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**JOINT ENGAGEMENT IN PARENT-CHILD INTERACTIONS INVOLVING
MALAY-SPEAKING MOTHERS AND THEIR CHILDREN WITH AUTISM
SPECTRUM DISORDERS**

By:

Nor Azrita Mohamed Zain

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ABSTRACT

It is well-accepted that social interaction skills are generally impaired in autism spectrum disorders (ASD). Children with ASD are commonly reported to be incompetent in partaking in reciprocal interactions, including in establishing joint engagement with other people. This PhD project examines naturally-occurring play interaction involving Malay-speaking children with ASD aged between 3;0 to 6;11 years and their mothers. The data consists of video recorded material collected from 10 hours of freeplay sessions between the child and adult participants. Comparative data from typically developing Malay-speaking children are also examined to ensure a thorough analysis of the Malay-speaking children.

This study deploys conversation analysis to explore joint engagement (non)establishments in interactions involving Malay-speaking children. Specifically, the aims are to scrutinise the children's responsive actions to maternal bids for joint engagement during play and to consider the interactional resources that may be utilised by the children as they comply with or decline their mothers' projection for an engagement. The study also aims to examine the mothers' initiating engagement actions and finally to use the findings from this CA-based study to consider joint engagement frameworks.

The analysis reveals the children with ASD's interactional competencies in handling joint engagement initiations. Despite evidence of atypicalities in their bodily and language use, children with ASD are found to demonstrate capabilities in producing fitted responsive actions following maternal bids by manipulating verbal and bodily behaviours thus allowing joint engagement to establish. The children also demonstrate effective skills to resist an engagement. The children with ASD also demonstrate behaviours that are not seen in the typically developing children dataset namely withholding a response despite having displayed their noticing of a bid, and displaying total non-orientation to a bid. The analysis also shows

the different designs of the maternal bids that are crucial for pursuing and securing the children's engagement.

The results indicate the feasibility of Conversation Analysis as a methodology to examine joint engagement establishment in specific and interactional abilities of children with ASD in general. Clinical implications of the current work are also discussed.

Chapter 1

INTRODUCTION

This thesis includes investigations on the naturally-occurring interactions involving children with ASD and their mothers during free play sessions. I use Conversation Analysis (CA) methodology for examining the parent-child interactions that take place at either a speech-language clinic or at the participants' homes. In this opening chapter, I will begin by reviewing studies on joint engagement in children. I will focus on the different aspects of joint engagement that have been commonly researched and reported in the literature (1.1). Following this, I will review relevant studies to explicate ASD and subsequently, to discuss the prominent theories in ASD (1.2). This will be followed by a review of relevant references to offer a concise background to CA that will be useful for, and pertinent to the theme of the present thesis (1.3). I will then consider CA as a feasible method to investigate ASD. Thereafter, I will review researches on parent-child interaction with a particular focus of those that involve children with ASD (1.4). Next, I will discuss the rationales for pursuing the current investigation, and the specific aims of the thesis (1.5). Finally, in 1.6 I will explain how this manuscript is arranged.

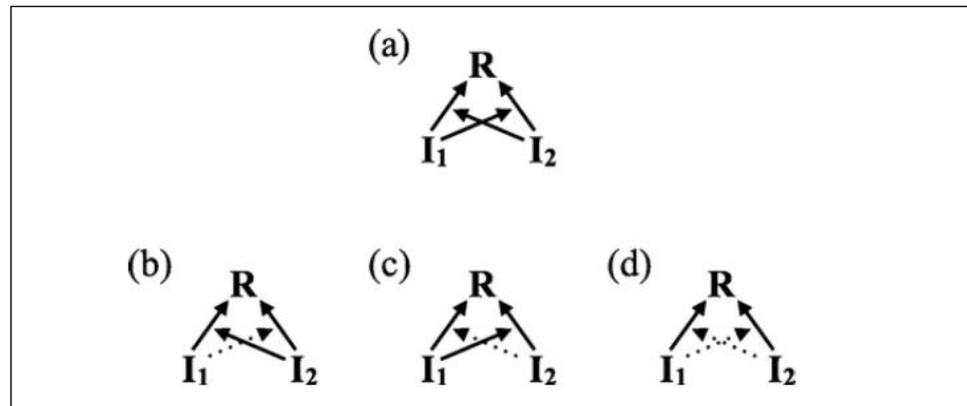
1.1 Joint engagement in children

For a pair of individuals to interact socially, they must establish dyadic (person A-person B), or triadic (person A-person B-shared referent) joint engagement (JE) with each other during the interaction (Leekam, López, Moore, & Lopez, 2000). Children's JE skills are developed from infancy as they learn to establish joint attention (JA) (e.g., Adamson, McArthur, Markov, Dunbar, & Bakeman, 2001) and joint reference (JR) (e.g., Go & Miraflores, 2009) with other people. Interactions between adults and infants particularly in the first few

months usually involve face-to-face, dyadic interactions (Devouche, Dominguez, Bobin-Bègue, & Gratier, 2012). In these dyadic interactions, the infants learn to focus on their interactive partner's face, before they then begin to respond to them, with smiles or vocalisations. The skill to socially attend to an interactive partner is particularly important for the children as it will serve as a foundation to the ability to partake in a more complex, triadic interaction.

In a triadic interaction, the adult typically directs the child's attention to a referent, usually an object, an event or another person. At this stage, the child will learn to identify the referent as well as being aware that the interactive partner is also attending to it. In this instance, JA is said to establish as the child is able to 'coordinate visual attention with a social partner around an object or event' usually indicated by the child's 'alternating gaze between an object and a person, pointing, showing, or giving to share or to show' (Kaale, Smith, & Sponheim, 2012, p.97, own emphasis). JA is a foundational social skill seen since infancy and the *JA* term is usually used in the literature to refer particularly to *visual* engagement between a young child and an adult before the former reach three years old (Adamson, Bakeman, Deckner, & Nelson, 2014). *Joint attention* refers to a situation when person A and person B visually attend to a shared referent (for example, a particular object or event) and are mutually mindful of each other's attention to it (Eilan, 2005). The establishment of JA is illustrated in diagram (a) of Figure 1 which has been extracted from Skarabela, Allen, and Scott-Phillips (2013). The authors use the diagrams (b) to (d) to show when joint attention fails to occur. The diagrams emphasise the necessity that the participants visually attend not only to the referent but also to each other for JA to establish (Skarabela et al., 2013).

Figure 1: Joint attention



From Skarabela et al., 2013 p. 7

The JA ability allows children to coordinate their focus between their interactive partner and another object included in the interaction, and thus helps them to attend better to a prospective language input, for example during word learning activities (Yu & Smith, 2012). JA is a fundamental component for the development of social interaction skills in children, and it is foundational to more developed abilities such as JR (Bruner, 1977).

Typically developing (TD) children are not only able to respond to initiations for JA but also to initiate one from a young age (Bruinsma, Koegel, & Koegel, 2004; Jones & Carr, 2004). In their first year, children typically respond to other person's referring acts which are usually done through gaze, head turn, and commenting (Bruner, 1983; Jones et al., 2004; Tomasello, 1995). For example, it is typical for children to look in the direction of another person's pointing. Soon, the children themselves may begin to direct their interactive partner's attention to a particular object or an event usually by pointing or showing (Bruner, 1983; Tomasello, 1995). This act of referring further contributes to the establishment of JR skill in the young children (Baldwin, 1991). JR occurs when participants of an interaction mutually understand an existing intention for doing a referring and coordinate their actions to the

referent (Bloom, 2000). Studies find that children as young as 10 months old are already able to designate point of references, usually of perceivable objects, to be shared with their communicative partners (Bornstein, Tamis-LeMonda, Hahn, & Haynes, 2008; Paavola, Kunnari, & Moilanen, 2005).

As children get older, they will be more competent to make a reference more explicitly as well as to respond to acts of referring by other people; either verbally, gesturally or both (Cogher, 1999; Grassmann & Tomasello, 2010). When children become verbal, they will be more reliant on using speech than gestures to engage in interactions with other people. It is noteworthy that JE focused on in the current project refers to the state where a child and an interactive partner (or person A and person B) are mutually engaged with another shared referent and the triadic engagement may be exhibited through all or any means available; verbal or non verbal actions including eye-gaze. Children usually joint engage with other people by mutually orienting to a particular something (such as an object, events or even an abstract reference) in activities such as play and conversation. In these activities, the participants may display their mutual engagement either visually, bodily or verbally (Adamson, Bakeman, & Deckner, 2004; Adamson & Bakeman, 2006) and this means that children's social engagement, as investigated in the current study, is not constrained to visual engagement. With the definitions of the relevant terms used in the current work explained, I will now proceed to review in brief the importance of JE in children.

1.1.1 The importance of joint engagement in children

The ability to joint engage is particularly important for children's language, communication, cognitive, and social skills (Adamson et al., 2014; Farrant, Maybery, & Fletcher, 2010; Vaiouli, Grimmet, & Ruich, 2013; Warreyn, van der Paelt, & Roeyers, 2014). JA

ability, for instance, is important for the development of young children's receptive and expressive language (Bottema-Beutel, Yoder, Hochman, & Watson, 2014). With children able to remain engaged with another person (e.g., their caregivers), the adults may begin to teach them language by introducing new words to them. As children learn to follow other people's pointing to an object for example, they learn to share a symbolised and concrete qualities of the object with the other person (Charman, 2003). As children's vocabulary size grows, the shared referents in the interactions they participate in will be extended from objects that are physically present to symbols that refer to them, as well as abstract concepts such as future and past experiences and emotions (Adamson, Bakeman, Deckner, & Romski, 2009; Adamson & Bakeman, 2006). Participation in mutual engagement with other people will allow children to learn to consider other people's mental states; an ability known as the theory of mind (Nelson, Adamson, & Bakeman, 2008). Nelson et al. (2008) found that children who spent more time being involved in JE would have higher scores in false belief tasks when they were in preschool than their peers who did not spend as much time. Through episodes of JE, children may learn about intentionality and consequently learn to connect with other people more efficiently.

1.1.2 Joint engagement in children with Autism Spectrum Disorders

Joint attention is commonly reported as impaired, lacking, problematic or challenged in children with ASD at all levels of severity (Gernsbacher, Stevenson, Khandakar, & Goldsmith, 2008; Meindl & Cannella-Malone, 2011). It is a prominent impairment in ASD that it is considered one characteristic of ASD. However, JA impairments are not necessarily because children with ASD lack the skill, as studies have found that they are potentially competent in understanding other people's intention and able to attend to stimuli and a proposed focal object albeit covertly (Gernsbacher et al., 2008). Rather, children with ASD may demonstrate

different abilities in perceiving a stimulus, and may have different ways in executing volitional action than those of TD peers (Gernsbacher et al., 2008; Schietecatte, Roeyers, & Warreyn, 2012).

Following others' gaze and establishing mutual eye-gaze are problematic for children with ASD. Children with ASD have been found to look more at people's bodies than at their heads compared to the children's TD peers and children with development delays (Shic, Bradshaw, Klin, Scassellati, & Chawarska, 2011). They may also attend more to objects than to people, and to non-social than social stimuli (Shic et al., 2011). Adamson et al. (2009) have found the children with ASD aged between three to five years demonstrated impairment in coordinating attention with other people. It was also noted that JA infrequently took place between children with ASD and attempting adults and this may be attributable to the lack of monitoring of the interactive partners' communication channel by the children (McArthur & Adamson, 1996). The impairments in JA have been found to distinguish children with ASD and neurotypical children and children with other disabilities (Adamson et al., 2009; Dawson et al., 2004; Wong & Kasari, 2012). Wong and Kasari (2012) noted that when compared to peers with developmental delays, children with ASD have been found to be unengaged most of the time while their peers with other disabilities namely speech and language delays, Down syndrome, cerebral palsy, and attention deficit/hyperactivity disorder (ADHD) usually spent their time in some sort of an engagement, for instance, by interacting or watching other people. The children with ASD also responded and initiated joint attention less frequently compared to other children, with and without disabilities (Leekam et al., 2000; Wong & Kasari, 2012).

