, as he does not adjust his head or body position and there is no eye-gaze. Given the lack of clear addressing and a recognisable action, it is unclear whether Mark's turn here is designed to mobilise a response (Stivers & Rossano, 2010). Yet we do see Mum speak in second turn position following Mark's utterance. Her talk ("it's a pepper") does not convey any indication of trouble with Mark's turn. She does not correct or repair his label as she does in line 5, but she does continue the 'word teaching' activity that she had previously demonstrated in line 8. Mum's continuation of this activity could suggest that she is not recognising Mark's utterance in line 10 as a first pair part designed for her to reply to.

Mark's ambiguous turn does not cause trouble in the interaction but is also not successful in initiating a potentially new interactional activity.

In line 14 we are provided with more evidence that Mark does appear to be initiating with Mum, rather than engaging in self-talk, as he restates the word "George" again. Mark does not use any embodied action or gaze to address the turn to his mother, but she does respond directly to it this time, suggesting his pursuit has been successful in mobilising a response. Mum treats Mark's turn as a naming of the pepper, and as before, explicitly corrects him ("it's not George", line 15). After a short pause, Mum appears to arrive at the possibility of an alternative meaning to Mark's utterance, that he could be requesting something rather than naming something. It is helpful to know at this point that 'George' is a character from a popular children's TV show 'Peppa Pig', and therefore Mum is offering a candidate understanding that perhaps Mark wants to watch this TV show. This demonstrates the ambiguity of Mark's first pair part and the possible actions that it could be forming. There is no immediate forthcoming response from Mark, so Mum repeats her offer, but then makes a self-initiated self-repair as she realises another possible meaning of Mark's turn. Mum has made the connection that she has been talking about a pepper, but this sounds like Peppa, which is the show featuring George (this connection is explicitly demonstrated later in Mum's talk and can be seen in extract 5.11 in section 5.4). Mum verbally explains her understanding in line 23, that Mark has been doing a telling about this connection. Mark vocalises following this, but at this point he is watching the TV. He does not confirm Mum's understanding, but also does not pursue further interaction.

The above sequence has shown how children's talk could be normatively produced in terms of lexical and morpho-syntactic features and speech pronunciation yet can still be

ambiguous to the recipient in terms of its intended social action. The unclear action formation in Mark's utterances in this extract prompted additional interactional work from his interlocutor to achieve intersubjectivity, but it was ultimately reached.

4.5 Chapter summary

This chapter has focused on dyadic interaction between young autistic children and their parents. It has presented findings regarding the sequential organisation of interaction in the everyday talk of these families. First, it presented the analysis focused on children's response turns to a parent's initiation and then presented the analysis focused on children's initiating turns. Analysis of children's response turns suggested that all the participating children demonstrated examples of second pair parts which displayed their understanding of a speaker's first pair part and were suitably designed to accomplish the actions projected by a speaker and to maintain the progressivity of the interaction. Analysis of children's response turns also showed that while unproblematic adjacency pairs were identified in the dataset, there were also examples where observable interactional trouble occurred. One such root of interactional trouble was the phenomenon of non-fitted response turns, where the expected second pair part was not forthcoming from the child and instead a non-fitted turn was produced in second turn position. A further source of interactional trouble was the phenomenon of noticeably absent responses, where the projected second part was again not forthcoming from the child and no response was produced by the child. This phenomenon resulted in observably problematic sequences and often abandonment of interactional projects by parents.

Analysis of children's first turns suggested that they were successful in initiating an interaction with their parent, producing a turn with a recognisable action which could then be responded to by parents, resulting in an accomplished action and a complete adjacency pair. This was achieved despite the children's speech and language difficulties which meant their turn design was constructed without the morphosyntactic accuracy that we might expect for their age. However, the analysis showed that such unproblematic exchanges also occurred alongside exchanges where interactional trouble was clearly evident. Analysis of the children's first turns showed that they could often be ambiguous in their meaning or their social actions due to the child's communication difficulties.

These findings are important in terms of understanding the impact of autism and associated communication difficulties on the establishment of intersubjectivity within dyadic parent-child interaction and the implications for progressivity. The phenomenon of non-fitted response turns and noticeably absent response turns highlighted how displays of intersubjectivity were lacking. Turn construction and action sequencing are considered to be one of the building blocks of the "architecture of intersubjectivity" (Heritage, 1984b). By offering a non-type-fitted turn in second turn position or not offering a turn at all, children failed to demonstrate that they were 'together' with the parents in mutual interaction and that they were sharing their attention to a joint activity with them. These turns represent departures from an "intersubjective social world shared in common by the participants" (Wilkinson, 2019, p. 293) and demonstrate how the children and parents did not always have equal access to cognitive resources related to establishing mutual understanding. Differences or failures to respond to social interaction is a diagnostic criterion of autism (American

Psychiatric Association, 2013) and my findings demonstrate how this feature occurs in real-time interaction between children and parents. The lack of displays of mutual understanding by the children led to parents attempting to re-establish intersubjectivity through strategies such as clarification requests or pursuing a response with repeated and/or reformulated first pair parts. Thus, the children's problematic second pair parts and the parents' subsequent remedial actions interfered with progressivity of the interactional activities initiated by parents. It is important to note that this analysis is not a criticism of the participants and is not intended to promote the deficit view of autism. The analysis and its significance are presented without judgement of abilities and simply with the aim to elucidate how the children's communication presentations and parents' subsequent reactions can impact on everyday interaction. This supports findings identified in quantitative coding studies (e.g., Adamson et al., 2001). It also corroborates interview studies which report parents' perspectives about finding it hard to establish mutual engagement with their children, as their child may present as having their 'own agenda' or being 'in their own world' (Hebert, 2014; Schertz et al., 2020).

We can also see difficulties in establishing intersubjectivity through the analysis of children's first pair parts. Children sometimes produced first turns which were ambiguous in their meaning and parents did not always treat the turns as having a recognisable action to which they could respond. The children were inviting the parents into their social worlds, but their turn constructions, and associated deviations from expected norms, resulted in parents having to do further interactional work to establish a shared meaning and join the children in their activities. Ambiguity in the child's first turns resulted in the impeding of the 'nextness' of the adjacency pair structure (Schegloff, 2007). The analysis showed how parents and the children engaged in sense-

making practices such as children re-doing their turns or adults doing clarification checks in order to establish mutual understanding and accomplish activities. This supports similar findings in studies of autistic children with limited spoken language (e.g., da Cruz, 2022). It also showed how progressivity of a sequence was delayed while parents displayed their lack of mutual understanding and sought to re-establish this within the interaction.

The following chapter will move on to consider the everyday talk of the participating families in multiparty interactions.

5 References to the co-present autistic child in everyday multiparty family interaction.

Chapter 4 focused on the analysis of the autistic children's interactions with their parents in everyday dyadic interaction. The present chapter further examines family interaction but focuses specifically on multiparty talk involving the autistic child and at least two other participants. Families were not explicitly asked to generate multiparty data as part of this project. However, the resulting dataset featured a number of recordings (see chapter 3) where multiple adults or siblings were present in addition to the autistic children. This provided a unique opportunity to analyse naturally occurring multiparty family interaction involving autistic children - an interactional context which is fairly limited in the published literature (although see Bottema-Beutel et al., 2020; Geils & Knoetze, 2008; Maynard et al., 2016). Initial analysis of these multiparty data identified that there were numerous instances where a co-present autistic child was talked about by their family members. I was interested in these sequences where children were talked about while being co-present as these sequences provide insight into the aspects of their children's communication which families chose as relevant topics to highlight and discuss with other people. This collection became a focus of the data analysis. The findings from this analytic path are presented in this chapter.

The analysis identified three actions accomplished by talk about co-present children. Firstly, co-participants spoke about a child following a noticeably absent response, and their references to the child provided an account of why a response from the child had not been forthcoming. Secondly, co-participants spoke about a child following some kind of interactional trouble and threats to intersubjectivity. In these cases, references to the child focused on interpreting and explaining the child's communication in order

to manage the interactional trouble. Finally, co-participants spoke about co-present children in order to positively assess a demonstration of communicative competence by the child. These three phenomena will be discussed in turn, but first a brief introduction to relevant conversation analysis concepts is presented to provide context to the analysis.

5.1 Participation status and participation framework

The concept of participation status and participation framework was first conceived by Goffman (1981) in his work exploring the nature of participation in social encounters. His ideas challenged the crude notions of speaker and hearer and that these roles are "situationally circumscribed" (p. 3). He explains that the role of individuals can be described by their relation to an utterance: "The relation of any one such member to this utterance can be called his "participation status" relative to it, and that of all the persons in the gathering the "participation framework" (Goffman, 1981, p. 137). Goffman (1981) differentiated between types of hearers within the participation framework. He postulated that hearers could be either ratified or unratified, depending on whether they have an official place in the interaction. Ratified participants can be either addressed recipients or co-present unaddressed recipients. Unratified participants are overhearers/bystanders or eavesdroppers.

Further empirical work by conversation analysts examined how participation status is established during sequential interaction. Interactional analysis furthered Goffman's ideas, demonstrating that participation is interactionally rather than physically established, and participant roles are interactionally assigned through verbal talk and embodied action (Goodwin & Goodwin, 2005; Rae, 2001). The audience within an

interaction can include different types of participants at any one time. The participation framework as a concept enables analysis of the different roles within multiparty interaction, such as how these roles are locally ascribed and how they can shift across sequential interaction.

5.2 Accounting

In his work in ethnomethodology, Garfinkel (1967) discussed how social activity is ordered and recognisable, and that this is achieved through the use of various interactional practices. He made early reference to the concept of accountability, proposing that "the activities whereby members produce and manage settings of organized everyday affairs are identical with members' procedures for making those settings 'account-able'" (Garfinkel, 1967, p. 1). Accountability and accounting practices have subsequently been studied in much conversation analytic literature (e.g., Antaki, 1994; Heritage, 1988; Robinson, 2016; Sacks, 1992). Heritage (1988) demonstrated how accounts can be provided by, or demanded from, participants in contexts where their social actions depart from the normative structure of interaction. For example, someone may provide an account of ignorance or inability to provide the normatively expected responsive action in an adjacency pair. When accounts are provided, they demonstrate an orientation to the moral necessity to provide a reason or an explanation to interlocutors to ensure mutual intelligibility (Robinson, 2016). If an account is not provided when one would be expected, this may be pursued by others and speakers who fail to provide an account may be sanctioned as being wilful (Heritage, 1988).

In addition to mundane conversation, accounting has been explored in atypical interaction, where participants may not have equal access to cognitive and

communication resources. For example, Drew and Penn (2016) discuss accountability related to failures to understand in an interaction between a woman with aphasia and her speech therapist, demonstrating how accountability is a collaborative effort and both speaker and hearer are responsible.

In the previous chapter I described how noticeably absent responses from the children occurred regularly in the dataset. In the following section, I explore how accounts for this phenomenon are deployed not by the children themselves, but by co-present participants in multi-party interaction.

5.3 Accounting for noticeably absent responses

Analysis of the data involving multiparty interaction identified a range of examples where the autistic child was addressed with a first pair part, the projected second pair part was not forthcoming from the child and subsequently one or more of the coparticipants oriented to this noticeably absent response and provided an account for it. Their accounts were designed as talk about the co-present autistic child without directly addressing them. As such, the children shifted from being ratified, addressed participants to being ratified but unaddressed participants across sequential turns. Within the collection of such examples, two different reasons for the child's absent response were noticed: (i) being otherwise engaged in a competing activity and (ii) being 'not bothered' by an activity. These phenomena are discussed in turn below.

5.3.1 Otherwise engaged

In these examples, a speaker addresses the autistic child with a first pair part, but the expected response turn from the child is not forthcoming. In the turns following the

noticeably absent second pair part, a co-participant talks about the child to a third copresent person. Within this reference to the co-present autistic child, they make relevant the child's absent turn and provide an account which relates to the child being involved in a competing activity.

The first extract exemplifying this phenomenon comes from a recording from Mark's dataset, where Mark is sitting on the sofa next to his Grandad ('Grdad' in the transcription), holding a plate of cake and watching the television. Mark's Mum is sitting on a nearby chair. Neither Grandad nor Mum have cake. Mark is watching the TV and does not shift his gaze from the TV at any point during this extract.

Extract 5.1 Mark_HM02_cake_lost to TV (00:00:03-00:01:02)

```
|you eat it
1
    Mark:
2
             ((holding fork up to own mouth))
3
    Grdad: no you eat it
            ((puts cake in mouth))
    Mark:
5
    Grdad:
             that's it
    Mark: ((chewing))
Grdad: [that's it
6
7
8
    Mum: [↑mm [mm mm ↑yummy
9
    Mark:
                    [bababa
10
             (4.0)
    Mark: it's (rayray8)
11
12
    Grdad: ((turns to look at Mark and back to TV))
   Mark:
13
             (rayray)
14
   Mum:
             Mark! (.) Mark! (.) ↑yummy cake
15
            (1.8)
   Mum: yummy cake ↑mmmmmm
16
17
    Grdad: what's Mummy saying?
18 Mum:
            ↑ mmmmmm
19 Grdad:
             |what's Mummy saying?
20
             ((looks at Mark, gestures towards Mum))
21
             (5.0)
22
            \rightarrow I've lost him to the telly haven't I?
    Mum:
23
    Grdad:
             ((looks at Mum, nods)
            ° ↓ yeah.°
24
    Mum:
    Grdad: → can't distract him=
25
26
              =no
27
    Grdad: → once he's into something
28
              (3.8)
```

_

⁸ Presumed to be an approximation of 'Man Ray' who is a character on the TV show.

Lines 1-13 in this extract are presented to demonstrate that Mark has been involved in some of the preceding interaction related to eating the cake, and therefore could justifiably be considered as a ratified participant with rights to participate. Mark issues a first turn in line 1. The turn linguistically appears to be designed as an imperative; however, Mark is in fact holding up the fork to his own mouth and not making eyecontact or shifting his body towards Grandad. Despite the lack of obvious addressing of the turn to Grandad, Grandad does in fact treat this as a directive and in his response turn (line 3) he rejects it, and instead deflects the directive back to Mark with "no you eat it". Mark complies in line 4 and his compliance is subsequently positively assessed by Grandad in lines 5 and 7 with "that's it". Mum overlaps with Grandad's second evaluation with a gustatory pleasure sound "mmmmm" (Wiggins, 2002) along with an assessment of Mark's cake "yummy". Mark overlaps with babbling sounds, while continuing to look at the TV. After a pause he then appears to label something on the show (lines 11 and 13).

In line 14 Mum restates her assessment of the cake as being yummy, but this time addresses her talk to Mark, as she calls his name twice. While assessments do not necessarily require a second pair part (Stivers & Rossano, 2010), Mum's repeated use of Mark's name suggests that she had designed this turn to project at least some acknowledgement from Mark, if not an agreement with her assessment. There is no response from Mark (verbal or non-verbal) and, following a pause, Mum provides a repetition of her assessment of Mark's cake in line 16, orienting to Mark's non-response as being noticeably absent. At this point, Grandad joins in the activity of eliciting a response from Mark to Mum's initiation. He asks Mark what his mum is saying (line 17), explicitly making relevant a response from Mark and implicitly suggesting that Mum's

assessment was hearable as projecting a response turn which Mark should have provided (i.e., that Mark's non-response was noticeably absent). Grandad's gesturing towards Mum also encourages Mark's attention towards her and away from the television, but this is also unsuccessful. After a long pause of five seconds, Mum comments to Grandad (line 22) that she has "lost" Mark to the television. This is an example of a participant's talk about the co-present autistic child. Mum's talk about Mark in this turn acts to provide an account for his noticeably absent responses to her first pair part in line 14. Her utterance suggests that Mark is not available as he is otherwise occupied by the TV, and therefore the expected response from Mark will not be forthcoming. Grandad shows agreement with Mum's account through a head nod (line 23) to which Mum responds with a quiet, sighing, "yeah", accepting Grandad's agreement.

This extract is an example of family members talking about a co-present autistic child. Their talk orients to the noticeably absent response by the child, and accounts for this lack of response. The response is treated as noticeably absent by both Mum and Grandad, as they both pursue a response (Mum by repeating her first pair part and Grandad by asking Mark what Mum is saying) suggesting that a second pair part was implied by Mum's first pair part. Following these unsuccessful attempts to mobilise a response, Mum then provides an account for Mark's lack of contribution to the interaction: he is unavailable to participate as he is otherwise engaged in the activity of watching television. Mum's word choice of "lost" suggests that she had perceived Mark to have, at one point, been a participant of the interaction, but that he has now moved out of this role and is no longer available to them, despite direct addressing of their talk to him which positioned him as a recipient. The participation framework shifts from

Mark being an addressed recipient in prior turns to an unaddressed recipient in line 22. Grandad shows affiliation with Mum's account, agreeing with her and providing additional commentary about it not being possible to distract Mark once he is otherwise engaged. The extract demonstrates how both Mum and Grandad appear to accept Mark's change in participant status and self-removal from the interactional activity before it was mutually closed, as he is not sanctioned for his absent responses. It also demonstrates how Mark does not object to being referred to as a third party co-present person and does not make any claims to more active involvement.

Extract 5.2 provides a further example of a noticeable absent response being accounted for by the autistic child's engagement in an alternative activity. In this extract, Mum, Holly and Jeff are playing with a train set in their living room. They are all sitting on the carpet and Holly is moving the train along the track where another train is stationed. As the extract starts, Mum and Jeff are watching Holly's play.

Extract 5.2 Jeff_HM01_train_doing that instead (00:03:36-00:03:47)

```
1
             ((watching what Holly is doing))
     Jeff:
 2
             oh! there's gonna be a crash
 3
             ((fleeting eye-gaze at Jeff))
 4
    Holly: uh-oh! better stop the train!
 5
    Mum:
             ((looks up at Jeff and smiles))
 6
    Jeff:
             ((gazing at floor))
    Holly:
 7
             There we go!
 8
              ((looks up at Jeff and smiles))
             ((gazing at blocks on floor))
 9
    Jeff:
10
    Mum:
              Jeff do you want to do it again?
11
                                        L((signs 'again'))
              [(2.0)]
12
             ((laying a block on the floor))
13
     Jeff:
14
    Holly:
              shall we do it again Jeffy?
              [(1.5)]
15
16
     Jeff:
              ((laying a block on the floor))
17
    Mum: \rightarrow | ^{\circ} ino .hh he's (.) doing that instead^{\circ}
18
             ((looks at Jeff then shifts eye-gaze to the floor))
19
              (2.0)
20
   Holly: I'm going to do it again I like it
```

As we join this interaction in the above extract, Jeff has paused his own activity (laying blocks on the floor) and is watching Holly's play. Mum then comments on Holly's play with the train, exclaiming that there will be a crash between the two trains (line 2). She intermittently directs eye-gaze to Jeff while doing this, suggesting that her talk is designed as recognising Jeff as being a ratified participant in the interaction, presumably interpreting Jeff watching the play as a demonstration of his availability. Holly also comments on her play actions in line 4, ("better stop the train"), and as she does stop the train and declares it done ("there we go"), she gazes and smiles at Jeff, suggesting that, similar to her mum, her talk is designed to be heard by Jeff. Following this, Mum addresses a first pair part to Jeff, offering him another turn at watching the train move (line 9). This first pair part does not receive a response from Jeff, and he does not acknowledge receipt of it, as he continues gazing at the floor. In chapter 4, an example of Mum pursuing a response from Jeff in dyadic interaction was presented (extract 4.11); however, in this extract, it is Jeff's sister who pursues a response by offering another opportunity for Jeff to watch the train move (line 12). There is a pause following Holly's offer, during which Jeff lays another block in his line, without shifting his eye-gaze from the carpet, and does not provide the expected response to Holly's first pair part. Following this pause and Jeff's lack of uptake of his turn, it is Mum who speaks next. She speaks for Jeff with an 'interjacent answer' (Hutchby & O'Reilly, 2010), positioning her answer between Holly's first turn and any potential second pair part from Jeff. She refers to him in the third person, rejecting Holly's offer with 'no' (line 15). Along with the rejection, her turn explains that Jeff is otherwise engaged in a different activity, "he's doing that instead". After a pause, Holly states that despite Jeff not being

interested, she is going to repeat her play sequence as she liked it. Mum then offers Jeff a block to add to his line, moving on from the train activity.

This extract shows another example of a child being directly addressed, and therefore considered an available participant, but then not providing an expected response turn. Consequently, they are spoken about by the other participants, who in some way make relevant the absent turn and refer to the child as being otherwise engaged in an activity, and therefore no longer available for participation. It demonstrates how Jeff moves in and out of the interaction with his family through non-verbal means, adjusting his participation status through eye-gaze and play with the toys. Jeff is directly addressed by Mum and Holly in lines 10 and 14 as he has shown some involvement in the activity through watching Holly's play. He is therefore explicitly positioned as a hearer and a recipient to their offers of repeating the train play. Jeff's non-response to Mum's first offer is oriented to as being noticeably absent, as Holly repeats the offer following a silence after Mum's first pair part and by doing so, pursues a response from Jeff. Again, a response is not forthcoming, and it is at this point (line 17) that we see Mum talk about Jeff and refer to him in the third person. Despite Jeff's physical location not changing during the interaction, his participation status has changed. Initially he was directly addressed but following his non-response and his engagement in other play, he is spoken *about* rather than *to* and temporarily ceases to be an addressed recipient within this multiparty exchange. Mum responds to Holly (rejecting her offer) on Jeff's behalf and provides a reason for why Jeff does not want to play. By doing so she is also accounting for Jeff's noticeably absent turn, explaining that he has moved out of the immediate interactional activity to play with his own toys. As in the previous extract,

Jeff is not sanctioned for his non-response and his opting out of the original interactional activity is accepted by his co-participants.

A similar account for Jeff having not responded to another's first pair parts is provided by Jeff's father in extract 5.3. Jeff and Holly are playing with the train set while Mum is watching. Jeff's Dad's car then pulls into the driveway on his return from work.

Extract 5.3 Jeff_HM01_train_daddy's home (00:08:52-00:09:28)

```
1
    Mıım:
              who's this I hear Jeff?
 2
             (1.5)
 3
     Jeff:
             ((moving a toy man on the track, gazing down))
 4
    Mum:
             Jeff?
 5
             |(1.5)|
 6
    Jeff:
             ((moving a toy man on the track, gazing down))
 7
             who's this?
    Mum:
             [(1.6)]
 8
 9
    Jeff:
             ((moving a toy man on the track, gazing down))
10
    Mum:
             Jeff I think Daddy's home
             ((gazes up at window then returns gaze down))
11
    Jeff:
12
             (1.3)
13
    Jeff:
             ((moving a toy man on the track, gazing down))
             ↑Daddy's home?
14
    Holly:
15
             ((leaves room))
             (2.3)
16
17
             ((moving a toy man on the track, gazing down))
    Jeff:
18
    Mum:
             Jeff, Daddy's home ((turns to look at door opening))
19
             (1.0)
20
             ((moving a toy man on the track, gazing down))
    Jeff:
             | ↑JEFF!
21
    Mum:
22
    Jeff:
             ((moving toy man on the track, gazing down))
23
             ((enters room))
    Dad:
             ((looks up and smiles at Dad))
24
    Mum:
25
    Holly:
             (come in)
             hello: ((enters room))
26
    Dad:
27
    Jeff:
             ((moving toy man on the track))
    Holly: Daddy's definitely home ((enters room))
28
29
             Jeff \[ look at Daddy! \]
30
                   ((points at Dad))
31
             ((moving toy man on the track))
    Jeff:
    Dad: →
32
             ↓oo he's not that bothered by [me, he's too busy with
33
             his train track,
34
    Holly:
                                            [Jeff look!
35
    Holly: the video.=
36
    Dad:
             =which I suspect he didn't (.) actually
37
    Holly: ye(h)ah
38
    Mum:
             well Holly helped him
```

The extract begins with the first reference to Dad arriving home through Mum's hint in line 1. This is addressed to Jeff but does receive a response from him; he continues to play with the train set, gazing down and away from Mum. After a pause, Mum reattempts to get Jeff's attention by calling his name (line 4) and following another lack of response from Jeff, recycles part of her initial question asking, "who's this?" (line 7), which again does not yield the expected second pair part. Mum then redesigns her first pair part as a statement of information rather than a question, being more explicit for Jeff about the activity that she is drawing his attention to. She again uses his name to address the turn to him, conveying an expectation of acknowledgement or response. This utterance does result in some acknowledgement from Jeff, who is observed to turn towards the window in line 11 (where the noise of Dad arriving home is emanating) before returning to his original activity with the track, but his acknowledgement is minimal.

At this point (line 14), Holly, who has been playing alongside Jeff, produces what is ostensibly the type of response which might be expected in relation to information about a parent possibly arriving home: She shows excitement through rising intonation and moves to the door to confirm whether Mum is correct about the noise that she heard as being their dad. Mum now makes an announcement for Jeff about Dad being home, removing any ambiguity from her previous talk about Dad being home. For the fifth time in the sequence, Jeff's response is absent. As the living room door opens, Mum raises her volume and exclaims Jeff's name, drawing on prosodic resources to elicit a response from him. Her action is not successful as Jeff continues to play. Mum turns her head and shifts her gaze to greet Dad as he enters the room accompanied by Holly.

Dad greets Mum and Jeff with "hello" (line 24) as he joins the recorded interaction. Mum has acknowledged Dad's entry with a smile already (line 23) but there is no acknowledgement or greeting from Jeff. Holly speaks next, making an announcement to confirm that their dad is "definitely home" (as she has queried this event earlier in line 14). Whereas Mum had been indirectly encouraging Jeff's attention to the arrival of his dad, Holly is explicit in her next turn about the expectation for Jeff as she produces a directive for Jeff to look at their Dad. There is no ambiguity at this stage that Holly is recruiting Jeff to acknowledge their dad and thus join the interactional activity which Holly, Dad and Mum are now all engaged in. Jeff does not respond and in line 32 we can see how talk about the co-present autistic child occurs in the sequence, with Dad stating, "oo he's not that bothered by me, he's too busy with his train track" (lines 32-33). This talk about Jeff follows on from multiple turns where he has been explicitly addressed, and again shows how his participant status changes as the sequence progresses.

This extract also demonstrates how different co-participants orient to Jeff being available or unavailable within the interaction. Holly is expecting Jeff to engage in the interaction with her directive, but Dad positions Jeff as not displaying signs of recipiency. Dad's turn provides an account for why Jeff was not complying as projected i.e., that Jeff is not interested in his father as he is already engaged in an ongoing activity (the train track). Being engaged in a competing activity can be considered a legitimate reason for a non-response, in that it makes the participant unavailable to be a hearer, and thus the next speaker (Goodwin, 1981). Dad's utterance suggests that he has assessed Jeff as not being available to complete the social action of greeting his father as Jeff is not sufficiently "bothered" by his dad to redirect his attention from his current

play. Holly continues to pursue Jeff's engagement in line 34 with a repeated directive, but Dad appears accepting of Jeff's absence of engagement in the interaction as he moves on to comment to Mum about who built the train track (line 35). As in the previous extracts (5.1 and 5.2), accounts are provided for children's noticeably absent responses and no sanctions are seen within the interaction.

Focusing on the word choice within Dad's account in lines 32-33, we can see that dad firstly suggests that Jeff is "not bothered" by him and then follows this up with an explanation that this is because he is "too busy with his train track" (i.e., otherwise engaged). Within the collection of examples of accounts of noticeably absent responses the phrase "not bothered" appeared on more occasions, but without being followed by a further explanation of being otherwise engaged. These are presented below.

5.3.2 "Not bothered"

Extract 5.4 demonstrates an example of a parent stating the reason for an absent response from a child as being that the child is "not bothered". In this extract Mum is sitting on the sofa with Mark sitting on top of her and facing her. India, Mark's sister, is sitting next to them.

Extract 5.4 Mark_HM04_Mum_bothered (00:03:08-00:03:34)

```
1
    Mark:
             ((rubbing Mum's hair and face))
    Mum:
2
             I don't like that
3
            don't do [that
    Mark:
4
                     [a beybebeybe
5
           don't like [it when you do dat
    Mum:
6
    Mark:
                        [beh
7
    Mark:
            bey[bebeybe
8
    India:
                [I'm going to pretend to be a puppy n let's eat
9
            Mark's ear
10
           alright
   Mum:
    India: ((puppy noises))
11
12
    Mark:
            hu:::: ((slurping noise))
```

```
13
              ((puppy noises))
    India:
             what's this [puppy doing?
14
    Mum:
                        (000
15
    Mark
16
                        L((rests head on Mum's chest facing away from
17
              India))
              (( puppy [noises [ puppy noises [ puppy noises ))
18
    India:
                        [what's In[dia puppy doing?
19
    Mum:
20
    Mark:
                                  [000
                                                  [ah
           → I don't think he's bothered
21
    Mum:
22
             [((laughs))
23
    Mark:
             [oo:: ah
             are y'?
24
    Miim:
25
    Mark:
            [000000000000ah
26
    India: [((puppy noises))
```

In lines 1-7 of this extract, Mark is rubbing Mum's hair and face, making 'self-talk' vocalisations, as evidenced by the lack of eye-gaze or embodied physical action to suggest that he is directing his vocalisations to others (Goffman, 1981). Mum is trying to discourage him from this behaviour, informing him that she does not like it. India produces the first utterance which talks about Mark in line 8, when she announces that she is going to play at being a puppy and "eat" Mark's ear. Mum allows this and India proceeds to make noises as if she were a puppy. Mark does not show any acknowledgement of this, continuing to produce vocalisations which do not appear to be communicative. In line 14, Mum directly addresses Mark with a question to draw his attention to India's attempts to engage him in play. Mark does not respond, again continuing to vocalise to himself. Mum pursues a response in line 17, restating her original question but specifying that by "puppy" she meant "India", removing any ambiguity about the subject of her question for Mark. Her pursuit evidences that a response from Mark was projected by her original first pair part. Her turn again fails to elicit a response or indeed any reaction from Mark, resulting in Mum accounting for this in her line 19 turn where she speculates that Mark must not be bothered by India and her play and that this is the reason for his lack of uptake of both India's play engagement attempts and Mum's questions. In contrast to the prior extract (extract 5.3) with Jeff where his dad specifically stated that Jeff was not "bothered by me" (his Dad) as "he is too busy with his train track", in this extract Mark's Mum's assessment is just that she does not think he is bothered, with no further information or explanation provided. This appears to be acceptable to Mum, as she laughs about it and there are no sanctions either for Mark's lack of response or his non-engagement in the activity. In this way, Mark's rights to opt out of participation are respected. While the three participants of this interaction are in very close physical proximity (Mark is sitting on Mum and facing her with India right beside them), this does not necessarily implicate participation. Mark is treated as a potential participant by his mother and sister in their activity of 'pretending India is a puppy' but he neither expresses participation or resistance to participation, he simply continues with his own activity without responding to his co-participants' initiations, and this approach is accounted for by his mum as him not being bothered.

Assessments of a child not being bothered following an absent response were also identified in the multiparty talk in Jeff's dataset. Extract 5.5 provides a further example of when this phrasing was used within an account for a noticeably absent response in a sequence. It is taken from the recording of Jeff, Holly and their mother playing with the train set in the living room.