The problem in developing joint attention skills lead to challenges in developing language in children and consequently affecting their social interaction abilities (Adamson et al., 2009). When young children have an impaired ability to respond to JA bids, they may not

be able to grasp the relation between people's speech and the referent they are referring to, and this may hamper the word and language learning as such a task will require the children to share focus with their interactive partners (Adamson, Bakeman, & Brandon, 2015). Difficulties in acquiring language may restrain the extent of engagement with other people, even for children with relatively unaffected JA skills. For instance, for children with Down syndrome who typically have impaired expressive language but intact JA skills such as pointing and mutual gaze, their engagement range may nonetheless be restricted to only 'immediate, concrete events' (Adamson et al., 2009, p.85). The impairment in JA skills therefore will consequently have negative effects on children's ability to joint engage with other people.

One of the many interactional skills with which children with ASD are documented to have challenges is responding to others' bids for JE (Persicke et al., 2013). The children display deficits, and poorer performance in both the quantity and quality of the skill when compared to TD peers and those with other disabilities (Adamson, Deckner, & Bakeman, 2010; Gernsbacher et al., 2008; Jackson et al., 2003; Jones & Schwartz, 2009; McArthur & Adamson, 1996). In a study comparing engagement skills between TD children, children with Down syndrome and with ASD, Adamson et al. (2010) found that the children with ASD spent less time in coordinated engagement with other people, which was linked to their lack of interest in people, as compared to their peers. Jackson et al. (2003) reported that children with ASD responded less than their peers with mental retardation, and that they produced no-responses more than they did positive, cooperative responses. The literature review on JE deficits in children with ASD reveals that this prominent feature of ASD is linked with their atypical manipulation of gaze, resistance to attempts to divert their current focus to a new one, impairment in the use and understanding of gesture, and disordered language abilities (e.g., Adamson, Bakeman, Deckner, & Ronski, 2009; Ellewadi & Weismer, 2014; Gernsbacher et al., 2008).

From the foregoing review, it is apparent that JE is generally agreed to be problematic in ASD. In the following section, I will continue reviewing the literature to explain ASD and its characteristics more broadly.

1.2 Autism Spectrum Disorders (ASD)

Autism spectrum disorders (ASD) are neurodevelopmental disorders typically diagnosed in childhood (Mundy & Burnette, 2005), and were first studied and reported by Kanner (1943). ASD refer to a spectrum of disorders to include Autistic Disorder, Rett's Disorder, Childhood Disintegrative Disorder, Asperger's Disorder, and Pervasive Developmental Disorder Not Otherwise Specified (American Psychiatric Association (APA), 2000). Children with ASD commonly have impairment in socio-communicative abilities. According to the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV-TR, American Psychiatric Association (APA), 2000) individuals with ASD suffer from deficits in social interactions, communication skills and repetitive/stereotyped behaviours although the impairments may vary from a person to another (Sapp, 2008). The impairment in social interactions refers to the children's lack of 'non-verbal signs of interest in and pleasure from being with another person' and deficits in communicative abilities are described as reduced skills to communicate 'non-verbally and verbally with another person, sharing ideas and interests or to negotiate in a positive friendly way' (Wing, Gould, & Gillberg, 2011, p.768). These two areas of impairments are particularly related to social engagement deficits in autism and have been combined into one diagnostic criteria in the latest version of DSM namely the DSM-V (American Psychiatric Association, 2013; Wing et al., 2011).

One of the features of socio-communicative impairment in children with ASD is that they usually have deficits to demonstrate behaviours that are relevant for establishing social engagement with other people. As widely reported, children with ASD have difficulty in

responding appropriately to other people's social initiations, as well as to initiating and sustaining social engagement (American Psychiatric Association (APA), 2000; Meindl & Cannella-Malone, 2011). Children with ASD are found to spend less time than their peers in partaking in social interactions and have difficulty to establish engagement with other people, and even reported to prefer objects over people (Adamson et al., 2010; Deckers, Roelofs, Muris, & Rinck, 2014; Korkiakangas, 2011). In a study on the children's responses to others' social bids produced by children with ASD and Down syndrome, the former group of children were found to be less responsive to such bids than the latter (Jackson et al., 2003). Dawson, Meltzoff, Osterling, Rinaldi, and Brown (1998) reported that children with ASD in their study consistently failed to demonstrate orientations to stimuli presented to them either social or non-social, with greater failure to the former. When the children with ASD did respond however, they were seen to be less compliant with the initiations for social engagement produced by their interactive partners, and they did not participate in prolonged play as much as did the children with Down syndrome (Jackson et al., 2003). Other studies have also reported that children with ASD initiate social engagement with other people less frequently than do their TD peers (Meindl & Cannella-Malone, 2011).

Individuals with ASD generally have language and communication impairments (Kjellmer, Hedvall, Fernell, Gillberg, & Norrelgen, 2012; Noens & van Berckelaer-Onnes, 2005). Receptive and expressive language are both impaired in ASD with the former more affected than the latter (Boucher, 2003; Chiang, 2009; Hudry et al., 2010; Kwok, Brown, Smyth, & Oram, 2015). Individuals with ASD may also understand what has been said to them literally (Wing et al., 2011). This relates to their difficulties to comprehend figurative speech, jokes or expressions (e.g., Huang, Oi, & Taguchi, 2015) although some studies have found that these areas might be intact (Lyons & Fitzgerald, 2004). With regards to speech, individuals with ASD may talk in a monotone or have idiosyncratic intonation (Nakai, Takashima, Takiguchi, &

Takada, 2014). They may produce many repetitions, echolalia, or jump from one topic to another without a clear connection which make their speech unclear or sometimes, seemingly nonsense. There are also individuals with ASD who remain non-verbal, or with very limited expressive language abilities (Chiang & Lin, 2008).

Another striking characteristic seen in individuals with ASD is they show repetitive, restricted or stereotyped behaviours, interests and activities. Children with ASD may demonstrate atypical physical behaviours such as rocking or hand-flapping (Malaysian Health Technology Assessment Section (MaHTAS), 2014). They commonly demonstrate insistence for routine and sameness that they may get overwhelmed with changes (American Psychiatric Association, 2013). Echolalia or repetitive speech is also evident in children with ASD (Wootton, 1999). Echolalia can be categorised into immediate or delayed: the former refers to immediate verbal repetitions of other people's talk and the latter refers to repetitions that are produced later in the interaction or at some other time (Kanner, 1943; Stribling, Rae, & Dickerson, 2007; Wing & Gould, 1979). Past studies have typically considered echolalia as idiosyncratic behaviours as it's manifestations rarely *seem* to be appropriate or meaningful within an ongoing interaction (Fay, 1969). More recent studies however begin to offer renewed perspectives on echolalia. It has been discovered that echolalia, even those that are produced by children with severe autism may actually be communicatively functional (see for review Sterponi & Shankey, 2014; Wootton, 1999).

Another characteristic in ASD that has been widely investigated is eye-gaze deficit. In addition to general deficits in establishing eye-contact with other people and reduced gaze to social stimuli, children with ASD may also have difficulties in gaze-following particularly when there are visual distractions present (Rombough & Larocci, 2013). Gaze-following difficulty in children with ASD is also affecting their ability to joint attend with other people, a skill required

for establishing JA. Further review on eye gaze and visual orientation in ASD will be done in the next section where I will continue to consider the social interaction and communicative impairments in ASD from two perspectives; the social attention and social cognitive perspectives.

1.2.1 Social-communication and interaction impairments in ASD from social attention and social cognitive perspectives

The social impairments in children with ASD are widely researched on and reported in the literature following two lines of inquiry namely social attention and social cognitive as will be reviewed in the following section.

1.2.1.1 Social attention perspective to social communication and interaction impairments in ASD

Social impairments in ASD have been commonly investigated and reported from social attention perspectives. While there is no particular or established definition for *social attention* per se, a review of the literature on social attention revealed that the term has been commonly used interchangeably to refer to at least three overlapped but different focuses of research, namely social behaviours, social visual orientation and social motivation (Salley & Colombo, 2016). The first classification comprises *behaviours* of coordinating social interaction with other people such as the orientation of attention that occurs during the establishment of JA and the deployment of non verbal communication (Salley & Combo, 2016). The second classification pertains to social attention as *basic visual attention* to social stimuli and in the third social attention is investigated with regards to one's *motivation* to socially engage with other people (Salley & Colombo, 2016).

As I have dedicated the earlier sections of this chapter on joint engagement and joint attention and the relevant behaviours for their establishment, in this section I will be focusing on reviewing the literature to address social attention with regards to *visual attention* and *motivation*. Social attention in the context of visual orientation is probably the most commonly researched area of social attention in ASD (Korkiakangas, 2011). Individuals with ASD have been found to exhibit difficulties in attentional functioning such as impairments in orientation and attention shifting between different stimuli, and these challenges are reported to lead to social disabilities. Dawson et al., (1998) reported that children with ASD either orient to social stimuli less (i.e., name calling and hand-clapping), or exhibit delayed responses when compared to typically developing peers or those with Down syndrome. In a later study, Dawson et al., (2004) found that children with ASD not only have deficits in orienting to stimuli and to establish joint attention with other people, they also demonstrated reduced capability to orient to the sign of other people's distress. As noted earlier too, children with ASD may also exhibit deficit in the ability to shift attention which requires them to disengage their attention from one stimulus before transferring their attention to another stimulus, particularly to a social stimulus (Persicke et al., 2013). As such it has been reported that children with ASD shift their attention to attend to social stimuli less efficiently than they would non-social stimuli although evidence have indicated that this characteristic may not be universal in ASD or across contexts (see for example, Leekam et al., 2000). The difficulties in orienting to socially-relevant information and to shift attention will thus hamper their social interaction skill as they may not have the competency to establish engagement with other people.

Chevallier, Kohls, Troiani, Brodtkin, and Schultz (2012) claimed that "social motivation is a powerful force guiding human behaviour" (p. 231). In this regard, motivation is considered a crucial drive for social skills that it is not only important for social interaction, it is also

theorised as underlying theory of mind performance (Broekhof et al., 2015). The deficits in the abilities to participate in social interactions in children with ASD have also been attributable to their lack of motivation, or decreased interests in social engagements. For instance, it has been suggested that JA impairment is not caused by the children's disability to joint attend but it is due to little interest to do so (Vismara & Lyons, 2007). In their intervention case-study involving three children with ASD, Vismara and Lyon (2007) found that by including objects that are considered as the participating children's perseverative interests (the children's highly preferred items) as resources in the intervention program for the children, the children have shown instantaneous increase in interests and participation in the activity. The children were found to initiate an interaction more when perseverative interests were used in the tasks compared to non-perseveratives interests (Vismara & Lyons, 2007).

1.2.1.2 Socio-cognitive perspective to social communication and interaction impairments in ASD

Socio-cognitive abilities, which refer to the capabilities to perceive other people's perspectives and mental states are essential for social interaction and communication development (Nilsen & Fecica, 2011). In ASD, however, socio-cognitive abilities are generally considered impaired (Baron-Cohen, Leslie, & Frith, 1985; Baron-Cohen, 2001). In the following paragraphs, I will review two theories within the socio-cognitive perspectives that have been widely used to investigate children's social understanding, namely the Theory of Mind (ToM) and Weak Central Coherence (WCC).