Extract 5.5 Jeff_HM01_train_do you want (00:01:50-00:02:12)

```
Holly:
              ((sets train ready to go on the track and presses go))
     Jeff:
              ((looks at train then looks back at blocks on the floor))
    Mum:
              do you want the train Jeff?
 4
              °oh no it's going°
    Holly:
 5
              bye bye train.
    Mum:
 6
              Jeff look at the train!
 7
              (2.0)
 8
    Jeff:
             L((lining up blocks))
    Mum:
              Jeff look at the train
10
              ((moves pointed finger from in front of Jeff's face
```

```
11
               towards train))
12
     Jeff:
               ((fleeting glance at train))
               bye bye train, where's it going?
13
     Mum:
14
               (2.5)
              ((lays down a block))
15
     Jeff:
16
            \rightarrow he's not bothered
              ((lays down another block))
17
```

In line 1, Holly sets the train on the track and presses the button to make it move. Jeff looks briefly at the train as it starts moving (it makes a noise as it does so) but then returns to looking at the blocks that he has been lining up on the floor. Mum addresses Jeff with an offer in line 3. At the time of Mum's offer Jeff is busy with his blocks, but he had just shown a brief display of interest in Holly's play prior to this. There is no response from Jeff in relation to Mum's first pair part. Holly speaks in the transitionrelevance place (line 4), but this is to comment on the train and does not refer to Mum's offer. In line 5, Mum says goodbye to the train, perhaps implicitly encouraging Jeff's attention to the train, and then immediately more explicitly attempts to guide his focus by issuing a directive for him to look at the train (line 6). Jeff does not comply with this directive, nor does he show any awareness that the train is moving, as he continues with his activity of lining up the blocks. In line 9, Mum issues another "look" directive, supplementing it this time with the embodied action of drawing her finger from in front of Jeff's face towards the desired object of attention, the train. This is successful in directing Jeff's attention to the train, but it is only a brief glance. Mum again attempts to engage Jeff in the train activity in line 13, with the similar design of saying goodbye to the train but also asking the known-answer question of "where's it going?". Once more it is unsuccessful as Jeff continues to focus on his own chosen activity. Consequently, after these repeated failed attempts to engage Jeff in the interaction, we observe Mum accounting for Jeff's absent responses by describing him as being "not bothered" (line 16). Jeff's Mum's assessment does not show the amusement that we saw with Mark's

Mum in extract 5.4 (i.e., she does not laugh) but there is also no evidence of sanctioning for Jeff's lack of response, and Mum does not pursue further engagement from him at this time. Similar to Mark's Mum, she appears to be accepting of Jeff's rights to not participate in the activity that she has proposed, which he has asserted through his non-verbal behaviour. The reason of "not being bothered" is assigned by the parents in these extracts (i.e., this reason is never provided by the children themselves) and it is treated as an acceptable motive for a lack of uptake of attempts to engage in play with the non-autistic participants.

The above sections have discussed how accounts for noticeably absent responses occur within multiparty talk. These accounts are one action of why the autistic children get talked *about* rather than just *to* within multiparty talk. Analysis of the collection of participants' talk about a co-present autistic child highlighted a second action of such talk, that of establishing the meaning of children's ambiguous turns. This will now be considered.

5.4 Making sense of autistic children's communication

Examples of trouble in determining the meaning of children's turns were seen in chapter 4, both when children produced non-relevant response turns in second turn position and in children's first pair parts. Such trouble was seen to arise due to unintelligibility of speech sound production and due to the use of idiosyncratic or apparently unusual phrases. In the data featuring multiparty talk, it is possible to examine how co-participants manage such interactional trouble and how the autistic child is talked about, despite being co-present, in order to make sense of the child's communication. The analysis demonstrates how family members work to establish

intersubjectivity and how they make claims of knowledge about the meaning of a child's communication.

The first extract to demonstrate this feature is from a recording made of Jeff playing on a swing set in his garden with his parents. It provides an example of when parents talk about a co-present autistic child in an effort to understand the child's ambiguous speech attempts. In this extract, Jeff is sitting on an outside swing in his garden. His Dad is standing in front of him, facing him. Mum is out of shot but audible. Dad has previously been pushing Jeff on the swing and tickling his toes as he does so.

Extract 5.6 Jeff_HM02_swing_saying_A (00:02:56-00:03:10)

```
lop p p °9
1
    Jeff:
2
             ((pointing to something in the distance))
3
    Jeff:
             [((looks to where Jeff is pointing))
    Dad:
5
    Mum:
             oſr
6
    Dad:
             [ (
                     [(falling off the swing)]
    Mum:
7
              [or
8
    Mum: → I think [he's saying
                                          m] mmmore
9
    Dad:
             more
10
             ((holds hands out))
11
    Mum:
             more
    Jeff:
             a a a
12
13
             L((points))
14
    Dad:
            [off?
15
    Mum:
            [off?
```

In this extract Jeff is communicating by making unintelligible vocalisations combined with distal pointing. The combination of gesture along with vocalisation suggests that Jeff is communicating for the purpose of his interaction partners i.e., it is not merely self-talk. His mum and dad are both situated as potential recipients as they are standing in front of him, although Dad is closer as he has been pushing the swing. Mum begins her interpretation of what Jeff is attempting to communicate by repeating the sound

-

⁹ p is the phonetic symbol to describe a back open vowel.

that he is making but adding an "r" sound, to make it "or" (lines 5 and 7). It is possible that Mum does this as part of her interpretation of Jeff's ambiguous vocalisation, trying to make sense of it by recasting it as a more likely vocalisation (in that "or" is a meaningful syllable in English language where /p/ is not), although we cannot be certain of this. In line 8 there is the first example of participants talking about the copresent autistic child rather than to them. Mum makes a suggestion of what Jeff could be saying to Dad, "more". Her turn proffers a candidate understanding (Heritage, 1984a) of Jeff's vocalisation rather than it asserting confirmed knowledge of his wants. Dad aligns with Mum's candidate suggestion, indicating that he accepts that Mum is positioned to guess what Jeff might be saying, despite not being immediately involved in the interaction (as she was not the one pushing Jeff on the swing). He goes along with Mum's suggestion and offers Jeff "more" tickling of his feet (as this is the activity they were doing before) with a multimodal turn in lines 9-10. Mum's interpretation of Jeff's turn appears to have been mistaken though, as in line 12 Jeff continues to vocalise and point, suggesting that Dad's offer of more tickling was not his intended communication. Both Mum and Dad recognise that the interpretation was not acceptable to Jeff as they simultaneously provide an alternative candidate understanding of "off".

The difficulty in understanding what Jeff is saying continues as the interaction progresses, as seen below.

Extract 5.7 Jeff_HM02_swing_saying_B (00:03:11-00:03:37)

```
αααλαα
16
    Jeff:
                 off?
    Dad:
17
18
                 L((signs off))
             Tum m
19
    Jeff:
20
             ((shakes head))
21
    Dad:
             get off?
             [(4.0)]
22
```

```
((swinging as Dad tickles his feet))
23
    Jeff:
24
    Mum:
             o:h! up up
25
    Dad:
              ((turns to look behind him))
26
    Jeff:
27
             L((points to distance, where Dad is looking))
28
           → I wonder what he's saying
    Mum:
29
    Dad:
30
           → [he's saying p p ((walks into shot))
    Mum:
              aaa:nd we'll swing
31
    Dad:
              ((pulls Jeff up and releases))
32
              ((pleasure noise and smiles))
33
     Jeff:
34
     Jeff:
             ααα
35
    Mum:
             m:ore
36
    Jeff:
             αααα
37
              (1.0)
```

In line 20, Jeff non-verbally rejects Dad's offer of getting off the swing by shaking his head. Dad re-offers in line 21 but Jeff does not respond and makes no indication that he wants to get off the swing as he continues to swing while Dad tickles his feet. Mum makes another candidate guess of what Jeff is saying, suggesting he means "up", prefaced by an expression of realisation, "oh!", a common change-of-state token (Heritage, 1984a). This does not receive acknowledgement by Dad or Jeff, who are looking in the direction of where Jeff had originally been pointing at the outset of the interaction. Mum then (in line 28) orients to the fact that neither she or Dad are sure of what Jeff is attempting to articulate and their candidate guesses must have been inaccurate. She restates the syllable that Jeff is producing in line 30, potentially as a strategy for helping her and Dad make sense of Jeff's unclear turn. She also walks closer to Dad and Jeff, more firmly positioning herself as a participant in this activity.

The attempts at making sense of Jeff's vocalisations continue for another minute and six seconds during which time Mum makes a further four candidate guesses at what Jeff wants, including swinging being finished, offering her shoes for Jeff to put on his feet, and asking Jeff if he wants Dad to sit on the swing or if he wants to stand up on the swing. None of these are successful and as we re-join the interaction in extract 5.8 we

see evidence of Jeff's frustration through the raising the volume on his vocalisations and moving his head down (lines 3-4 below).

Extract 5.8 Jeff_HM02_swing_saying_C (00:04:43-00:05:50)

```
38
     Jeff:
               aw aw
     Mum:
39
               aw m:ore
40
     Jeff:
              ((loud vocalisation and shakes head looking down))
41
               you'll have to give us a bit more than that
     Dad:
              |p p ai10
42
     Jeff:
43
              L((sticks out feet))
              shoes? tickle?
44
     Mum:
45
              (1.5)
46
    Dad:
              ((tickles Jeff's feet))
              ((tickles Jeff's feet))
47
     Mum:
48
     Jeff:
               ((laughs))
              Γ(
49
     Mum:
                   )
              ((steps back))
50
51
     Jeff:
              no no<sup>11</sup>
52
              \lfloor ((looks at Mum)) \rfloor
53
     Mum:
             → he probably just wants to climb on you
54
              (1.0)
55
              ((moves so Jeff can put feet on Dad's knees))
     Dad:
56
               [(3.0)]
57
              ((Jeff puts feet on Dad's knees))
58
     Mum:
               up up | up
59
     Jeff:
                     L((looks at Mum))
60
     Jeff:
               α
61
     Mum:
               up
62
     Mum:
              lup
63
              ((bends down towards Jeff))
64
               ul p
               ((cued articulation on p))
65
66
               up | stand up
67
                  L((puts out hands))
     Jeff:
              no [o
68
69
              ((shakes head))
70
                   [no?
     Miim :
71
              (4.2)
72
              o:h oo oo
     Jeff:
73
              (2.6)
74
     Mum:
              do you want Daddy on?
75
     Dad:
              want me to sit on?
76
            \rightarrow have you done where you sit on and he sits round you?
     Mum:
77
            \rightarrow does he want that?
78
               do you want to sit on with daddy, mummy help, help.
     Mum:
79
               ((gets off swing to allow Dad to sit down)
     Jeff:
```

^{10 [}ai] sounds like 'I'.

¹¹ This is not entirely accurately produced as "no", but Jeff has approximation of "no" in his communication repertoire which his family recognise as such and treat it as meaning "no" throughout the dataset.

After Jeff's display of frustration in lines 38 and 40, Dad overtly orients to the difficulty in understanding what Jeff is saying based on his ambiguous vocalisations, by requesting Jeff "give us" (i.e., Mum and Dad) "a bit more than that". Jeff does in fact fulfil Dad's request, providing another vowel sound ([aɪ]) and embodied action of sticking out his feet (which he has done previously in the interaction). Mum interprets this as Jeff wanting a tickle (line 44, immediately after a guess of "shoes?"), and she and Dad therefore tickle Jeff's feet which he appears to enjoy (as he laughs in line 48). At this point it appears that the trio have successfully reached a mutual understanding. However, this soon is shown not to be the case, as Jeff complains "no no" in line 51. Mum speculates on another potential understanding of Jeff's desires, this time addressed to Dad and talking about Jeff rather than making the suggestion directly to him (line 53). Dad responds to Mum's idea by positioning himself so that Jeff can climb on him but in line 68-69 it again becomes clear that this is not Jeff's preference, as he again rejects it with verbal "no" and shaking of his head. In line 76, Mum asks Dad if he has swung with Jeff sitting "round" him on the swing, and immediately following, suggests that as a further candidate guess about Jeff's desire. This is the tenth guess of the activity (following off, up, more, finished, shoes, Dad sit, stand up, tickle and climb) and it appears to be the ultimate solution, as Jeff complies when Mum offers for him to get off the swing in order to be lifted onto Dad.

These three extracts from this one activity have featured seven examples of turns where Jeff is referenced as a co-present person. All of them were issued by Mum and all were related to the interactional activity of establishing the meaning of a request from Jeff. All of Dad's responses are affiliative in that he goes along with Mum's candidate

understandings. Although the request is related to Dad (as he was the participant present when the request is made), Mum is heavily involved in resolving the interactional trouble and ultimately Mum and Dad work together to make sense of Jeff's request and establish intersubjectivity for all participants. It demonstrates how the child can initiate the topic of an interaction i.e., with a request, but in the process of trying to grant the request, the parents move between addressing the child directly (thus treating them as a competent communicator) and referring to them as an unaddressed co-present person (thus suggesting that children are not consistently positioned as a being sufficiently or successfully able to communicate their message). It also demonstrates the commitment from parents to make sense of their child's communication in order to achieve intersubjectivity and be able to grant them what they want across lengthy sequences.

This phenomenon of participants talking about a co-present child in order to make sense of the autistic child's communication was also seen in Mark's dataset as shown below. In this extract Mark is playing with wooden bricks on the floor. India and Mum are in shot and have been opening India's birthday presents. Dad is behind the camera and is therefore not in shot.

Extract 5.9 Mark_HM04_birthday03_tunnels (00:08:14-00:08:42)

```
1
              what are you making Mark?
 2
             ((turns towards Dad))
    Mark:
              da it's a brid tunnels
 3
 4
    Dad:
              it's a what?
    Mark:
 5
             ((turns back to play with bricks))
 6
    India: → he said it's a [brick tunnels
 7
    Mum:
                             [a brick t[unnels
                                         [a brick tunnel?
 8
    Dad:
 9
           → it's what he calls er bridges and tunnels
    Miim:
10
    Miim:
             w- we went to town yesterday to the cinema and we went
11
              though (.) past Tesco's (.) [and went under a you know
12
              the big railway
13
    Dad:
                                          [yeah
```

```
14   Mum: → bridge [and he goes ↑oh it's a tunn[el↑
15   Dad: [yeah
16   Mark: [( ) bricks
```

Mum opens this sequence with an information solicit regarding what Mark is building with his wooden blocks. It is clearly addressed to Mark and projects a response from him. Mark provides this response in line 2, labelling his building, although he does not speak to Mum who issued the first pair part, instead turning towards Dad. It is speculated that he could be addressing Dad with "da" also. While the social action of Mark's turn is appropriate, the intelligibility of it is lacking, with the use of "brid" prefacing the word "tunnels". Dad enters the interaction at this point in line 4, with a clarification request. We cannot see Dad's eye-gaze, but Mark is looking at the direction of the camera which Dad is holding and it would make sense that this other-initiated repair is designed for Mark, given the preference for self-repair (Schegloff et al., 1977). However, it is actually India who speaks next with an interjacent answer, interpreting for Dad what Mark had said. In this turn she refers to Mark in the third person (line 6). India relays what Mark has said, treating Dad's repair initiator as him not having heard what Mark has said, but she also embeds in her turn a repair of Mark's mispronunciation of "brick" as "brid". With this turn, India claims greater knowledge of Mark's communication than her dad. She demonstrates that she is able to understand Mark, whereas her dad is not. Mum also chimes in to overlap with India's interpretation and in doing so, likewise claims greater knowledge than Dad. In line 8, Dad seeks further clarification, presumably as the recasting of Mark's speech by India and Mum, while now in acceptable English words (where "brid" was not), is still not grammatically correct (Mum and India both restate Mark's use of a singular "a" combined with a plural "tunnels"). This results in another turn where Mark is referred to in the third person

while being co-present (line 9). Whereas India's previous talk about Mark's speech had been to recast his pronunciation, Mum's turn here serves to provide further meaning to Dad about what Mark meant. We see her draw on her prior knowledge of Mark's communication to explain to Dad that when Mark uses "a brick tunnels" he is referring to bridges and tunnels. Mum positions herself here as a 'knower' of Mark's communication. She provides further evidence for her epistemic position in lines 10-14 when she tells a story about Mark previously labelling "tunnel" while out on a drive the day before. Throughout this exchange Mark is not addressed directly and he continues to play with the bricks, showing no concern that he is being talked about and not making any observable contributions to the activity of making sense of his communication.

This feature of Mark's Mum being positioned and equipped to interpret Mark's communication attempts is also seen when she interprets utterances that are intelligible in terms of speech sound pronunciation but are ambiguous in terms of semantic meaning, as shown in extract 5.10. In this recording, Mark, India, Mum, Dad, Grandad and Grandma are sitting at a table eating cake. Mark is drinking from a bottle and spills some liquid on himself.

Extract 5.10 Mark_HM04_cake_mess (00:01:30-00:02:11)

```
1
    Mark:
             ((spills drink on t-shirt))
2
3
             ((puts bottle on table))
4
             ((looks at and touches t-shirt))
5
             uh oh it's alright
    Dad:
    Mark:
             my mess
7
    Dad:
             not a problem
    Mark:
             my mess my mess
9
    Dad:
             do I need to take
    Mark:
10
             a:::: my mess .h
11
    India:
             one two three four moo
12
             ((singing a song to herself))
```

```
go the bath in the bath
13
    Mark:
                ((looks across table at Dad and Grandad))
14
15
    Grdad: [no
16
    Dad:
            [in the bath?=
             =no bath
17
    Grdad:
18
    Dad:
             you don't want a bath do you?
19
    India: yours=
           → =it's 'cause it- he thinks [every time he makes a mess
20
    Mum:
21
    Mark:
                                         [take off ((stands up and
22
             leaves the table))
23
    Grdad:
             no [no not having a bath [no bath
24
    Dad:
                [yeah
25
    Mum:
                                      [he's er he's [having a bath
26
              it's because every time he makes a mess he's having a
27
               bath
28
                                                     let's go find
    Mark:
29
               the chalice let's go find [the ch-
30
                                                     L((walking around
31
              the table))
32
    Mum:
                                          [Mark we're eating cake!
33
              There you are Mark that's for you look
    Grdad:
34
    Mark:
              ((wiping t-shirt looking down))
```

In this extract the family are sharing India's birthday cake. Mark spills a drink on himself and says "my mess" (lines 6, 8 and 10) and is visibly upset by the spilled drink on his t-shirt. In line 13 Mark then suggests or requests to "go the bath in the bath". He directs this towards his dad and grandad with eye-gaze, who both respond simultaneously. Grandad rejects Mark's suggestion outright (line 15) whereas Dad requests clarification by repeating "in the bath?" (line 16). Grandad restates his rejection, specifying "no bath", while Dad again queries Mark's suggestion with him in line 16. Mum enters the interaction in line 20 with a turn that interprets Mark's communication for Dad and Grandad and supports the accomplishment of intersubjectivity. She explains that Mark is mentioning a bath as every time he makes a mess, he associates it with having a bath. Mum presents this explanation as fact, rather than a candidate understanding. She positions herself as having the greatest knowledge of the meaning of Mark's communication. This is not queried further by the other adults, and when Mum proceeds to move the focus to directing Mark's attention to an alternative activity (the cake being served), Grandad follows with offering Mark his slice

of the cake. Mum's explanation for Mark's communication has been accepted and the sequence demonstrates how Mum is positioned to have the right to speak for Mark even when he is co-present.

The above extracts all show how the autistic children use communication which is not always immediately understandable to all the participants and thus creates interactional trouble due to a lack of intersubjectivity. They have shown how family members collaborate to interpret a child's intended message and how some family members will position themselves as being the 'knowers' of the child's communication. While the children all at some point are active participants in the interaction, their language or communication differences result in them being talked about by coparticipants, resulting in them momentarily being excluded as ratified participants.

5.5 Positive assessments of children's communication

Along with instances involving problematic interactions, there were also examples where the parents complimented their children's communicative competence. It was considered important to highlight this positive feature of everyday family talk to avoid taking a solely deficit stance to autistic interaction. It was also thought to be an interesting feature to examine as it demonstrates how children's speech and language skills are made relevant by parents and thus provide insight into families' perspectives of the impact of communication difficulties on their everyday interactions. Three examples of where parents talk positively about their child's communication are presented in this section.

The first extract, extract 5.11, follows on from extract 4.20 presented in chapter 4. Mark has been showing Mum a pepper, which he labelled a carrot. His mum corrected him,

labelling the vegetable as a pepper, but as she is doing so Mark is stating "George George", which we later find out is a character from a TV show (Peppa Pig). In this extract, Mum is in the room setting up the camera when Mark enters holding a piece of pepper. Dad is out of shot in the kitchen, but he is audible.

Extract 5.11 Mark_HM06_TV_pepper (00:00:50-00:01:48)

```
((setting up the camera))
 1
    Mum:
    Mark:
 2
              ((enters the room and sits on the sofa))
 3
    Mark:
             |it's carrots
 4
             ((holding up pepper, looking at Mum))
 5
              it's not a carrot it's a pepper
    Mum:
              but that's a good try
 6
 7
 8
              pepper, it's a (.) red pepper. isn't it? (.)
 9
              but good boy ((moves to turn the TV on))
10
   Mark: → | George George
            ((looking at his pepper))
11
    Mum:
12
             it's a pepper (.) isn't it? pepper
13
             ((sits beside Mark on sofa holding TV remote))
14 Mark: George
15
    Mum:
            it's not George
16
             (1.4)
17
    Mum:
             do you want to watch George?
18
             (0.9)
19
    Mum: do you want to w- oh!
20
                                ((taps Mark on shoulder))
21
             'cause it's a pepper
22
             L((points at pepper))
23
   Mark:
             | ↑ mmm ↑
24
             \lfloor ((looking\ at\ TV)) \rfloor
25
   Mum:
            have you 'eard that Dan?
26
   Mark:
             ((slides onto floor, facing away from Mum))
27
    Mark:
             [delicious
28
    Dad:
             [what?
29
           \rightarrow I said er it's it's not a carrot it's a pepper
    Mum:
30
              and then he went George and I went (2.0)
31
             no George isn't a pepper
32
              and it- n he's er he's telling me (1.2)
33
              George you know Peppa's brother George
34
              I- I didn't realise it
35
             you are clever boy
36
             ((rubs the tops of Mark's head))
37
             ((facing away from Mum, eating pepper))
    Mark:
38
              (3.7)
39
             you made a connection there didn't you
    Mum:
40
             ((facing TV holding remote))
41
              what about Mark if we watch the squirrel?
```

The analysis of the lines 1-24 have previously been presented in the discussion of extract 4.20 (section 4.4.2.) but a brief summary is provided again here for ease of reading. Mark opens the extract with a first pair part, holding up a piece of pepper and incorrectly labelling it as "carrots". Mum repairs Mark's labelling, providing the correct vocabulary of "pepper", and subsequently praises Mark for his attempt at labelling. In line 9, Mark speaks again with "George George". His turn is not overtly addressed to his mother, as his eye-gaze is focused on the pepper in his hand rather than directed towards his potential interlocutor. It is not clear at this point as to the nature of Mark's turn i.e., whether it is designed as a label for the food he is holding. Mark's Mum replies in the next turn space, continuing her previous social action of labelling the pepper for Mark, with the repetition of the label ostensibly designed as a pedagogical strategy to teach Mark the word "pepper". Mark again utters "George", and this time Mum does treat his turn as labelling (incorrectly) the food item, as in her turn on 14 she explicitly contradicts Mark's utterance, stating "it's not George". Following a pause, Mum reaches an alternative conclusion of what Mark's utterance might mean (that Mark is referring to George as a TV character) and proceeds to offer the option of watching George on TV (Mum is holding the remote control at this time). A pause follows, with Mark not producing a second pair part to Mum's turn. Mum pursues a response by repeating her question, but before completion she abandons it with a change-of-state token "oh!" to express an unexpected realisation. She voices her realisation that Mark is saying "George" as this is a character in the TV show (Peppa Pig) and thus Mark has associated pepper with the homophonous Peppa and thus with George. Mark does not show any acknowledgement or reaction to Mum's realisation (his "mmm" vocalisation in line 24 is deemed to be a high-pitched pleasure sound rather than an agreement).

Turning attention then to lines 25 onwards, Mum calls out to her husband to find out if he has overheard the exchange between her and Mark. Dad replies with an open class repair "what?" (Drew, 1997). Mum explains what has happened, recounting her exchange with Mark for his dad. She refers to Mark in the third person, talking about him, even though he remains in close physical proximity and had been an active participant in the interaction up to this point. Mum moves from her dyadic interaction with Mark to addressing Dad, without bringing Mark into the interaction to make it triadic, despite Mark being the focus of the talk. As in the extracts above, Mark does not object to being spoken about. Mum talks about him for the social action of informing Dad of Mark's communicative competence and providing a positive assessment of Mark's talk. This is in contrast to the previous section where the families' talk about the autistic child's communication arose due to interactional trouble and communication breakdown, rather than success.

Following Mum's talk about Mark, she then moves to address and praise Mark directly with "you are a clever boy" (line 35) which provides confirmation for us that she has viewed Mark's talk in a favourable way. There is no audible response from Dad but following another pause (in which Mark is now sitting facing away from Mum, eating his pepper and not demonstrating any acknowledgement of Mum's praise), Mum accounts for her praise, stating that Mark had "made a connection" (line 39) i.e., between 'pepper' the vegetable and 'Peppa' the television show.

The next extract also presents an example of a parent sharing an achievement in their autistic child's communication with someone who had not directly witnessed it. Jeff and Mum are sitting in front of the TV and Mum is supporting Jeff to request her to turn the

TV on using a sentence strip from his PECS book. We join the extract at the point of Jeff handing the PECS strip to Mum.

Extract 5.12 Jeff_HM02_TV2_asked nicely (00:04:40-00:05:04)

```
1
     Jeff:
              ((hands Mum a PECS strip))
 2
    Mum:
             I. want. TV.
 3
             ((moves Jeff's hand along the strip))
 4
             ↑TV:!
 5
             ((turns TV on))
 6
    Holly:
             ((enters room))
 7
             I want TV! I want my TV!
 8
    Mıam:
            Holly wants TV
 9
           → Jeff's [just asked really nicely with PECS for the TV
    Holly:
                     [.h why don't (.) we watch something that both
10
11
             me and Jeff like
12
    Mum:
             well let's just see
    Holly: I'll I'll ask him if he likes any
13
14
    Mum:
             well let's just see
15
              I think he maybe wants to watch another(.)ninkynonk
    Jeff: ((vocalisation))
Mum: good boy Jeff
16
17
    Mum:
              good boy Jeff.
18
              TV
```

Once Jeff has handed Mum the PECS strip, she takes his hand and moves it along the strip, labelling the words as she goes, to produce the verbal equivalent of his non-verbal request. She then acts upon his request by turning the television on. At this point, Holly enters the room and declares her request to watch the television. Mum acknowledges Holly's request by recycling it with Holly referred to in the third person. This turn design is arguably to provide a model of the language of requesting for Jeff (i.e., the subject+want+object structure) as this is the interactional skill which Mum has just been supporting him with. This strategy of repeating turns at talk for the benefit of the autistic child is seen in many extracts. Mum does not actually grant or reject Holly's request, and instead she informs Holly that "Jeff has just asked really nicely with PECS for the TV" (line 9). Mum provides a positive assessment within her turn "asked really nicely" which conveys that she is deeming Jeff's communication attempt to be praiseworthy rather than merely noteworthy. Holly overlaps with Mum's praise of Jeff

to return back to her request to watch television, this time strategically suggesting that they could find something that both she and Jeff could watch (line 10). She has not acknowledged Mum's praise turn.

Mum replies with a dispreferred response, not quite agreeing with Holly's suggestion but instead delaying commitment to either agreement or rejection with "well let's just see". Holly perseveres with her activity of finding a show that both her and Jeff want to watch in line 13, but again Mum suggests waiting, and then upgrades her dispreferred response with an epistemic claim about Jeff's preference, informing Holly that Jeff wants to watch "another ninkynonk" (which later on the interaction becomes evident that this is not a show that Holly wants to watch). Jeff then vocalises which draws Mum's attention back to him and in line 17 she directly praises him with "good boy".

This sequence follows the same structure as that in extract 5.11 above: the autistic child has done something which one co-participant has witnessed, the co-participant then reports this behaviour to another person (who was not privy to the child's communication) using a reference to the autistic child in third person format, before praising the autistic child directly. Also similar to extract 5.11, once dyadic interaction between Mum and Jeff has finished and Mum is reporting her positive assessment to Holly, Jeff ceases to be an active participant in the interaction, even when Mum addresses her direct praise to him.

The final example demonstrating how references to the co-present autistic child are used to draw attention to positive aspects of their communication is taken from an interaction with Mark, his mum and his sister. It is similar to the extract above in that a parent is sharing the communicative competence of their autistic child with their

sibling. Mark and his mum have been doing an activity where he hangs pieces of clothing on a makeshift washing line and they practice naming items of clothes. India, Mark's sister, was not initially involved but joined to witness Mark hang one item up and is now joining in for the end of the activity where they are unpegging the clothes and tidying up. As the extract starts, Mark is occupying himself by looking at his reflection in the fireplace. During the extract he does not use any eye-gaze towards Mum or India.

Extract 5.13 Mark_HM03_washingline02_helped (00:06:16-00:06:56)

```
1
    Mum:
              come Mark let's take the pegs,
 2
              |(1.1)|
 3
              ((moves towards the washing line))
 4
              take the peg off here like that
 5
                                         L((pinching a peg))
 6
              (1.0)
 7
              take it off
              (1.4)
              I think I've lost you to it ( ) all haven'ta?
             [(1.2)]
10
             ((takes peg off))
11
12
    India:
             ((starts taking a peg off))
13
              oh you are a good angel India well done
    Mum:
              (3.4)
14
15
             ((taking clothes off))
    Mum:
16
     India:
             ((taking clothes off))
              and then we'll take that off
17
18
              (1.1)
19
     India:
              at least Mark has helped a bit
20
           → he has and he's been able to name everything India
21
              so I'm really pleased with that
              (5.8)
22
23
             ((tidying up))
    Mum:
24
             ((tidying up))
     India:
2.5
    Mark:
             ((staring at his reflection in the mirror))
```

At the outset of this extract, Mum utters a first pair part, summoning and directing Mark to come and help with taking the clothes off the makeshift washing line. Mum's first pair part is spread over lines 1-3. Mark does not comply, nor does he show any related resistance or indeed acknowledgement of the request, as he continues to be involved in

his own activity of looking at his reflection in the fireplace. Mum reissues the directive to Mark, this time upgrading it to a more explicit design of "take it off" (vs. "let's take the pegs"). This upgrading of a turn following non-compliance is an interactional technique identified in other parent-child interaction studies e.g., Craven and Potter (2010). Instead of pursuing compliance further, Mum orients to Mark's lack of attention, and that she has "lost" him to another activity. This legitimises Mark's non-compliance, as him being engaged in a competing activity would not make him available to complying with Mum's alternative request. This word choice of "lost" to account for absent responses from Mark was seen in other places in Mark's dataset, as exemplified in extract 5.1. However, in contrast to that extract, in this present example Mum uses it in a turn addressed to Mark, rather than in one where he is referred to as a co-present person. Interestingly though, while the turn is addressed to Mark, as his name is used, ostensibly it is not designed to project a response, as embedded in the turn is an acknowledgement that Mark is not currently available as an interlocutor. Mum completes the abandonment of engaging Mark to help with the pegs in line 11 by starting to take them off herself.

As Mum starts taking the pegs off, we see India join in and help with the unpegging. This elicits praise from Mum, who declares India to be a "good angel" for helping with this task. Mum and India continue to dismantle the washing line (lines 14-18). India then produces a turn talking about Mark, which is the focus of this analysis, commenting "at least Mark has helped a bit" (line 19). This assessment of Mark's behaviour is analysed as referring to Mark's compliance with the previous activity of putting the clothes on, but the "at least" phrase India uses also makes reference to the non-compliance with Mum's directive to take the clothes off. Mum agrees with India's assessment with "he

has" in line 20, and adds further praise, informing India about a positive feature of Mark's communication in that he was able to name all of the clothes items, which India had not been witness to, as she was not present at that point. Mum follows up her information-giving with further assessment; that she is "really pleased" with what Mark has been able to achieve in terms of demonstrating his vocabulary during the activity. Throughout Mum and India's exchange, Mark has been occupying himself with an alternative activity and does not show any acknowledgement of the praise. The activity concludes with Mum and India continuing to take the washing line down.