ToM is a term used by Premack and Woodruff (1978) to refer to the ability to attribute own's and other people's mind or mental states. This inference capability thus allows people to predict the other's actions and is considered an essential skill for establishing social

engagement (Baron-Cohen et al., 1985; Premack & Woodruff, 1978). In their seminal work, Baron-Cohen et al., (1985) emphasise that ToM is a 'mechanism which underlies a crucial aspect of social skills, namely being able to conceive of mental states: that is, knowing that other people know, want, feel, or believe things' (p. 38). Baron-Cohen et al., (1985) argue that children with ASD lack ToM which contributes to the social deficits in the population (see Baron-Cohen et al., (1985) for a detailed review on the Theory of Mind testing). The authors found that, dissimilar to the performance of their typically developing peers and those with Down syndrome, the children with ASD failed to impute where 'Sally', a character in the cognitive test administered, might be looking in order to retrieve her marbles which, unknown to her, had been removed by another character, 'Annie'. Rather than assuming that 'Sally' would go searching at the original place where she had left the marbles, the children with ASD pointed to the actual location of the marbles, thus indicating the children's ToM impairment (Baron-Cohen et al., 1985).

JA is a skill that is commonly associated with ToM (e.g., Ishijima, 2012; Sodian & Kristen-Antonow, 2015). Two main acts in JA are initiating and responding to bids for JA. To initiate JA, children must direct their interactive partner's visual attention towards a particular referent while making perceivable their shared intention, by either pointing or gazing. On the other hand, if the children were in the role of a recipient of such an initiation of JA, they must be able to notice and understand the other people's intention to establish a visual sharing task and *follow* the other's directing behaviours (Sullivan et al., 2007). In both doings, therefore, the children must deploy their cognitive skills as to impute information on their interactive partners' visual knowledge (Baron-Cohen, 1989) in order to orient to the partner's behaviours accordingly, a skill that has been found to be problematic in ASD. Operatively, interactional engagement is also affected in children with ASD with impaired ToM. This is given that communication process requires people to be attentive to both their interactive partner and

be mindful of their mental states to act accordingly (Baron-Cohen, 2001) thus without ToM ability, children with ASD will naturally have difficulty to interact competently.

Another cognitive theory widely used in ASD is Weak Central Coherence. WCC refers to a tendency for detail, rather than global - central processing which has been proposed as prominent deficit in ASD (Happé & Frith, 2006). Compared to neurotypical individuals who have the preference to process received information from a global perspective, people with ASD are reported to experience WCC, a condition which initially deemed as an impairment in ASD as they are inclined to focus on specific features and local details to process information (Frith, 1989). This notion however, has been challenged as researchers have found evidence to support that preference for detail processing over global processing is a bias, or an information processing style, rather than a cognitive deficit (Happé & Frith, 2006). This means that, while individuals with ASD tend to focus on small features while processing information, they have the capability to process information globally when required to do so (Sowden, Perkins, & Clegg, 2009).

The theory of WCC predicts that the preference for processing input locally will result in impairment in socio-communicative in ASD. Frith (1989) proposed that individuals with ASD were not able to process meaning in context which grounds their remarkable ability to identify small features, but incapable of understanding global meaning. Although some studies have found supports for Frith's proposal (e.g., Happé, 1997) more recent reports have begun to promote otherwise (e.g., Brock, Norbury, Einav, & Nation, 2008; López & Leekam, 2003; Norbury, 2005). Norbury (2005) for instance found that not all children with autism had a deficit in contextual processing. Instead, any children with language impairment including those without autism would have a difficulty utilising contextual information (Norbury, 2005). As such, it is indicated that contextual processing impairment is not autism-specific; rather, it is

associated with one's language disability. Given that children with ASD commonly have language impairment however, it is reasonable to propose that children with ASD may experience contextual processing difficulties, at least to a certain extent.

WCC has also been used to account for speech-gesture integration impairment in ASD (Sowden et al., 2009). Children with ASD have been commonly reported to have the tendency to perceive features of speech and gestures, but may have difficulties perceiving or utilising both modalities in combination in interaction (Silverman, Bennetto, Campana, & Tanenhaus, 2010; So, Wong, Lui, & Yip, 2015; Sowden, Clegg, & Perkins, 2013; Sowden et al., 2009). In their case studies, Sowden et al., (2009) investigated gesture development in two children with ASD (aged two years old) who had participated in an intervention program. In the study, the author explored the children's use of two kind of gestures, namely, reinforcing (the gesture has similar information as the speech), and supplementary (the gesture provides additional information to the speech) gestures. After the training program, it was found that only one of the children produced reinforcing gestures. In their later longitudinal work involving four children aged between two- to three- years old with ASD, Sowden et al., (2013) reported similar findings. The children had different language abilities but all demonstrated the capability to integrate speech or vocalisations with gestures. However, supplementary gestures that would have aided their speech or vocalisations were either absent or sparsely used (Sowden et al., 2013). In a similar study by So et al., (2015) on speech-gesture integration during spontaneous conversation, in older children aged between six to 12 years old with ASD, the authors also found persistent absence of supplementary gestures in the children with ASD. Such gestures were prominent in their TD peers' repertoire. It is indicative from these reports, therefore, that children with ASD have cross-modal processing difficulties and this has negative consequences for their social interaction.

The previous studies reviewed in the preceding section have predominantly used experimental and quantitative research methodologies. We will now consider CA and its contribution to research into ASD.

1.3 Conversation Analysis (CA)

Conversation analysis (CA) was founded by Harvey Sacks, Emanuel Schegloff and Gail Jefferson in the 1960s (Sacks, 1995; Sidnell, 2010). CA started when Harvey Sacks became inspired by the work of two social scientists; Harold Garfinkel's ethnomethodological approach to interactional analysis, and Erving Goffman's view on the orderliness of social interactions (Sidnell, 2010). The fundamental focus of investigation in CA is on the sequences of talk-in-interaction (Heritage & Raymond, 2005). CA application however has been increasingly common in multimodal, embodied interactions (e.g., Goodwin, 2000). In addition to studying how talk is organised, CA also examines the deployment of other multimodal resources during interactions, which includes bodily movements, eye gaze and head turn.

CA is a meticulous way of examining interaction as it enforces on scrutinisation of the sequential organisation of actions of the participants, turn-by-turn, and all presumptions of the interactional practices and social actions within the analysed data are drawn from the participants' orientation. Conversation analysts will gather naturally-occurring data and examine the order and organisation of an interaction from the participants' standpoint with the interest to explore *how* people do particular social actions that they do (Ten Have, 2007; Seedhouse, 2006).

Its fine-grained approach to data analysis makes CA an investigation technique with many advantages particularly when compared to laboratory experimental-based methods in studying social interaction and understanding. While experimental work is specific and

favourable in identifying relationships between variables in question or the influence of a variable on the other, it poses a restriction to understanding social interaction as a social activity in interactional context. This is because as the experiments are usually conducted in controlled settings, the retrieved data are inevitably eradicated from real-life, interactional environment.

Another important factor that makes CA feasible as an investigation tool in social interaction, such as in the current project is its usability cross cultures. CA is culturally sensitive - which means its examinations may reveal phenomena that are universal or distinctive to certain cultures. Its fundamental principle that concerns with the local organisation of the participants' actions in interactions and the participants' orientations to these actions ensures that it is a method that is not culturally, or setting-biased (cf. Rossano, Brown, & Levinson, 2009). Due to this, as well as its qualitative and comprehensive approach to data examination, CA was deemed the most feasible method for the primary investigation of the current project which involves Malay-speaking dyads from Malay background – a population that has been relatively under-researched. The small data size of this study may not permit a generalisation of the findings to the population at large; however, the detailed analysis of the data would offer relevant orientations to future work.

In the following sub-sections, I will review briefly two prominent aspects in CA namely turns organisation and multimodality in interactions, that will be particularly relevant in understanding the analytical framework for examining interactions in the current work.

1.3.1 Turns in talk-in-interaction

A turn is the 'basic unit of a conversation', and turn-taking system is therefore a fundamental aspect of interaction (Sidnell, 2010, p.36). Sacks, Schegloff and Jefferson (1974) have introduced turn-constructive-units (henceforth, TCU) as the minimal units in a turn which can be 'lexical, clausal, phrasal, or sentential' or even in vocalisations, non-lexical in construction (p.702). A turn can be built of one TCU or more, and turns in interactions are organised in a sequence, which means the participants generally produce their turns one after another (Sidnell, 2010). There are a few established rules of turn-taking system that are found to be universal (Sidnell, 2010). This includes the rule that in a conversation the participants usually take a turn to talk at one time, and while turn orders and sizes are varied rather than fixed, there can be commonplace characters to a transition-relevant-place (TRP) or a point when a turn is completed and the next turn becomes relevant (see Sacks, et al., (1974) for a more detailed list of general rules of turn-takings). In an ongoing conversation, as a speaker reaches a TRP of their turn, the next speaker will have the opportunity to produce their turn, and in many instances are obliged to do so. If for instance, the selected next speaker (the *selection* thus makes them obliged to produce the next turn-in-talk) fails to produce any TCU, their anticipated response will be treated as *noticeably absent* and a response is likely to be pursued. Likewise, if the next speaker produces an irrelevant talk in their next turn, the turn will be treated as problematic, and a *repair* will be sought.

As interactions are sequentially organised, the talk shall progress from one TCU to another, from one speaker to the next. In conversations, the participants must adhere to the 'next turn allocation' (Schegloff, 2007, p.15) rules to make the interaction work. Simply put, in the next turn allocation scheme the next speaker can be selected by the prior speaker and in instances when the next speaker has not been selected in a conversational setting with more

than two participants present, a person can self-select themselves to take up the next turn (Schegloff, 2007). The next turns are particularly important, as Schegloff (2007) explains;

“Next turns are understood by co-participants to display their speaker’s understanding of the just-prior turn and to embody an action responsive to the just-prior turn so understood (unless the turn has been marked as addressing something other than just-prior turn)” (p.15).

The nextness in talk-in-interaction can be further discussed by addressing the utterance sequence known as adjacency pairs (Schegloff & Sacks, 1973). The basic organisation of adjacency pairs involves two turns adjacent from one another by two different speakers, each known as first pair parts (FPP) and second pair parts (SPP) (Schegloff, 2007). The common examples for adjacency pairs are question-answer, greeting-greeting and invitation-acceptance. FPPs project for certain, preferred SPPs. For instance, a preferred response to an offer is an acceptance rather than a decline (Davidson, 1984) and to a question is an answer than a non-answer response (Stivers & Robinson, 2006).

What I wish to highlight here with regards to next-turn-in-talk is that the participants of an interaction must have oriented to the preceding turn to be able to determine who the selected next speaker is (if there is one or otherwise), and what actions are being implicated in the turn in order for them to respond fittingly (Schegloff, 2007). In the current thesis as presented in Chapters 4 and 5, I investigated the next-turns produced by children with ASD following their mothers’ initiating engagement turns (IET). I was particularly interested to examine *if* and *how* a) do the child participants orient to these prior turns, and b) do they display or fail to display the anticipated responses.

1.3.2 Multimodal interactional resources

Although CA was initially developed as a method that focuses on the sequential organisation of talk (Sacks, 1995), the number of studies that take into account multimodal resources in the interactions being investigated have increased rapidly (Deppermann, 2013). To examine talk such as that collected from telephone calls, audio data captured through audio-recorders would be sufficient for the undertaking of the investigations within CA-framework. With the advancement of technology, however, analysts can now video-record their data – a recording technique that enable analysts to capture not only vocal elements, but also non-vocal elements which include body movement, gestures, facial expression and eye gaze that may be useful for examining interactions more thoroughly (Heath, 1985; Korkiakangas, 2011).

In interactions, both vocal and non-vocal behaviours of the participants in an interaction can be deployed to perform actions (Deppermann, 2013; Korkiakangas, 2011). However, vocal behaviours which include talk and non-speech production such as ‘hmm’ and ‘eh’ and non-vocal behaviours which include bodily movements may be used either independently or interdependently of each other (Berger & Rae, 2012). For example, let us consider the following extracts in which different modalities are used by the participants to demonstrate a confirmation or an agreement to the prior talk.