This extract shows examples of both India and Mum doing positive assessments of Mark's behaviour, but it is Mum's talk that specifically refers to Mark's communication skills of naming and using spoken vocabulary. She shares his success with India, giving us insight into Mum's evaluation of Mark's communicative efforts and her celebration of communicative competence.

5.6 Chapter summary

This chapter has presented the analysis of multiparty talk in everyday family interaction involving autistic children, specifically examining collections of when the autistic children are spoken about by co-participants. The analysis in this chapter demonstrates how the autistic children's communication is made relevant as a topic to be discussed in everyday family interaction. Families orient to children's interactional trouble and interactional success and thus the analysis of others' talk about the autistic child provides insight into families' observations of the children's social communication and interaction abilities and how these can impact everyday family talk. Firstly, it presented examples of where others' talk about the autistic child oriented to noticeably absent

responses from the children and accounted for this. Patterns of two types of accounts were demonstrated: (i) explaining that the autistic child was otherwise engaged in a competing activity and therefore not available to respond and (ii) that the child was not interested in participating in the ongoing interaction. Next, it discussed examples of how others talked about an autistic child in order to make sense of the autistic child's communication and manage interactional trouble. Finally, the analysis showed how others provided positive assessments of autistic children's communication in their talk about the co-present children.

The analysis of parents' accounts for a child's noticeably absent response exemplifies how participation status in an interaction is not static or pre-assigned and instead it is flexible and interactionally managed. Children were addressed in parents' first pair parts and thus there is evidence that they were treated as available recipients to the speaker's talk. However, by not producing a response in the expected second pair part position, children demonstrate a lack of involvement and an absence of recipiency. They do not display actions which suggest that they are participating in an interaction with their parents. The children are initially implicated in the interactional event as a ratified hearer by the nature of being physically present and being addressed by other speakers, but their absent responses show how they opt out of participation. We see how parents orient to the children's change of participation status through their accounts addressed to others present in the physical space. The activity shifts from a dyadic interaction with the child where the child is the addressee, to a dyadic interaction with another copresent participant where they are now the addressee. Thus, there is concomitant shift in the participation framework, as the participation status of both the child and the copresent participants has changed (Goodwin & Goodwin, 2005).

The analysis of sequences where parents or others attempt to make sense of a child's communication also demonstrates the differing participation statuses of those present. I presented examples where the child was either initiating with a first pair part to a copresent person or was responding with a second pair part when addressed by a speaker. Due to ambiguity in meaning of the child's turn construction, another copresent unaddressed participant (not the original member of the dyadic interaction with the autistic child) self-selected to speak in order to do a sense-making practice, such as offering a suggestion for the meaning of the child's turn. Unaddressed recipients became speakers as they joined the interaction in order to support intersubjectivity and progressivity. They claimed entitlement both to take a turn at talk but also to make a knowledge claim (Heritage, 2012) about the potential meaning of the child's ambiguous talk. They positioned themselves as the 'knower' of the child's communication and this stance tended to go unchallenged by the other participants, including the child whom they were talking about. The children did not object to being spoken about and there was no orientation to any potential moral issues of others claiming greater knowledge than themselves. The adults providing the knowledge claims did not address these to the children in terms of an other-initiated repair of the trouble source located in the child's turn. Instead, they addressed it to the co-present participant whom the child had originally been interacting with. These examples show how participation statuses shift across sequential interaction and how the participation framework is locally managed. They also highlight how participants can make epistemic claims about the meaning of children's communicative attempts. While candidate understandings as a strategy for making sense of the talk of individuals with communication are well documented (e.g., Antaki et al., 2019; Pilnick et al., 2021), more assertive knowledge claims and claims in multiparty talk are less studied.

Parents drawing attention to a communication success in the child's talk was the final phenomenon of talk about a co-present autistic child to be presented in this chapter. It was important to document this to present a balanced view of how both communication challenges and communication successes are oriented to by families in their everyday lives and to avoid inadvertently aligning with a deficit perspective. The data showed how parents shifted from their dyadic interactions with their children to initiate a new sequence with another co-present participant to compliment or praise the autistic child. They shared their pride about their children's communication attempts with others through their positive assessments. This finding reflects the literature which has shown that parents are proud of their children's abilities, as well as recognising their difficulties, when considering the impact of autism on the family (Hastings et al., 2005; Kayfitz et al., 2010).

The following chapter continues the analysis of multiparty interaction, focusing on sibling-parent-child interactions.

6 Directives in parent-sibling multiparty talk in the everyday context

This chapter presents analysis of parent-siblings interaction for two of the autistic children, Jeff and Mark. As per the previous chapter, families were not asked specifically to generate recordings of multiparty interaction, but inevitably did so as part of everyday family life. In the resulting dataset there were a number of recordings of Jeff and Mark and their older siblings, providing a valuable opportunity to analyse this type of interaction in a naturalistic context¹².

As discussed in chapter 2, there is a large body of research aimed at understanding the experiences of sibling of autistic children. For example, there are two recent systematic reviews on this topic (Leedham et al., 2020; Watson et al., 2021). Such work has generated themes related to both the benefits and challenges experienced by siblings. Positive narratives about love, empathy and appreciation are identified, alongside difficulties related to interacting with their siblings, feeling that they need to give in to their siblings to avoid conflict and increased responsibilities at home. The studies included in these reviews all report on sibling's perspectives on their experiences. There is little research which focuses specifically on examining real-time interactions of siblings where one or more of the children is autistic. The published literature which does focus on interaction typically utilises methods entailing coding observations of pre-determined behaviours. For example, El-Ghoroury and Romanczyk (1999) and Rum et al. (2021) focused on coding prosocial behaviour such as initiation and imitation by

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¹² While there were two recordings (one each) featuring Molly and Seth and their siblings, these were not included as the recording from Seth did not feature any interaction between him and his brother (who has Down Syndrome) during their mealtime, and the recording from Molly also featured limited interaction between her and her younger brother as her brother engaged in his own play, mostly out of shot.

the autistic children. To my knowledge, there are no studies employing an inductive, data-driven approach or where conversation analysis has been utilised specifically to study naturalistic interactions involving an autistic child, a sibling and their parents.

Viewing of the data from my study highlighted frequent instances of a parent attempting to direct a sibling's behaviour in relation to the autistic child, such as asking a sibling to give their brother something, to help them with a task or to leave them alone. It was thus decided to focus on parent-sibling sequences to explore what their talk might tell us about everyday family interaction when the family includes an autistic child. The analysis presented in this chapter focuses on parent directives in family talk, examining a collection of examples of parents using "utterances designed to get someone to do something" (Goodwin, 2006, p. 517). It concentrates specifically on directives where an older, typically developing sibling is required to do something in relation to their younger, autistic sibling.

The chapter opens with a brief overview of directives from previous conversation analysis literature. It then presents examples of directives issued by parents to siblings in multiparty interactions (parents, autistic children and their siblings). Following this, the chapter moves to focus on sequences from multiparty talk where the directive was resisted by the sibling. Finally, it presents a case example of interactional conflict between parent and sibling arising from disputes over directives.

6.1 Directives

Early work on directives by Ervin-Tripp et al. (1984) defines directives as "offers, requests, orders, prohibitions, and other verbal moves that solicit goods or attempts to effect changes in the activities of others" (p. 116). The social action of directing another

to do something can be accomplished in a variety of ways (Curl & Drew, 2008; Ervin-Tripp, 1976). This could include, but is not limited to, linguistic structures such as an imperative ("Do X"), an expression of need or want ("I need/want you to do X") or a question with a modal ("Could you do X?"). The design of a directive is not restricted to verbal language and features of grammatical construction and prosody; there is also a role for non-verbal resources such as facial expressions, gesture, gaze and embodied actions (Goodwin & Cekaite, 2014).

The entitlement of the speaker to issue a directive and control the actions of others can be a key element in how the directive is accomplished, along with acknowledgement of contingencies related to the recipient's ability to complete the desired action (Curl & Drew, 2008). For example, an imperative implies a higher entitlement claim and less recognition of potential contingencies than a modal interrogative such as "I wonder if you could do X". From a conversation analysis perspective, authority to get someone else to do something is interactionally displayed through the speaker's design choice of their directive utterance rather than necessarily being a static status associated with a particular role (Craven & Potter, 2010; Curl & Drew, 2008; Heinemann, 2006). Analysis of directives can therefore provide insights into participants' perceptions of authority and entitlement within an interaction. This has been explored widely in adult-child interaction, both in institutional contexts, such as teaching (e.g., Stevanovic & Kuusisto, 2019), along with studies focusing on everyday family interactions such as play, daily routines and mealtimes (e.g., Aronsson & Cekaite, 2011; Bottema-Beutel et al., 2022; Craven & Potter, 2010; Gaskins & Frick, 2022; Goodwin & Cekaite, 2014). Such work has illustrated how parents claim high entitlement through frequent use of imperatives (e.g., Craven & Potter, 2010), but also how directives can be adjusted through

upgrading and downgrading by speakers within sequential interaction to accomplish family activities (e.g., Aronsson & Cekaite, 2011). Analysis of parent-child interaction also illuminates the issue of deontic authority, in terms of who has the social capacity or the rights to say what should be done by others (Stevanovic, 2018; Stevanovic & Svennevig, 2015).

In addition to examining directives themselves, studies of family interaction have explored how directives can be responded to by children (Henderson, 2021b; Kent, 2012a). Children can choose to display compliance with a verbal or embodied second pair part and, by doing so, align to the action occasioned by the parent's first pair part and ensure progressivity. As such, compliance is considered the preferred response (Pomerantz, 1984a). When children comply, they demonstrate that they are accepting of and ratifying a parent's claim of entitlement in their first pair part. Alternatively, children can assert agency to resist or refuse a directive and thus potentially disrupt progressivity within an interactional sequence. Children can resist or refuse a directive, or demonstrate incipient compliance where they show some signs of moving towards compliance, without fully complying (Kent, 2012a). Children can also complain about the request or account for why they legitimately cannot comply, perhaps through finding fault in a parent's arguments (Goodwin, 2006). Non-compliance can lead to disputes between interlocutors, as parents may pursue compliance by repeating and recycling their positions, providing explanations or upgrading assertions of control to which children may continue to resist or refuse, resulting in extended sequences of interactional conflict across multiple turns (Busch, 2012; Goodwin, 2006; Goodwin & Loyd, 2020).

In summary, parents attempting to get children to do something is a common social action within parent-child interaction. Parents' directives can take a variety of forms as they claim entitlement to control someone else's behaviour and as they recognise the contingencies of a child complying. Children can respond to directives along a spectrum of compliance, from flat out refusal to full compliance, with resistance of refusal potentially resulting in interactional conflict. I shall now present examples of directive sequences from the data. For the purpose of my analysis, I aligned with the broader concept of a directive being any turn designed to effect change in the activity of another.

6.2 Directives addressed to siblings related to the autistic children

The first example is an extract from a recording where Mark and his sister Holly are playing with Duplo blocks and their Mum is watching. The children are playing alongside each other but building separate structures.

Extract 6.1 Mark_HM07_duplo_take it off (00:23:47-00:25:01)

```
1
     India:
             Mark you can have this
 2
             ((places a piece next to Mark))
 3
             can I borrow some Lego?
 4
             ((reaches for pieces on Mark's structure))
 5
             [p-
 6
    Mum:
             [well Mark is using it(.)
 7
             [in a minute
 8
    India:
             [I just need to borrow [these
 9
             ((touching the pieces on Mark's structure))
10
                                    [((voc[alisation))
    Mark:
11
                                            [well a-
    Mum:
12
    India: can I just borrow these?
13
    Mum: → ask Mark they're Mark's toys=
14
    India: =Mark can I borrow these?
    Mark: ((vocalisation, continuing to play, no change in eye-gaze))
15
    Mum: \rightarrow take it off and see what happens
16
17
    India: ((takes pieces off))
    Mark:
18
             ((continuing to play))
19
    Mum:
             okay
20
    India: ok(h)ay I guess he didn't mind
```

At the opening of the extract, India gives a piece of Lego to Mark (lines 1-2) and then makes a request to borrow some pieces from him (line 3). As she makes this verbal request, she is already physically acting on it and she reaches for a piece of Mark's Lego. Although India's turn is addressed to Mark, it is Mum who speaks next with an interjacent answer. She interjects to inform India that Mark is using those pieces, effectively denying India's request. Mum's use of "well" at the start of her turn provides the hint that her turn is not going to be India's preferred projected response (Heritage, 2015). Mum then utters "in a minute" (line 7) which is analysed as letting India know that she can have the pieces but not immediately, and that she will need to wait a little while. India begins to speak at the same time as Mum specifying (and thus downgrading) her request that she "just" needs to borrow certain pieces (line 8). Mark is vocalising during this but as he is not directing his noises to anyone, it is deemed to be self-talk.

In line 11, Mum begins to speak with another well-prefaced turn, suggesting that she is again going to produce a dispreferred response to India's request, but instead she abandons her turn. In the following space, India again requests to borrow the pieces that she specified in her previous turn. Mum issues a directive at this stage (line 13), telling India to address her request to Mark, as he is the owner of the items that she is seeking to obtain. Despite Mum herself not being the owner, she claims greater deontic status to instruct India on Mark's behalf. Mark is thus the beneficiary of Mum's directive. India complies with this, ratifying Mum's claim, and addresses her subsequent turn to Mark using his name. No response from Mark is forthcoming; he vocalises but there is no evidence in his embodied action that this is intentional communication directed to co-participants. Mum now directs India to take the pieces off and await Mark's reaction

(line 16). She suggests a compromise for India: take the piece as she suggested but wait to see his reaction to know what to do next. With this turn, Mum shows her uncertainty about how Mark might react and provides the opportunity to prevent distress if Mark does respond badly to India's action. In this turn she is also orienting to Mark's lack of response in second turn position to India's first pair part, as we have seen in previous chapters. India takes the pieces from Mark's structure and there is no visible reaction from Mark; he continues to play as he has been. Mum subsequently does an assessment of Mark's response with "okay", referencing the lack of problematic reaction to India's actions. India aligns with Mum's assessment, also commenting "ok(h)ay" but laughter particles are inserted within her assessment, suggesting that she finds either Mark's lack of reaction, or Mum's assessment of it, amusing. She also expands on her assessment, commenting that Mark must not have minded her borrowing the pieces after all, perhaps cheekily suggesting that it was unnecessary for Mum to direct India's behaviour for the benefit of Mark, as she orients to Mark's lack of response to her request for permission. Ultimately, India has achieved her preferred outcome of her original request in line 3. It is not possible to know whether this outcome would have been achieved without Mum's intervention i.e., if India had proceeded to take the pieces as she had begun to in line 4 and Mum had not stepped in, but this example does demonstrate how a parent directed a sibling's behaviour in relation to their autistic sibling to minimise the risk of problematic reactions and sibling conflict. It also exemplifies how parents speak on behalf of the autistic child, as seen in previous chapters.

In the extract above, Mum successfully averted a potential sibling dispute. However, perhaps unsurprisingly, disputes between siblings did sometimes occur. One example is

shown below, which has occurred because Mark has just tried to open one of India's presents on her birthday. In this example we see how India is directed to ignore Mark's behaviour in an effort to resolve the conflict. Mum speaks to effect change in India's behaviour, not Mark's, in order to prioritise harmony.

Extract 6.2 Mark_HM04_birthday_interested (00:01:38-00:01:55)

```
1
             no no [no ((screams))
    Mark:
 2
    India:
             |↑Mark it's not your birthday↑
 3
             ((pushes Mark))
 4
             it's alright India
    Mum:
 5
           \rightarrow [you just open your presents
 6
    Mark:
             [((
                    screaming
    Mark:
 7
             [no no [no no no no
 8
    India: [((sits down, opens a present))
 9
    Mum:
                      [right let (
10
    Mark:
             I think he's just interested India that's all
11
    Mum:
    India:
12
             ((opening presents))
```

India takes the present that Mark is trying to open off him, resulting in him complaining "no no no" and screaming, as seen in line 1. As Mark is screaming, we see India overlap with him, informing him that it is not his birthday, providing an account of why she is complaining about him opening a present. India delivers this turn with a raised, complaining pitch and she is evidently annoyed as she physically pushes Mark. Mum reassures India in line 3 with "it's alright" and then instructs her to focus on opening her presents. Mum's turn design here, using "you just open", suggests that Mum is trying to get India to focus just on opening her presents and to ignore her brother's behaviour. India complies with Mum's directive as in line 8 we can observe her sitting down and unwrapping another present, and she does not interact any further with Mark. In line 11 Mum provides a post-directive account for Mark's behaviour to India, explaining that he is "just interested that's all", suggesting that she is not treating Mark's behaviour as being purposefully destructive to India, but that his actions to open India's presents

were just his way of demonstrating interest. This account comes even after India has complied. With this explanation, Mum makes relevant Mark's autism and his developmental differences. She also demonstrates a claim that she has more knowledge than India of Mark's inner state and is allowed to mind read and share this on Mark's behalf (and indeed Mark does not object to Mum's interpretation). The extract shows an example of sibling dispute and subsequent parent intervention. As with prior extracts, the parent directs the sibling's actions in relation to the autistic child's behaviour. An account related to the autistic child's understanding is provided as justification for the directive.

The next extract presents a further example of India's activity being directed in relation to Mark. Similar to the extract above, we see Mum direct India to not interact with her brother and to "leave him alone". In this recording India, Mum and Mark are watching television. The television is showing children's songs and Mum has been singing along, encouraging Mark to join in by looking between him and the TV.

Extract 6.3 Mark HM02 pizza quack (00:01:08-00:01:29)

```
1
    Mum:
             quack quack ((singing along to TV,
             looking between Mark and TV))
3
    India:
             one little duck came swimming back ((singing))
             (2.0)
5
             Marksy
6
             ((looking at Mark))
    Mum:
           → India leave him alone love
8
    Mark:
             ((gets off sofa and turns back to camera))
9
    India:
             you see he doesn't wanna do it he's filming his bum
10
    Mum:
             h h
11
    India: ((laughs))
```

Line 1 shows Mum singing along to the song on the television and looking between Mark and the TV. Arguably, this is an attempt by Mum to establish shared attention with Mark in the activity of watching the TV, and potentially encouraging him to sing along.

In line 2 India joins in the singing. There is a pause after India sings her line, following which India calls Mark's nickname (line 4) and looks towards him. Here India has explicitly tried to draw Mark in as an active participant, requiring a response to her first pair part name calling. Up until this point, Mum had not designed her interaction with Mark to necessitate a response turn from him. When India calls Mark's name, Mum immediately utters a directive for India to leave Mark alone (line 6), expressing her disapproval at India's social action of pursuing a response from Mark. She designs her turn with a turn-final term of endearment ("love" – line 6) rendering the turn hearable as a downgraded directive, rather a telling off, and displaying her positive affective stance towards India in this moment (Lerner, 2003; Pauletto et al., 2017). India complies with Mum, as she does not pursue further interaction with Mark, who at this point has stood up from the sofa and turned his back to the camera. India treats Mark's embodied movement as confirmation that Mark did not want to engage in the singing that Mum had been encouraging. She uses it as justification ("you see he doesn't wanna do it" – line 8) that she was right to explicitly pursue Mark to join in her original turn in line 4 (as Mum's approach had not worked and therefore Mark would have been unlikely to join in without India's involvement and her more explicit attempt to position him as an interactional participant). Mum does not respond to this, instead softly laughing at India's comment that Mark wanted instead to "film his bum".

Another example of an older sibling being instructed to not interact with their younger brother is shown below in extract 6.4. This is from Jeff's dataset and is taken from a recording where Holly, Jeff and Mum are playing with a train set. Jeff has been distressed earlier in the recording, but at the point of joining this extract he appears calm and is playing with some cars on the track. Earlier in the recording Jeff had been

bothered by the position of a wooden figure on the track, which is the "little girl" that Holly refers to below.

Extract 6.4 Jeff_HM02_train obstacle_girl (00:12:15-00:12:33)

```
1
    Holly:
              Jeffy!
 2
              (1.2)
 3
    Holly:
              JEFFY!
    Mum:
 4
              he's alright now [he's playing with the cars now
                               [\uparrow what about we put the little
    Holly:
 5
 6
              [girl on the Jenga bricks↑((parentese tone))
 7
           → [sh::::::::
    Mum:
 8
    Mum:
           → why don't we just leave the little [girl
 9
    Holly:
                                                  [will we put [the
10
              little girl on the Jenga [bricks ((parentese tone))
11
    Mum:
                                                               [Holly?
12
    Mum:
                                       [why don't we just leave the
13
              [little girl
14
    Holly:
             [or she can just be a random STATUE
15
              he's forgotten about her
    Mum:
16
    Holly: that's appeared out of nowhere
```

Holly summons Jeff's attention in line 1, repeating it with increased volume in line 3 after a non-response. Mum does an assessment in line 4, commenting that Jeff is "alright now" (following previous upset) and is occupied with playing with the cars. Holly continues addressing her talk to Jeff, making a suggestion of where they should put the "little girl". Mum overlaps with Holly to shush her (line 7) which is considered to be a directive from Mum in the activity of getting Holly to not interact with Jeff as he is okay playing with his cars. Mum subsequently suggests to Holly that she "leave the little girl", which is the item that had provoked Jeff's upset previously in the recording. This goes unacknowledged by Holly, who repeats her own suggestion that the little girl be placed on top of the Jenga bricks. This results in Mum overlapping with Holly's talk, calling her name in a hearably stern tone, potentially admonishing her for non-compliance with her suggestion that they leave the little girl where it is, or cautioning her to abandon her pursuit. Holly continues with her turn and Mum overlaps again, recycling her position (Goodwin, 2006) about leaving the little girl. Holly proceeds to overlap with Mum, again

showing resistance to Mum's agenda of leaving the girl alone. She suggests an alternative location of the little girl (being a "random statue", staying where she is) from her previous proposal (on top of the Jenga bricks). Holly's tone changes in this turn; in her previous turns she has used a 'parentese' tone of voice (high pitch, exaggerated melody) but this is dropped in this turn, potentially displaying the turn is made for Mum's benefit now rather than being addressed to Jeff. Holly's line 14 turn displays some acknowledgement of Mum's talk, which she had not previously shown in the sequence. Holly's raised volume and emphasis of "STATUE" in line 14 insinuates that this is not Holly's preferred outcome and displays resistance to Mum's agenda of leaving the little girl alone. However, Holly's turn does also demonstrate some incipient compliance (Kent, 2012a), in that it is a precursor to Holly complying with Mum's requests for her to leave the little girl alone (as the suggestion of the girl being a "random statue" inherently involves it remaining where Holly has now placed it on the play scene with no need for her to move it again).

Mum's directives for Holly to leave the girl alone are related to Mum's original preference for Holly to not upset Jeff with the activity of moving of the girl, as indicated in line 4 when Mum had assessed Jeff as being "alright now" and alternatively occupied in another activity. Mum is thus privileging Jeff's state over Holly's, and Mum's directives are designed to reduce Jeff's potential distress. Mum returns to this point in line 15, commenting that Jeff has forgotten about the little girl. This serves as an account for why Mum directed Holly's behaviour as she has, which ultimately ended in some frustration for Holly. Overall, the extract shows a further example of how parents manage sibling talk and behaviour to maintain interactional harmony in play activities.

The next example is taken from a recording of a family mealtime in Mark's house. Mealtimes are a setting where directives frequently occur and have been well-studied (e.g., Gaskins & Frick, 2022; Kent, 2012a; Ochs & Shohet, 2006). The family are sitting at the table while Mark and India eat their dinner. In this extract we see Dad issue a prohibitive or a grammatically negative imperative (i.e., "don't do X") to India related to how she is eating, which is seconded by a related directive from Mum, who accounts for the directive by explaining India is required to demonstrate desired behaviour for her younger brother.

Extract 6.5 Mark_HM06_dinner_show Mark_A (00:04:33-00:05:26)

```
1
     India:
              ((loud eating noises))
 2
     Dad: → don't do- don't open your mouth
 3
     \operatorname{Mum}: \rightarrow come on we need to show Mark how we eat
 4
     Dad:
              yeah
 5
     India:
              sorry
 6
              °okay° (.) got to-
     Mum:
 7
              that's the thing when you're a big \underline{\operatorname{sis}}ter you've to
 8
              show (.) little brothers and little sisters (.)
 9
              in your case a brother a little brother how to behave
10
     India: mm hm even if (.) even like if you're twins (.)
11
              like if a girl and a girl (.) the older girl [(
12
     Mum:
                                                               [well it's just
13
              good to model the right kind of behaviours and Mark
14
              needs to be shown how to model the right kind of behaviours
15
              doesn't he? (.)
              so if his big sister's eating nicely with her knife and
16
17
              fork
18
                                                                 L((picks up
19
              India's knife briefly))
              can't you film it?
20
     India:
              I am filming it sweetheart
21
    Mum:
22
              ((3 mins of other discussion))
```

India makes some loud eating noises in line 1, which is the catalyst for a negative imperative directive from her dad (line 2) who directs her to not open her mouth (presumably while eating, as culturally this would be considered ill-mannered). At this point the directive is solely related to India and does not make any reference to her position in the family or her identity as a sibling. In the following turn (line 3), Mum

aligns with Dad's instruction to India regarding her eating. However, whereas Dad's formulation was an unmitigated directive, Mum's follow-on turn has a downgraded format, evidenced by her collaborative "we" and a reason-giving for why this is being asked of India i.e., "we need to show Mark how we eat". In this turn, Mum invokes India's social role as a sibling, positioning her as a role-model to Mark. She introduces the concept of Mark learning from his older sister about how to behave at the dinner table. We see Dad subsequently agree with Mum's account with "yeah" in line 4. India demonstrates compliance with the directives from her parents, as she ceases making the loud eating open mouth eating noises as soon as Dad spoke in line 2, and in line 5 we see her apologise. This apology is accepted by Mum in line 6.

However, this does not close the sequence as, after a false start, Mum continues to explain how India, as a big sister, is required to show Mark how to behave (lines 7-9). Despite India already complying, Mum provides a post-sequence account for her and Dad's prior directives. Mum presents a rule for the desired behaviour, implying that India is obliged to comply within her role as the older sibling. India's identity as the older sibling or "big sister" is entreated by Mum in the account that she provides for her (and Dad's) directives. India initially agrees with Mum with "mm hm" but then queries her explanation in lines 10-11, asking if Mum's account would still apply to twins of the same age. Mum acknowledges India's query with a well-prefaced turn in her response, but does not directly address it, proceeding instead to justify that it is "just good to model the right kind of behaviours" (lines 12-13). The concept of the action of modelling being "just good" invokes a moral obligation for India to comply with Mum. In addition to this broader moral responsibility, Mum also states that Mark specifically needs this modelling. India is therefore being made accountable in her choice to act

favourably or not by both her role of moral citizen and her local identity as Mark's older sister. Mum completes her turn with a turn-final tag question, "doesn't he?" (line 15) which projects agreement from India about Mum's account of Mark's need.

The preferred response of agreement is not forthcoming from India though, and following a micropause, Mum continues speaking. At this point (lines 16-17), Mum issues another directive, this time with an implicit design, encouraging India to use her cutlery. Up to this point, Mum's requirements of India's behaviour has been quite vague e.g., "show... how to behave" (line 8-9) and "model the right kind of behaviours" (line 13). Now though, Mum provides a more specific example of what might constitute the "right kind of behaviours". Mum starts her turn as though she will design it with an ifconditional construction when presenting this example, but her turn is incomplete and she does not state what the result of the conditional would be i.e., what happens if India "eats nicely". Her turn is designed as an implicit directive, as she briefly lifts India's knife, ostensibly to show her that she is expecting her to use it. We can ascertain from the prior talk that *if* India were to eat with her knife and fork, this would be desirable behaviour for Mark to copy. India does not respond to Mum's turn with relevant talk or embodied action (such as picking up her knife), but instead asks Mum to film the meal, shifting the activity. Mum does not pursue the original activity trajectory and instead responds to India's request. Later in this recording though, we see the issue of India needing to use her cutlery in order to demonstrate the behaviour for Mark being made relevant again by Mum, as shown in extract 6.6.

Extract 6.6 Mark_HM06_dinner_show Mark_ B (00:08:18-00:08:54)

```
1 Mark: ((leans over plate to pick sausage up with his mouth))
2 Mum: no no we use a knife and fork please (.) Mark
3 Mark: ((sits up))
```

```
dib dib
 4
    Mum:
 5
              ((dipping sausage on fork into ketchup))
 6
                   [knives and forks at the table
 7
              knives and forks at the table.
 8
              that's because you need to show (.)
 9
              how you use your knife and fork [( )
10
     India:
                                                [I was using them properly
11
    Mum:
              veah but v- (.)
              some people use a knife and fork at the same time
12
13
     India:
              and some people don't ((drops sausage from her mouth))
14
    Miim:
              India
15
     India:
              what?
16
    Miim:
            → eat it nicely please
17
     India:
              (
                   Γ
                     )
                   ['cause look | he's- is he eating it nicely?
18
19
                               L((points at Mark))
20
    Mark:
              ((eating sausage with half of it out of his mouth))
21
     India:
              no heh heh
22
    Mum:
              fn \uparrow of (0.5)
23
              so it's important that you show him isn't it?
24
              (3.1)
```

This extract starts with Mark leaning forward over his plate to pick up a sausage with his mouth, without using a utensil. Mum corrects this behaviour first with a repeated "no" followed by an implicit directive for Mark to use his cutlery ("we use a knife and fork please", line 2) and demonstrates the desired behaviour for Mark in lines 4-5. India joins in the reproach of Mark's behaviour, stating "knives and forks at the table", positioning herself as having the power and authority to proclaim mealtime rules for proper behaviour. Mum repeats India's utterance, then proceeds to assign blame to India for Mark's behaviour, stating that it occurred because India had not shown how she uses her knife and fork (lines 8-9). India refutes this blame, claiming that she was using her cutlery properly (line 10) to which Mum responds with an agreement-but-disagreement (Pomerantz, 1984a, p. 72). She initially agrees with "yeah" followed immediately with "but", claiming that some people use knives and forks at the same time, and that India had in fact not complied as she is protesting that she did. India disputes this account, picking up on Mum's word choice of "some people" in line 13, exposing a weakness in Mum's argument (i.e., that not *all* people do) and counter

claiming that "some people don't", and therefore Mum's blame is not justified based on the argument of what other people do. Just as India declares this, and before Mum responds regarding the legitimacy of India's argument, India drops the sausage from her mouth that she has been eating. Mum admonishes her by using her name (line 14), prosodically designed with a negative affective stance, to which India seeks further information with "what?" (line 15). This results in a clear directive for India to "eat it nicely".

As in previous extracts, we see Mum relate this directive of India's behaviour to Mark across her following turns. India's turn in line 17 is not audible but in line 18 Mum directs India to look at Mark, initially beginning to describe him, but then self-repairing and asking India to see if he is doing what Mum wants India to show him ("eating nicely"). India provides the preferred response in line 21, agreeing that Mark is indeed not eating nicely and laughs to show amusement at this. Mum also shows amusement, as her follow-up agreement is delivered with smiling voice (line 22). However, this shared amusement does not distract Mum from her activity, as she concludes the sequence with an account for the importance of India needing to show Mark how to eat, which implies her entitlement to direct India's behaviour as she did in line 16, and how this is relevant to Mark. Mum formulates this with a turn-final tag question, which is not responded to by India. There is a pause in the talk and when it resumes it is focused on other topics, although we later see India use her knife and fork as instructed by Mum.