Extract 1.1 (Berger & Rae, 2012, p.1824)

- | | |
|---------|--|
| 1 Coral | =would you like me to heat up your potatuh an green |
| 2 | beans for ya |
| 3 | (7.0 during which Al looks at plate and takes a drink) |
| 4 Al→ | ↑Mhm |

Extract 1.2 (Berger & Rae, 2012, p.1892)

- 1 Leif So you bought it about a year ago
2 Paula→ Hmm ((nodding))
3 Leif You probably have Leopard

Extract 1.3 (Berger & Rae, 2012, p.1892)

- 1 Al My dad had some of them
2 Coral What a train set
3 Al→ ((nod))

The three simple extracts above have clearly illustrated how the similar action of agreeing to the prior talk has been done in different ways (Berger & Rae, 2012). Al in Extract 1.1 produces only a non-talk vocalisation '↑Mhm' to demonstrate his agreement to the offer made by Coral to heat up his food for him; Paula in Extract 1.2, combines both the vocalisation 'Hmm' with a nod; and Al in Extract 1.3 nods without producing any vocalisation. As such it is implicated that participants of an interaction may choose to deploy any modalities available to them.

As exemplified in the above examples, vocalisations and gestures can be utilised independently or in combination to perform one similar action. In other situations, however, the organisation of multimodal resources may only be understood as performing particular actions when the deployed resources are considered interdependently. For instance, Goodwin (2000) had shown how gestural and bodily displays were used in coordination with talk by the speaker (Carla) to challenge the recipient (Diana) in a dispute between them during a hopscotch game. Using the example, Goodwin (2000) has explicated in detail how the

challenge by Clara was built through the deployment of her talk, hand and leg movements as well as body posture. Clearly in the extract it was the combination of the multimodal resources, rather than their autonomous use, that constituted the social actions within the dispute (Goodwin, 2000).

Eye-gaze is also a crucial interactional resource particularly in a face-to-face interaction as gaze can be manipulated to accomplish various actions (Stivers & Sidnell, 2005). For instance, studies have reported that eye-gaze can be used by a speaker in a multi-party interaction to identify a recipient of talk (Goodwin, 1979), or to select a next speaker that shall take the subsequent turn (Lerner, 2003) by orienting visually towards the selected person, usually at or towards the transition relevance place (TRP). On the other hand, gaze is also one of the useful tools to indicate one's reciprocity of a talk (Rossano, 2012). In his book, Goodwin (1981) has detailed how a recipient may display their orientation to an ongoing talk by gazing towards the speaker thus make public their reciprocity. Recipients can also demonstrate their disengagement from the interaction by, for example, gazing away (Goodwin, 1981).

Multimodality is evidently important not only in typical interactions but also, perhaps more so, in atypical interactions. Let us consider how multimodality facilitates the interactions affected by lack of, or impaired verbal abilities in individuals with aphasia. Aphasia is an acquired disorder due to brain injury, and as implied by its name ('*a*' means 'without', and '*phasia*' means 'utterance'), language is the major area that is affected (Parr, Byng, Gilpin, & Ireland, 1997). In one of its types, Broca's aphasia, speech production is particularly impaired. Individuals with Broca's aphasia will have a significant difficulty to speak, although their understanding is generally intact, as demonstrated by Chil, a participant in a study done by Goodwin (2002). With his speech severely impaired and restricted physical abilities (his right limb was paralysed), Chil had nonetheless shown a persistent effort to participate in

interactions with his family members by manipulating the resource still accessible to him; the left-hand movements along with his restricted speech (Goodwin, 2002). Chil was able to use his left hand, in coordination with his co-interactant's behaviours, to produce various interactional gestures to accomplish different social actions (Goodwin, 2002, 2004). In another study, Klippi (2014) reported that individuals with aphasia relied on their pointing gestures as facilitative behaviours not only when they were experiencing difficulties in language production but also language comprehension. Clearly, these multimodal resources are particularly valuable in facilitating impaired speech and language abilities for individuals with language impairments.

The reviews of the studies on multimodal interactional resources have shown the significance of deployment of the various resources in *doing* social interactions. As noted earlier, however, in ASD both vocal and non-vocal resources may manifest as atypical. In the subsequent chapters 4 and 5, I will examine how children with ASD make use of the multimodal resources accessible to them in negotiating their participation in joint engagement activities initiated by their mothers, and how the mothers orient to this. In the next section, I will first consider how CA can be a useful, arguably indispensable research tool to investigate social interaction in ASD.

1.3.3 Conversation Analysis (CA) as an approach to ASD research

Although in its early years Conversation Analysis has been primarily used to investigate mundane, typical interaction (e.g., Pomerantz, 1984a; Sacks et al., 1974; Schegloff & Sacks, 1973); in the latter years more investigations have been conducted to explore interactions involving individuals with interactional challenges (e.g., Dickerson, Rae, Stribling, Dautenhahn, & Werry, 2005; Goodwin, 2004; Stribling et al., 2007). To date, there is an ever increasing

number of studies that deployed CA to examine ASD (O'Reilly, Lester, & Muskett, 2015; Solomon, Heritage, Yin, Maynard, & Bauman, 2015). In this section, I will review a few of the studies which have investigated different pervasive features of the population - mostly interactional - in various settings.

One of the interactional characteristics in ASD that has been researched most is repetitive talk (e.g., Local & Wootton, 1995; Sterponi & Shankey, 2014). Repetitive talk in ASD may be delayed or immediate, and may be of one own's (echolalia) or other people's talk (palilalia) (Local & Wootton, 1995; Sterponi & Shankey, 2014; Stribling et al., 2007; Wootton, 1999). Repetitive talk is a prominent, peculiar feature in ASD (Buium & Stuecher, 1974; Fay, 1969), and has always been considered non-functional (Sterponi & Shankey, 2014). It is usually treated as interactionally irrelevant; however, the studies that have considered this phenomenon as it unfolds in ongoing interactions have suggested that this is not always true.

Local and Wootton (1995) examined the production of immediate echoes of an 11 year old boy with ASD - whom was known as Kevin – by scrutinising their interactional and phonetic features. This was a case study, and the data were collected by video recording the child's in two different settings- at home without the presence of any of the researchers, and at school where a researcher would be involved (Local and Wootton, 1995). The analysis has revealed that there were different *kinds* of immediate echoes produced by Kevin and that 'they varied subtly but systematically in terms of their linguistic, rhythmic and prosodic features' (Perkins, 2015, p.596). In addition, they found that these varied immediate echoes were used by Kevin to indicate his different reactions to directives produced by his interlocutor; and that there was also evidence of the interlocutor's orientation to these differences (Local & Wootton, 1995; Perkins, 2015). As such, Local and Wootton (1995) have

demonstrated that a careful examination such as that using CA may reveal the very subtle characteristics of immediate echolalia usually treated as peculiar and inappropriate.

In a later study involving the data from the same child, Wootton (1999) proceeded to examine Kevin's delayed echolalia. Wootton (1999) found that Kevin's production and deployment of delayed echoes were indicative of his monitoring of other people's interactional behaviours (Wootton, 1999). These delayed echoes were also used to perform different actions during interactions with his family (Wootton, 1999). These conclusions were indeed derived from a careful analysis that took into account the design and placement of the child's verbal and non verbal behaviours, as well as the surrounding talk. Without such a thorough and detail examination of the particular phenomenon of echolalia, the child's repetitive behaviours might only be treated as atypical, meaningless doings (Wootton, 1999).

Sterponi and Shankey (2014) have further extended the exploration of echolalia in ASD. Their work was also a case study, which involved the child and his family members and tutors in the home setting. In their study, Sterponi and Shankey (2014) also showed that repetitions - recurrently produced in what was considered an atypical interaction of a child with ASD - might be feasible interactional devices. They found that the repetitions were deployed by the child with ASD not only to perform different actions such as refuting a directive or redirecting a recipient's attention, but also to demonstrate his stances to his interlocutor's trajectories throughout the interactions (Sterponi & Shankey, 2014). Another CA-based case study by Stribling et al. (2007) has added to the knowledge of repetitive talk in ASD by elucidating more of a type of repetition which has received less attention in the literature, namely, palilalia. Consistent with the other studies reported earlier, Stribling et al. (2007) reported that palilalia, too, was socially and interactionally functional.

The uses of repetitions reported in the aforementioned studies are unusual by normative standard, and understandably are commonly treated as such. Nonetheless, these findings signify the communicative values of repetitive talk and its use for achieving certain communicative goals (Local & Wootton, 1995; Sterponi & Shankey, 2014; Wootton, 1999). The examination of echolalia and palilalia in spontaneous ongoing interactions in which they materialise has revealed their utilities for children with ASD, as well as reflecting the children's capability in putting their atypical behavior to good use.

Similarly, Muskett, Perkins, Clegg, and Body (2010) have used the sequential analysis of CA to uncover the strategic and competent use of inflexible talk; an otherwise atypical symptom of ASD which appeared to have no communicative importance. The girl with ASD in their study demonstrated idiosyncratic use of talk and appeared to be inflexible in deploying interactional devices while playing with the adult co-interactant, who was clearly a speaker with superior interactive abilities (Muskett et al., 2010). Despite the atypicalities of the child's interactional performance, the analysis revealed that the inflexibility was the result of her effort to manoeuvre and control the interaction thus suggesting her skill in managing her limited interactional resources (Muskett et al., 2010). More specifically, the authors have shown that the child's inflexible talk was actually her interactional means to avoid the adult's interruption of her ongoing play (Muskett et al., 2010).

CA analyses of embodied action in naturally - occurring interactions involving children with ASD have also been particularly beneficial in providing richer understanding of the children's non-verbal interactive behaviours in triadic engagements. For example, Rendle-Short, Cobb-Moore, and Danby, (2014) examined play interactions between two girls including one with Asperger's Syndrome to understand how they 'get into and out of spontaneous activities' (p.797). Through their multimodal analysis, they showed how both children were

capable of demonstrating appropriate use of verbal and nonverbal actions such as smiles, laughers, bodily movements and eye-gaze to display their alignment and disalignment with the other's play trajectory (Rendle-Short et al., 2014). This, however, required complex interactional abilities from both participants, thus could be more challenging for the girl with Asperger's Syndrome at times.

Korkiakangas' PhD work (2011) has offered a nuanced understanding of non-verbal behaviors in ASD, particularly smile and eye-gaze. The analysis of eye-gaze demonstrated by the children with ASD has revealed the children's competency in manipulating the behaviour as an effective interactional resource (Korkiakangas, 2011). Korkiakangas (2011) also focused on the use of smile as an interactional tool. In particular, she examined relevant data from a boy with ASD called Niko. The analysis showed that Niko's smiles were consistently produced in two different environments; first, when his talk reached the end of his turn and second, as a way to repond to his interlocutor's (i.e., his teacher, Katja) verbal actions. In both situations, Niko's smiles were accompanied by gaze towards Katja, thus suggesting the social-ness of his smiles (Korkiakangas, 2011). Also, that Niko's smiles co-occured with gaze and gestures suggested his capability to orient to his interlocutor's different, subtle interactional projections. The systematic coordination between the smiles and eye gaze has also been found to do varied social actions (Korkiakangas, 2011).

Indeed, CA approaches to multimodal interaction has allowed for a meticulous analysis of atypical interactions, including those involving individuals with ASD. As mentioned earlier in this thesis, a speaker with speech impairments usually utilise other non-speech resources (e.g., vocalisations or gestures) in place of the talk (Goodwin, 2000). This thus will project for more collaborative interactional work from the recipients in identifying the social actions the speaker attempts to establish. CA's nature that focuses on the courses of actions between the

participants thus allows scrutinisation of the concerted sense-making between the participants (Geils & Knoetze, 2008). Muskett, Body, and Perkins (2012) have shown that a detail examination of *reciprocal* interactions between participants might reveal interactional competencies in individuals with communication impairments. By analysing the interaction between a clinician and a child with ASD turn-by-turn during the administration of a labelling task, Muskett et al. (2012) have demonstrated that it is possible to recognise the child's abilities to 'perform complex and multifaceted actions' (p.98). In the study, the child participant has demonstrated the capacities to reflect upon his own performance during the task as well as to monitor and react accordingly to the examiner's feedbacks.

In an earlier study, Finlay, Walton, and Antaki (2008) have shown how a competent interactant's actions can contribute to apparent challenges demonstrated by the less-competent interactant in institutionalised interactions. The authors examined interactions between staff and residents in residences for people with intellectual disabilities and discovered that the staff might actually affect a resident's responses negatively. The staff were found to produce questions, or talk in a way that might be inappropriate for the resident's capabilities (Finlay et al., 2008). This has led to, for example, difficulties in answering for the residents (Finlay et al., 2008).

Fasulo and Fiore (2007) highlighted CA's applicability in a clinical setting. Somewhat comparable to the findings from Finlay, Walton, et al. (2008), they showed how interactional challenges could actually materialise from the actions of the competent speaker - a therapist - rather than those of the children with ASD who the therapist was interacting with (Fasulo & Fiore, 2007). The analysis demonstrated that interactional problems were not necessarily caused by children with ASD when talking with neurotypical partner. In addition to reflecting how one could undermine an interactional activity with individuals with inferior abilities by

focusing on their atypicalities, the study also highlighted the importance of therapeutic services to be based on knowledge of naturally occurring talk-in-interaction. Constrained by specific aims or goals to be achieved in a particular interactional session, a therapist may easily go against the nature of *natural* interaction thus affecting what would have been a successful interaction.

Certainly, CA investigations in ASD have not been limited to interactional aspects only. To exemplify, Maynard (2005) has studied the impairment of global understanding in children with ASD. As mentioned in the earlier section of this thesis, individuals with ASD generally have a difficulty to perceive global information as they are prone to focus on the local details instead. Maynard (2005) explored this particular impairment of ASD by scrutinising a child's responses in an interaction with a clinician that took place during the administration of the Brigance subtest assessment which was used to examine the child's perceptual ability. The analysis has revealed that 'the logic and the design' of the test has placed constraints to the child's responses (Garcia, 2012, p.356). While some of the child's answers to the 'What Do You Do When' questions were deemed incorrect by the test's standard and suggested the child's global perceptual limitation, Maynard (2005) have shown the logics underlying the child's responses, and offered a sound explanation of "practical reasoning in autistic intelligence" (p.500).

The analysis and findings of the studies reviewed above have clearly suggested CA's feasibility, utility and advantages as a research tool for investigating ASD. Careful contemplation and reflection on the use of CA offered in these ASD studies have further emphasised the great potential of CA to serve as an alternative to traditional research approaches (e.g., psychological, experimental and observational approach) (Muskett & Body, 2013; Muskett, Body, & Perkins, 2012; O'Reilly et al., 2015; Sterponi, de Kirby, & Shankey,

2014). Investigations of the characteristics of children with ASD - involving all aspects such as language, communicative, and social features - have mainly been conducted using 'cross-sectional and experimental' design (Sterponi et al., 2014, p.2). While the advantages of the conventional methodologies to studies in ASD cannot be undervalued there are, however, some limitations especially in the extent of spontaneous interactional details that they may explore. Such studies may miss identifying the children's atypical behaviours that are potentially functional, and fail to consider the importance and influences of context and interlocutors on interactions (Sterponi et al., 2014). The qualitative examinations of CA however, allow a detailed, moment-by-moment micro-inspection of all interlocutors' behaviours and thus may lead to comprehensive understanding of how the interlocutors may influence, and may be influenced by each other's behaviors, as well as how they may interrelate with other, co-occurring elements such as the interactional context (Sterponi et al., 2014). As such therefore, CA is rightfully a valuable research tool for studies of typical and atypical interactions, with its use is by no means limited to any one particular setting.

1.4 Studies on parent-child interaction involving children with ASD

Adults particularly mothers, fathers, grandparents, carers and teachers are common interactive partners for children. Differences have been observed in the adults' interactional styles and the influences they have on the children's development. Nonetheless, their inputs and contributions in adult-child interaction are undoubtedly valuable and important for children's communication skills. Due to the scope of the current project, however, only mothers will be participating and their involvement in interactions with their children will be investigated and as such, the following review will be focusing on this cohort.

The literature has shown that maternal supports in the establishment of joint engagement with their young children are considered important and advantageous for children's social and language development. Adamson et al. (2004) in their observational, longitudinal study found that mothers' assistance in the formation of shared attention was essential for children to learn to instil symbols into their interaction. Mothers' behaviours that scaffold the children's attention to a referent, their support to children's interests, and their fitting reactions to children's communicative acts during interactions are also proven to encourage children's vocabulary, language and social development (Hoff & Naigles, 2012; Tamis-LeMonda, Bornstein, & Baumwell, 2001). In a cross-sectional study involving mothers and their typically-developing children aged two- to five- year old, Kloth, Janssen, Kraaimaat, dan Bruten (1998) recorded the dyads interacting in two different settings of interaction, coded and analysed the communicative behaviours quantitatively, and found that the mothers mainly used three different communicative styles which they categorised as either 'non-intervening, explaining or directing' styles (p. 149). Bornstein et al. (2008) reported that the mothers in their study did not only react to their young children's bids for responses, but also to the children's behaviours that might not explicitly demand their feedback. The mothers were found to initially produce mainly informative commentaries on their children's activities, but later began to treat the children more as an interactive partner as they reach their second year of life by also instigating verbal input from them (Bornstein et al., 2008).

Maternal participation in parent-child interactions involving atypically developing children, such as those with ASD, is also considered essential for helping the children's social communication development. For instance, Siller and Sigman (2002) investigated the effects of synchronisation of caregivers' behaviours with their children's focus during play on the children's language and joint attention development. They found that such synchronisation positively influenced the development of children's joint attention and language. McDuffie and

Yoder (2010) reported that parents follow-in during interaction with their children would encourage the children's vocabulary growth. Also, Bottema-Beutel et al. (2014) noted that parents' supportive interactive technique in which they talked on something that was within their children's focus appears to be facilitating the children's receptive language growth.

In a study that investigated the relation between the engagement's initiator and parents' interaction styles in play involving toddlers with ASD, Patterson, Elder, Gulsrud, and Kasari (2013) found that parents' directiveness was positively related to parent-initiated engagement, while parents' responsiveness associated with child-initiated engagement. Studies into parents' styles have also revealed some differences between the manner the parents use to interact with typically developing children and children with disabilities including those with ASD, and also between children with ASD of different severity (e.g., Strid, Heimann, & Tjus, 2013). Strid et al. (2013) found that although parents of children with ASD and those of typically developing children produced synchronised comments, the former did so significantly less than the latter (Strid et al., 2013). Also, parents of speaking children with ASD produced such comments in a greater frequency compared to parents of non-speaking children with ASD (Strid et al., 2013). In an earlier study, Kasari, Sigman, Mundy, and Yirmiya (1988) reported that caregivers of children with better communicative skills appeared to impose control less and instead engage their children more in mutual play compared to the parents of children with less communicative abilities. They also found that caregivers from the latter group tended to regulate their children's behaviours in order to maintain their physical involvement and orientation to the activity they were involved in (Kasari et al., 1988).

Parent-child interaction involving ASD has also been studied from conversation analytic perspective. These studies have commonly addressed, in great details, the interactional phenomena, processes and patterns in parent-child interaction (e.g., Brouwer et

al., 2011; Sterponi & Fasulo, 2010). Using a case study of a boy with ASD called Aaron, Sterponi and Fasulo (2010) examined how Aaron utilised repetitive talk as ‘progressivity techniques’ to participate – competently – in interactions with other people, as well as the contributions of his interlocutors in further facilitating the child’s participation (p.121). Particularly relevant to this section is how the analysis has unearthed the mother’s behaviours as providing scaffolds for the child’s participation in the interaction (Sterponi & Fasulo, 2010). The mother was seen to orient to the interactional sequences in which she and her child were involved in as pretend play and to consistently use verbal play, which demonstrated her trust in her child’s capability to partake in the talk sequence (Sterponi & Fasulo, 2010). Also, Aaron’s mother has consistently oriented to his input as acceptable and deployed different scaffolding techniques such as reformulation of the child’s talk and adhering to the child’s capability level that have further projected for his participation in the interactional activity (Sterponi & Fasulo, 2010).

In another study Brouwer et al. (2011) examined the interactional patterns of parents of children with disabilities including ASD in making sensible of their child’s peculiar actions. The analysis indicated that the parents utilised different techniques that were “finely tuned and fine grained as well as very locally situated” (p. 171). These techniques employed by the parents were found varied in what they were projecting (e.g., orienting to child’s action as irrelevant, or, relevant, providing verbal or physical assistance) but nonetheless functional in facilitating the child’s participation in the interactional sequence (Brouwer et al., 2011).

Clearly illustrated from the above review, parents are argued to have significant influence and roles in children’s communication development. It is important to note however, that it is still not clear *how* parents’ contributions to interaction are manifested in parent-child talk, and how they are oriented to by the mothers as well as the children in an ongoing interaction. In this thesis, I will examine these areas further. In specific, I will inspect how

mothers instigate an engagement with their children while playing with them and how the mothers' acts of initiation for joint engagement are responded to by the children.

1.5 The rationale and aims of the present study

The *jointness* between two or more individuals and a referent in joint engagement is what making it social and allows people to relate with others. Joint engagement skills typically develop from infancy (usually referred to as joint attention), however as previously mentioned children with ASD are known to lack the ability to engage efficiently with other people. Nonetheless, children with ASD are reported as potentially capable of partaking in social interactions, although this might be restricted to selective situations (Ochs & Solomon, 2010). Findings from careful investigations into their interactional instances have revealed that children with high-functioning autism or Aspergers demonstrate abilities in social coordination with other people, for instance by displaying appropriate, or 'proximally relevant' contributions to interactions (Ochs & Solomon, 2010, p.79). Even non-verbal children with more severe ASD may be capable of participating in social interaction when the interaction is not dependable on talk alone, in that other mediums of communicating such as gestures and eye-gaze are regarded and treated as potentially communicative (Ochs & Solomon, 2010).

Nonetheless, particularly attributable to their perspectives and adopted methodologies, past studies typically fail to recognise or acknowledge the potentials of the *atypical* skills of children with ASD as communicatively functional (Sterponi et al., 2014). This has led to limited effort being placed into researching the prospect. With regards to the impairment in JE, it is not clear how the children with ASD utilise their vocal and non-vocal *(in)capabilities* as a participant in joint engagement episodes. In addition, the coordinated interactional activity that needs to occur between children with ASD and their communicative partners for an engagement to establish is under researched; and *how* their lack or impaired

responding actions affect the pursued engagement are not clear. The consequences of the children's actions or their absence on the ongoing, supposedly shared, intersubjective activity is not known. Information on the manifestation of the children's impaired skills and how they are managed by mothers, or by the children themselves during the interaction warrants further investigation.

Furthermore, past studies have effectively informed us about mother-child joint engagements and maternal styles as well as the contributions of these aspects to the development of children's communication skills. However, both mother-child JE and maternal styles have rarely been investigated as part of sequential interactional processes in their original setting, an interaction. Elements such as bids for joint attention or responses to the bids, by either a mother or a child, have been typically coded and investigated in isolation from the pre- and proceeding events within the particular interactions (e.g., Adamson, Bakeman, Deckner, & Nelson, 2012). The accounts on *how* and *why* a) JEs occur or fail to occur in interactions and b) maternal styles affect JE are not readily available. Also no explicit descriptions of the influential roles of both mother and child with ASD on each other as interlocutors of an interaction have been found. A detailed investigation of *how* joint engagements between Malay-speaking mothers and their children with ASD unfold, are pursued, and accomplished or failed to accomplish was therefore needed to fill up the mentioned gaps in the understanding of joint engagement in ASD. In addition, this study will contribute to the much needed research on language and communication involving Malay speaking children particularly those with ASD (cf. Xiang Neik, Wah, Min, Hwee, & Keong, 2014). It cannot be assumed that findings in Western cultures pertain to all cultures. While studies on joint engagement and maternal responsiveness have been conducted in many languages other than English (Seedhouse, 2006), no studies could be found in the Malay language. The present project involved Malay-speaking mothers and their typically-developing children and would

therefore serve as an avenue for a rudimentary exploration of the language and its speakers which have been limitedly studied and reported in the literature.