This extract demonstrates how parent-issued directives to siblings can be accounted for by invoking the older sibling's social position as being a role model for their younger sibling. Older siblings are required to demonstrate desirable behaviours (and reduce undesirable ones) as they may be copied by younger siblings. This positions the autistic

child as a potential beneficiary of the directive (Clayman & Heritage, 2014), along with the parents who are issuing the directive, despite the child not necessarily directly participating in the interaction. It is also interesting to note that in the previous two extracts (extracts 6.5 and 6.6), India is being requested to model a desired behaviour for Mark. However, in extract 6.3 she was spontaneously modelling a desired behaviour (singing along to the song), but at the point when she tries to draw Mark's attention to it, she is instructed to stop. These examples show how the concept of desirable behaviour and modelling are locally situated, varying from interaction to interaction and being interactionally managed by parents, thus requiring siblings to learn the delicate nuances of their social role as older sibling.

The next section specifically considers examples where siblings resist directives issued by parents in relation to the autistic children.

6.3 Siblings' agency and resistance to directives

As noted earlier in the chapter, the preferred response type for directives is compliance, where the recipient of the directive fulfils the requirements of the speaker and there is unmarked resolution to the sequence. However, there are alternative responses available to the recipient, such as resistance or refusal, where the response does not align with the speaker's intended outcome. The following section will focus on examples of the latter, where siblings demonstrate their agency to resist or refuse parent directives which refer to the present autistic child.

The first example is taken from Holly and Jeff's data and is a clear example of a sibling refusing to participate in an activity suggested by their mother. The 'getting someone to do something' in this case refers to Mum getting Holly to participate in the therapy

activity of modelling the word "open" for Jeff. "Open" is a target word for Jeff from his speech and language therapy programme. The ultimate aim is for Jeff to make any attempt at approximation of the word, such as the /əu/ ("oh") sound, with one key aspect being that he voices the sound, as he currently only whispers or mouths sounds, which often means that they are unintelligible to his communication partners. In order to work towards this target, Mum has been encouraged to emphasise and exaggerate the "oh" sound in the word "open" during everyday routines, in an effort to draw Jeff's attention to models of the target sound. She has also been advised to create opportunities for Jeff to attempt the target word/sound, through pausing after she produces her model to create an implicit expectation that Jeff may take a turn in the transition-relevance place. The extract below demonstrates Mum carrying out this therapy activity and her attempt to involve Holly in it. Thus, the directive asks Holly to do something for the benefit of Jeff. In the recording, Jeff, Holly and Mum are sitting at the table eating lunch. Holly has a book in front of her which she is reading during the extract. Directives are highlighted using the $'\rightarrow'$ symbol, as in previous extracts, whereas response turns are highlighted using the '->' symbol.

Extract 6.7 Jeff HM02 sandwich mouth closed (00:02:58-00:03:42)

```
Jeff
               ((eating raisins))
 2
               ((picks up a raisin from the table))
     Mum:
 3
              Jeff
              Mummy's going to look,
 4
 5
     Jeff:
                       ((vocalisations))
 6
                      ((grabs Mum's hand and pulls it towards him))
 7
              [o::pen >your mouth< ((releases raisin))</pre>
     Mum:
 8
              ((takes raisin from Mum's hand))
     Jeff:
 9
              ((shakes head and shakes hands))
10
              L((vocalisations))
11
              n↑o?
     Mum:
12
              is that too much like work?
13
              (3.6)
14
     Mum:
              o:[::pen
15
                [((shakes head, laughs))
     Jeff:
```

```
((vocalisations))
16
17
              look (.) £Jeff look watch Holly watch Holly£
    Mum:
18
              she's going to put her sandwich in
19
              what's she going to do with her mouth?
20
              (1.6)
              o:::[pen
21
    Mıım:
22
                  L((points at Holly))
23
    Hollv:
              ((eating sandwich))
24
              ((vocalisation))
     Jeff:
25
              (4.0)
              Jeff shall we feed Holly her sandwich?
26
    Mum:
              ((reaches for Holly's plate))
27
              nah hah=
28
    Holly:
29
              L((covers her sandwich))
30
    Mum:
            → =°>Holly Holly <°
31
            \rightarrow °can you keep your mouth closed until Mummy-
            \rightarrow until you say open°
32
33
    Holly:-> no
              you're not gonna play?
34
    Mum:
              ((shakes head))
35
    Holly:
              °okay°
36
    Mum:
37
     Jeff:
              ((coughs))
38
              cough cough
    Mum:
```

In lines 2-7, Mum is modelling the "oh" sound and attempting to elicit it from Jeff. Mum makes Holly relevant to the interaction in line 17 when she refers to her as a co-present participant. Mum directs Jeff to watch Holly as she eats, drawing his attention to Holly opening her mouth. Mum times her spoken model of 'open' to Holly opening her mouth to eat the sandwich. While Holly looks up during the sequence, she does not engage further with any verbal communication and returns to reading her book. In line 26 we see Mum open a new sequence, this time proposing that she and Jeff "feed Holly her sandwich". This turn is not addressed to Holly, but it implicates her in the interaction as Mum's suggestion to Jeff involves Holly's sandwich and Holly being fed. Mum's turn here is conceptualised as a directive for both Holly and Jeff, as her suggestion is designed to get both of them to do something – Jeff to help Mum with feeding using a "we" construction ("shall we feed Holly her sandwich?") and Holly to be the recipient of the feeding.

Holly resists this directive with her response in line 28. She does this verbally with "nah-hah" and with the embodied action of covering her sandwich to render it inaccessible to Mum. Jeff does not respond at all to Mum's suggestion, thus neither complying nor refusing. Mum pursues compliance from Holly, re-establishing her attention by calling her name in quick succession and then requesting that she keeps her mouth open and models "open" for Jeff. Mum initially indicates that she (Mum) will say "open" but then she self-repairs this to specify Holly would say "open". Mum's second directive here receives another resistance response from Holly, who states a flat refusal of "no" (line 33). Mum checks her understanding of Holly's turn, proposing the candidate understanding that Holly is not going to play, and Holly confirms this with a head shake. Mum accepts this refusal in third turn position, closing the sequence with "okay". Holly's participation in this activity is not pursued again in the recording.

Extract 6.7 demonstrates how Mum directs Holly's behaviour in relation to her younger sibling, this time attempting to recruit Holly to participate in a therapeutic activity with Jeff as part of their mealtime. The analysis shows an example of a sibling resisting cooperation with the parental directive. While it resulted in further pursuit of compliance by the parent, the ultimate outcome was acceptance of the child's refusal, and thus acknowledgement of Holly's agency and her right to refuse in this particular situation.

A further example of a sibling upholding their right to refuse direction from their parent in relation to their sibling is displayed in extract 6.8 below. This extract is from the same recording as extract 6.3 above, where India, Mark and Mum are watching various children's songs on the television.

Extract 6.8 Mark_HM02_pizza_calm (00:02:05-00:03:04)

```
((new song comes on the TV))
2
             .h what izit?
    Mum:
3
             Marksy! RAIN! (.) rain
    India:
             ((watching TV))
    Mark:
5
             oo Daddy's back
    Mum:
6
             maybe that will make him join in with the song
    India:
             can you put my expensive pillows on the chair
7
             ...(20 seconds of talk about India putting pillows away,
9
             which she does) ...
10
    India: ((sits on sofa next to Mark))
             ((leans in to Mark and claps hands along to the music))
11
12
    Mark:
             ((tries to grab India's hair))
             L£ah£
13
    India:
14
             sun. Mr golden sun.
15
             ((leans into Mark doing actions from song))
   Mark:
16
            ((takes India's hand))
17
    India: ((takes Mark's hand))
18
             In↓dia
           → | just calm it down
19
20
   Mark:
             ((puts foot on side of India's face))
21
    India: ((stays still, looks up at television))
22
    Mark:
             ((puts other foot on India's face))
23
    India:
             ((smiles, turns to Mark, takes hold of his foot))
24
    Mum:
             In↓dia
25
             (1.5)
26
           → just go and sit over there please
27
    India:-> no I want to sit wher'a:m
28
             ((folds arms))
29
    Mum:
             but it's not nice to have a foot put on your face
30
    India:
             fI don't caref!
31
             ((laughs, takes hold of Mark's foot))
32
    Mark:
             ((laughs))
```

At the start of the extract a new song has come on the television. Mum attempts to draw Mark's attention to it by calling his name and asking "what izit?" India also tries to draw Mark's attention by calling his nickname and labelling what is on the TV (at the start of the video there is rain on the screen before it turns into a song about Mr Golden Sun). There is no acknowledgment of either of these turns from Mark and he continues watching television with no shift in his eye-gaze, expression or bodily movement. Mum then announces that Daddy is back (line 5) and India suggests in response that perhaps Dad being home will make Mark join in with the song, orienting to her and Mum's failed attempts to engage Mark in participating in the activity of singing along with the

television (both in this extract and previously in the recorded interaction as seen in extract 6.3). Chapters 4 and 5 presented similar examples of parents orienting to absent responses and lack of participation, and India's turn here shows that older siblings are also aware of this phenomenon in their younger sibling's interactional approach.

Mum asks India to tidy up the cushions, which India complies with, and there is some additional talk about this activity which is not transcribed. India then moves over to the sofa that Mark is sitting on and sits next to him (line 10). She makes another attempt to establish interaction with him, by leaning in towards him and clapping along to the music. Mark responds by trying to take hold of India's hair, a sensory behaviour which Mark often engages in. India play-protests, as indicated by the smiley voice accompanying her "ah" complaint in line 13. She then continues to sing along to the television, acting out the song movements. Mark again reaches for India's hair, this time taking hold of it (line 16). India moves Mark's hand away, but this brief tousle results in Mum calling India's name (line 18) in a hearably admonishing tone (through its prosodic design). She also issues the directive for India to "just calm it down" (line 19). India does not respond verbally to Mum's imperative, but she shows embodied compliance as she stays still, refraining from touching Mark further, and she redirects her eye-gaze towards the television.

This compliance is brief though, as when Mark puts his other foot up on her face, she returns to playing with him. This results in another admonishment by Mum, who asserts an upgraded imperative – this time for India to move to the other sofa. This directive is refused by India with "no", a declaration of her preference to remain where she is, and embodied resistance with the folding of her arms. Her resistance is framed as unwillingness rather than inability. Mum challenges India's preference, stating that "it's

not nice to have a foot put on your face", designing her account positively and being in India's best interest, rather than about preventing a potential fall-out between siblings due to the roughhousing play. This is countered by India who proclaims, "I don't care", asserting her agency over her own preferences and dismissing Mum's explanation as not being justified as India has an alternative stance (that she doesn't care about having a foot in her face). India laughs at this point and returns to playing with Mark, while Mum appears to abandon any further control of India's behaviour.

Mum's directive in line 26 for India to move is related to Mark's behaviour. Mum demonstrates acknowledgement of Mark's behaviour of putting his feet on India's face as being undesirable, yet she addresses India in her directives, attempting to modify her behaviour rather than Mark's. Mum focuses on managing India's reaction to Mark's behaviours, rather than addressing Mark and the source of the provoking action. It is argued that Mum's directive in this case is formulated for peace-keeping purposes, and is similar to extract 6.1 above, where Mum directs India's behaviour to minimise potential escalation in sibling conflict. India's resistance response in this extract did not have significant sequential implications, as Mum allowed India and Mark to continue their physical playing on the sofa. However, in other examples the analysis showed that disputes arose from directive and resistance response sequences that impacted on the progressivity of the interaction. Such examples are presented in the remaining extracts of this chapter.

6.4 Interactional conflict

The following collection of extracts is from a recording of Jeff and Holly playing with a train set in the living room. All the extracts are examples of directive/response

sequences which are analysed as representing conflict between parent (Mum) and the older sibling (Holly) which has arisen from a directive from Mum to Holly which was designed to benefit Jeff. Interactional conflict is conceptualised as disagreement between two or more interlocutors (Coupland et al., 1991) or opposing orientations between conversation partners (Mikesell, 2016). Sequential analysis highlighted that Mum issued directives to Holly based on some event occurring in the interaction related to Jeff and that such directives were subsequently resisted by Holly as she disagreed with them. Following such resistance, Mum further pursued compliance and accounted for this through reference to some feature of Jeff's developmental profile. Thus, Jeff's autism was made relevant to the interaction.

Extract 6.9 is the first occurring example of a conflict sequence in the recording. Jeff and Holly are playing with a train track in the living room. The train track is made up of 'official' track pieces and the children have also added some other blocks. Mum is observing.

Extract 6.9 Jeff HM02 train obstacle doesn't understand (00:01:38-00:02:11)

```
↑hmm shall we move it along Jeff so it's like here?
 1
    Holly:
 2
                          \lfloor ((points)) \rfloor
 3
              (1.8)
 4
    Holly:
              like here?
 5
              (0.6)
 6
    Holly:
              Jeff?
     Jeff:
 7
             ((places block))
 8
    Holly:
              good boy, you can [put the other ones after it as well
 9
    Jeff:
                                  [((vocalisation))
10
    Holly:
              like this
11
               L((points))
12
     Jeff:
              ((whimpers))
                               you put [that there
13
    Holly:
               [can I take
14
               [L((picks up block))
                                       [L((puts block down in new spot))
15
    Jeff:
               [((whimper
                                       [ ((CRYING))
16
    Mum: \rightarrow
                                        [no ask him for another one
17
              'cause there's loads here Holly
18
              (1.2)
19
     Jeff:
              [((CRYING))]
```

```
20
    Mum:
           → [ask [him (to get you one)
21
    Holly: ->
                  [†NO because this is supposed to be an obstacle
22
             course
           yeah [but the thing is (.) Jeff (.) [Jeff does-
23
    Mum:
    Jeff:
24
                  [((CRYING))
                                                 [((biting hand))
25
    Mum:
             >no no no no no<
             ((leans towards Jeff))]
26
    Jeff:
27
             ((SCREAMING))
28
             Jeff doesn't understand that you want to build an
    Mum:
29
              obstacle course
    Jeff:
30
             ((SCREAMING))
31
             ((points towards bridge))
32
    Mum:
             what's the matter Jeff?
33
             do you want to move that one?
```

Jeff is holding a block in his hand and in line 1 Holly tenders a suggestion as to how the other blocks should be positioned. Jeff does not respond (line 2) and Holly repeats the suggestion of place (line 4). This again does not elicit a response from Jeff, so she pursues his attention with a name call. Jeff places the block down on the carpet at this point which results in a positive assessment and praise from Holly ("good boy", line 8). Building on this embodied alignment with her play suggestion from Jeff, Holly demonstrates where he can place further blocks. Jeff shows some discontent at this point as he begins to whimper. In line 13 Holly requests Jeff's permission to "take" – she does not complete this verbal turn, but as she is speaking she has already picked up the block. This embodied action indicates which item she was referring to in her incomplete turn construction unit, but also that her intended action was not conditional to Jeff's response, as she was already doing the action as she was requesting permission.

As Holly moves the block and shows Jeff where it can go, Jeff's whimpers become a louder cry and Mum intervenes in line 16. Mum flags that something problematic has occurred in the interaction, based on Jeff's response. Mum interjects and denies Holly's request to take the block even though it was addressed to Jeff and not her, evidencing Mum's authority to respond on behalf of Jeff. Mum also directs Holly to ask Jeff for

"another" (different) block, explaining that there are "loads" of alternatives (line 17). Holly does not respond in second turn position, showing the first potential sign of resistance to Mum's request, as delays are indicative of a dispreferred response (Kendrick & Torreira, 2015). Mum recycles her imperative following a pause to pursue compliance, and as she does so, Holly overlaps with overt refusal in the form of a loud "no". Holly accounts for her resistance with an explanation that the formation of the blocks is "supposed to be an obstacle course" (lines 21-22).

Mum responds with an agreement-but-disagreement, initially appearing to agree with Holly's reasoning with "yeah" but then adding a contrastive conjunction "but" before proceeding to account for her directive for Holly to not move the blocks. This account is spread over lines 23-29 (broken up with an insert sequence of Mum calming Jeff who is exhibiting distress though screaming and biting himself). Mum explains that "Jeff doesn't understand that you want to build an obstacle course". With this turn Mum makes relevant an aspect of Jeff's developmental profile, in this case his inability to understand Holly's intentions and she mind reads for Jeff, claiming epistemic knowledge of his inner state, an interactional move we also saw Mark's Mum use previously in extract 6.7. This extract shows how a physical action by Holly (moving a block) triggered a directive by Mum for the benefit of Jeff (for Holly to ask Jeff for a different block), resulting in a resistance response by Holly (refusing to move the block as it was meant to be an obstacle course). This was responded to by Mum with a dispute of Holly's resistance and accounted for by a reason related to Jeff 's developmental profile (i.e., Jeff not understanding Holly's intentions).

Further evidence of Mum making relevant Jeff's abilities or difficulties and the impact of this on Holly's activities is shown in the next extract . This interaction occurs a few minutes after the one presented above. In the meantime, Mum has been trying to calm Jeff down and the children have been playing with separate items since the dispute over the moving of blocks in the prior extract. Mum refers to that dispute in line 1. This extract does not feature another directive for Holly, instead it is presented to show the continuation of the account that Mum provides of why she was trying to effect change in Holly's behaviour.

Extract 6.10 Jeff_HM02_train obstacle_quite right (00:05:28-00:06:00)

```
Mum:
              are you going to be able to play with Jeff again?
 1
 2
    Holly:
             maybe
 3
              (2.1)
 4
              I think he just got upset because (.) you weren't
    Mum:
 5
              putting things down in the same place where he wanted
 6
             them put down Holly
 7
    Holly:
             well he can't always have his way
 8
              I know that, I know that but he (.) he just gets very
    Mum:
 9
              upset when things aren't quite right=
10
    Holly:
             =just
11
             fhe d(h)oes d(h)on't youf
    Mum:
12
             L((looking at Jeff))
13
              yes
14
    Holly:
              really?
15
              you're saying- are you saying just?
16
    Mum:
              just.
17
              (0.4)
18
    Mum:
              ↑Jeff
19
              (0.6)
20
              give this little block to Holly
    Mum:
```

Mum solicits Holly's thoughts on whether she is able to play with Jeff again in line 1. The design of this turn is interesting, as Mum does not enquire as to whether Holly *wants* to play with Jeff again, but rather whether she is *able*. Given our knowledge about what occurred in the previous extract, this can be analysed as Mum finding out whether Holly can play with Jeff again in the desired way i.e., not disrupting his blocks. She

acknowledged that there may be a contingency for Holly not being able to play as desired. The formulation of Mum's turn as a yes/no interrogative provides room for Holly to make the choice to agree or disagree. Holly does not reply with a preferred 'yes' agreement, but instead responds with a non-committal "maybe", perhaps showing recognition that Mum's turn alluded to a negative assessment of Holly's prior play behaviours, and a reluctance to show her affiliation with Mum's stance.

A pause follows and then Mum formulates her understanding of the dispute – that Jeff got upset because Holly had moved his blocks (lines 4-6). Holly displays her reluctance to accept this formulation with a well-prefaced turn (line 7), using an extreme case formulation (Pomerantz, 1986), "always", to legitimise her claim that Jeff should not "always have his way". Mum responds with an agreement-but-disagreement, an interactional feature we saw her use in the previous extract. Mum initially aligns with Holly's assertion with "I know that" (repeated) but then follows it with "but" and an account related to Jeff's becoming "upset when things aren't quite right" Such rigidity or difficulty with undesired change is considered a diagnostic feature of autism, and therefore Mum is making Jeff's autistic profile relevant to the interaction.

Holly restates part of Mum's turn, "just", format-tying (Goodwin & Goodwin, 1987) her word choice to Mum's retaining Mum's prosodic emphasis of this word. This turn is not received by Mum, who turns to look at Jeff at this point and confirms her account of Jeff's behaviour with him. It is delivered with smiling voice and laughter particles which remove any potential for interpretation of Mum's prior turn as being a complaint or a negative assessment. Mum completes her turn with a tag question which she answers herself in line 13, orienting to the fact that Jeff would be unlikely to respond (given his communication level). Holly revisits Mum's word choice in the turn following Mum's

brief interaction with Jeff, questioning Mum's use of "just" in her explanation of Jeff's behaviour. Mum restates "just" in line 16 and this is not pursued any further by Holly.

Extract 6.11 also shows how Jeff's autism is oriented to by Mum in her attempts to negotiate with Holly about how to play. It follows the same sequence as in extract 6.10, where there is a catalyst for a directive to be issued by Mum, which is resisted by Holly, and followed up by an account from Mum that refers to some feature of Jeff's profile. The recording joins the play just as Mum is about to set a car off down a hill on the train track.

Extract 6.11 Jeff_HM02_train obstacle_playing differently (00:07:52-00:08:40)

```
1
    Mum:
             rea[d:::y::
2
    Jeff:
                [((sits down))
3
    Holly: the car can't go down a hill
5
    Jeff:
             [((picks up toy people near Holly))
6
    Holly:
             JE:::[FF!
    Holly: L((grabs Jeff's arm))
7
8
           → Holly please just let him ↑move them
    Mum:
    Holly:-> ↓no:
9
10
    Mum: \rightarrow just let him (.) see what he's going to do with them
11
    Jeff:
            [((vocalisation))
12
             [he's playing a bit different from you that's all
    Holly:
             °I don't care if he's playing different°
13
             >(you don't-)< [Jeff watch the ca:r ready steady</pre>
14
    Mum:
15
    Jeff:
                             [(VOCALISATION
16
    Holly:
                             [my bricks
17
            ((releases car))
    Mum:
    Jeff:
             ((CRYING))
18
19
    Holly:
             ha ha ha
20
             ((tosses car off track))
21
    Jeff:
            ((CRYING))
22
    Mum:
             what do you think Jeff is getting so cross about Holly?
23
             °I don't know°
    Holly:
24
    Jeff:
             ((VOCALISATION, runs to Mum))
25
    Mum:
             hello
```

In this extract the catalyst for Mum's directive is when Holly grabs hold of Jeff's arm and shouts his name in lines 6-7. Holly's actions do not occur out of the blue; they are in response to Jeff picking up the wooden toy people which are in the middle of the play

area. Mum's directive, which comes in line 8, is addressed to Holly though, and not to Jeff. It overlaps with Holly's shouting at Jeff, and requests that Holly allow Jeff to move the toy figures. Holly outright refuses this request, showing non-compliance with a "no" produced in second turn position (line 9). Mum pursues Holly's compliance following this resistance move, instructing Holly to let Jeff play with them in his way. Mum adds an account to this compliance pursuit, explaining that Jeff is "playing a bit different" (line 12). This turn orients to differences in Jeff's approach to play when compared to Holly's more normative play behaviours. Mum's account ends with "that's all" which is analysed as working to minimise and downplay Jeff's actions and construct 'playing different' as not being an overly significant issue. Still, Holly rejects Mum's account, stating in a quiet voice "I don't care if he's playing different", resisting the claim that she should have to accommodate Jeff's approach to play. Mum appears to begin to respond to Holly in line 14 but abandons her turn construction and instead returns to the original activity of sending the car down the track, which she had first started in the very beginning of this sequence. Holly however continues with her resistance, overlapping Mum's talk to announce that the bricks which they are playing with are in fact hers ("my bricks", line 16), presumably to claim the entitlement that she should have a say in how they are played with. This is not acknowledged by Mum who completes the activity of releasing the car down the hill.

This initially appears to be the completion of the directive/ resistance conflict sequence. However, a few turns later it is reopened by Mum. While Mum releases the car on the track (line 17), Jeff is crying loudly. As the car comes to a stop, Holly tosses it off the track, an action in line with her earlier complaint in line 3 that "the car can't go down a hill". Jeff continues to cry and Mum subsequently solicits Holly's thoughts on why Jeff is

so upset (line 22). While this turn could be analysed as a known-answer question in that Mum is referring back to Holly's earlier actions of her objection to Jeff moving the toy people, is it hypothesised that this could also be a genuine enquiry by Mum, referring to Jeff's intermittent distress throughout the recording which has not been resolved. Either way, Holly's response is dispreferred, as she does not provide Mum with the information sought, claiming that she does not know why Jeff is so upset. Mum does not pursue this further, instead greeting Jeff (who has ceased crying) as he comes towards her.

The action of establishing why Jeff is upset is a feature present in other sequences in this recording. In extract 6.12, Jeff is holding a block and Mum has been watching him to see where is going to place it.

Extract 6.12 Jeff_HM02_train obstacle_finished (00:08:48-00:09:43)

```
1
            ((crying, holding wooden toy figures))
    Jeff:
2
    Holly:
             I need that [lady
3
    Jeff:
                         [((cry[ing))
4
    Mum:
5
    Holly:
            I need that girl
6
             \(\( (crying) \)
    Jeff:
7
    Mum:
             Ls:h:
8
             °do you know what I think Jeff is getting
    Mum:
9
             [really upset
10
    Jeff:
             [((crying, reaches forward))
    Mum: → how [about
11
12
   Holly:
                 [ [↑°Jeff°
13
                 [ L((moves pieces))
    Mum: → Holly Holly wa-
14
15
    Jeff:
            ((crying and biting hand))
16
           → <how about>, (.) <how about> you take the four thingies
17
             and we'll take them and put them- play with them
18
             in the playroom or come back and play with them in
19
             a little while when [Jeff's not playing on the train track
20
    Jeff:
                                [((whining))
21
    Holly:
             okay but Jeff's never going to stop playing on the
22
             train track
23
             he is he is (.) [in a little while [when he's finished
    Mum:
24
                             Holly:
25
             building it up
    Mum:
             [(2.1)]
26
27
    Jeff:
            ((moves away to other bricks))
```

```
28
    Hollv:
             L((standing people up))
29
    Mum:
             you see I think you put out some extra blocks
30
              (1.2)
31
             and that made him all excited that he could put them
32
             in his own way and now (.) he doesn't understand that you
33
             want them in your way as well
34
             (3.8)
35
             ((laying blocks))
    Holly:
36
             I like them running along there
    Mum:
             maybe he'll leave them there
37
38
    Holly:
             that's a ding dong
39
             °ding dong°
    Mum:
40
             that's a train
41
             train coming
42
    Jeff:
            ((stands up and moves towards Holly))
43
    Mum:
             are we going to sort things out [upstairs?
44
    Jeff:
                                              [((whining noise, bends
45
             down))
46
    Holly: JEFF!
47
    Jeff:
             ((crying, points))
48
             °don't move that°
    Holly:
49
    Mum:
             Holly
50
    Hollv:
             I got to remember this >remember this remember this<
51
             ((looks at track, knocks fist to forehead))
52
    Jeff:
            ((crying, points))
53
    Mum:
             alright Jeff, you don't like those people there do you?
54
    Jeff:
            ((vocalisation))
55
    Mum:
             why don't you like those people there?
56
    Holly:
             those people don't have to be there
57
             ((throws people off the track))
58
             okay where are we gonna put the people Jeff?
    Mum:
59
             thank you Holly that's very kind
```

Jeff is distressed as this extract starts. He is sitting next to his mother holding the toy figures which Holly is requesting in lines 2 and 5. Mum is trying to soothe Jeff with "sh" sounds in lines 4 and 7. This is unsuccessful as Jeff continues to cry and in lines 8-9 Mum announces that Jeff is "really upset", a pre-sequence providing an account for the directive to come across lines 11-19. Mum suggests that Holly take the "four thingies" (the toy figures) and play with them elsewhere. This is a clear example of how Holly's play is required to accommodate Jeff, as she is being asked to leave the play space. Holly appears to align with Mum's suggestion with an "okay" agreement, but then shows resistance with a "but" disagreement, stating that Jeff is never going to stop playing (line 21). Mum rejects Holly's extreme case formulation (Pomerantz, 1986) of "never",

reassuring Holly that Jeff will be finished at some point, but this is disputed twice by Holly who disagrees with her mother (line 24). A pause ensues in which Holly is standing toy people up (different ones to those Jeff was holding) and Jeff has moved elsewhere on the carpet with his blocks. Mum explains her interpretation of why Jeff is upset (line 29): that Holly had brought out some new blocks and Jeff did not understand that they might want to play with them in different ways. As in previous examples, Mum refers to Jeff's difficulties as a way of accounting for her need to direct Holly's play. She positions Holly as better able to change her behaviour, because Jeff does not understand and therefore cannot adapt like Holly can. Holly does not acknowledge Mum's account and also does not comply with Mum's directive to play elsewhere. At this point (line 34/35), Jeff appears to no longer be upset as he is not demonstrating any distress. Mum ceases to pursue Holly's compliance, arguably as there is no need now that Jeff is no longer upset. Instead, Mum affiliates with Holly by complimenting Holly on her block design and suggests that Jeff might actually leave the blocks where they are and go along with Holly. Ultimately, Holly's resistance has been successful, as Mum shifts the trajectory of her talk away from the directive sequence, but as in previous extracts this is timed with Jeff ceasing to show overt distress.

This apparent resolution does not last though, as 11 seconds later (lines 38-43, during which Mum and Holly are talking about train sounds) Jeff starts crying again (line 44). Mum proposes a change of activity to Holly which receives no response as Jeff overlaps with a whining noise and bends down where Holly is sitting. Holly complains about this, raising her voice and shouting Jeff's name. As Jeff continues to cry and now points at the blocks, Holly warns him with a directive to not touch her design. At this point, Mum admonishes Holly (line 49), suggesting she is not permitting Holly to raise her voice at

Jeff and tell him what to do (or not to do). Mum is objecting to Holly's deontic stance of being able to set rules for Jeff. Mum shifts her affiliation back to Jeff (line 53), seeking confirmation about why he was crying with a check that it was about the people which Holly had previously put down on the track in extract 6.10. This therefore implicates Holly as a co-present participant in the sequence between Mum and Jeff, despite her not being directly addressed. Mum seeks further information from Jeff (despite Jeff not having the communication skills to respond) in line 55, but Holly treats this as being relevant to her, and as an indirect request for her to move them. Holly complies, albeit we can assume reluctantly, as she takes the people off the track and tosses them across the room. Mum acknowledges Holly's actions with "okay" and turns to Jeff to elicit his preference for how to place the people, before thanking Holly and positively assessing her actions as being kind.

This extract provides another example of how parents issue directives to non-autistic siblings to modify their behaviour for the benefit of their autistic sibling. It illustrates how non-autistic siblings can refuse compliance and how such resistance can result in interactional conflict between parent and sibling which the parent then seeks to resolve. As seen in previous examples, Mum refers to Jeff's difficulty with understanding Holly's play as an account for her directives and to explain why Holly needs to adapt her play for the benefit of Jeff. In this extract Holly ultimately does comply, but only after a number of resistance moves to assert her stance on the conflict.

6.5 Chapter summary

This chapter has explored multiparty interaction involving an autistic child, their nonautistic sibling and a parent. It has specifically focused on directive sequences from a parent to the non-autistic sibling. Firstly, it presented examples of directives identified in the dataset showing that parents directed the non-autistic siblings to modify their behaviour in relation to the autistic child in order to avoid or resolve conflict, or to model desirable behaviours for the autistic children. In this way, siblings are used as a resource for managing the wellbeing of the autistic child and the autistic children's state is privileged over the siblings. All of the sequences examined within this chapter focus on the directives being issues to the non-autistic sibling, as this was the predominant phenomenon. The analysis did not identify interactions within the present dataset where the autistic siblings were directed to modify their behaviour in relation to their non-autistic sibling.

The analysis also showed that parents referred to aspects of a child's developmental profile, such as a different way of expressing interest, or difficulties with understanding situations, as accounts for why they are issuing these directives. This chapter has presented examples of siblings both complying with parents' directives and thus ratifying their entitlement to direct, and examples where they resisted and refused to comply, showing how siblings can assert agency over their behaviour. Sometimes such refusal was accepted by the parents and easily resolved within an interaction. However, the final section of this chapter provided analysis of a case example where multiple directives across a sequence were issued to the sibling who resisted, resulting in interactional conflict between parents and non-autistic siblings. This case example showed how disputes can develop and persist during an activity, before the non-autistic sibling ultimately conceded to the parent. It demonstrated how the sibling attempted to negotiate their rights and resisted the parent's invoking of family moral order. Overall,

the chapter has presented analysis of directive sequences in multiparty interactions occurring in the everyday lives of families with autistic children.