The main purpose of this study was to explore how mothers and their children with autism regulate actions in achieving joint engagements in interactions during free plays. As such, I intended to examine responses offered or failed to be offered by children with autism following their mothers' bids for an engagement. Another focus of the present study was how actually mothers initiate an engagement with their children in talk-in-interaction. In order to accomplish the aforementioned goals, the Conversation Analysis (CA) approach (Sacks et al., 1974; Seedhouse, 2005) was applied. CA, a method that perceives interactions as 'organisational and procedural' (p.9), allows natural, non-experimental analyses and descriptions of the mother-child interactions and takes into consideration the contributions of each participant during the talk-in-interaction (Sidnell, 2010). This approach of analysis permits a detailed investigation of the interlocutors' turns-at-talk that are anticipated as influential to the next and of the previous (Seedhouse, 2006). The application of the methodology allows a fine-grained analysis of the turn-by-turn interactional process of an engagement accomplishment, and equally inspects the child's and mother's involvement as significant contributors of the endeavour. This might inform us *how* exactly the mothers and their children affect each other in shared engagements establishment or non-establishment. More specifically, the objectives of the present study were to:

- 1) examine how the children with ASD respond to initiations for JE during free play interactions with mothers
- 2) consider the interactional resources available and deployed by the children with ASD in managing engagement pursued by mothers

- 3) investigate the different social actions accomplished by mothers in initiating JE with their children
- 4) review JE frameworks and how CA augments the understanding of an establishment and construction of JE.

The present work was not however, meant to argue or test any theories of ASD or joint engagement. As such, the investigation involved examinations of naturally-occurring data collected from video recordings as will be explicated in the methodology chapters. Considering that studies on Malay-speaking children in general and parent-child interaction involving Malay speakers in particular are scarce, it was deemed important that a preliminary study being conducted to involve typically-developing children prior to the main study of children with ASD. This will be explicated in more detail in the following section as well as in Chapter 2. I will now proceed to explain the arrangement of the thesis in the following section.

1.6 The arrangement of the thesis

Thus far I have reviewed relevant studies to provide a background to key themes of the current work which would focus on sequential analysis of multimodal interactions between children with ASD and their mothers. However, given that data of Malay-speaking children are very limitedly available in the literature, I embarked on a pilot study which aimed to gather communicative data of TD children from the Malay-speaking population in Malaysia. The pilot study also sought to determine the main focus for the main investigation of the current PhD project. The details of the pilot study will be explicated in Chapter 2.

In Chapter 3, I will describe the methodology of the primary investigation. This will include information on the child participants with ASD and their mothers, and the procedures for data collection and analysis. The next three chapters (Chapters 4, 5, and 6) are dedicated to

present the conversation analytical work of the interactions between the participants. The analytical chapters begin with the examination of the instances in which the child participants with ASD demonstrate compliance to their mothers' initiations for engagement (Chapter 4). In particular, I was interested in scrutinising how the children organise their actions to display their compliance and how the mothers orient to this. Following this, I examined the instances in which the child participants demonstrate resistance to the mothers' initiations for engagement (Chapter 5). My aims for this chapter will be to examine the construction of the displays of resistance by the children, the autism-specific behaviours materialised from these displays, and how the mothers respond to them. In the last analytical chapter, I will focus on examining maternal initiating actions (Chapter 6). In particular, I will explore the different initiating actions deployed by mothers in their pursuit for joint engagement with their children with ASD. I will also discuss how the different initiating actions serve as a feasible tool in establishing joint engagement with their children with ASD.

In the last chapter of the thesis (Chapter 7), I will draw a conclusion on the sequential analysis of the interactional data. I will also consider the construction of joint engagement using CA perspectives. In addition, I will discuss the research analytic implications as well as the implications of the project for speech and language therapy intervention aimed at optimising language learning interaction. Finally, I will consider the limitations of the current work and recommend areas for further investigations.

Chapter 2

STUDY 1

2.1 Introduction

Although the underlying theme of the current PhD project is ASD, in order to calibrate the data from the children with atypical profiles, it was decided to gather and analyse data from interactions between Malay-speaking children who were typically-developing (TD) as well as those with autism spectrum disorders (ASD), and their mothers. This PhD project consists of two studies which will be referred to in this thesis as Study 1 concerning typical children and Study 2 concerning the data collected from children with ASD. In this chapter, Study 1 will be detailed as the outcomes had an influence on how Study 2 was shaped. Firstly, the aims of Study 1 will be explained and secondly, the methodology will be described. This includes the design of the study, and the information on the participants, the data collection settings, measures, materials and equipment. Issues related to the methodology, ethics and sensitivities will also be considered and discussed. The outcomes of Study 1 will then be presented. As will be explicated, the data gathered from the free play sessions will be used in the main study.

2.2 The aims of Study 1

Study 1 was designed to be conducted prior to the development of the primary study, the main purpose being to serve as an exploratory work to identify the potential focus for an in-depth investigation on interactions involving children with ASD at the main project level. As noted in the earlier chapter past studies on the interactions involving Malay-speaking children have been limited in number and scope, and none were found to focus on parent-child interaction (e.g., Lim, Wells, & Howard, 2015; Phoon, Abdullah, Lee, & Murugaiah, 2014).

Consequently, no information on parent-child interaction of Malay speakers was readily available for reference in this study. Also, although CA's approach to investigation focuses on moment-to-moment interaction sequences in-situ, an analyst's examination of the data is based on the common interactional behaviours and practices of the speakers from the investigated population. Due to the unavailability of *typical* interactional data of Malay-speaking dyads in the literature therefore, it was considered useful if such data were gathered in Study 1. Such data would be particularly advantageous as comparative data to that of children with ASD in Study 2 (cf. Korkiakangas, 2011) as well as for possible cross-referencing purposes.

In addition, given that *culture* is recurrently discussed as an influential aspect for parent-child interaction (e.g., Burns, 2008; Kärtner, Keller, & Yovsi, 2010), an exploration in this direction was also pursued. In particular, I was interested to explore the Malay mothers' perspectives on parent-child interaction. To achieve this, I used a questionnaire developed by Johnston and Wong (2002) which focuses on parents' view on childrearing, child learning and child-directed speech as will be elaborated in greater details in later sections of this chapter. It was hoped that the results from the questionnaire would add to a comprehensive understanding on Malay-speaking mothers' roles and participation in parent-child interactions.

It is important to reiterate that at stage 1 of the project, it was not yet determined that CA would be deployed as the *principal* method of the investigation. The limitation in the number of published studies on Malay-speaking children meant that there was very limited information in any form on Malay-speaking children's language and communication skills accessible from the literature including normative data. As information on typical language and communication abilities may be useful for cross-referencing in a study involving atypical interactions such as in Study 2, it was considered necessary that some backgrounds to the

child participants' language and communication skills to be determined. As noted earlier however, standardised language assessments that were normed to Malay-speaking children were not available (Ooi & Wong, 2015). Therefore, for the current work, two measures that are based on English-speakers were utilised to explore the children's language and communication abilities; the Preschool Language Scale-4 (Zimmerman, Steiner, & Pond, 2002) and the Children Communication Checklist-Second Edition (CCC-2; Bishop, 2003). These measures were first translated into the Malay language, as will be further explained in the following sections. As such therefore, Study 1 also aimed to determine the applicability of the two measures for further use with Malay-speaking children as well as to trial the design of the study for use in the primary work. In summary, the objectives of Study 1 were to:

1. initiate the investigation into parent-child interaction involving neurotypical Malay-speaking children
2. investigate the mothers' perception on aspects of parent-child interaction
3. establish the trajectory of investigation in Study 2
4. determine the design of Study 2.

2.3 The methodology of Study 1

2.3.1 Study design

Study 1 was explorative and data driven in design. Descriptive analysis method was employed as necessary to document thorough findings of the dataset. Given that the current work is qualitative in approach, there were ethical challenges such as those related to consent, data confidentiality and participants' privacy (cf., Ryan, 2004) that merit further consideration, as will be deliberated in the following section.

2.3.2 Ethical consideration

Prior to the participant recruitment and data collection, ethical approval was sought and gained from the University of Sheffield (a copy of ethics approval form in Appendix A). The ethical clearance application focused primarily on ensuring that the proposed project adhered to appropriate research conduct for the benefits of everyone involved particularly the researcher, and the participants. As part of the application documentation, research information sheet and consent form which would be distributed to the participants were prepared (see Appendix B and C for samples of the information sheet and consent form). The research information sheet included particulars considered necessary to inform the participants of the research and their potential participations. It was intended that by reading the information sheet the participants would acquire adequate understanding which would help them determine whether they wanted to partake in the research.

Both the information sheet and the consent form were given to the adult participants prior to them being in direct communication with me as the investigator. My contact details along with my supervisors' were also mentioned on the sheet and the participants were invited to be in touch if they had any further inquiries of the research prior to consenting or declining to participate. Participant recruitment was done by approaching the public via two avenues; nurseries around Kuantan, Malaysia and IIUM staff emails. For the recruitment at nurseries in Kuantan, the information sheet and consent form were distributed to the parents with the help of the teachers as mediators (more explanation on the recruitment process in the next section). Interested parents were requested to fill up and return the consent form to the teachers before they were contacted for further discussion on the research and their involvement.

IUM staff who responded to the email which contained a description of the project, pre-set criteria for participant and invitation for participation was then invited to contact me by email or phone for further discussion. Following this, the information sheet and consent form were emailed to them. As such therefore, no direct contact was made with the participants before the potential participants had the chance to read necessary information of the research, and only interested individuals would be followed-up. This was considered necessary as an effort to avoid breaching of privacy and minimise the risk of coerced participation (cf. Speer & Stokoe, 2014). It was also noted that the wordings of research-related documents - how ever carefully chosen to avoid jargon which might affect their clarity - (British Psychological Society, 2014), could still be too *technical* or unclear to be understood by individuals outside the research team. Studies have shown that having signed the consent does not necessarily imply that the participants have fully understood the information received (Alby, Zucchermaglio, & Fatigante, 2014). In past studies, it has been found that information sheet may lack certain details, although it is also possible that even with sufficient information the participants might still have additional, legitimate queries (Alby et al., 2014). By allowing some time for the potential participants to read the written information and consider, as well as time for further discussion with the investigator, therefore, it was anticipated that they had ample opportunity and understanding to make an informed decision regarding their involvement in the research.

The process of consent-gaining of the participants in this PhD project is a noteworthy matter, particularly because it involved child participants, including those with ASD. Much has been discussed in the literature that reflects how important but complicated the aspect of gaining informed consent from *all* participants really is, especially when informed consent is sought from children and individuals with vulnerability (e.g., Dockett, Perry, & Kearney, 2012; Gallagher, Haywood, Jones, & Milne, 2010; Kirk, 2007; Oulton et al., 2016; Speer & Stokoe,

2014). It is considered ethically appropriate that children be included in the decision making process, however, there are also concerns of their vulnerability and needs for adults' protection as well as limited capacity to consent (Sibley, Sheehan, & Pollard, 2012). Young children particularly those under 10 years of age are generally considered incapable of making informed consent (Lambert & Glacken, 2011) although the age range may be extended to 18 (Lindeke, Hauck, & Tanner, 2000). For these children therefore, informed consent is typically sought from their parents, however, it is always good research practice to gain *assent* from the children (Gallagher et al., 2010; Lambert & Glacken, 2011). In the current work, consent for research participation was given by the mother for both herself and her child. As such, no direct consent was gained from the child, only their assent to participate in the activities.