The analysis presented in this chapter demonstrates how parents explain the need for the adjustments or adapted behaviour described above. Parents account for the need to effect change in the siblings' actions or activities as being due to features of the autistic child's profile. They offer a justification for their entitlement to issue directives.

Through these accounts, parents bring moral dimensions into focus (Drew, 1998). The accounts establish a moral obligation for the siblings to comply and display how the siblings are socialised into their roles as the sibling of an autistic child. These accounts also specifically made autism relevant to everyday family interactions, highlighting particular reasons why the sibling should comply.

Previous literature exploring the perspectives of siblings of autistic individuals reported that they experience differences in their interactions with siblings. One of these differences is the need for non-autistic siblings to give way or concede to their autistic siblings and to make sure that they are taken care of ahead of non-autistic siblings as part of adjusting family life around an autistic child (Chan & Goh, 2014; Petalas et al., 2009; Tsai et al., 2018; Ward et al., 2016). The analysis of sibling-parent-autistic child interactions in this chapter triangulates this perspective, providing evidence from naturally occurring interactions about how siblings might be directed to modify their play or actions in relation to their autistic sibling. Conflict with parents related to having to accommodate autistic siblings is also recalled by participants in interview-based studies (e.g., Pavlopoulou & Dimitriou, 2019) and is reflected in my data through examples where siblings resist or dispute parents' directives, which can lead to interactional conflict. The data presented in this chapter also corroborate findings from

previous studies suggesting that non-autistic siblings can be positioned as role models by their parents; being required to demonstrate desired behaviours to help the autistic child learn (Angell et al., 2012; Leedham et al., 2020).

The following chapter will present an overall discussion of the findings from the research.

7 Discussion

This research study focuses on examining everyday family interactions involving young autistic children using conversation analysis methodology. This final chapter will demonstrate how the work undertaken achieves the research aims. It will provide a summary of the findings and will discuss these in the context of existing literature. It will present an overview of the implications of the research and the contributions of the thesis. It will also consider the limitations of the study and possible future research directions.

7.1 Revisiting the research aims

The overarching aim of this research project was to use conversation analysis to examine everyday home interactions of families involving younger autistic children with speech, language and communication needs, in order to further understand the organisation of talk-in-interaction within this population. More specifically, it aimed to add new knowledge of how young autistic children with communication difficulties participate in family interaction and to explore the potential impact of autism and communication difficulties on everyday family talk. This was achieved through a process of unmotivated looking, resulting in a focus on three specific phenomena which have been discussed in this thesis:

- 1. Initiating and responsive action sequences between parents and autistic children within dyadic interaction.
- 2. Episodes where co-participants refer to the autistic child in their presence within multiparty interaction to talk about noticeable interactional issues.

3. How non-autistic siblings participate in family interaction in sequences where parents issue them directives related to their autistic sibling.

This has been accomplished through the analysis of video recorded data of everyday family interaction from four families, all of which include a young autistic child with speech, language and communication needs. These phenomena will each be discussed in turn in the following sections.

7.1.1 Initiating and responsive action sequences between parents and autistic children within dyadic interaction

Firstly, I shall provide a summary of the main findings related to this research aim, which were presented in detail in chapter 4. This chapter focused on parent-child dyadic interactions involving the young autistic children. It examined both children's response turns (second pair parts) and their initiations (first pair parts) in sequential interaction. The main findings from this analysis demonstrated that autistic children produced both unproblematic and problematic response turns, and unproblematic and problematic initiating turns. Problematic turns were those which resulted in interactional trouble and impacted on intersubjectivity and progressivity. Problematic response turns included non-fitted response turns and absent response turns. Non-fitted response turns were turns where the expected second part pair was not forthcoming from the child and instead a non-fitted turn (in terms of the projected adjacency pair sequence) was produced by the child in second turn position. Absent response turns were where the projected second part was again not forthcoming from the child and no response was produced. Problematic initiating turns were included

those which were ambiguous in their meaning or in their intended social actions for the parents.

Adjacency pairs were selected for analysis due to their important theoretical significance to the organisation of conversation. The aim of the chapter was to describe how children responded, or did not respond, to first pair parts issued by parents. It also sought to describe the nature of first turns deployed by the children. By describing such sequences, the analysis strived to contribute to existing literature on noticeable features of autistic children's communication. This is in fitting with an applied conversation analysis approach, focusing on communicational applied conversation analysis (Antaki, 2011) or atypical interaction analysis (Wilkinson et al., 2020). This differs to pure or traditional conversation analytic studies, where the aim is to establish a model or system of sequence organisation, such as the seminal work by Sacks et al. (1974). The analysis of adjacency pair sequences in the current dataset enabled consideration of how the communication practices of the participating autistic children could differ to normative structures, and what this could potentially tell us about dyadic parent-child interaction in this population.

7.1.1.1 Intersubjectivity

Intersubjectivity in parent-child dyadic interaction is one of the topics to which the findings can contribute. Interlocutors establish intersubjectivity, or shared meaning, on a turn-by-turn basis within sequential interaction (Sacks et al., 1974). Participants implicitly display their understanding of each other's talk through their own turns-attalk. By analysing adjacency pairs, or pairs of first and second turns, we can gain insight into whether intersubjectivity has been displayed and how it is being maintained. For

example, if a type-fitted second pair part is produced following a first pair part, we can identify that these are linked actions which demonstrate mutual understanding between participants. In contrast, if the expected second pair part is not produced by a recipient, this indicates to the original speaker that there is some interactional trouble which needs repairing in order to secure a common understanding. Violations to the neatness and nextness of the elements in adjacency pairs can have consequences for the progressivity of the talk, or how a sequence progresses to accomplish its social actions (Schegloff, 2007).

The analysis of response turns in my study suggest that parent-child interactions involving the autistic children in this dataset are vulnerable to a loss of intersubjectivity. Lack of displays of intersubjectivity was not inevitable, as the findings do demonstrate that mutual understanding was easily recognisable in some sequences. For example, children produced type-fitted responses to a parent's first pair part and the interaction then progressed without trouble, or children produced unproblematic first pair parts and parents responded in a manner that was treated as acceptable to the children. However, there were multiple examples in the dataset where a loss of intersubjectivity was indeed recognisable across sequences. This occurred both when the children were speakers and recipients. For example, the analysis identified how children provided non-type-fitted turns in second turn position, or they did not produce a second pair part at all, despite one being projected by a parent's first turn. This resulted in parents engaging in sense-making practices such as clarification requests and candidate understandings, or parents pursuing a response through repetition or reformulation in the case of a noticeably absent response. Threats to intersubjectivity also arose when children produced first pair parts which were treated as ambiguous by parents, as

evidenced by other-initiated repair practices such as clarification requests or requests for a child to re-do their turn.

7.1.1.2 Intersubjectivity and noticeably absent responses

The phenomenon of children's noticeably absent responses demonstrated how the children were not necessarily 'together' in the interaction with their parents. There were multiple examples where parents issued response-relevant first pair parts, but the second pair part from children was not forthcoming. Consequently, there was an absence of a mutual understanding when the parent was attempting to initiate or maintain an overarching activity of interacting with their child. The threat to intersubjectivity in these cases was not related to a shared semantic understanding of particular utterances, but to the premise of the purposes of the talk i.e., that a parent was attempting to establish social interaction with their child and accomplish an interactional activity. The findings from the current study demonstrate that mutual understanding of this agenda was not always established between the parents and the children. There was often a departure from shared social norms. Parents pursued responses from their children, often over multiple turns, but they did not sanction them (e.g., through practices such as reprimands or punishment) when responses were not forthcoming. Instead, they accounted for absent responses by accepting the child was not 'in' the interaction with them or had a competing interactional priority. This shall be discussed further in section 7.1.2 which considers the multiparty data and parents' references to the autistic child.

A lack of expected responses from autistic children has been documented elsewhere.

Indeed, a 'failure' to respond to social interaction is mentioned as an example of social

communication difficulties in the diagnostic criteria of autism (American Psychiatric Association, 2013). Quantitative coding studies have demonstrated that autistic children did not respond to questions and comments as often when compared to children with developmental delays but matched language ability (Capps et al., 1998). Conversation analysis studies have also shown examples of children not producing responses as projected by a speaker's first pair part. For example, Rendle-Short (2002) reported how phone conversations with a twelve-year old autistic girl featured extensive inter-turn silences which resulted in pursuit and repair by her communication partner in order to manage the arising interactional trouble. Maxwell and Damico (2022) also identified examples of absent responses in their data of an eleven-year-old boy interacting with a clinician. The authors demonstrate how the child would sometimes withdraw from interactions when the clinician initiated repair sequences to make sense of the child's unclear talk. A study of joint attention in young autistic children (3;0-6;11 years) and parent dyads also documented how children displayed non-orientation to maternal bids to engage (Mohamed Zain, 2016). Conversation analysis research has also shown how autistic children may present with competing interactional priorities to those of their interlocutors (e.g., Bottema-Beutel et al., 2015; Stribling et al., 2009), which result in children not producing response turns as expected.

7.1.1.3 Intersubjectivity and non-fitted response turns and ambiguous first pair parts

The children's use of non-fitted response turns and ambiguous first pair parts also
comprised threats to intersubjectivity in parent-child dyadic interaction. As with
noticeably absent responses, these interactional features interfere with the nextness or
congruity of the adjacency pair structure, and therefore impact on the "architecture of

intersubjectivity" (Heritage, 1984b, p. 254). Such turns demonstrated how the children did not necessarily display orientation to shared social norms, which causes us to question whether all participants have equal awareness of, or access to, these social norms. These turns also impacted on progressivity, as the parents, and sometimes the children, engaged in repair practices to re-establish shared meaning.

Prior conversation analytic research has also demonstrated that interactions involving autistic children can be particularly susceptible to a loss of intersubjectivity arising from interlocutors' difficulties in making sense of each other's talk and the associated disruption to adjacency pair structures. For example, Maxwell and Damico (2022) examined the use of the discourse marker 'well' in reading-focused interactions between a clinician and an eleven-year-old autistic boy. They identified that one category of use of this discourse marker in the child's second turns was an indication of a loss of intersubjectivity in the exchange. The use of this discourse marker by the child prompted the clinician to provide further conversational support. My findings are similar in that it was often utterances by the child in second turn position which evidenced the lack of intersubjectivity between interlocutors. However, the child's use of 'well' in the study by Maxwell and Damico (2022) was shown to alert the communication partner to the potential loss of shared meaning. In contrast, my analysis did not identify any particular practices used by the children and instead it was simply the non-fitted responses and the parents' subsequent treatment of these which characterised the loss of intersubjectivity. This may be related to differences in my participants' communication skills, in that they are younger with less well developed spoken language abilities.

Sterponi and Fasulo (2010) also reflect on intersubjectivity in their analysis of naturalistic interactions involving a five-year-old autistic boy. They discussed that there was an intrinsic risk to intersubjectivity in the extracts they analysed, as there is for all interactions whether any of the participants are autistic or not, as communication is "grounded on mutual trust" (Sterponi & Fasulo, 2010, p. 119). However, their data demonstrated how the child employed a repertoire of techniques to manage progressivity in second turn position, such as appendor questions¹³ and tag questions. These allowed the child to gain some control of the trajectory of an interaction. When the adult interlocutors ratified the child's moves in third turn position, despite not showing clear displays of mutual understanding of where the interaction might lead, it resulted in more extended sequences featuring wider contributions from the child and elements of playfulness and language exploration. They demonstrated how this supported progressivity within the interactions. In contrast, my findings demonstrated that non-fitted responses generally *did* disrupt progressivity, as parents engaged in other-initiated repair to make sense of children's non-fitted response turns or ambiguous first turns which interfered with the adjacency pair structure. As before, it is considered as to whether this is related to the children's language abilities.

The data of the present study shows how parents engaged in other-initiated repair practices and sense-making strategies in order to resolve arising interactional trouble arising from children's non-fitted second pair parts or ambiguous first turns. Such practices included requests for repetition, clarification requests, candidate understandings and other-corrections. This is comparable to previous research

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 $^{^{13}}$ Appendor questions are described by Sacks (1992) as phrase constructions syntactically related to the preceding trouble source.

examining adult repair practices in problematic sequences involving children with autism (e.g., Bottema-Beutel et al., 2020; da Cruz, 2022; Dindar et al., 2015; Rae & Ramey, 2020a; Wiklund & Laakso, 2019). Analysis of repair sequences in such research often demonstrates how interactional trouble was resolved by participants. While such a result was seen in my data, the analysis also showed that participants did not reach a mutual understanding. Parents may have initiated repair using various practices, but, ultimately, they were unsuccessful, and sequences were abandoned without making sense of the child's talk. This pattern was also identified by da Cruz (2022) in their analysis of non-lexical vocalisations produced by autistic children. In my data this was also seen in extracts where children used lexical utterances and not exclusively non-lexical vocalisations.

The findings of the present study showed that the children inconsistently oriented to parents' non-understanding and inconsistently contributed to sequences focused on reestablishing intersubjectivity. The analysis indicated that in talk where the children's turns did not project a clear need for physical action from the parent (such as granting a request for an item or help etc.), then the children did not engage in repair behaviours or pursuits to establish joint understanding of their talk in first or second turn position e.g., in extract 4.6 when Seth is talking about a baby crying. This demonstrates a similar outcome to absent responses, where the children did not always display togetherness in an interaction with their parents, despite taking a turn-at-talk and appearing to be a ratified participant. In contrast, repair strategies were more likely to be used by children in situations where they appeared to be seeking specific actions from their parents in order to accomplish a specific interactional activity or project e.g., extracts 4.17 involving Jeff and the hole in the biscuit.

Prior quantitative research has also explored repair practices used by autistic children, rather than adult participants (Keen, 2003; Ohtake et al., 2011; Ohtake et al., 2005; Volden, 2004). My findings are both comparable and different to this prior research. Ohtake et al. (2005) examined contrived communication breakdowns in three nonspeaking or minimally verbal autistic children. The researchers found that the children repaired 'almost all' of the breakdowns. The same authors later conducted a small scale study of 12 autistic children aged 6-9 years with verbal skills (Ohtake et al., 2011). This study showed that the children repaired 80% of contrived communication breakdowns in free play. While the researchers investigated the different types of breakdowns (e.g., verbal request, gestural request, wrong response) and subsequent responses from children, they did not examine the communication initiations of the children in either study i.e., what were the social actions projected by the children's first turns and therefore, what was the specific trouble source. Based on the examples provided in the papers, these communication initiations appeared to be mainly, if not all, requests for items or actions from the conversation partner. This reflects the same type of interactional projects which tended to evidence repair strategies in my data i.e., the child trying to get the parent to do something, versus sequences where there was not a clear need for embodied action by the parent based on the children's utterances. However, in contrast, my data also presented examples where the children's first turns did not project a clear physical action from the parent. The study by Ohtake et al. (2011) also did not consider communication breakdowns occurring from a child's second turn (rather than their first), which were noticeable in my data due to using sequential analysis of naturalistic data rather than contrived examples.

Qualitative studies of autistic interaction have provided more insight into the sequential organisation of repair sequences and the repair practices utilised by autistic children This work has also drawn on naturally occurring interaction rather than contrived examples, increasing the ecological validity. For example, Dindar et al. (2015), demonstrated how children can use various verbal and non-verbal practices to repair interactional trouble and secure mutual understanding with their interlocutors. This included strategies such as accounting for their actions, repeating requests, prolonged mutual gaze and refraining from taking suggested courses of actions. Such verbal strategies were not identified in my data, although the children did use non-verbal strategies such as gestures or displaying resistance to suggested courses of actions. However, the participants in the study by Dindar et al. (2015) were aged eight, eleven and fourteen years with more advanced language skills. In contrast, other studies, such as Maxwell and Damico (2022), have identified that autistic children do not always engage in repair practices and can withdraw from interactions before intersubjectivity is accomplished. This pattern was recognisable in my data. While the current project has strived to avoid focusing on potential interactional deficits of autistic children, the findings add to the literature examining both when children do, but also do not, contribute to repair sequences and collaborative practices to display intersubjectivity within interactions.

The second objective of this study was to analyse collections where participants talk about a co-present autistic child in multiparty interaction. This will now be discussed.

7.1.2 Episodes where co-participants refer to the autistic child in their presence within multiparty interaction to talk about noticeable interactional issues.

As per the previous section, I shall first provide a brief summary of the main findings related to this research aim, which were presented in detail in chapter 5. This chapter focused on multiparty talk where an autistic child was referred to by co-participants. It identified that one reason for children to be talked about was following an absent response from a child, in order to provide an account to co-participants of why the child did not respond. Accounts included assessing the child as being otherwise occupied in a competing activity or not being interested in the ongoing interaction. The findings also demonstrate that the autistic children were talked about by families as part of families' efforts to make sense of trouble sources in the children's talk, such as the intelligibility or meaning of their talk. Finally, the analysis showed how children were talked about to draw attention to their communication successes.

7.1.2.1 Participation status and framework

Analysis of the multiparty talk showed that when parents treated children's non-responses as noticeably absent second pair parts, they would often provide an account for this for the other participants in the interactional space. Children were addressed in parents' first pair parts and therefore were positioned as available recipients and as active within the participation framework being established by the parents. However, when the children did not produce an expected second pair part, they in fact displayed a different relative status to the participation framework. The parents are implicating the children in an interaction, but the children are demonstrating an absence of recipiency and engagement. When this occurred in spaces where there were other people who are

unaddressed bystanders (such as another parent, a grandparent or a sibling), the parent speaker often then provided an account for the child's noticeably absent response. These accounts either suggested the autistic child was engaged in a competing priority (e.g., "I've lost him to the telly haven't I" from extract 5.1) or was not bothered by the parents' initiations of interaction (e.g., "I don't think he's bothered" from extract 5.4). Such accounts show how parents orient to the child as no longer being an available recipient and that there had been a shift in the child's participation status. Parents' accounts addressed to other participants in multiparty talk show that they have recognised this shift in the status of the child. This is not visible when only considering dyadic parent-child interaction, as the dyadic data (presented in chapter 4) showed that parents did not provide accounts in such contexts. The presence of a bystander enables the parents to create a new participation framework where the co-participants can become alternative recipients following a failed sequence to elicit a response from an addressed child. The parent can then address their account of the child's non-uptake of a first pair part to these new recipients, making it available for analysis. These findings highlight the value of studying multiparty family interaction with multiple adult participants.

Participants' pursuit of differing interactional priorities has been evidenced in other conversation analytic work examining autistic interaction. Sterponi and Shankey (2014) analysed interactions involving a 5:10 year-old autistic boy and his parents, specifically focusing on occurrences of echolalia. Their analysis demonstrated how the child produced echolalic utterances following a directive from a parent to pursue a particular course of action (e.g., using their napkin), and how the echolalic utterance worked to negotiate or divert an activity. The echolalia was therefore used in sequences where

there were competing interactional priorities between the child and the parents. Henderson (2021b) also examined directive sequences, analysing interactions where a parent was trying to secure an autistic six-year-old child's completion of the activity of getting ready to go to bed. The data showed how the child asserted his autonomy to reject the directives or negotiate alternative terms, displaying interactional priorities at cross purposes from his mother. Both these prior studies focused on examples involving directive sequences, where the parent was trying to get the child to do something or pursue a particular action or activity. In contrast, my data demonstrated that parents' explanations for a noticeably absent response as due to a child being otherwise engaged also occurred in sequences where the parents first pair part carried the social action of drawing a child's attention to a shared focus (e.g., "yummy cake" in extract 5.1, or the train set in extract 5.2) without projecting a particular action from the child.

7.1.2.2 Knowledge claims related to children's communication

Analysis of multiparty family interaction also provided insight into collaborative practices for making sense of children's communicative attempts when the meaning was not readily available to recipients. The strategies for repair of trouble arising out of a child's talk not being understandable to others has been discussed above in section 7.1.1.3. However, the multiparty data also enables analysis of who contributes to sensemaking practices when there are multiple participants present. In turn, this allows us to examine how participants position themselves to conduct other-initiated repairs and how they claim knowledge of the meaning of children's problematic communication. It contributes to our understanding of the epistemic order in family interactions, that is how participants produce and manage knowledge claims (Heritage, 2012).

Chapter five showed examples where a child initiated with a first pair part to a copresent person or responded with a second pair part when addressed by a speaker, but there was some ambiguity in the meaning of the child's talk. The interlocutor initiated repair of the child's talk when there was a problem with the understandability o the child's utterance. Subsequently, another co-present, unaddressed recipient self-selected to speak in order to do a sense-making practice and contribute to the resolution of the trouble source. They addressed their contributing turn to the adult participant and not the child who was the speaker of the trouble source. The participant who joined in the interaction to provide an explanation for the child's talk evidenced claims of greater relative epistemic access to the potential meaning of children's communication. In my recordings, it was typically the mothers or in some cases the siblings, who provided these explanations. The mothers accounted for their position as the more knowledgeable other by providing information about prior experiences with the child which had informed their understanding. For example, Jeff's mum talked about a particular way of sitting on the swing with Jeff before (extract 5.8) and Mark's Mum shared about going under a bridge when Mark is talking about bridges and tunnels (extract 5.9). The analysis showed that the original participants did not challenge the mothers' epistemic authority or their rights to articulate their epistemic status, despite them not being part of the original participation framework. The other participants accepted Mum's interpretation of the child's talk and appeared to respect her knowledge and expertise. Ultimately, the mothers' self-selected, other-repair in these sequences contributes to the intersubjectivity between the child and the original interlocutor, as well as supporting progressivity of the interaction.

These findings about unaddressed co-present participants selecting to repair trouble sources and make knowledge claims contribute to our knowledge of multiparty family interaction and how children's communication differences are oriented to in everyday talk. The majority of the literature examining interactions involving autistic children has focused on dyadic interaction, particularly in studies focusing on family interaction. Coparticipants self-selecting to do an other-repair and thus make an epistemic claim about a child's communication has not, to my knowledge, been explored in depth. Geils and Knoetze (2008) briefly report that the older sibling of the autistic child in their study carried out repairs on her brother's behalf for others, positioning herself as her brother's advocate. However, detailed examples of the sequential positions these occur in are not provided, and epistemic claims are not discussed. In a study of a bilingual, autistic child interacting with his family, Klein (2021) touches on the idea of certain participants (in this case the mother and an aunt) acting as "intersubjective facilitators" (p. 237) who help resolve interactional trouble between the child and the father. Klein (2021) draws on the concept of "language brokers", a term coined by Bolden (2012) to describe participants who help resolve trouble arising from divergent language use in bilingual interaction. The analysis in the study by Klein (2021) differs from mine in that it focuses on examples of when the autistic participant initiated an other-repair with an unaddressed participant in response to a trouble source in his father's prior talk. In contrast, the trouble sources in my data arose from the autistic children's turns, and they did not show any actions to recruit a co-participant's help in establishing shared understanding.

Although repairs to autistic children's communication in multiparty talk have not previously been considered in depth, there are studies which have focused on repair

and epistemic rights in multiparty interaction involving non-autistic children. Bolden (2011) demonstrated how an addressed adult recipient may select a parent to provide a repair solution following a preceding trouble source in a child's turn at talk. Parents are treated as having epistemic rights to explain a child's talk. Although the similar phenomenon of a primary caregiver making sense of a child's talk for a co-participant with lesser epistemic access to the meaning of a child's communication attempt was seen in my data, the selection of the next speaker following a child's problematic turn differs. In the data in Bolden (2011), an addressed participant recruited an unaddressed parent to assist with repair. The parent was positioned by others as being the more knowledgeable other. In contrast, in my data the parent providing the repair self-selected to speak next, they were not recruited by other co-present participants. Their self-selections followed unsuccessful repair initiation attempts by the original adult interlocutor. The parent providing the interpretation of the child's talk asserted their own knowledge claim, without being addressed. They claimed a higher epistemic status, rather than it being interactionally assigned.

7.1.2.3 Attention to communication achievements

The final finding related to children being talked about in multiparty interaction, is that parents spoke about a child to another participant in order to positively assess an element of the child's communication. Much of the data in this study has considered problematic interactions, but the children also displayed successful interactions which parents oriented to. It is important to highlight this within the thesis to avoid a purely deficit-focused analysis. Analysis of the multiparty data demonstrated how parents would draw a co-participant's attention to the children's talk in order to compliment or celebrate a communicative accomplishment. Parents shifted from dyadic interaction

with their child to address a co-participant to share a positive assessment of a child's communicative skill, for example naming items or using PECS to make a request.

Such assessments demonstrate how parents orient to language learning and communication development within the context of everyday family interaction. While some of these positive assessments followed what can be perceived as more pedagogical activities (e.g., Mark naming items he was hanging up on a washing line), they also occurred in mundane, non-pedagogical interactions (e.g., watching TV with no specific agenda). This shows that communication development is not isolated to particular interactional contexts, but that it can occur in the everyday talk of families and can be oriented to at any time by interlocutors. This supports findings from many other studies of child development in naturalistic interaction, both from typically-developing child datasets (e.g., Forrester & Cherrington, 2009; Searles & Barriage, 2018; Wootton, 1994) and those with communication differences (e.g., Hughes et al., 2022; Ramey & Rae, 2015; Saad et al., 2021). This finding also triangulates results from interview-based studies examining parents' experiences of raising an autistic child, which suggests that parents are proud of their children's skills and abilities, while also recognising areas they may find difficult (Hastings et al., 2005; Kayfitz et al., 2010).

The third research aim of the study was to analyse directive sequences involving the non-autistic siblings. This will now be discussed.

7.1.3 How non-autistic siblings participate in family interaction in sequences where parents issue them directives related to their autistic sibling

As before, I shall first provide a brief summary of the main findings related to this research aim, which were presented in detail in chapter 6. This final analysis chapter

examined family interactions involving the siblings of the autistic children. It specifically focused on directives addressed to siblings which were related to their behaviour and its implications for the autistic child, such as being asked to model a desired behaviour for the autistic child or to leave the autistic child alone in order to prevent potential disagreements or distress. It showed how parents referred to aspects of the child's autism or developmental profile in order to account for these directives. The analysis demonstrated how siblings sometimes complied with such directives, but at other times they resisted and refused, leading to interactional conflict.

7.1.3.1 Moral order

The directive sequences between parents and siblings in this study enable us to witness how moral order is constructed in the everyday talk of the participating families.

Garfinkel (1967) conceptualises moral order to be the rules which govern everyday social interaction. It is interactionally constructed, and the analysis of parent-sibling talk related a co-present autistic sibling makes visible the moral order. It displays how siblings are socialised into family life within their role as a sibling to an autistic child.

The analysis demonstrated how parents claimed deontic authority to direct the siblings' behaviour in relation their autistic sibling. For example, siblings were directed to play in a certain way, model a certain behaviour or cease interacting with their sibling. With these directives, parents momentarily privileged the autistic child over the older sibling. The findings highlighted how parents provided accounts related to the autistic siblings' developmental profile in order to justify why they were issuing a directive. For example, they made references to the autistic child's understanding, interests, or learning.

Through these accounts, parents invoked a moral obligation or imperative for the sibling to act in a certain way. In these sequences, parents also presented knowledge

claims about how the autistic child might be feeling e.g., that they are just interested, or they do not understand. Through the parents' directives we can see how older siblings were encouraged to see their younger autistic siblings' perspectives and how intersubjectivity of the unfolding sequence was supported.

These findings contribute to our understanding of the interactional construction of moral order in neurodivergent families. While children's co-construction of their social worlds has been extensively studied in neurotypical populations, less is known about how this might differ in families with autistic children. Henderson (2021b) explored directive sequences involving a parent and an autistic child, where the parent was trying to get the child to go to bed. While this paper makes reference to family rules and family membership, the study was limited to dyadic interaction between a parent and one child. The analysis from the present thesis therefore broadens our knowledge of wider family interaction.

The findings also add to the existing literature drawn from data of neurotypical families. For example, Aronsson and Cekaite (2011) examined directive sequences occurring in everyday interaction recordings from eight Swedish families. They specifically focused on sequences aimed at establishing activity contracts, or agreements related to target activities for the children such as showering or cleaning their bedroom. They demonstrated how both adult and child participants employed a range of interactional moves as part of the negotiations of family rules and the local moral order. Similar moves were identified in my data, such as parents providing accounts and siblings providing reasons for why they should not comply. Although the families in this study consisted of more than one child, similar to Henderson (2021b), the data only examined dyadic-parent child interaction rather than multiparty talk. Other studies however have

focused more closely on sibling sociality. Galatolo and Caronia (2018) studied 28 mealtimes of six Italian families using conversation analysis. They showed how children were prompted by parents to take into account another's perspective (often a sibling) and to modify their behaviour based on this other's needs or actions e.g., not leaving the table as a sibling was not finished. This reflects the pattern identified though my analysis, where parents referred to a co-present autistic sibling as the reason for why they were directing the non-autistic sibling to act in a certain way. Busch (2012) also focused on family mealtimes, demonstrating how, through her talk, the mother of two boys made visible the moral orders of 'sharing' and 'being nice' in sibling interaction.

The findings from the present study also contribute to our understanding of parent-child interactional conflict or disputes. The analysis showed how siblings sometimes complied with parental directives and by doing so, they ratified parents' entitlement to govern their behaviour. However, the data also showed how siblings could resist or refuse to comply, consequently asserting their own agency as a social actor within family interaction. At times, the siblings' refusals were accepted by parents, and children's agency to refuse was respected. However, more often than not, resistance and refusal led to interactional conflict. By studying conflict sequences, we can see clearly how moral orders are being negotiated and constructed (Danby & Theobald, 2012; Maynard, 1985).

Conflict in the everyday interactions of families with autistic children has not previously been studied. However, there is a comprehensive body of interaction-focused literature examining neurotypical family conflict and disputes. As part of her extensive work on the social organisation of family life, Goodwin (2006), analysed directive sequences between parents and children. She demonstrated how children could find faults with

accounts used by parents to justify their directives. Goodwin and Loyd (2020) expand this work on disputes, demonstrating how children compete with parents for control, resulting in extended argument sequences. Kent (2012b) also showed how authority and compliance in family interaction were established collaboratively through parent and sibling talk, rather than being static pre-determined concepts or states. My analysis reflects some of these previous findings. Conflict between parents and children could persist over a number of turns before a resolution was reached. Children finding fault in a parents' justification for their directive was also demonstrated. For example, in extract 6.10, Holly rejects Mum's instruction to adapt her play to Jeff's wishes because Jeff "can't always have his way" (line 7). In response, Mum shows some agreement with her, "I know that", (line 8) but continues to seek compliance with a further reference to Jeff's state, "he just gets very upset when things aren't quite right" (lines 8-9). Such fault-finding demonstrates how parents references to the autistic child's profile are not sufficient for securing compliance, and that siblings do not necessarily treat features of autism as being a justifiable account for why they should modify their behaviour.

7.1.3.2 Triangulating studies of siblings' experiences

A further contribution of the analysis focusing on parent-sibling directive sequences is that it uses naturally occurring data to triangulate findings from interview- and survey-based studies exploring children's perspectives of growing up with an autistic sibling. Prior research indicates that siblings report experiences of needing to concede or give way to their autistic siblings in order to maintain family harmony and ensure that autistic siblings are supported (Chan & Goh, 2014; Petalas et al., 2009; Tsai et al., 2018; Ward et al., 2016). The data from the present study corroborates this viewpoint, demonstrating how parents direct the sibling in order to benefit the autistic child in

some way e.g., to support them to play in their way or to avoid potential distress.

Siblings also recall that they have experienced conflict with their parents as a result of having to adapt and adjust for their autistic siblings (Pavlopoulou & Dimitriou, 2019).

This is also reflected in my data through the occurrence of interactional conflict arising from siblings' resistance to parental directives related to the autistic child.