At the start of the first meeting with the participants, a round of explanation regarding the investigator and the research (e.g., self-introduction, the purpose of their gathering, the research purpose, what was expected from the child and their mother, and the freedom for the participants to decline, at any time, from participating or continuing) was made. Explanation to the child was also made in a simplified, informal Malay language considered appropriate for children. The child's assent or agreement to take part in the research was pursued at this stage. With the children's assent, the data collection session would proceed. Their agreement was closely and continuously monitored by the investigator by observing any signs of non-cooperation, non agreement, withdrawal, or tiredness. Considering that the signs of fatigue or decreased cooperation might be subtle, I frequently sought the mother's confirmation of her observation of the child's condition mid- and in between activities as necessary to ensure the child's ongoing willingness to continue.

With regards to the confidentiality of data collected from the participants and presented within this thesis, as commonly raised in qualitative studies, anonymisation is an

issue that needed to be carefully considered. Anonymisation is indeed an important (O'Reilly, Karim, Taylor, & Dogra, 2012) but complex matter as it does 'not only concern how to anonymise data.... but also what to anonymise' (Mondada, 2014, p.181, own emphasis). The participants were thus informed that all data would remain confidential and would only be accessible by my supervisors and I. Pseudonyms were used in place of the participants' real names throughout the data management, analysis and presentation processes. On the consent form it was also clearly stated that the participants' face might not necessarily be anonymised and all of the participants had consented to this. To ensure that the participants' identities were preserved, however, their faces captured on the screengrabs and included in the extracts used in this thesis were all blurred (examples of this in Section 2.3.5.4).

Another aspect of the research mentioned on the information sheet which consent was sought for was the data collection venue. The adult participants were invited to decide whether they wanted the data collection to take place at the Hearing and Speech Clinic, IIUM, or in their own home. This option allowed for some flexibility in the arrangement for the data collection venue and was deemed necessary to facilitate the participants' choice of a location most convenient for them. The venue for data collection was selected and consented by mothers (i.e., the adult participants). Despite the attained consent however, it was noted that there were other ethical and methodological issues particularly pertaining to collecting data in the participant homes such as privacy, data confidentiality, pragmatic and safety that warranted careful consideration prior to, and in the process of, the data collection. Discussion on the data collection was made before the home visit to ensure that the participants were well informed of the research procedures, particularly on the activities that would be conducted and the estimated duration.

The mothers were also reminded that the data collection session would be recorded and thus a well lit but quite room or space in the house with minimal distractions would be needed for this purpose. This was mainly for ensuring the clarity of the recording as well as to avoid disruptions that might jeopardise the participants' comfort or privacy (cf. MacDonald & Greggans, 2008). It was also clarified during the discussion prior to the home visit that the mother would be required to play with their participating child using the toys prepared by the investigator. Consequently, majority of the mothers had made relevant arrangements so that the session could be conducted with minimal risk for interruptions. For instance, there were mothers who made an arrangement with either their spouse to mind their other children, or an older child to play with the other younger ones. There were also mothers who requested for the session to be conducted while their non-participating children were at school.

During the visit, I stayed in the room or space of the house as allocated by the participants to minimise the invasion of the participants' personal space. I was also careful to ensure that only the participating mother and child were recorded; and should any other family members were recorded accidentally the bit of recording would be excluded from the data analysis. Suitable with the research aims and needs, the video recorder was static (mounted on a tripod) thus only limited space determined in advanced by the participants would be captured in the recording. As such therefore, the participants had the control over what aspects of their household would be recorded (cf. Silverman, 2016). The time of data collection was also determined by the participants as they felt most comfortable and willing. Time adjustments were also tolerated to ascertain that the participants were as comfortable as possible at the time of data collection.

Another concern in doing data collection in the participant homes is researcher safety. Although the research topic was considered low risk (cf. Paterson et al 1999), threats to

researcher safety is always possible and therefore precaution is essential (Parker & O'Reilly, 2013; Paterson, Gregory, & Thorne, 1999). As safety measures, I was always chaperoned by a family member (i.e., a brother or father) who drove us to the participant homes and waited right outside the house the whole time. The participants were informed of the chaperone's presence. Also, the data collection sessions involved more than a participant (i.e., at least a mother and her young child would be present) thus further reducing the risk of safety issue compared to if I was alone with a participant of opposite gender (cf. Parker & Oreilly, 2013). Nonetheless, I made sure that I had a fully charged mobile phone to make emergency calls if necessary.

2.3.3 Participants

The data recruitment procedure for Study 1 that was based on convenience sampling was deemed appropriate to the explorative nature of Study 1. Although the results might not necessarily be representative of the entire Malay-speaking population, the data collected would be adequate for a preliminary analysis of the interactions between mothers and their children from this group. Following the ethics approval from the University of Sheffield, nurseries and kindergartens around Kuantan city in the state of Pahang and Shah Alam in Selangor were contacted to initiate communication with the managers regarding the study. The contact details of these centres were obtained from the advertisement displayed for public at the centres or on their websites. From this early discussion with the centres, three nurseries in Kuantan, Pahang and two in Shah Alam, Selangor through their managers confirmed their interest in participating in the project. With the permission from the managers of the centres, the research information sheets and consent forms were then distributed to the parents with the assistance of the teachers as the middle persons. An announcement on this study was also made by emails sent to the staff of the International Islamic University of

Malaysia (IIUM), Kuantan at the same time the communication with the preschool centres took place.

One dyad was recruited from the recruitment involving nurseries around Kuantan and 11 from the advertisement distributed by email to IIUM staff. In total therefore, twelve children and their mothers participated in this study. The pre-set criteria of the potential participants were that both the children and adult participants must have the Malay language as their primary language, and the children must be typically developing and with no known disabilities, and aged between three years to five years and 11 months. The age range was chosen for the current study because it was the usual range of paediatric patients seen in Malaysian clinics. All of these children were already exposed to English by the time of the study, as the language was also used as the secondary language at home or at their nurseries, or both. Similarly, all of the mothers in this study had the Malay language as their primary language and English as their second. Using English as the second language is common in Malaysian population from an early age.

The demographic details of the child and adults participants are presented in Tables 1 and 2 respectively. Note that the children's listed names are all pseudonyms to secure their anonymity. The number of the syllables of these made-up names' however, was consistent with those of their real names' to allow for a detailed analysis of the interaction.

Table 1: The background information of the child participants' in Study 1

Pseudonym	Age (year; month)	Gender	Research venue
Adlina	3;1	Female	Home
Amir	3;1	Male	Home
Amila	3;5	Female	Hearing and Speech Clinic
Razi	3;8	Male	Hearing and Speech Clinic
Anny	3;9	Female	Home
Difa	4;0	Female	Home
Aina	4;3	Female	Hearing and Speech Clinic
Zack	4;7	Male	Hearing and Speech Clinic
Alif	4;7	Male	Home
Hetty	4;8	Female	Hearing and Speech Clinic
Azlan	5;0	Male	Home
Adik/Deena	5;2	Female	Home

Table 2: Mothers' demographic data

Pseudonyms	Age (year; month)	Occupation
Mother of Adlina	28;2	Lecturer
Mother of Amir	30;2	Lecturer
Mother of Amina	29;7	Technologist
Mother of Razi	33;11	Lecturer
Mother of Anny	44;0	Teacher
Mother of Difa	30;9	Secretary
Mother of Aina	32;5	Optometrist

Mother of Zack	41;10	Lecturer
Mother of Alif	38;5	Homemaker
Mother of Hetty	30;5	Lecturer
Mother of Azlan	32;10	Medical Officer
Mother of Adik/Deena	41;7	Secretary

2.3.4 Data collection

In this section, the settings, measures, materials and equipment used in the data collection work would be described.

2.3.4.1 Settings

The data collection took place at either the participant homes or at a room at the Hearing and Speech Clinic, International Islamic University Malaysia in Kuantan, Pahang. The venue for the data collection was determined by the adult participants according to their preference as reported in Table 1.

2.3.4.2 Measures and materials

Four measures were included in Study 1; the Malay version of Preschool Language Scale-4 (PLS-4; adapted from Zimmerman, Steiner, & Pond, 2002), the Malay-version of Children Communication Checklist-Second Edition (CCC-2; adapted from Bishop, 2003), a questionnaire on mothers' perception of parent-child interaction (adapted from Johnston and Wong, 2002) and the examination of the mother and child interaction recorded during free play and snacking time using the CA approach.

2.3.4.2.1 The Malay version of Preschool Language Scale-4 (PLS-4; adapted from Zimmerman, Steiner, & Pond, 2002)

The Preschool Language Scale-4 is a standardised language assessment used to measure receptive and expressive language skills of children as young as newborn to the age of six years and eleven months. Other than to confirm the language abilities of the child participants, this test was included in the current project to allow for an exploration of its potential and feasibility for further inclusion and investigation within this PhD project.

The translation of the PLS-4

For use in this study, the instructions and questions of the Auditory Comprehension and Expressive Communication of the PLS-4 were first translated into the standard Malay language. This was done by me as a native speaker of the Malay language, and had English as her second language. More specifically, the tasks including the introductions that were to be used by the examiner were translated into the formal spoken language of Malay (sample of the Malay version form in Appendix D). This was to ensure the consistency of the instructions delivery, and to avoid any biases that could occur if the informal spoken language was used during the administration of the test. The Malay version of the PLS-4 was then translated back into English by a Malay-speaking speech-language pathologist from Malaysia who was also very proficient in both the Malay language and English. The back-to-back translation work was to ensure the accuracy of the translation and consistency between the Malay and the original versions of the test. Following this, the Malay version of PLS-4 was reviewed by an experienced Malay-language teacher who has had an extensive training and experience in teaching the language particularly to children to verify the suitability of the words used in the translation. All of the experts' comments and suggestions were discussed and a conclusion made for each of the issue raised.

The modifications to the items of the PLS-4

In addition to the translation, modifications were also made to the items in the Auditory Comprehension and Expressive Communication assessments. In total, seven items from the Auditory Comprehension, and seven from the Expressive Communication were modified to ensure that they were more appropriate for Malay-speaking children. The modifications made are explicated in Appendix E.

2.3.4.2.2 The Malay-version of Children Communication Checklist-Second Edition (CCC-2; adapted from Bishop, 2003).

Test background and rationale for inclusion

The CCC-2 is a checklist that is to be completed by an individual who is familiar with the child evaluated, usually a parent or any adult who has had the opportunity to spend time with the child for at least three to four days each week for three months in minimum (Bishop, 2003). The CCC-2 is comprehensive in the sense that it does not only examine a child's different aspects of communication abilities such as syntax, semantics, and use of context, it is also able to detect features that are considered as atypical (Bishop, 2003). The checklist was included in this study with the aim to profile the child's communication abilities as per maternal rating, including those that are not necessarily observable during the data collection session but might be important in later analysis.

The CCC-2 checklist takes five to 15 minutes to finish, and consists of 70 items which are categorised into 10 scales. The checklist was developed and standardised for children from English-speaking background in the United Kingdom and Australia, and therefore there are some items that might not be appropriate for children from other culture. As will be detailed

later in the 'Changes to the items in the CCC-2' subsection, modifications were made to these items to make them or the scales they are prescribed into more feasible for use with the Malay-speaking children in the current project.

The translation of the CCC-2

As it was with the PLS-4, the CCC-2 too was first translated into the Malay language. This Malay version was then given to a certified translator for a back-to-back translation. The translator was proficient in both the Malay and English languages, having had the languages as her first and second respectively, and obtained a doctorate degree in Linguistics from a European university. The translator had not looked at the original version of the CCC-2 prior to this. All of the inconsistencies noted between the translated and the original versions were discussed. The Malay version of CCC-2 was also checked by a language teacher for verification (sample of the Malay version of the CCC-2 is provided in Appendix F).