The analysis also triangulates findings from studies suggesting that non-autistic siblings can be positioned as role models by their parents; being required to demonstrate desired behaviours to help the autistic child learn (Angell et al., 2012; Leedham et al., 2020). The current data showed how parents attempted to recruit siblings to model behaviour targets, such as using their cutlery or producing speech targets. The analysis highlighted how siblings are treated as "competent socializing agents" (Goodwin, 2017, p. 23) of their younger brothers, and how this is interactionally accomplished, rather than the position of 'role model' being a static construct or an assumption due to the child's position in the family. The findings also showed how such interactional positioning was not always successful, as siblings exercised agency to not comply with parents' directives. The present thesis demonstrates the value of conversation analysis and the benefits of studying naturally occurring data as an alternative or a supplement to studies where siblings recall their experiences of family interaction.

The above sections have revisited the research aims of the study. The following sections will discuss the implications, limitations and contributions of the research, along with some personal reflections of completing this thesis.

7.2 Implications

This research study of everyday family talk involving young autistic children has both analytical and clinical relevance. Firstly, it provides information about autistic interaction and how autistic children with speech, language and communication needs participate in interactions with their families. It has implications for our knowledge about what is *typical* for this population, despite the analysis sitting within the broader field of *atypical interaction*. Studies of autism in children have historically focused on how communication and interaction deviates from existing neurotypical descriptions of children's development. However, it is important to develop our understanding and appreciation of what an autistic developmental trajectory of communication and interaction looks like in its own right, rather than always comparing it to a neurotypical people and finding it lacking in comparison. This supports the agenda of autistic advocates (e.g., Lees, 2022) and builds on an expanding body of work aimed at understanding features of autism as communication strategies and skills rather than deficits (e.g., Korkiakangas et al., 2012; Muskett et al., 2010; Sterponi et al., 2015; Stribling et al., 2006).

A further analytic implication is the value of studying multiparty data when considering parent-child and family interaction. Studies of dyadic interaction have provided valuable insight into how parents and autistic children interact with each other, and analysis of multiparty data allows us to further this understanding. It provides another context to make visible the impact of children's and parents' interactional moves on an unfolding sequence. For example, we saw that parents oriented to children's noticeably absent responses in dyadic interaction through their pursuits of a response. However, it is only through the multi-party data that we gathered evidence for how parents account

for or explain these absent responses in their talk. In multi-party interaction, parents have access to other co-present participants with whom they can address their accounts. This enabled us to witness how parents treat children's absent responses as being legitimate as they are engaged in a competing activity or recognising that they have ceased to be an active participant in an interaction due to being "not bothered". Such analysis provides unique insight into parents' perspective that would not be possible through dyadic analysis alone.

In terms of clinical relevance, this study provides examples of older siblings interacting with their younger autistic siblings, and parental involvement in such interactions. The role of neurotypical siblings as potential therapeutic agents for supporting autistic children's development has been proposed in recent sibling-mediated intervention approaches (Bene & Lapina, 2021; Lu et al., 2021). Such interventions train children to interact with their autistic siblings, focusing on strategies such as providing invitations to share, prompting for language, or giving play instructions. The data in my study demonstrates how siblings already display such supportive strategies in naturally occurring interactions, and how parents facilitate this, without parents or siblings being specifically trained. Basing any potential intervention approaches on naturally occurring, organised interactional practices may well increase the social validity and the acceptability of such training programmes.

7.3 Contributions of the thesis

This thesis contributes to the literature on interactions involving autistic children and their family members. It specifically adds to the interaction-focused literature, using conversation analysis to examine real-world, naturalistic video data produced by four

families in their own homes. Multiple families participated in the project and this enabled identification of recurring patterns across different participants rather than being evident in only a single participant example. It features young autistic participants who are still developing their spoken language skills and who present with speech and language difficulties in addition to the social communication differences typically associated with autism. This is a population generally less studied in the conversation analysis literature. In addition, the study draws on multiparty data as well as dyadic interactions, enabling analysis of how the children's communication and interactional resources are made relevant in everyday family talk. Furthermore, the thesis contributes to our knowledge of family interaction involving autistic and non-autistic siblings, a participant group which has not frequently been studied in prior research.

The thesis also contributes specific findings in relation to the research aim. It has added to our understanding of how intersubjectivity is, or is not, collaboratively established, maintained, and displayed in parent-child interaction involving autistic children. It has shown how children's communication differences are oriented to by participants in everyday talk, both in dyadic and multiparty talk. The findings from the multiparty data furthers our awareness of the epistemic order in autistic family interactions, in terms of how participants produce and manage knowledge claims about the autistic child and their communication. Finally, the analysis of interactions involving siblings has contributed to our understanding of the interactional construction of moral order in families of autistic children and how parent-child interactional conflict may occur and be resolved. In summary, the research has contributed to the field of autism interaction through qualitative, interactional analysis of a relatively unique dataset

7.4 Limitations and future research directions

A primary limitation of this study is that it was conducted by a non-autistic researcher without collaboration with or input or from the autistic population. During the timespan in which this thesis was conceptualised and completed, the drive for participatory research became increasingly recognised in the field of autism. Autistic communities have called for non-autistic researchers to avoid conducting research about them without involving them, aligning with the "nothing about us without us" principle of disability work (see Charlton, 1998). Ideally this should take the form of co-production with autistic individuals being involved from the outset of a project idea through to project delivery, completion and dissemination (Fletcher-Watson et al., 2019; Leadbitter et al., 2021). Unfortunately, the current study does not adhere to this recommendation due to lack of insight into the importance of this at the start of the project and also due to funding restrictions preventing payment for any community participation. This limitation risks the project being not relevant, or worse, being detrimental, to autistic people's experiences. Any future research I undertake will address this issue, ensuring a participatory approach is taken through involvement of autistic groups or collaboration with autistic researchers.

A further limitation of the project is the impact on recruitment of the narrowing in scope of the thesis from the original aim of looking at clinical interaction data and everyday interaction, to just looking at everyday interaction. This decision was made as it became apparent that analysis of both contexts would surpass the expected scope of a PhD thesis and the timeframe for completing the project, especially given the impact of Covid-19 on the write-up phase of the project. However, recognising this earlier would have significantly eased the recruitment process as I would not have been trying to

recruit both families and clinicians which proved extremely difficult and delayed data collection and the start of data analysis.

Another limitation of the project to report is that most of the usable multiparty data was only collected from two out of the four participating families. Families were not specifically asked to collect multiparty data however this proved to be a very interesting data type and a prominent analytical focus of the project. Further multiparty talk would likely have strengthened the analysis, although this is the nature of inductive research that we may not be aware of points of interest until after data collection and once analysis has begun.

Linked to the issue of the small number of participants, is the limitation of the generalisability of the findings. The small dataset size, the scope of participants and their heterogeneity does not allow for generalisation of the findings to wider populations. The study reports on findings for this dataset with these participants, but the results should not be considered generalisable to all autistic children and families.

A final consideration is the choice of transcription convention. Specifically, it was decided here to provide glosses of multi-modal features rather than employ a more detailed multi-modal transcription system such as that of Mondada (2018). This decision was made to aid readability of the transcripts, but utilisation of a more detailed approach may have enabled closer analysis of non-verbal, multi-modal features which could have enhanced the project findings. This will be taken into account with any future publications of this work.

Future research into autistic interaction should continue to recruit children of a range of ages and communicative ability in order to encourage wider representation of

populations in naturalistic studies. Future projects could also build on the focus on multiparty talk in addition to parent-child dyadic interaction. Research could also continue to examine family talk particularly involving siblings to further develop the findings presented in this thesis about parent-sibling interaction, but also to examine talk-in-interaction between siblings and autistic children and add to the literature about sibling relationships from a naturalistic, data-driven perspective. Finally, future work could involve the comparison of family interactions involving autistic children to those with other developmental differences such as Developmental Language Disorder or Learning Disability, in order to identify similarities and differences from the perspective of interactional analysis in addition to clinical descriptions.

7.5 Conclusion

This thesis has reported on a conversation analytic study of everyday family interactions involving young autistic children with speech, language and communication needs. It has examined phenomena occurring in recordings of family talk, including initiating and responsive action sequences, episodes where autistic children are talked about by co-participants and directive sequences involving non-autistic siblings in relation to the autistic child. Through analysis of these phenomena, this work has considered issues such as adjacency pairs and the structural organisation of dyadic parent-child interaction, displays of intersubjectivity, participation and the family moral order. Overall, this thesis has added to our understanding of features of family interaction involving young autistic children, and it has demonstrated the benefits of collecting and analysing naturally occurring, everyday multiparty family interaction data.

Appendix 1 Transcription symbols

<talk> Slower than surrounding talk >talk< Faster than surrounding talk **TALK** Louder than surrounding talk °talk° Quieter than surrounding talk Emphasised syllable <u>wo</u>rd wor-Cut off syllable wo:rd Lengthened spoken syllable. Longer or shorter exhalations indicated with more or fewer colons .h Inhalation. Longer or shorter inhalations indicated with more or fewer letters h Exhalation. Longer or shorter exhalations indicated with more or fewer letters ((picks up)) Described phenomenon e.g., gestures, actions, gaze

(.) Micropause

(0.2) Pause in seconds, Continuing intonation? Rising intonation

↑ Rising pitch

↓ Lowering pitch! Exclamation£ Smiley voice

[] Simultaneous occurrence of talk of different speakers

Simultaneous talk and gloss of co-occurring actions

from the same speaker

= Absence of discernible silence between two turns

() Unclear audio

(talk) Guess of unclear audio

ETHICS REVIEWERS' COMMENTS FORM

1. Name of Ethics Reviewers:		Ray Wilkinson (lead) Catherine Tattersall Sarah Spencer	
2. Research Pr	oject Title:	Clinical and everyda involving young chil	
3. Principal Inv	estigator (or Supervisor):	Tom Muskett	ar or r
4. Name of Stu	dent (if applicable):	Helen Cameron	
5. Academic De	epartment / School:	Human Communica	tion Sciences
	t I do not have a conflict of t, in my judgment, the appl	•	oject application
Be approved:	Be approved with B suggested and/or	e approved providing requirements specified in '9' below are met:	NOT be approved for the reason(s) given in '10' below:
X	in o below.	are met.	below.
9. Approved pro	d, the ethics reviewers do reviewers do reviewers do reviewers do reviewers do reviewers need to see the reviewers need to	pulsory requirement	
10. Not approve	ed for the following reason	(s):	3
	cs Review: completed 13.1.		
5,,	1: Roy William		

RESEARCH PROJECT:



Clinical and everyday interactions involving young children with language and communication impairments

PROJECT INFORMATION FOR FAMILIES

My name is Helen Cameron and I am a qualified Speech and Language Therapist (SLT) completing my PhD in the Department of Human Communication Sciences at the University of Sheffield.

What is the project about?

In this project, I want to find out more about the different kinds of interactions that young children who attend speech and language therapy experience. In particular, I want to compare video recordings of their clinical sessions to video recordings taken by their families at home during their everyday lives. To do this, I will use a specific approach called *conversation analysis* to look at the videos very closely. This will allow me to look at features of verbal and non-verbal communication in the recordings in very fine detail. I am interested in using my findings to develop a better understanding of the interaction skills of young children with language and communication needs. I am also interested in using these findings to think about how best to provide advice to families of such children.

Who will take part in the project?

Five children aged 2-6 years with language and communication needs are engaged with the Sheffield Small Talk group will take part in the project. These children's families (e.g. parents and siblings) will also participate as well as the therapists delivering the therapy service. Children and families must speak English as their primary language at home.

What will happen if I decide to take part?

If you decide to take part in this project I will also ask you and your child to attend four, weekly 30 minute sessions of speech and language therapy held at the clinic in the Department of Human Communication Sciences. These sessions will be provided by qualified speech and language therapists or student speech and language therapists supervised by qualified therapists. These sessions will be provided as an add-on to any other therapy services you may be availing of, and will focus on targets agreed in collaboration with you as part of any existing therapy your child is receiving. These sessions can take place during the regular running of Sheffield Small Talk (Tuesday morning) or can be arranged for another time if this is more convenient for you and the therapist/student therapist. These therapy sessions will be video-recorded.

In addition I will provide your family with a video camera to make recordings of you interacting with your child during everyday activities at home in between therapy sessions over four weeks. Such activities could include therapy homework, play time, meal time, story time etc. It is hoped you would film approximately 30-60 minutes of footage per week, spread over as many time points as you wish. At the beginning of the project I will visit you at home to show you how to set up and use the video equipment. I will also collect some background information about your child including looking at any speech and language reports in order to confirm your child's diagnosis/ communication profile. This session will take approximately 30-45 minutes. You will bring the video camera to each speech and language therapy session for me to transfer the data and then I will collect the camera at the end of the four-week filming period.

What are the disadvantages of taking part in the project?

There are no foreseeable risks for families taking part in this project. Families can choose what they film and can delete any footage they do not wish to be used as part of the project.

Do I have to take part?

No, it is up to you to decide whether you would like your family to participate or not. If you do decide to take part and then later change your mind you can withdraw at any time without giving a reason and without any consequence. I will then destroy any data that might already have been collected.

What will happen to the videos and written data during and after the project?

The recordings will be kept safe on a password protected folder on an encrypted hard drive to be securely stored in my office in the Department of Human Communication Sciences at University of Sheffield. Only I will have access to the recordings and they will only be viewed by me and the research team, unless you consent to others viewing the recordings. The consent forms will be stored separately to the recordings in order to maintain confidentiality. I will transcribe the video recordings and the written transcripts and reports produced from the data will contain no identifying information. The recordings will be destroyed after the project's completion unless you consent to their further use. Further uses of the video data include (i) the use of the video data for conferences/seminars (e.g. showing them to an audience of other researchers/practitioners) (ii) the use of the video data for training other researchers/practitioners/ (iii) further analysis beyond the present project for future research. You can still take part in the project if you do not wish to consent to these further uses.

What will happen to the results of the project?

The written results of this project (i.e. written records of what was said during the video recordings) will be used for my PhD thesis and may be used in presentations at relevant conferences or in articles written for scientific journals. All written reports will be anonymous as any identifying information (names, places etc.) will be replaced with pseudonyms. Video recordings may also be used for such purposes but only with your consent.

What if I have concerns about the project?

Please contact me on h.m.cameron@sheffield.ac.uk, ph. 0114 2222400. Alternatively, you can contact the project supervisor, Dr Tom Muskett, t.muskett@sheffield.ac.uk, ph. 0114 2222443. If you wish to speak to someone outside of the project you can contact Professor Patricia Cowell, Head of the Department of Human Communication Sciences, ph. 0114 2222426. If you continue to have concerns, you can contact the University's Registrar and Secretary, Dr Philip Harvey, Firth Court, Western Bank, Sheffield, S10 2TN, UK.

Who has ethically approved this project?

This project has been ethically approved via the Department of Human Communication Sciences Research Ethics Review Panel within the University of Sheffield.

How do I volunteer for the project or get more information?

Please contact me by e-mail, h.m.cameron@sheffield.ac.uk, or phone me on ph.0114.2222400.

Thank you for considering taking part in this project

RESEARCH PROJECT:



Clinical and everyday interactions involving young children with language and communication impairments

PROJECT INFORMATION FOR THERAPISTS

My name is Helen Cameron and I am a Speech and Language Therapist working towards my PhD in the Department of Human Communication Sciences. I am recruiting volunteers for a research project about children's interaction during speech and language therapy sessions and at home.

What is the study about?

This project aims to explore the interactions of young children with language and communication difficulties across two contexts: first, in speech and language therapy sessions and second, in everyday activities at home. Video recordings will be made of children during four speech and language therapy sessions and families will also be provided with a video camera to make some recordings of children at home in between therapy sessions. These recordings will be analysed using an approach called conversation analysis which involves researchers looking at features of verbal and non-verbal communication in very fine detail. I am interested in using my findings to develop a better understanding of the interaction skills of young children with language and communication needs. I am also interested in using these findings to think about how best to provide advice to families of such children.

Who will take part in the project?

Five children aged 2-6 years with language and communication needs who attend Sheffield Small Talk or Big Talk therapy groups will take part in this project. Five therapists/ student therapists will also participate, as the children will be filmed during speech and language therapy sessions. The children's parents and siblings will also take part through home recordings.

What will happen if I decide to take part?

If you participate in the project, I will record you delivering four weekly 30 minute sessions of speech and language therapy to a child engaged with Sheffield Small Talk or Big Talk group. These sessions will take place in the department of Human Communication Sciences at a time convenient to both you and families. You will be provided with information about the child and family and all targets and activities will be collaboratively established ahead of the sessions commencing. Your participation in this study is voluntary and is not linked to your university course. It is important to note that the study does not involve evaluating you individually as a therapist; it will focus on the clinical interaction in general. However, time will be allocated after each session to review and discuss recordings if you feel this would be helpful to your clinical development. This is an optional part of the project; you can still participate if you do not wish to do this. Participating families will also take a video camera home with them in between sessions in order to make recordings of everyday activities at home. I will support parents with this aspect of the project.

What are the benefits of taking part in this project?

Participating in this project presents the opportunity to practise planning and providing therapy to young children with complex language and communication impairments. You will be provided with time to review the recorded clinical sessions as part a clinical development activity if you wish.

What are the disadvantages of taking part in the project?

There are no foreseeable risks involved in taking part in this project. If you are not happy with any of the recordings I can delete them at your request.

Do I have to take part?

No. It is up to you to decide whether you would like to participate or not. If you do decide to take part and then later change your mind you can withdraw at any time without giving a reason and without any consequence. I will then destroy any data that might already have been collected.

What will happen to the videos and written data during and after the project?

The recordings will be kept safe. The video recordings will be transferred to a password protected folder on an encrypted external hard drive to be kept securely in my office in the Department of Human Communication Sciences. Only I will have access to the recordings and they will only be viewed by me and the research team, unless you consent to others viewing the recordings. The consent forms will be stored separately to the recordings and background information forms in order to maintain confidentiality. The video recordings will be transcribed and the written transcripts and reports produced from the data will contain no identifying information. The recordings will be destroyed after the project's completion unless you consent to their further use. Further uses of the video data include (i) the use of the video data for conferences/seminars (e.g. showing them to an audience of other researchers and therapists) (ii) the use of the video data for training other practitioners/researchers (iii) further analysis beyond the present project for future research. You can still take part in the project if you do not wish to consent to these further uses.

What will happen to the results of the project?

The written results of this project will be used for my PhD thesis and may be used in presentations at relevant conferences or be used to write articles for scientific journals. All written reports will be anonymous. Video recordings may also be used for such purposes but only with your consent.

What if I have concerns about the project?

Please discuss any concerns with Helen Cameron, h.m.cameron@sheffield.ac.uk, ph. 0114 2222400. Alternatively, you can contact the project supervisor, Dr Tom Muskett, t.muskett@sheffield.ac.uk, ph. 0114 2222443. If you wish to speak to someone outside of the project you can contact Professor Patricia Cowell, Head of the Department of Human Communication Sciences, p.e.cowell@sheffield.ac.uk. If you continue to have concerns you can contact the University's Registrar and Secretary, Dr Philip Harvey, Firth Court, Western Bank, Sheffield, S10 2TN, UK.

Who has ethically approved this project?

This project has been ethically approved via the Department of Human Communication Sciences Research Ethics Review Panel within the University of Sheffield.

How do I volunteer for the project or get more information?

Please contact me by e-mail, h.m.cameron@sheffield.ac.uk, or phone me on ph. 0114 2222400

Thank you for considering taking part in this project

Clinical and everyday interactions involving young children



Consent form (Family)

Lead Researcher: Helen Cameron, Department of Human Communication Sciences,

University of Sheffield, UK.

Supervised by: Dr Tom Muskett & Dr Richard Body, Department of Human

Communication Sciences, University of Sheffield, UK.

Please initial

	rieuse initiai
I confirm that I have read and I understand the research project information sheet and that I have had the opportunity to ask questions about the project.	
I understand that my family's participation is voluntary and that we are free to withdraw from this project at any time without giving a reason and without there being any negative consequences. Should I choose to withdraw from the study, I understand that any data already collected will be destroyed immediately.	
I understand that video recordings will be made of me and my family as part of this project.	
I understand that the video recordings will be viewed by the research team.	
I understand that the video recordings will be securely stored and accessed by the research team only and that they will be destroyed at the end of this project unless I consent to their further use (see overleaf).	
I understand that any written notes or reports based on the study (such as video transcriptions, research reports etc.) will not contain any identifying information.	
I understand that the lead researcher will look at my child's most recent speech and language therapy report and will note down relevant information anonymously.	
I agree for me and my family to take part in this research project.	

Please turn over

As additional and optional components to participation in the study, I agree that the video recordings and accompanying anonymous written transcripts can be used for the purposes outlined below. I understand that in these cases, all data will be securely stored and then destroyed by the researcher at the latest 10 years from the date of consent. I am aware I can request the data to be destroyed at any time before this point by contacting the lead researcher, Helen Cameron on h.m.cameron@sheffield.ac.uk or the Director of Research in the Department of Human Communication Sciences on ph. 0114 2222418.

Video data can be shown at events such as seminars and conferences to parents and professionals interested in language and communication impairments/ speech and language therapy/communication and interaction etc.

Please Initial

Please initial

	ricuse iiiitiui
Yes I agree to this	
Yes I agree to this but request that the data is anonymised by the blurring of faces and the removal of names on the video.	
No I do not agree to this	

Video data may be used by the research team for education and training for future researchers and practitioners.

	rieuse iiiiuui
Yes I agree to this	
Yes I agree to this but request that the data is anonymised by the blurring of faces and the removal of names on the video.	
No I do not agree to this	

The research team may carry out further analysis on the data beyond the duration of the present project.

+‡+		Please initial
	Yes I agree to this	
	No I do not agree to this – and therefore the researcher will destroy all	\vdash
	recordings one year after the end of the present project	

Clinical and everyday interactions involving young children



Consent form (Therapist)

Lead Researcher: Helen Cameron, Department of Human Communication Sciences,

University of Sheffield, UK.

Supervised by: Dr Tom Muskett & Dr Richard Body, Department of Human

Communication Sciences, University of Sheffield, UK.

Please initial

I confirm that I have read and I understand the research project information sheet and that I have had the opportunity to ask questions about the project.	
I understand that my participation is voluntary and that I am free to withdraw from this project at any time without giving a reason and without there being any negative consequences. Should I choose to withdraw from the study, I understand that any data already collected will be destroyed immediately.	
I understand that video recordings will be made of me as part of this project.	
I understand that the video recordings will be viewed by the research team	
I understand that the video recordings will be securely stored and accessed by the research team only and that they will be destroyed at the end of this project unless I consent to their further use.	
I understand that any written notes or reports based on the study (such as video transcriptions, research reports etc.) will not contain any identifying information.	
I agree to take part in this research project.	

Please turn over

As additional and optional components to participation in the study, I agree that the video recordings and accompanying anonymous written transcripts can be used for the purposes outlined below. I understand that in these cases all data will be securely stored and then destroyed by the researcher at the latest 10 years from the date of consent. I am aware I can request the data to be destroyed at any time before this point by contacting the lead researcher Helen Cameron on h.m.cameron@sheffield.ac.uk or the Director of Research in the Department of Human Communication Sciences on ph. 0114 2222418.

Video data can be shown at events such as seminars and conferences to parents and professionals interested in language and communication impairments/ speech and language therapy/communication and interaction etc.

	Please initial
Yes I agree to this	
Yes I agree to this but request that the data is anonymised by the	
blurring of faces and the removal of names on the video.	
No I do not agree to this	

Video data may be used by the research team for education and training for future researchers and practitioners.

	Please initial
Yes I agree to this	
	+
Yes I agree to this but request that the data is anonymised by the blurring of faces and the removal of names on the video.	
No I do not agree to this	
No rao not agree to tins	

The research team may carry out further analysis on the data beyond the duration of the present project.

+		rieuse illitiu
Yes I agree to this		
No I do not agree to this – recordings one year after	-	
		į.
Name of Therapist	Date	Signature of Therapist
Helen Cameron		
Name of lead researcher		



Guidelines for filming

These guidelines are designed to help you in making recordings for the "Clinical and everyday interactions involving young children" research project. If you have any questions at any stage during the filming period please contact me on h.m.cameron@sheffield.ac.uk or ph. 0114 222 2400. No question is too big or too small!

What should I film?

You can choose what you would like to film. Suggestions include you playing with your child at any activities that you typically do, such as playing games, reading or looking at books with your child, doing 'homework' from therapy sessions, singing songs, snack/meal times etc. There are no right or wrong things to film.

How should I set up the camera for filming?

- Set the camera up at a level/height that will capture both you and your child
- Sit as close to the camera as you can to let the microphone pick up your talking (but without the camera being in your way)
- Don't worry if your child is coming and going from the filming space-it can be hard to keep children still!
- Where possible turn off TVs and radios as their noise will interfere with filming
- Make sure to turn on any lights as this helps make the films easier to view

How long should I film for?

Hopefully you will be able to record approximately 1 hour per week. However, it is up to you to choose what you film and how long you film for so don't worry if you think you are filming too much or too little. Your camera can film for approximately 120 minutes (2 hours) before the memory card will fill up. You should bring the camera with you to your child's speech and language therapy sessions during the filming period and I shall transfer collected data and then you will be able to record more footage.

How long will the battery last?

The batteries in your camera are meant to last for approximately 2 hours. I have provided you with spare batteries so please use these as needed-instructions for changing the batteries are provided overleaf.

Can I delete something that I have filmed?

Yes you can delete anything that you would not like me to see or use. I can help you delete anything you do not want me to use when you return the camera. If you wish to delete recordings yourself, instructions are provided overleaf. Please be careful to delete only the bits you don't want to keep and not the rest of the recordings.

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References

- Adamson, L. B., McArthur, D., Markov, Y., Dunbar, B., & Bakeman, R. (2001). Autism and joint attention: Young children's responses to maternal bids. *Journal of Applied Developmental Psychology*, 22(4), 439-453. https://doi.org/10.1016/S0193-3973(01)00089-2
- American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). Author.
- Angell, M. E., Meadan, H., & Stoner, J. B. (2012). Experiences of siblings of individuals with autism spectrum disorders. *Autism Research and Treatment*, 949586. https://doi.org/10.1155/2012/949586
- Antaki, C. (1994). Explaining and arguing: The social organization of accounts. Sage.
- Antaki, C. (2011). Six kinds of applied conversation analysis. In C. Antaki (Ed.), *Applied conversation analysis: Intervention and change in institutional talk* (pp. 1-14). Palgrave MacMillian.
- Antaki, C., Chinn, D., Walton, C., Finlay, W. M. L., & Sempik, J. (2019). To initiate repair or not? Coping with difficulties in the talk of adults with intellectual disabilities. *Clinical Linguistics & Phonetics*, 34, 954 976. https://doi.org/10.1080/02699206.2019.1680734
- Aronsson, K., & Cekaite, A. (2011). Activity contracts and directives in everyday family politics. *Discourse & Society*, 22(2), 137-154. https://doi.org/10.1177/0957926510392124
- Bai, D., Yip, B. H. K., Windham, G. C., Sourander, A., Francis, R., Yoffe, R., Glasson, E., Mahjani, B., Suominen, A., & Leonard, H. (2019). Association of genetic and environmental factors with autism in a 5-country cohort. *JAMA Psychiatry*, *76*(10), 1035-1043. https://doi.org/http://doi.org/10.1001/jamapsychiatry.2019.1411
- Baird, G., Simonoff, E., Pickles, A., Chandler, S., Loucas, T., Meldrum, D., & Charman, T. (2006). Prevalence of disorders of the autism spectrum in a population cohort of children in South Thames: The Special Needs and Autism Project (SNAP). *The Lancet, 368*(9531), 210-215. https://doi.org/10.1016/S0140-6736(06)69041-7
- Barnard-Dadds, T., & Conn, C. (2018). Challenges of listening to an autistic pupil in a person-centred planning meeting. *Journal of Research in Special Educational Needs, 18*, 15-24. https://doi.org/10.1111/1471-3802.12414
- Ben-Itzchak, E., Zukerman, G., & Zachor, D. A. (2016). Having older siblings is associated with less severe social communication symptoms in young children with autism spectrum disorder. *Journal of Abnormal Child Psychology*, 44(8), 1613-1620. https://doi.org/10.1007/s10802-016-0133-0
- Bene, K., & Lapina, A. (2021). A meta-analysis of sibling-mediated intervention for brothers and sisters who have autism spectrum disorder. *Review Journal of Autism and Developmental Disorders*, 8(2), 186-194. https://doi.org/10.1007/s40489-020-00212-z
- Bentenuto, A., Perzolli, S., Bertamini, G., Venuti, P., & de Falco, S. (2021). Paternal speech directed to young children with autism spectrum disorders and typical development.

- Research in Developmental Disabilities, 112, 103886. https://doi.org/10.1016/j.ridd.2021.103886
- Bolden, G. B. (2011). On the organization of repair in multiperson conversation: The case of "other"-selection in other-initiated repair sequences. *Research on Language and Social Interaction*, 44(3), 237-262. https://doi.org/10.1080/08351813.2011.591835
- Bolden, G. B. (2012). Across languages and cultures: Brokering problems of understanding in conversational repair. *Language in Society, 41*(1), 97-121. https://doi.org/10.1017/S0047404511000923
- Bölte, S., Girdler, S., & Marschik, P. B. (2019). The contribution of environmental exposure to the etiology of autism spectrum disorder. *Cellular and Molecular Life Sciences, 76*(7), 1275-1297. https://doi.org/10.1007/s00018-018-2988-4
- Bondy, A. S., & Frost, L. A. (1994). The Picture Exchange Communication System. *Focus on Autism and Other Developmental Disabilities*, 9(3), 1-19. https://doi.org/10.1177/108835769400900301
- Bottema-Beutel, K., Crowley, S., & Kim, S. Y. (2022). Sequence organization of autistic children's play with caregivers: Rethinking follow-in directives. *Autism*, *26*(5), 1267-1281. https://doi.org/10.1177/13623613211046799
- Bottema-Beutel, K., Kapp, S. K., Lester, J. N., Sasson, N. J., & Hand, B. N. (2021). Avoiding ableist language: Suggestions for autism researchers. *Autism in Adulthood, 3*(1), 18-29. https://doi.org/10.1089/aut.2020.0014
- Bottema-Beutel, K., & Kim, S. Y. (2021). A systematic literature review of autism research on caregiver talk. *Autism Research*, 14(3), 432-449. https://doi.org/10.1002/aur.2461
- Bottema-Beutel, K., Lloyd, B., Watson, L., & Yoder, P. (2018). Bidirectional influences of caregiver utterances and supported joint engagement in children with and without autism spectrum disorder. *Autism Research*, *11*(5), 755-765. https://doi.org/10.1002/aur.1928
- Bottema-Beutel, K., Louick, R., & White, R. (2015). Repetition, response mobilization, and face: Analysis of group interactions with a 19-year-old with Asperger syndrome. *Journal of Communication Disorders*, *58*, 179-193. https://doi.org/10.1016/j.jcomdis.2015.05.002
- Bottema-Beutel, K., Oliveira, G., Cohen, S. R., & Miguel, J. (2020). Question–response–evaluation sequences in the home interactions of a bilingual child with autism spectrum disorder. *International Journal of Language and Communication Disorders*, *55*(2), 216-230. https://doi.org/10.1111/1460-6984.12513
- Boucher, J. (2012). Research review: structural language in autistic spectrum disorder–characteristics and causes. *Journal of Child Psychology and Psychiatry*, *53*(3), 219-233. https://doi.org/10.1111/j.1469-7610.2011.02508.x
- Bradley, L. (2015). An interactional analysis of support and `self-work' during interventions for children with social, emotional and behavioural difficulties [Unpublished doctoral dissertation, Lougborough University]. Loughborough, UK. https://repository.lboro.ac.uk/articles/thesis/An interactional analysis of support and diself-

- work during interventions for children with social emotional and behavioural difficu lties/9479873/1
- Brett, D., Warnell, F., McConachie, H., & Parr, J. R. (2016). Factors affecting age at ASD diagnosis in UK: No evidence that diagnosis age has decreased between 2004 and 2014. *Journal of Autism and Developmental Disorders*, 46(6), 1974-1984. https://doi.org/10.1007/s10803-016-2716-6
- Brewer, A. (2018). "We were on our own": Mothers' experiences navigating the fragmented system of professional care for autism. *Social Science & Medicine, 215,* 61-68. https://doi.org/https://doi.org/10.1016/j.socscimed.2018.08.039
- British Medical Association. (2019). Failing a generation: Delays in waiting times from referral to diagnostic assessment for autism spectrum disorder.

 https://www.bma.org.uk/media/2056/autism-briefing.pdf
- Brody, G. H. (1998). Sibling relationship quality: Its causes and consequences. *Annual Review of Psychology*, 49(1), 1-24. https://doi.org/10.1146/annurev.psych.49.1.1
- Bromley, J., Hare, D. J., Davison, K., & Emerson, E. (2004). Mothers supporting children with autistic spectrum disorders: Social support, mental health status and satisfaction with services. *Autism*, *8*(4), 409-423. https://doi.org/10.1177/1362361304047224
- Bruinsma, Y., Koegel, R. L., & Koegel, L. K. (2004). Joint attention and children with autism: A review of the literature. *Mental Retardation and Developmental Disabilities Research Reviews*, *10*(3), 169-175. https://doi.org/10.1002/mrdd.20036
- Burke, M., & Heller, T. (2016). Individual, parent and social–environmental correlates of caregiving experiences among parents of adults with autism spectrum disorder. *Journal of Intellectual Disability Research*, 60(5), 401-411. https://doi.org/https://doi.org/10.1111/jir.12271
- Bury, S. M., Jellett, R., Spoor, J. R., & Hedley, D. (2020). "It defines who I am" or "It's something I have": What language do [autistic] Australian adults [on the autism spectrum] prefer? *Journal of Autism and Developmental Disorders*. https://doi.org/10.1007/s10803-020-04425-3
- Busch, G. (2012). Will, you've got to share: Disputes during family mealtime. In S. Danby & M. Theobald (Eds.), *Disputes in everyday life: Social and moral orders of children and young people* (Vol. 15, pp. 27-56). Emerald. https://doi.org/10.1108/S1537-4661(2012)0000015006
- Capps, L., Kehres, J., & Sigman, M. (1998). Conversational abilities among children with autism and children with developmental delays. *Autism, 2*(4), 325-344. https://doi.org/10.1177/1362361398024002
- Carter, A. S., Messinger, D. S., Stone, W. L., Celimli, S., Nahmias, A. S., & Yoder, P. (2011). A randomized controlled trial of Hanen's 'More Than Words' in toddlers with early autism symptoms. *Journal of Child Psychology and Psychiatry, and Allied Disciplines, 52*(7), 741-752. https://doi.org/10.1111/j.1469-7610.2011.02395.x
- Chan, G. W. L., & Goh, E. C. L. (2014). 'My parents told us that they will always treat my brother differently because he is autistic': Are siblings of autistic children the forgotten ones?

- Journal of Social Work Practice, 28(2), 155-171. https://doi.org/10.1080/02650533.2013.844114
- Charlton, J. I. (1998). *Nothing about us without us: Disability oppression and empowerment* (1 ed.). University of California Press. http://www.jstor.org/stable/10.1525/j.ctt1pnqn9
- Chiarotti, F., & Venerosi, A. (2020). Epidemiology of autism spectrum disorders: A review of worldwide prevalence estimates since 2014. *Brain Sciences, 10*(5), 274. https://doi.org/10.3390/brainsci10050274
- Chown, N., Robinson, J., Beardon, L., Downing, J., Hughes, L., Leatherland, J., Fox, K., Hickman, L., & MacGregor, D. (2017). Improving research about us, with us: A draft framework for inclusive autism research. *Disability & Society, 32*(5), 720-734. https://doi.org/10.1080/09687599.2017.1320273
- Clayman, S., & Heritage, J. (2014). Benefactors and beneficiaries: Benefactive status and stance in the management of offers and requests. In E. Couper-Kuhlen & P. Drew (Eds.), *Requesting in social interaction* (pp. 55-86). John Benjamins.
- Coupland, N., Wiemann, J., & Howard, G. (1991). "Miscommunication" and problematic talk. Sage.
- Crandall, M., McDaniel, J., Watson, L. R., & Yoder, P. (2019). The relation between early parent verb input and later expressive verb vocabulary in children with autism spectrum disorder. *Journal of Speech, Language, and Hearing Research, 62*(6), 1787-1797. https://doi.org/10.1044/2019_JSLHR-L-18-0081
- Crane, L., Chester, J. W., Goddard, L., Henry, L. A., & Hill, E. (2016). Experiences of autism diagnosis: A survey of over 1000 parents in the United Kingdom. *Autism*, 20(2), 153-162. https://doi.org/10.1177/1362361315573636
- Craven, A., & Potter, J. (2010). Directives: Entitlement and contingency in action. *Discourse Studies*, *12*(4), 419-442. https://doi.org/10.1177/1461445610370126
- Crompton, C. J., Ropar, D., Evans-Williams, C. V., Flynn, E. G., & Fletcher-Watson, S. (2020). Autistic peer-to-peer information transfer is highly effective. *Autism, 24*(7), 1704-1712. https://doi.org/10.1177/1362361320919286
- Curl, T. S., & Drew, P. (2008). Contingency and action: A comparison of two forms of requesting. Research on Language and Social Interaction, 41(2), 129-153. https://doi.org/10.1080/08351810802028613
- da Cruz, F. M. (2022). Multimodal interaction analysis of non-lexical vocalisations in low-verbal autistic children. *Clinical Linguistics & Phonetics*, 1-22. https://doi.org/10.1080/02699206.2022.2082887
- Danby, S., & Theobald, M. (2012). Introduction. In S. Danby & M. Theobald (Eds.), *Disputes in everyday life: Social and moral orders of children and young people* (pp. xv-xxiv). Emerald.
- Dardas, L. A., & Ahmad, M. M. (2014). Predictors of quality of life for fathers and mothers of children with autistic disorder. *Research in Developmental Disabilities*, *35*(6), 1326-1333. https://doi.org/10.1016/j.ridd.2014.03.009
- Davis, N. O., & Carter, A. S. (2008). Parenting stress in mothers and fathers of toddlers with autism spectrum disorders: Associations with child characteristics. *Journal of Autism*

- *and Developmental Disorders, 38*(7), 1278-1291. https://doi.org/10.1007/s10803-007-0512-z
- DeMyer, M. K., Pontius, W., Norton, J. A., Barton, S., Allen, J., & Steele, R. (1972). Parental practices and innate activity in normal, autistic, and brain-damaged infants. *Journal of Autism and Childhood Schizophrenia*, *2*(1), 49-66. https://doi.org/10.1007/bf01537626
- Dickerson, P., Rae, J. P., Stribling, P., Dautenhahn, K., & Werry, I. (2007). Autistic children's coordination of gaze and talk: Re-examining the 'asocial' autist. In K. Richards & P. Seedhouse (Eds.), *Applying conversation analysis* (pp. 19-37). Palgrave Macmillan. https://doi.org/10.1057/9780230287853_2
- Dickerson, P., & Robins, B. (2017). Conversation analysis with children with an autism spectrum disorder and limited verbal ability. In M. O'Reilly, J. N. Lester, & T. Muskett (Eds.), *A practical guide to social interaction research in autism spectrum disorders* (pp. 167-191). Palgrave MacmIllian. https://doi.org/10.1057/978-1-137-59236-1 7
- Dickerson, P., Stribling, P., & Rae, J. P. (2007). Tapping into interaction: How children with autistic spectrum disorders design and place tapping in relation to activities in progress. *Gesture*, 7(2007), 271-303. https://doi.org/10.1075/gest.7.3.02dic
- Dindar, K., Korkiakangas, T., & Laitila, A. (2015). Building mutual understanding: How children with autism spectrum disorder manage interactional trouble. *Journal of Interactional Research in Communication Disorders*, 7(1), 49-77. https://doi.org/10.1558/jircd.v7i1.28228
- Dindar, K., Lindblom, A., & Kärnä, E. (2017). The construction of communicative (in)competence in autism: A focus on methodological decisions. *Disability & Society, 32*(6), 868-891. https://doi.org/10.1080/09687599.2017.1329709
- Dobbinson, S., Perkins, M., & Boucher, J. (2003). The interactional significance of formulas in autistic language. *Clinical Linguistics and Phonetics, 17*(4-5), 299-307. https://doi.org/10.1080/0269920031000080046
- Drew, P. (1997). 'Open' class repair initiators in response to sequential sources of troubles in conversation. *Journal of Pragmatics*, *28*(1), 69-101. https://doi.org/10.1016/S0378-2166(97)89759-7
- Drew, P. (1998). Complaints about transgressions and misconduct. *Research on Language and Social Interaction*, 31(3-4), 295-325. https://doi.org/10.1080/08351813.1998.9683595
- Drew, P., & Heritage, J. (1992). *Talk at work: Interaction in institutional settings*. Cambridge University Press. https://doi.org/10.1017/S0047404500020844
- Drew, P., & Penn, C. (2016). On failure to understand what the other Is saying: Accountability, incongruity, and miscommunication. In J. D. Robinson (Ed.), *Accountability in social interaction* (pp. 47-72). Oxford University Press. https://doi.org/10.1093/acprof:oso/9780190210557.003.0002
- Drotar, D. (1977). Parent-child interaction and infantile autism. *Journal of Pediatric Psychology*, 2(4), 167-171. https://doi.org/10.1093/jpepsy/2.4.167

- Dugdale, A. S., Thompson, A. R., Leedham, A., Beail, N., & Freeth, M. (2021). Intense connection and love: The experiences of autistic mothers. *Autism*. https://doi.org/10.1177/13623613211005987
- Dunn, J. (1988). Sibling influences on childhood development. *Journal of Child Psychology and Psychiatry*, *29*(2), 119-127. https://doi.org/10.1111/j.1469-7610.1988.tb00697.x
- Edmunds, S. R., Kover, S. T., & Stone, W. L. (2019). The relation between parent verbal responsiveness and child communication in young children with or at risk for autism spectrum disorder: A systematic review and meta-analysis. *Autism Research*, *12*(5), 715-731. https://doi.org/10.1002/aur.2100
- Ekberg, S., Danby, S., Theobald, M., Fisher, B., & Wyeth, P. (2019). Using physical objects with young children in 'face-to-face' and telehealth speech and language therapy. *Disability and Rehabilitation*, *41*(14), 1664-1675. https://doi.org/10.1080/09638288.2018.1448464
- El-Ghoroury, N. H., & Romanczyk, R. G. (1999). Play interactions of family members towards children with autism. *Journal of Autism and Developmental Disorders, 29*(3), 249-258. https://doi.org/10.1023/A:1023036223397
- Elder, J. H., Valcante, G., Groce, S., Yarandi, H., & Carlton, M. S. (2002). Social interactions of children with autism in father-child and mother-child play sessions. *Pediatric Nursing, 28*(6), 573-578, 581. https://www.proquest.com/scholarly-journals/social-interactions-children-with-autism-father/docview/199420708/se-2
- Elsabbagh, M., Divan, G., Koh, Y. J., Kim, Y. S., Kauchali, S., Marcín, C., Montiel-Nava, C., Patel, V., Paula, C. S., & Wang, C. (2012). Global prevalence of autism and other pervasive developmental disorders. *Autism Research*, *5*(3), 160-179. https://doi.org/10.1002/aur.239
- Ervin-Tripp, S. (1976). Is Sybil there? The structure of some American English directives. *Language in Society, 5*(1), 25-66. https://doi.org/10.1017/S0047404500006849
- Ervin-Tripp, S., O'Connor, M. C., & Rosenberg, J. (1984). Language and power in the family. In C. Kramarae, M. Schulz, & W. M. O"Barr (Eds.), *Language and power* (pp. 116-135). Sage.
- Ewen, J. B., Marvin, A. R., Law, K., & Lipkin, P. H. (2019). Epilepsy and autism severity: A study of 6,975 children. *Autism Research*, *12*(8), 1251-1259. https://doi.org/10.1002/aur.2132
- Fletcher-Watson, S., Adams, J., Brook, K., Charman, T., Crane, L., Cusack, J., Leekam, S., Milton, D., Parr, J. R., & Pellicano, E. (2019). Making the future together: Shaping autism research through meaningful participation. *Autism, 23*(4), 943-953. https://doi.org/10.1177/1362361318786721
- Fletcher-Watson, S., & Happé, F. (2019). *Autism: A new introduction to psychological theory and current debate*. Routledge.
- Fombonne, E. (2018). Editorial: The rising prevalence of autism. *Journal of Child Psychology and Psychiatry*, *59*(7), 717-720. https://doi.org/10.1111/jcpp.12941
- Forrester, M. A. (2008). The emergence of self-repair: A case study of one child during the early preschool years. *Research on Language and Social Interaction, 41*(1), 99-128. https://doi.org/10.1080/08351810701691206

- Forrester, M. A., & Cherrington, S. (2009). The development of other-related conversational skills: A case study of conversational repair during the early years. . *First Language*, 29(2), 166-191. https://doi.org/10.1177/0142723708094452
- Galatolo, R., & Caronia, L. (2018). Morality at dinnertime: The sense of the Other as a practical accomplishment in family interaction. *Discourse & Society, 29*(1), 43-62. https://doi.org/10.1177/0957926517726110
- Gardner, F. (2000). Methodological issues in the direct observation of parent–child interaction: Do observational findings reflect the natural behavior of participants? *Clinical Child and Family Psychology Review, 3*(3), 185-198. https://doi.org/10.1023/a:1009503409699
- Garfinkel, H. (1967). Studies in ethnomethodology. Prentice-Hall.
- Gaskins, D., & Frick, M. (2022). Embodiment in directive sequences: The case of triadic interactions in a Polish-English bilingual family. *International Journal of Bilingualism*. https://doi.org/10.1177/13670069221078334
- Geils, C., & Knoetze, J. (2008). Conversations with Barney: A conversation analysis of interactions with a child with autism. *South African Journal of Psychology, 38*(1), 200-224. https://doi.org/10.1177/008124630803800111
- Goffman, E. (1981). Forms of talk. University of Pennsylvania Press.
- Goffman, E. (1983). The interaction order: American Sociological Association, 1982 Presidential Address. *Sociological Review*, 48(1), 1-17. https://doi.org/10.2307/2095141
- Goodwin, C. (1981). *Conversational organization: Interaction between speakers and hearers*. Academic Press.
- Goodwin, C., & Goodwin, M. H. (2005). Participation. In A. Duranti (Ed.), *A companion to linguistic anthropology* (pp. 222-244). Blackwell. https://doi.org/10.1002/9780470996522.ch10
- Goodwin, M. H. (2006). Participation, affect, and trajectory in family directive/response sequences. *Text and Talk*, *26*(4-5), 515-543. https://doi.org/10.1515/TEXT.2006.021
- Goodwin, M. H. (2017). Sibling sociality: Participation and apprenticeship across contexts. Research on Children and Social Interaction, 1(1), 4-29. https://doi.org/10.1558/rcsi.28317
- Goodwin, M. H., & Cekaite, A. (2014). Orchestrating directive trajectories in communicative projects in family interaction. In P. Drew & E. Couper-Kuhlen (Eds.), *Requesting in social interaction* (pp. 185-214). John Benjamins. https://doi.org/10.1075/slsi.26.08goo
- Goodwin, M. H., & Goodwin, C. (1987). Children's arguing. In S. Philips, S. Steele, & C. Tanz (Eds.), Language, gender, and sex in comparative perspective (pp. 200-248). Cambridge University Press. https://doi.org/10.1017/CB09780511621918.011
- Goodwin, M. H., & Loyd, H. (2020). The face of noncompliance in family interaction. *Text and Talk*, 40(5), 573-598. https://doi.org/10.1515/text-2020-2080

- Gowen, E., Taylor, R., Bleazard, T., Greenstein, A., Baimbridge, P., & Poole, D. (2019). Guidelines for conducting research studies with the autism community. *Autism Policy & Practice*, 2(1), 29-45. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7099931/
- Grosse, G., & Tomasello, M. (2012). Two-year-old children differentiate test questions from genuine questions. *Journal of Child Language*, *39*(1), 192-204. https://doi.org/10.1017/S0305000910000760
- Guillon, Q., Hadjikhani, N., Baduel, S., & Rogé, B. (2014). Visual social attention in autism spectrum disorder: Insights from eye tracking studies. *Neuroscience & Biobehavioral Reviews*, *42*, 279-297. https://doi.org/10.1016/j.neubiorev.2014.03.013
- Hall, H. R., & Graff, J. C. (2011). The relationships among adaptive behaviors of children with autism, family support, parenting stress, and coping. *Issues in Comprehensive Pediatric Nursing*, 34(1), 4-25. https://doi.org/10.3109/01460862.2011.555270
- Happé, F., & Frith, U. (2020). Annual research review: Looking back to look forward changes in the concept of autism and implications for future research. *Journal of Child Psychology and Psychiatry*, *61*(3), 218-232. https://doi.org/https://doi.org/10.1111/jcpp.13176
- Hastings, R. P., Beck, A., & Hill, C. (2005). Positive contributions made by children with an intellectual disability in the family: Mothers' and fathers' perceptions. *Journal of Intellectual Disabilities*, 9(2), 155-165. https://doi.org/10.1177/1744629505053930
- Hayes, J., Ford, T., Rafeeque, H., & Russell, G. (2018). Clinical practice guidelines for diagnosis of autism spectrum disorder in adults and children in the UK: A narrative review. *BMC Psychiatry*, 18(1), 1-25. https://doi.org/10.1186/s12888-018-1800-1
- Hebert, E. B. (2014). Factors affecting parental decision-making regarding interventions for their child with autism. *Focus on Autism and Other Developmental Disabilities, 29*(2), 111-124. https://doi.org/10.1177/1088357614522291
- Heinemann, T. (2006). 'Will you or can't you?': Displaying entitlement in interrogative requests. *Journal of Pragmatics, 38*(7), 1081-1104.

 https://doi.org/10.1016/j.pragma.2005.09.013
- Henderson, G. E. (2021a). Autistic children's explanations of their own behavior. *Journal of Interactional Research in Communication Disorders*, *10*(2), 99-124. https://doi.org/10.1558/jircd.20363
- Henderson, G. E. (2021b). Deontics at bedtime: A case study of participants' resources in a directive trajectory involving a mother and her autistic child. *Research on Children and Social Interaction*, 4(2), 168–191. https://doi.org/10.1558/rcsi.12412
- Hepburn, A., & Bolden, G. B. (2012). The conversation analytic approach to transcription. In J. Sidnell (Ed.), *The handbook of conversation analysis* (pp. 57-76). Wiley-Blackwell. https://doi.org/10.1002/9781118325001.ch4
- Hepburn, A., & Bolden, G. B. (2017). Transcribing for social research. Sage.
- Hepburn, A., & Potter, J. (2011). Threats: Power, family mealtimes, and social influence. *The British Journal of Social Psychology*, *50*, 99-120. https://doi.org/10.1348/014466610X500791

- Heritage, J. (1984a). A change-of-state token and aspects of its sequential placement. In J. M. Atkinson & J. Hertiage (Eds.), *Structures of social action: Studies in conversation analysis* (pp. 299-345). Cambridge University Press. https://doi.org/10.1017/CB09780511665868.020
- Heritage, J. (1984b). *Garfinkel and ethnomethodology*. Polity.
- Heritage, J. (1987). Ethnomethodology. In A. Giddens & J. Turner (Eds.), *Social theory today* (pp. 224-272). Standford University Press.
- Heritage, J. (1988). Explanations as accounts: A conversation analytic perspective. In C. Antaki (Ed.), *Analysing everyday explanation: A casebook of methods* (pp. 127-144). Sage.
- Heritage, J. (1997). Conversation analysis and insitutional talk: Analysing data. In D. Silverman (Ed.), *Qualitative research: Theory, method and practice* (pp. 161-182). Sage.
- Heritage, J. (2005). Conversation analysis and institutional talk. In K. L. Fitch & R. E. Sanders (Eds.), *Handbook of language and social interaction* (pp. 233-331). Lawrence Erlbaum Associates.
- Heritage, J. (2007). Intersubjectivity and progressivity in person (and place) reference. In N. J. Enfield & S. Levison (Eds.), *Person reference in interaction: Linguistic, cultural and social perspectives* (pp. 255-280). Cambridge University Press. https://doi.org/10.1017/CB09780511486746.012
- Heritage, J. (2012). Epistemics in conversation. In J. Sidnell & T. Stivers (Eds.), *The handbook of conversation analysis* (pp. 370-394). Wiley-Blackwell.
- Heritage, J. (2015). Well-prefaced turns in English conversation: A conversation analytic perspective. *Journal of Pragmatics*, 88, 88-104. https://doi.org/10.1016/j.pragma.2015.08.008
- Heritage, J., & Atkinson, J. M. (1984). Introduction. In J. M. Atkinson (Ed.), *Structures of social action: Studies of conversation analysis* (pp. 1-16). Cambridge University Press. https://doi.org/10.1017/CB09780511665868
- Hoffman, C. D., Sweeney, D. P., Hodge, D., Lopez-Wagner, M. C., & Looney, L. (2009). Parenting stress and closeness: Mothers of typically developing children and mothers of children with autism. *Focus on Autism and Other Developmental Disabilities*, *24*(3), 178-187. https://doi.org/10.1177/1088357609338715
- Hollin, G., & Pilnick, A. (2018). The categorisation of resistance: interpreting failure to follow a proposed line of action in the diagnosis of autism amongst young adults. *Sociology of Health & Illness, 40*(7), 1215-1232. https://doi.org/10.1111/1467-9566.12749
- Hughes, L., Corrin, J., Newton, C., & Best, W. (2022). 'Where does Granny live?' The role of test questions in conversational remembering between mothers and their children with developmental language disorder. *Journal of Interactional Research in Communication Disorders*, *12*(2), 152-182. https://doi.org/10.1558/jircd.20235
- Hurwitz, S., & Watson, L. R. (2016). Joint attention revisited: Finding strengths among children with autism. *Autism*, *20*(5), 538-550. https://doi.org/10.1177/1362361315593536

- Hutchby, I., & O'Reilly, M. (2010). Children's participation and the familial moral order in family therapy. *Discourse Studies*, 12(1), 49-64. https://doi.org/10.1177/1461445609357406
- Hutchby, I., & Wooffitt, R. (2008). Conversation analysis (2nd ed.). Polity.
- Jefferson, G. (2004). Glossary of transcript symbols with an introduction. In G. H. Lerner (Ed.), *Conversation analysis* (pp. 43-59). John Benjamins.
- Kaminsky, L., & Dewey, D. (2002). Psychosocial adjustment in siblings of children with autism. *Journal of Child Psychology and Psychiatry*, 43(2), 225-232. https://doi.org/10.1111/1469-7610.00015
- Kapp, S. K. (2020). Introduction. In S. K. Kapp (Ed.), *Autistic community and the neurodiversity movement: Stories from the frontline* (pp. 1-19). Springer https://doi.org/10.1007/978-981-13-8437-0-1
- Karst, J. S., & Van Hecke, A. V. (2012). Parent and family impact of autism spectrum disorders: A review and proposed model for intervention evaluation. *Clinical Child and Family Psychology Review*, 15(3), 247-277. https://doi.org/10.1007/s10567-012-0119-6
- Kasari, C., Sigman, M., Mundy, P., & Yirmiya, N. (1990). Affective sharing in the context of joint attention interactions of normal, autistic, and mentally retarded children. *Journal of Autism and Developmental Disorders, 20*(1), 87-100. https://doi.org/10.1007/bf02206859
- Kayfitz, A. D., Gragg, M. N., & Orr, R. (2010). Positive experiences of mothers and fathers of children with autism. *Journal of Applied Research in Intellectual Disabilities*, *23*(4), 337-343. https://doi.org/10.1111/j.1468-3148.2009.00539.x
- Keen, D. (2003). Communicative repair strategies and problem behaviours of children with autism. *International Journal of Disability, Development and Education, 50*, 53-64. https://doi.org/10.1080/1034912032000053331
- Kendrick, K. H., & Torreira, F. (2015). The timing and construction of preference: A quantitative study. *Discourse Processes*, *52*(4), 255-289. https://doi.org/10.1080/0163853X.2014.955997
- Kenny, L., Hattersley, C., Molins, B., Buckley, C., Povey, C., & Pellicano, E. (2016). Which terms should be used to describe autism? Perspectives from the UK autism community. *Autism*, 20(4), 442-462. https://doi.org/10.1177/1362361315588200
- Kent, A. (2012a). Compliance, resistance and incipient compliance when responding to directives. *Discourse Studies*, *14*(6), 711-730. https://doi.org/10.1177/1461445612457485
- Kent, A. (2012b). Responding to directives: What can children do when a parent tells them what to do? In S. Danby & M. Theobald (Eds.), *Disputes in everyday life: Social and moral orders of children and young people* (Vol. 15, pp. 57-84). Emerald. https://doi.org/10.1108/S1537-4661(2012)0000015007
- Kent, A., & Kendrick, K. H. (2016). Imperative directives: Orientations to accountability. *Research on Language and Social Interaction, 49*(3), 272-288. <u>https://doi.org/10.1080/08351813.2016.1201737</u>

- Kjelgaard, M. M., & Tager-Flusberg, H. (2001). An investigation of language impairment in autism: Implications for genetic subgroups. *Language and Cognitive Processes*, 16(2-3), 287-308. https://doi.org/10.1080/01690960042000058
- Klein, W. (2021). Managing trouble spots in conversation: Other-initiated repair elicitations produced by a bilingual youth with autism. *Pragmatics*, *31*(2), 225-249. https://doi.org/10.1075/prag.19042.kle
- Knott, F., Lewis, C., & Williams, T. (1995). Sibling interaction of children with learning disabilities: A comparison of autism and Down's syndrome. *Journal of Child Psychology and Psychiatry*, *36*(6), 965-976. https://doi.org/10.1111/j.1469-7610.1995.tb01343.x
- Korkiakangas, T., & Rae, J. P. (2013). Gearing up to a new activity: How teachers use object adjustments to manage the attention of children with autism. *Augmentative and Alternative Communication*, *29*(1), 83-103. https://doi.org/10.3109/07434618.2013.767488
- Korkiakangas, T., & Rae, J. P. (2014). The interactional use of eye-gaze in children with autism spectrum disorders. *Interaction Studies*, *15*(2), 233-259. https://doi.org/10.1075/is.15.2.12kor
- Korkiakangas, T., Rae, J. P., & Dickerson, P. (2012). The interactional work of repeated talk between a teacher and a child with autism. *Journal of Interactional Research in Communication Disorders*, *3*(1), 1-25. https://doi.org/10.1558/jircd.v3i1.1
- Koshik, I. (2002). Designedly incomplete utterances: A pedagogical practice for eliciting knowledge displays in error correction sequences. *Research on Language and Social Interaction*, 35(3), 277-309. https://doi.org/10.1207/S15327973RLSI3503_2
- Koskinen, E., Stevanovic, M., & Peräkylä, A. (2021). The recognition and interactional management of face threats: Comparing neurotypical participants and participants with asperger's syndrome. *Social Psychology Quarterly, 84*(2), 132-154. https://doi.org/10.1177/01902725211003023
- Kurzrok, J., McBride, E., & Grossman, R. B. (2021). Autism-specific parenting self-efficacy: An examination of the role of parent-reported intervention involvement, satisfaction with intervention-related training, and caregiver burden. *Autism*. https://doi.org/10.1177/1362361321990931
- Kwok, E. Y. L., Brown, H. M., Smyth, R. E., & Oram Cardy, J. (2015). Meta-analysis of receptive and expressive language skills in autism spectrum disorder. *Research in Autism Spectrum Disorders*, *9*, 202-222. https://doi.org/10.1016/j.rasd.2014.10.008
- Laakso, M. (2010). Children's emerging and developing self-repair practices. In H. Gardner & M. Forrester (Eds.), *Analysing interactions in childhood: Insights from conversation analysis* (pp. 74-99). John Wiley & Sons, Incorporated. http://ebookcentral.proquest.com/lib/sheffield/detail.action?docID=470261
- Leadbitter, K., Buckle, K. L., Ellis, C., & Dekker, M. (2021). Autistic self-advocacy and the neurodiversity movement: Implications for autism early intervention research and practice. *Frontiers In Psychology*, *12*(635690). https://doi.org/10.3389/fpsyg.2021.635690

- Leader, G., Tuohy, E., Chen, J. L., Mannion, A., & Gilroy, S. P. (2020). Feeding problems, gastrointestinal symptoms, challenging behavior and sensory issues in children and adolescents with autism spectrum disorder. *Journal of Autism and Developmental Disorders*, *50*(4), 1-10. https://doi.org/10.1007/s10803-019-04357-7
- Leedham, A. T., Thompson, A. R., & Freeth, M. (2020). A thematic synthesis of siblings' lived experiences of autism: Distress, responsibilities, compassion and connection. *Research in Developmental Disabilities*, *97*, 103547. https://doi.org/10.1016/j.ridd.2019.103547
- Lees, E. (2022). The neurodiversity paradigm. RCSLT Bulletin, Autumn 2022(832), 23.
- Lerner, G. H. (2003). Selecting next speaker: The context-sensitive operation of a context-free organization. *Language in Society, 32*(02), 177-201. https://doi.org/10.1017/S004740450332202X
- Leyfer, O. T., Folstein, S. E., Bacalman, S., Davis, N. O., Dinh, E., Morgan, J., Tager-Flusberg, H., & Lainhart, J. E. (2006). Comorbid psychiatric disorders in children with autism: Interview development and rates of disorders. *Journal of Autism and Developmental Disorders*, 36(7), 849-861. https://doi.org/10.1007/s10803-006-0123-0
- Local, J., & Wootton, T. (1995). Interactional and phonetic aspects of immediate echolalia in autism: A case study. *Clinical Linguistics & Phonetics*, 9(2), 155-184. https://doi.org/10.3109/02699209508985330
- Loomes, R., Hull, L., & Mandy, W. P. L. (2017). What is the male-to-female ratio in autism spectrum disorder? A systematic review and meta-analysis. *Journal of the American Academy of Child & Adolescent Psychiatry*, *56*(6), 466-474. https://doi.org/10.1016/j.jaac.2017.03.013
- Lu, Y., Douglas, S. N., Bagawan, A., & Hauck, J. L. (2021). Using neurotypical siblings as intervention agents to guide individuals with autism spectrum disorders: A systematic review. *Research in Autism Spectrum Disorders*, 89, 101868. https://doi.org/10.1016/j.rasd.2021.101868
- Lyons, A. M., Leon, S. C., Roecker Phelps, C. E., & Dunleavy, A. M. (2010). The impact of child symptom severity on stress among parents of children with ASD: The moderating role of coping styles. *Journal of Child and Family Studies, 19*(4), 516-524. https://doi.org/10.1007/s10826-009-9323-5
- Mascha, K., & Boucher, J. (2006). Preliminary investigation of a qualitative method of examining siblings' experiences of living with a child with ASD. *The British Journal of Development Disabilities*, *52*(102), 19-28. https://doi.org/10.1179/096979506799103659
- Maxwell, J., & Damico, J. (2022). Investigating the interactional significance of the use of well by a child with ASD during writing interactions. *Journal of Interactional Research in Communication Disorders.*, 13(1), 101-119. https://doi.org/10.1558/jircd.21245
- Maynard, D. W. (1985). On the functions of social conflict among children. *American Sociological Review, 50,* 207-223. https://doi.org/10.2307/2095410
- Maynard, D. W. (2005). Social actions, gestalt coherence, and designations of disability: Lessons from and about autism. *Social Problems*, *52*(4), 499-524. https://doi.org/10.1525/sp.2005.52.4.499

- Maynard, D. W., McDonald, T. A., & Stickle, T. (2016). Parents as a team: Mother, father, a child with autism spectrum disorder, and a spinning toy. *Journal of Autism and Developmental Disorders*, 46(2), 406-423. https://doi.org/10.1007/s10803-015-2568-5
- Maynard, D. W., & Turowetz, J. (2022). *Autistic intelligence: Interaction, individuality, and the challenges of diagnosis*. University of Chicago Press. https://doi.org/10.7208/chicago/9780226815992.001.0001
- Maynard, D. W., & Turowetz, J. J. (2017a). Doing diagnosis: Autism, interaction order, and the use of narrative in clinical talk. *Social Psychology Quarterly, 80*(3), 254-275. https://doi.org/10.1177/0190272517720683
- Maynard, D. W., & Turowetz, J. J. (2017b). Doing testing: How concrete competence can facilitate or inhibit performances of children with autism spectrum disorder. *Qualitative Sociology*, 40(4), 467-491. https://doi.org/10.1007/s11133-017-9368-5
- Maynard, D. W., & Turowetz, J. J. (2019). Doing abstraction: Autism, diagnosis, and social theory. *Sociological Theory*, *37*(1), 89-116. https://doi.org/10.1177/0735275119830450
- McIntosh, N., Bates, P., Brykczynska, G., Dunstan, G., Goldman, A., Harvey, D., Larcher, V., McCrae, D., McKinnon, A., Patton, M., Saunders, J., & Shelley, P. (2000). Guidelines for the ethical conduct of medical research involving children. Royal College of Paediatrics, Child Health: Ethics Advisory Committee. *Archives of Disease in Childhood.*, 82(2), 177-182. https://doi.org/10.1136/adc.82.2.177
- McKinney, A., Weisblatt, E. J., Hotson, K. L., Bilal Ahmed, Z., Dias, C., BenShalom, D., Foster, J., Murphy, S., Villar, S. S., & Belmonte, M. K. (2021). Overcoming hurdles to intervention studies with autistic children with profound communication difficulties and their families. *Autism*, *25*(6), 1627-1639. https://doi.org/10.1177/1362361321998916
- Meek, S. E., Robinson, L. T., & Jahromi, L. B. (2012). Parent–child predictors of social competence with peers in children with and without autism. *Research in Autism Spectrum Disorders*, 6(2), 815-823. https://doi.org/10.1016/j.rasd.2011.11.001
- Mehan, H. (1979). "What time is it, Denise?": Asking known information questions in classroom discourse. *Theory Into Practice*, *18*(4), 285-294. http://www.istor.org/stable/1476655
- Mikesell, L. (2016). Opposing orientations in interactions with individuals with frontotemporal dementia. *Journal of Language Aggression and Conflict, 4*(1), 62-89. https://doi.org/10.1075/jlac.4.1.03mik
- Milton, D. E. M. (2012). On the ontological status of autism: The 'double empathy problem'. *Disability & Society, 27*(6), 883-887. https://doi.org/10.1080/09687599.2012.710008
- Mohamed Zain, N. A. (2016). *Joint engagement in parent-child interactions involving Malay-speaking mothers and their children with autism spectrum disorders* [Doctoral dissertation, University of Sheffield]. White Rose eTheses Online. https://etheses.whitrose.ac.uk/15481/
- Mohamed Zain, N. A., Muskett, T., & Gardner, H. (2017). Discursive methods and the cross-linguistic study of ASD: A conversation analytic study of repetitive language in a Malay-speaking child. In M. O'Reilly, J. N. Lester, & T. Muskett (Eds.), *A practical guide to social interaction research in autism spectrum disorders* (pp. 275-296). Palgrave Macmillan https://doi.org/10.1057/978-1-137-59236-1 11

- Mondada, L. (2013). The conversation analytic approach to data collection. In J. Sidnell & T. Stivers (Eds.), *The handbook of conversation analysis* (pp. 32-56). Wiley-Blackwell.
- Mondada, L. (2018). Transcription in linguistics. In L. Litosseliti (Ed.), *Research methods in linguistics* (pp. 85-115). Bloomsbury.
- Muir, S. (2008). *Toolkit # 04 Participant produced video: Giving participants camcorders as a social research method*. Retrieved 5/01/2021 from http://hummedia.manchester.ac.uk/schools/soss/morgancentre/toolkits/2008-07-toolkit-camcorders.pdf
- Mundy, P. (1995). Joint attention and social-emotional approach behavior in children with autism. *Development and Psychopathology*, 7(01), 63-82. https://doi.org/10.1017/S0954579400006349
- Mundy, P., Sigman, M., Ungerer, J., & Sherman, T. (1986). Defining the social deficits of autism: The contribution of non-verbal communication measures *Journal of Child Psychology and Psychiatry*, *27*(5), 657-669. https://doi.org/10.1111/j.1469-7610.1986.tb00190.x
- Murillo, E., Camacho, L., & Montero, I. (2021). Multimodal communication in children with autism spectrum disorder and different linguistic development. *Journal of Autism and Developmental Disorders*, *51*(5), 1528-1539. https://doi.org/10.1007/s10803-020-04637-7
- Muskett, T., & Body, R. (2013). The case for multimodal analysis of atypical interaction: questions, answers and gaze in play involving a child with autism. *Clinical Linguistics & Phonetics*, *27*(10-11), 837-850. https://doi.org/10.3109/02699206.2013.816780
- Muskett, T., Perkins, M., Clegg, J., & Body, R. (2010). Inflexibility as an interactional phenomenon: Using conversation analysis to re-examine a symptom of autism. *Clinical Linguistics & Phonetics*, 24(1), 1-16. https://doi.org/10.3109/02699200903281739
- Nicolaidis, C., Raymaker, D., Kapp, S. K., Baggs, A., Ashkenazy, E., McDonald, K., Weiner, M., Maslak, J., Hunter, M., & Joyce, A. (2019). The AASPIRE practice-based guidelines for the inclusion of autistic adults in research as co-researchers and study participants. *Autism*, 23(8), 2007-2019. https://doi.org/10.1177/1362361319830523
- O'Brien, M., Johnson, J. M., & Anderson-Goetz, D. (1989). Evaluating quality in mother-infant interaction: Situational effects. *Infant Behavior and Development, 12*(4), 451-464. https://doi.org/10.1016/0163-6383(89)90026-X
- O'Brien, G., & Pearson, J. (2004). Autism and learning disability. *Autism, 8*(2), 125-140. https://doi.org/10.1177/1362361304042718
- O'Reilly, M., Lester, J. N., & Muskett, T. (2016). Discourse/conversation analysis and autism spectrum disorder. *Journal of Autism and Developmental Disorders*, 46(2), 355-359. https://doi.org/10.1007/s10803-015-2665-5
- O'Reilly, M., Nina Lester, J., Muskett, T., & Karim, K. (2017). How parents build a case for autism spectrum disorder during initial assessments: 'We're fighting a losing battle'. *Discourse Studies*, 19(1), 69-83. https://doi.org/10.1177/1461445616683590
- Ochs, E., & Shohet, M. (2006). The cultural structuring of mealtime socialization. *New Directions for Child and Adolescent Development, 111,* 35-49. https://doi.org/10.1002/cd.154

- Ohtake, Y., Wehmeyer, M. L., Nakaya, A., Takahashi, S., & Yanagihara, M. (2011). Repair strategies used by verbal students with autism during free play. *Focus on Autism and Other Developmental Disabilities*, *26*(1), 3-14. https://doi.org/10.1177/1088357610396079
- Ohtake, Y., Yanagihara, M., Nakaya, A., Takahashi, S., & et al. (2005). Repair strategies used by elementary-age beginning communicators with autism: A preliminary descriptive study. *Focus on Autism and Other Developmental Disabilities, 20*(3), 158-168. https://doi.org/10.1177/10883576050200030401
- Oliver, M. (1990). *Politics of disablement*. Macmillan International Higher Education.
- Passy, J. (2010). Cued articulation: Consonants and vowels (2nd ed.). ACER.
- Pauletto, F., Aronsson, K., & Galeano, G. (2017). Endearment and address terms in family life: Children's and parents' requests in Italian and Swedish dinnertime interaction. *Journal of Pragmatics*, 109, 82-94. https://doi.org/10.1016/j.pragma.2016.12.014
- Pavlopoulou, G., & Dimitriou, D. (2019). 'I don't live with autism; I live with my sister': Sisters' accounts on growing up with their preverbal autistic siblings. *Research in Developmental Disabilities*, 88, 1-15. https://doi.org/10.1016/j.ridd.2019.01.013
- Perryman, T. Y., Carter, A. S., Messinger, D. S., Stone, W. L., Ivanescu, A. E., & Yoder, P. J. (2013). Brief report: Parental child-directed speech as a predictor of receptive language in children with autism symptomatology. *Journal of Autism and Developmental Disorders*, 43(8), 1983-1987. https://doi.org/10.1007/s10803-012-1725-3
- Petalas, M. A., Hastings, R. P., Nash, S., Dowey, A., & Reilly, D. (2009). "I like that he always shows who he is": The perceptions and experiences of siblings with a brother with autism spectrum disorder. *International Journal of Disability, Development and Education, 56*(4), 381-399. https://doi.org/10.1080/10349120903306715
- Pilnick, A., O'Brien, R., Beeke, S., Goldberg, S., & Harwood, R. (2021). Avoiding repair, maintaining face: Responding to hard-to-interpret talk from people living with dementia in the acute hospital. *Social Science and Medicine, 282*, Article 114156. https://doi.org/10.1016/j.socscimed.2021.114156
- Pomerantz, A. (1984a). Agreeing and disagreeing with assessment: Some features of preferred/dispreferred turn shapes. In J. M. Atkinson & J. Heritage (Eds.), *Structures of social action: Studies in conversation analysis* (pp. 75-101). Cambridge University Press. https://doi.org/10.1017/CB09780511665868.008
- Pomerantz, A. (1984b). Pursuing a response. In J. M. Atkinson (Ed.), *Structures of social action: Studies in conversation analysis* (pp. 152-164). Cambridge University Press. https://doi.org/10.1017/CB09780511665868.011
- Pomerantz, A. (1986). Extreme case formulations: A way of legitimizing claims. *Human Studies,* 9(2), 219-229. https://doi.org/10.1007/BF00148128
- Pomerantz, A., & Heritage, J. (2012). Preference. In J. Sidnell (Ed.), *The handbook of conversation analysis* (pp. 210-228). Wiley-Blackwell. https://doi.org/10.1002/9781118325001
- Potter, J., & Wetherell, M. (1987). *Discourse and social psychology: Beyond attitudes and behaviours*. Sage.

- Pottie, C. G., & Ingram, K. M. (2008). Daily stress, coping, and well-being in parents of children with autism: a multilevel modeling approach. *Journal of Family Psychology, 22*(6), 855-864. https://doi.org/10.1037/a0013604
- Psathas, G. (1995). Conversation analysis: The study of talk-in-interaction. Sage.
- Rae, J. P. (2001). Organizing participation in interaction: Doing participation framework. *Research on Language and Social Interaction, 34*(2), 253-278. https://doi.org/10.1207/S15327973RLSI34-2_4
- Rae, J. P., & Ramey, M. (2020a). Correction and repair: A comparative analysis of a boy with ASD interacting with a parent and with an ABA trainer. *Clinical Linguistics & Phonetics.*, 34(10-11), 1018-1044. https://doi.org/10.1080/02699206.2020.1754920
- Rae, J. P., & Ramey, M. (2020b). Making and taking opportunities for co-participation in an interaction between a boy with autism spectrum disorder and his father. In R. Wilkinson, J. P. Rae, & G. Rasmussen (Eds.), *Atypical interaction: The impact of communicative impairments within everyday talk*. Palgrave Macmillan. https://doi.org/10.1007/978-3-030-28799-3_3
- Ramey, M., & Rae, J. P. (2015). Parents' resources for facilitating the activities of children with autism at home. In M. O'Reilly & J. N. Lester (Eds.), *The Palgrave handbook of child mental health* (pp. 459-477). Palgrave Macmillan. https://doi.org/10.1057/9781137428318.25
- Raymond, G. (2003). Grammar and social organization: Yes/no interrogatives and the structure of responding. *American Sociological Review*, 939-967. https://doi.org/10.2307/1519752
- Rendle-Short, J. (2002). Managing interaction: A conversation analytic approach to the management of interaction by an 8 year-old girl with Asperger's Syndrome. *Issues in Applied Linguistics*, *13*(2), 161-186. https://doi.org/10.5070/L4132005061
- Rendle-Short, J., Cobb-Moore, C., & Danby, S. (2014). Aligning in and through interaction: Children getting in and out of spontaneous activity. *Discourse Studies, 16*(6), 792-815. https://doi.org/10.1177/1461445614546248
- Rendle-Short, J., Wilkinson, R., & Danby, S. (2015). Name-calling by a child with Asperger's syndrome. In M. O'Reilly & J. N. Lester (Eds.), *The Palgrave handbook of child mental health* (pp. 350-383). Palgrave Macmillan. https://doi.org/10.1057/9781137428318 19
- Richdale, A. L., & Schreck, K. A. (2009). Sleep problems in autism spectrum disorders: Prevalence, nature, and possible biopsychosocial aetiologies. *Sleep Medicine Reviews*, 13(6), 403-411. https://doi.org/10.1016/j.smrv.2009.02.003
- Robinson, J. D. (2016). *Accountability in social interaction*. Oxford University Press.
- Roman-Urrestarazu, A., van Kessel, R., Allison, C., Matthews, F. E., Brayne, C., & Baron-Cohen, S. (2021). Association of race/ethnicity and social disadvantage with autism prevalence in 7 million school children in England. *JAMA pediatrics*, e210054-e210054. https://doi.org/10.1001/jamapediatrics.2021.0054
- Roulstone, S., Glogowska, M., Peters, T. J., & Enderby, P. (2004). Building good practice: lessons from a multimethod study of speech and language therapy. *International Journal of*

- *Therapy and Rehabilitation, 11*(5), 199-205. https://doi.org/10.12968/ijtr.2004.11.5.13339
- Rudelli, N., Straccia, C., & Petitpierre, G. (2021). Fathers of children with autism spectrum disorder: Their perceptions of paternal role a predictor of caregiving satisfaction, self-efficacy and burden. *Research in Autism Spectrum Disorders, 83*, 101744. https://doi.org/10.1016/j.rasd.2021.101744
- Rum, Y., Zachor, D. A., & Dromi, E. (2021). Prosocial behaviors of children with autism spectrum disorder (ASD) during interactions with their typically developing siblings. *International Journal of Behavioral Development*, *45*(4), 293-298. https://doi.org/10.1177/0165025420971042
- Russell, G. (2020). Critiques of the neurodiversity movement. In S. K. Kapp (Ed.), *Autistic community and the neurodiversity movement: Stories from the frontline* (pp. 287-303). Springer Singapore. https://doi.org/10.1007/978-981-13-8437-0 21
- Russell, G., & Pavelk, Z. (2013). Co-occurrence of developmental disorders: Children who share symptoms of autism, dyslexia and attention deficit hyperactivity disorder. In *Recent Advances in Autism Spectrum Disorders Volume I*. InTech. https://doi.org/10.5772/54159
- Rutter, M., & Lord, C. (1987). Language disorders associated with psychiatric disturbance. In W. Yule & M. Rutter (Eds.), *Language Development and Disorders* (pp. 206-233). Mac Keith.
- Saad, M. A., Jan, J. M., & Wahid, R. (2021). Parents' linguistic strategies in interaction with their children with history of cleft lip and/or palate. *International Journal of Language and Communication Disorders*, *56*(5), 940-953. https://doi.org/10.1111/1460-6984.12646
- Sacks, H. (1984). Notes on methodology. In *Structures of social action: Studies in conversation analysis* (pp. 21-27). Cambridge University Press. https://doi.org/10.1017/CB09780511665868.005
- Sacks, H. (1992). Lectures on conversation: Volume I. Blackwell.
- Sacks, H., Schegloff, E. A., & Jefferson, G. (1974). A simplest systematics for the organization of turn-taking for conversation. *Language*, *50*(4), 696-735. https://doi.org/10.1353/lan.1974.0010
- Sandin, S., Schendel, D., Magnusson, P., Hultman, C., Surén, P., Susser, E., Grønborg, T., Gissler, M., Gunnes, N., & Gross, R. (2016). Autism risk associated with parental age and with increasing difference in age between the parents. *Molecular Psychiatry*, *21*(5), 693-700. https://doi.org/10.1038/mp.2015.70
- Saul, J., & Norbury, C. (2020). Does phonetic repertoire in minimally verbal autistic preschoolers predict the severity of later expressive language impairment? *Autism, 24*(5), 1217-1231. https://doi.org/10.1177/1362361319898560
- Schegloff, E. A. (1968). Sequencing in conversational openings. *American Anthropologist*, 70(6), 1075-1095. https://doi.org/10.1525/aa.1968.70.6.02a00030
- Schegloff, E. A. (1993). Reflections on quantification in the study of conversation. *Research on Language and Social Interaction*, *26*(1), 99-128. https://doi.org/10.1207/s15327973rlsi2601_5

- Schegloff, E. A. (1996). Confirming allusions: Toward an empirical account of action. *American Journal of Sociology, 102*(1), 161-216. https://www.jstor.org/stable/2782190
- Schegloff, E. A. (2007). Sequence organization in interaction. Cambridge University Press.
- Schegloff, E. A., Jefferson, G., & Sacks, H. (1977). The preference for self-correction in the organization of repair in conversation. *Language*, *53*(2), 361-382. https://doi.org/10.2307/413107
- Schegloff, E. A., & Sacks, H. (1973). Opening up closings. *Semiotica*, 8(4), 289-327. https://doi.org/10.1515/semi.1973.8.4.289
- Schertz, H. H., Lester, J., Erden, E., Safran, S., & Githens, P. (2020). Challenges and contributors to self-efficacy for caregivers of toddlers with autism. *Autism*, *24*(5), 1260-1272. https://doi.org/10.1177/1362361319899761
- Searles, D. K., & Barriage, S. (2018). "What does curious even mean do you know?": Orientations to word meanings in family interactions. *Journal of Pragmatics, 134*, 57-69. https://doi.org/10.1016/j.pragma.2018.06.013
- Shattuck, P. T., Durkin, M., Maenner, M., Newschaffer, C., Mandell, D. S., Wiggins, L., Lee, L.-C., Rice, C., Giarelli, E., Kirby, R., Baio, J., Pinto-Martin, J., & Cuniff, C. (2009). Timing of identification among Cchildren with an autism spectrum disorder: Findings from a population-based surveillance study. *Journal of the American Academy of Child and Adolescent Psychiatry*, 48(5), 474-483. https://doi.org/10.1097/CHI.0b013e31819b3848
- Shepherd, D., Landon, J., Goedeke, S., & Meads, J. (2021). Stress and distress in New Zealand parents caring for a child with autism spectrum disorder. *Research in Developmental Disabilities*, 111, Article 103875. https://doi.org/10.1016/j.ridd.2021.103875
- Sidnell, J. (2010). *Conversation analysis: An introduction*. Wiley-Blackwell.
- Sidnell, J. (2013). Basic conversation analytic methods. In J. Sindnell & T. Stivers (Eds.), *The handbook of conversation analysis* (pp. 77-99). Wiley-Blackwell. https://doi.org/10.1002/9781118325001.ch5
- Sievers, S. B., Trembath, D., & Westerveld, M. (2018). A systematic review of predictors, moderators, and mediators of augmentative and alternative communication (AAC) outcomes for children with autism spectrum disorder. *Augmentative and Alternative Communication*, 34(3), 219-229. https://doi.org/10.1080/07434618.2018.1462849
- Sikora, D., Moran, E., Orlich, F., Hall, T. A., Kovacs, E. A., Delahaye, J., Clemons, T. E., & Kuhlthau, K. (2013). The relationship between family functioning and behavior problems in children with autism spectrum disorders. *Research in Autism Spectrum Disorders*, 7(2), 307-315. https://doi.org/10.1016/j.rasd.2012.09.006
- Siller, M., & Sigman, M. (2002). The behaviors of parents of children with autism predict the subsequent development of their children's communication. *Journal of Autism and Developmental Disorders*, 32(2), 77-89. https://doi.org/10.1023/a:1014884404276
- Silverman, D. (2011). *Interpreting qualitative data* Sage.

- Silverman, L. B., Bennetto, L., Campana, E., & Tanenhaus, M. K. (2010). Speech-and-gesture integration in high functioning autism. *Cognition*, *115*(3), 380-393. https://doi.org/10.1016/j.cognition.2010.01.002
- Solomon, O., Heritage, J., Yin, L., Maynard, D. W., & Bauman, M. L. (2016). 'What brings him here today?': Medical problem presentation involving children with autism spectrum disorders and typically developing children. *Journal of Autism and Developmental Disorders*, 46(2), 378-393. https://doi.org/10.1007/s10803-015-2550-2
- Speer, S. A. (2002). `Natural' and `contrived' data: A sustainable distinction? *Discourse Studies,* 4(4), 511-525. https://doi.org/10.1177/14614456020040040601
- Steffenburg, H., Steffenburg, S., Gillberg, C., & Billstedt, E. (2018). Children with autism spectrum disorders and selective mutism. *Neuropsychiatric Disease and Treatment, 14*, 1163. https://doi.org/10.2147/NDT.S154966
- Sterponi, L., De Kirby, K., & Shankey, J. (2015). Rethinking language in autism. *Autism*, *19*(5), 517-526. https://doi.org/10.1177/1362361314537125
- Sterponi, L., & Fasulo, A. (2010). "How to go on": Intersubjectivity and progressivity in the communication of a child with autism. *Ethos, 38*(1), 116-142. https://doi.org/10.1111/j.1548-1352.2009.01084.x
- Sterponi, L., & Shankey, J. (2014). Rethinking echolalia: Repetition as interactional resource in the communication of a child with autism. *Journal of Child Language*, 41(2), 275-304. https://doi.org/10.1017/s0305000912000682
- Stevanovic, M. (2018). Social deontics: A nano-level approach to human power play. *Journal for the Theory of Social Behaviour, 48*(3), 369-389. https://doi.org/10.1111/jtsb.12175
- Stevanovic, M., & Kuusisto, A. (2019). Teacher directives in children's musical instrument instruction: Activity context, student cooperation, and institutional priority. *Scandinavian Journal of Educational Research*, *63*(7), 1022-1040. https://doi.org/10.1080/00313831.2018.1476405
- Stevanovic, M., & Peräkylä, A. (2012). Deontic authority in interaction: The right to announce, propose, and decide. *Research on Language and Social Interaction, 45*(3), 297-321. https://doi.org/10.1080/08351813.2012.699260
- Stevanovic, M., & Svennevig, J. (2015). Introduction: Epistemics and deontics in conversational directives. *Journal of Pragmatics*, 78, 1-6. https://doi.org/10.1016/j.pragma.2015.01.008
- Stickle, T., Duck, W. O., & Maynard, D. (2017). Children's use of "I don't know" during clinical evaluations for autism spectrum disorder: Responses to emotion questions. In M. O'Reilly, J. N. Lester, & T. Muskett (Eds.), *A practical guide to social interaction research in autism spectrum disorders* (pp. 247-273). Palgrave Macmillan. https://doi.org/10.1057/978-1-137-59236-1 10
- Stivers, T. (2008). Stance, alignment, and affiliation during storytelling: When nodding Is a token of affiliation. *Research on Language and Social Interaction, 41*(1), 31-57. https://doi.org/10.1080/08351810701691123

- Stivers, T. (2013). Sequence organization. In J. Sidnell & T. Stivers (Eds.), *The handbook of conversation analysis* (pp. 191-209). Wiley-Blackwell. https://doi.org/10.1002/9781118325001.ch10
- Stivers, T., & Rossano, F. (2010). Mobilizing response. *Research on Language and Social Interaction*, 43(1), 3-31. https://doi.org/10.1080/08351810903471258
- Stivers, T., & Sidnell, J. (2013). Introduction. In J. Sidnell & T. Stivers (Eds.), *The handbook of conversation analysis* (pp. 1-8). Wiley-Blackwell. https://doi.org/10.1002/9781118325001.ch1
- Stivers, T., & Sidnell, J. (2016). Proposals for activity collaboration. *Research on Language and Social Interaction*, 49(2), 148-166. https://doi.org/10.1080/08351813.2016.1164409
- Stribling, P., & Rae, J. P. (2010). Interactional analysis of scaffolding in a mathematical task in ASD. In H. Gardner & M. Forrester (Eds.), *Analysing interactions in childhood* (pp. 185-208). Wiley-Blackwell.
- Stribling, P., Rae, J. P., & Dickerson, P. (2006). "Spelling it out": The design, delivery, and placement of delayed echolalic utterances by a child with an autistic spectrum disorder. *Issues in Applied Linguistics*, 15(1), 3-32. https://doi.org/10.5070/L4151005078
- Stribling, P., Rae, J. P., & Dickerson, P. (2007). Two forms of spoken repetition in a girl with autism. *International Journal of Language & Communication Disorders* 42(4), 427-444. https://doi.org/10.1080/13682820601183659
- Stribling, P., Rae, J. P., & Dickerson, P. (2009). Using conversation analysis to explore the recurrence of a topic in the talk of a boy with an autism spectrum disorder. *Clinical Linguistics & Phonetics*, 23(8), 555-582. https://doi.org/10.1080/02699200802491165
- Tager-Flusberg, H., & Kasari, C. (2013). Minimally verbal school-aged children with autism spectrum disorder: The neglected end of the spectrum. *Autism Research*, 6(6), 468-478. https://doi.org/10.1002/aur.1329
- Tarplee, C., & Barrow, E. (1999). Delayed echoing as an interactional resource: a case study of a 3-year-old child on the autistic spectrum. *Clinical Linguistics & Phonetics*, *13*(6), 449-482. https://doi.org/10.1080/026992099298988
- Tehee, E., Honan, R., & Hevey, D. (2009). Factors contributing to stress in parents of individuals with autistic spectrum disorders. *Journal of Applied Research in Intellectual Disabilities*, 22(1), 34-42. https://doi.org/10.1111/j.1468-3148.2008.00437.x
- ten Have, P. (1999). Doing conversation analysis: A practical guide. Sage.
- ten Have, P. (2007). Doing conversation analysis: A practical guide (2nd ed.). Sage
- The Makaton Charity. (n.d.). *What is Makaton?* Retrieved 4/09/22 from https://makaton.org/TMC/About_Makaton/What is Makaton.aspx
- Tsai, H.-W. J., Cebula, K., Liang, S. H., & Fletcher-Watson, S. (2018). Siblings' experiences of growing up with children with autism in Taiwan and the United Kingdom. *Research in Developmental Disabilities*, 83, 206-216. https://doi.org/10.1016/j.ridd.2018.09.001

- Turowetz, J. (2015a). Citing conduct, individualizing symptoms: Accomplishing autism diagnosis in clinical case conferences. *Social Science and Medicine, 142*, 214-222. https://doi.org/10.1016/j.socscimed.2015.08.022
- Turowetz, J. (2015b). The interactional production of a clinical fact in a case of autism. *Qualitative Sociology, 38*(1), 57-78. https://doi.org/10.1007/s11133-014-9294-8
- Turowetz, J., & Maynard, D. W. (2016). Category attribution as a device for diagnosis: Fitting children to the autism spectrum. *Sociology of Health and Illness, 38*(4), 610-626. https://doi.org/10.1111/1467-9566.12382
- Turowetz, J., & Maynard, D. W. (2018). Narrative methods for differential diagnosis in a case of autism. *Symbolic Interaction*, 41(3), 357-383. https://doi.org/10.1002/symb.344
- Turowetz, J., & Maynard, D. W. (2019). Documenting diagnosis: testing, labelling, and the production of medical records in an autism clinic. *Sociology of Health and Illness, 41*(6), 1023-1039. https://doi.org/10.1111/1467-9566.12882
- Vasilopoulou, E., & Nisbet, J. (2016). The quality of life of parents of children with autism spectrum disorder: A systematic review. *Research in Autism Spectrum Disorders, 23*, 36-49. https://doi.org/10.1016/j.rasd.2015.11.008
- Volden, J. (2004). Conversational repair in speakers with autism spectrum disorder.

 International journal of language & communication disorders / Royal College of Speech & Language Therapists, 39(2), 171-189.

 https://doi.org/10.1080/13682820410001663252
- Ward, B., Tanner, B. S., Mandleco, B., Dyches, T. T., & Freeborn, D. (2016). Sibling experiences: Living with young persons with autism spectrum disorders. *Pediatric Nursing, 42*(2), 69-76. https://www.proquest.com/scholarly-journals/sibling-experiences-living-with-young-persons/docview/1793907231/se-2?accountid=13828
- Watson, L., Hanna, P., & Jones, C. J. (2021). A systematic review of the experience of being a sibling of a child with an autism spectrum disorder. *Clinical child psychology and psychiatry*, 26(3), 734-749. https://doi.org/10.1177/13591045211007921
- Wiklund, M., & Laakso, M. (2019). Ungrammatical utterances and disfluent speech as causes of comprehension problems in interactions of preadolescents with high functioning autism. *Clinical Linguistics and Phonetics*, 33(7), 654-676. https://doi.org/10.1080/02699206.2019.1578415
- Wilkinson, R. (2011). Changing interactional behaviour: Using conversation analysis in intervention programmes for aphasic conversation. In C. Antaki (Ed.), *Applied conversation analysis: Intervention and change in institutional talk* (pp. 32-53).
- Wilkinson, R. (2013). Gestural depiction in acquired language disorders: On the form and use of iconic gestures in aphasic talk-in-interaction. *AAC: Augmentative and Alternative Communication*, 29(1), 68-82. https://doi.org/10.3109/07434618.2013.767558
- Wilkinson, R. (2019). Atypical interaction: Conversation analysis and communicative impairments. *Research on Language and Social Interaction*, *52*(3), 281-299. https://doi.org/10.1080/08351813.2019.1631045

- Wilkinson, R., Rae, J. P., & Rasmussen, G. (2020). Introduction. In R. Wilkinson, J. P. Rae, & G. Rasmussen (Eds.), *Atypical interaction: The impact of communicative impairments within everyday talk* (pp. 1-36). Palgrave Macmillan. https://doi.org/10.1007/978-3-030-28799-3 1
- Wing, L., & Potter, D. (2002). The epidemiology of autistic spectrum disorders: is the prevalence rising? *Mental Retardation and Developmental Disabilities Research Reviews, 8*(3), 151-161. https://doi.org/10.1002/mrdd.10029
- Wootton, A. J. (1994). Object transfer, intersubjectivity and third position repair: Early developmental observations of one child. *Journal of Child Language*, *21*(3), 543-564. https://doi.org/10.1017/S0305000900009454
- Wootton, A. J. (1999). An investigation of delayed echoing in a child with autism. *First Language*, 19(57), 359-381. https://doi.org/10.1177/014272379901905704
- Woynaroski, T., Watson, L., Gardner, E., Newsom, C. R., Keceli-Kaysili, B., & Yoder, P. J. (2016). Early predictors of growth in diversity of key consonants used in communication in initially preverbal children with autism spectrum disorder. *Journal of Autism and Developmental Disorders, 46*(3), 1013-1024. https://doi.org/10.1007/s10803-015-2647-7
- Yantzi, N. M., Rosenberg, M. W., & McKeever, P. (2007). Getting out of the house: The challenges mothers face when their children have long-term care needs. *Health and Social Care in the Community, 15*(1), 45-55. https://doi.org/10.1111/j.1365-2524.2006.00663.x
- Yoder, P., & Stone, W. L. (2006). Randomized comparison of two communication interventions for preschoolers with autism spectrum disorders. *Journal of Consulting and Clinical Psychology*, 74(3), 426-435. https://doi.org/10.1037/0022-006X.74.3.426