Changes to the items in the CCC-2

In the process of translating the CCC-2 into the Malay language, there were items that were perceived as potentially jargon for use with the Malay population and therefore required modifications. The modifications made to the items to be used in the Malay-version of the CCC-2 are described in Appendix G.

2.3.4.2.3 Questionnaire on mothers' perception of parent-child interaction (adapted from Johnston & Wong, 2002)

The questionnaire background and rationale for inclusion

The questionnaire was developed by Johnston and Wong (2002) in their study that compared maternal perspectives of parenting and aspects of parent-child interaction between mothers from Chinese and English backgrounds. The questionnaire consists two sections; one that explores the mothers' views on their children's interaction and abilities, and what they think important for the children's development, and the other focuses on how the parents talk to their offspring (Johnston & Wong, 2002). This questionnaire was included in the current study to explore the beliefs and practices of the Malay-speaking mothers' regarding interaction with their children.

The translation of the questionnaire into the Malay-language

As were the two aforementioned measures, the questionnaire was also first translated into the Malay language, and the accuracy of the translation was verified using the back-to-back translation procedure by the linguist. The Malay version of the questionnaire was also then checked by the language teacher to ascertain its clarity for use with mothers from Malay backgrounds.

All items from the original questionnaire were translated and included in the Malay-version (the Malay version of the questionnaire form in Appendix H). All of the words used in the Malay-version of the questionnaire were those that were considered common in the Malay population. To achieve this, two modifications were made to the questionnaire; 'Sally' in item 7 was replace with a Malay female name 'Salmah', and 'wawa/water' and

'*jamies/pajamas*' that were given as the examples in item 10 were substituted with '*cucu/susu*' (milk) and '*mamam/makan*' (eat).

2.3.4.2.4 Mother-child interaction sampling during free-play and snack time

The interaction between the adult and child participants during play and snack time were also video recorded. The sampling procedure was included to allow for a detailed analysis of all verbal and nonverbal behaviours of the participants during the mother-child interaction using the CA approach.

Materials for the conversations sampling

The toys and materials that were pre-determined and included during the free play were a set each of vehicles, wild and farm animals, fruits, and kitchen tools; a doll, a colorful chain, bubbles, a shape ball puzzle, a puppet, and a big-sized book. Cookies and drinks were also made available for the snacking session following the free play activity.

2.3.4.3 Recording equipment

The segments when the PLS-4 was conducted and the free play took place between the dyads were video recorded to enable later transcriptions and analyses of the interactions between the mothers and their children. Video recording would also allow for detailed analyses of the participants' discernible behaviours during the interactions, and pertinent contextual settings that might be useful for the investigation. A Sony HDR-XR260 recorder and a tripod were used for this purpose. The video recorder was mounted on the tripod and was placed in the room in which the data collection being carried out at a corner that would allow for as full and as clear view as possible. However, efforts were being made to ensure that the

recording equipment did not obstruct the participants in any ways, and contributed to as minimal distraction to them as possible. The child participants were also allowed to explore and manipulate the recording equipment prior to the recording session, in order to let them be comfortable with having the machines around (cf. Speer & Hutchby, 2003).

2.3.4.4 Data collection procedures

Each data collection session in Study 1 lasted in between one hour and forty-five minutes to two hours. The measures were conducted in the following order:

- 1 The administration of the Malay version of PLS-4 (adapted from Zimmerman, Steiner, & Pond, 2002).

The Malay version of PLS-4 was conducted as per the test administration guidelines provided in the manual to investigate the children language abilities. This activity, which took approximately 30 to 40 minutes to be completed, was also video recorded for later analysis.

- 2 The video recording of mother-child interaction during free-play and snack time.

The mothers and their children were first recorded playing together using a set of predetermined toys for 15 minutes. The mothers were instructed to play and interact with their children as they usually would. The dyads were then recorded eating snacks together for 15 minutes. The video recording was necessary as to allow observations of any nonverbal communication that might occur during the interaction. The interaction that took place during these sessions was transcribed and analysed using CA method.

- 3 The completion of Malay-version of CCC-2 (adapted from Bishop, 2003).

This task involved the mothers completing the checklist on their own and it took approximately 15 minutes to be completed.

- 4 The completion of questionnaire on parents' perception of parent-child interaction (adapted from Johnston and Wong, 2002)

This activity involved the mothers completing the questionnaire on their own and it took approximately 15 minutes to be completed.

2.3.5 Data analysis and findings

2.3.5.1 Data collected from the administration of the Malay version of PLS-4

The whole process of preparing the Malay-version of the PLS-4, its administration during the actual data collection, and the children's performance were analysed qualitatively. Although the children's responses to the Malay version of the PLS-4 tasks were scored as per the guidelines provided in the manual, the determination of their language skills levels based on the normative data given was however not possible. This was due to the non-applicability of the normative data to the children involved in this study, and due to the extensive modifications needed to be made to the PLS-4 for use in the current project that have affected the test's items. The inclusion of the Malay-version of PLS-4 in Study 1 however, leads to findings that merit further investigation as presented below, although they were not necessarily pursuable in the current project.

The analysis of the administration of the Malay-version of the PLS-4

The administration of the Malay-version of the PLS-4 in this study took approximately between 18 to 60 minutes (mean: 36.33 minutes) before the test was brought to cease, either due to the completion of the test or child factors (i.e., signs of fatigue or uncooperativeness demonstrated or a request to stop the test made). From the 12 sessions, the test was successfully completed (that is, with the basal and ceilings established) in two sessions only. Although the underlying reasons for the poor rate of test completion could only be speculated at this point, the issue of the test's length and the formality of language used may be interesting and promising aspects for further investigation.

Due to the modifications made to the PLS-4 as part of its translation work into the Malay language and the fact that the participants were not from the population included in the standardisation group, neither the standardised scores nor the age equivalence given in the manual could be used to interpret the performance of the children. Consequently, no further analyses of the children's scores could be undertaken. Although this finding appears to hamper the benefits of the inclusion of the Malay-version of PLS-4 in this study, it actually highlights the issue of potential invalidity and inapplicability of adapted standardised assessments commonly used in Malaysian clinics (Lian & Abdullah, 2001; Ooi & Wong, 2015). Due to the aforementioned limitations noted from the inclusion of the Malay-version of PLS-4 in this study it was decided that it would not be included in Study 2.

2.3.5.2 Data collected from the administration of the CCC-2

As was the PLS-4, the normative data provided in the CCC-2 was also based on the English-speaking population. As explicated in 2.3.3.2.3, there were also items in the CCC-2 that

needed to be excluded from the Malay version. This has affected the number of the items in the checklist, and consequently, the calculation and interpretation of the participants' answers based on the test guidelines could not be conducted. Furthermore, the scoring derived from the mothers' answers could not be used against the normative data provided in the test to reflect the performance of the child participants' in this study or to determine whether these children have communication impairments.

Nonetheless, the information gathered from the mothers has provided valuable insights into their children's interactional abilities which could not be identified during the research sessions. The information gathered from the Malay-version of CCC-2 and the previously discussed PLS-4 as well as from the observation made throughout the data collection sessions have made it possible for me, based on my experience as a speech therapist and a native Malay-speaker, to make an informed judgement that the children were within *typical* range. Note that this phase of study was explorative, therefore the inclusion of CCC-2 was initially deemed as appropriate to gather as much information on the children's communication abilities as possible, and the findings were to be used for cross-reference purposes as necessary. Due to the limitations of the Malay-version of CCC-2 as well as the decision to pursue a CA-in-approach investigation on parent-child interaction in the primary work of the current project as would be explained in 2.3.4.4, it was determined that this checklist would not be included in Study 2.

2.3.5.3 Data collected from the administration of the Questionnaire

The data collected using the questionnaire were also analysed descriptively. For analysis purpose, the questionnaire items were divided into two categories, similar to the analysis conducted by Johnston and Wong (2002). The first category was the percentage of the

mothers' agreement of the first 20 statements pertaining to children's learning and how they should be reared, and the second was the frequencies of maternal practise of child directed speech. Note that the sample size in the present study was small (N=12) compared to the number of participants in Johnston and Wong (2002) (N=97), and that the mothers who participated were those of TD children while those in Johnston and Wong (2002) had children with language delay (as shown in Table 3). For these reasons therefore, any reference of the results of the questionnaire in the current study to that of Johnston and Wong's must be done with caution. It is acknowledged that the results of the current study may not be comparable to those of Johnston and Wong's, however, to offer a clear perspective into the differences of the results, both sets of findings are presented in Table 3 (the complete results in Appendix I).

As shown in Table 3, the analysis revealed that all of the Malay mothers in the present study considered speech as key for their children to socialise with peers (item 4). It also appeared that only 16.7% of the mothers agreed with item 7 which indicated that the majority of them thought that children's ability to recognise an object was more crucial than that of proper titles for use in addressing other people. It was also reflected in the findings that 66.7% Malay mothers considered baby talk as unfavourable to children's speech development (item 10), 91.7% believed that children would learn through playing and 100% agreed that the children would automatically develop communication skills provided that they were being talked to (item 17).

Table 3: Percentage of mothers' agreement on 20 statements on childrearing and learning

Item	Johnston and Wong (2002)		
	CHINESE (N=42)	ENGLISH (N=44)	MALAY (N=12)
1	67	43	66.7
2	93	86	100
3	76	73	83.3
4	91	66	100
5	93	98	100
6	90	95	100
7	55	89	16.7
8	38	41	33.3
9 ^a	57	36	25
10	26	43	66.7
11	60	91	16.7
12	91	39	58.3
13	93	61	58.3
14	86	100	91.7
15	88	86	91.7
16	71	82	83.3
17	31	27	100
18 ^a	62	64	16.7
19	50	86	50
20	71	36	66.7

^a Percentages stated are for 'disagree' and 'strongly disagree' to be consistent with Johnston and Wong's report, as the maternal rates in their study for these items were prominently negative

In relation to child directed speech (Table 4), it was found that the Malay mothers in this study employed a pedagogic-oriented style in their interaction with their children. Many Malay mothers would correct their children’s errors in communication by addressing the mistake when the children used words incorrectly (91.7%). Also, not a single Malay-speaking mother would disregard when the children said something incomprehensible. The Malay mothers also appeared to be accommodating in conversation with their children. All mothers reported that they would follow their children’s lead in conversation, and 91.7% of them would modify their talk when the children were unable to comprehend them.

Table 4: Percentage of mothers stating that they employ a child-directed speech style ‘very often’ or ‘almost always’

Item	Johnston and Wong (2002)		
	CHINESE (N=42)	ENGLISH (N=44)	MALAY (N=12)
21	40	43	91.7
22	29	84	33.3
23	31	59	0
24	7	55	100
25	43	75	75
26	69	82	66.7
27 ^a	57	66	33.3
28	79	91	91.7
29	52	91	83.3
30	64	46	83.3
31	2	21	58.3
32	21	73	75

^a Percentages stated are for ‘hardly ever’ or ‘sometimes’ to be consistent with Johnston and Wong’s report, as the maternal rates in their study for these items were prominently negative

These findings provide preliminary information related to the Malay-speaking mothers views on child nurturing and their learning. It was acknowledged though, that further investigations would be needed to confirm whether these findings are generalisable to the whole Malay-speaking population and to determine how these maternal beliefs materialise in or influence the interactions with their children. As such, these findings have instigated potential directions for future research, although they may not be automatically pursuable or applicable in the primary investigation of the current project.

2.3.5.4 The analysis of the video data of the interaction between mothers and their typically developing children

The video recordings of approximately six hours of interaction between the adult participants and their children during free play and a snacking time were first viewed to examine the technical aspects of the data. From the viewing work, it was found that while all dyads appeared to be engaged in the free play activity and spent the whole 15 minutes playing; none of the dyads actually reached 15 minutes for snacking with the average time spent for snacking was seven minutes. It was found that the snacking activity was fused with free play for eight dyads with one child refused to have her snack altogether. It was concluded that a snacking activity following a free play might not be an efficient setting for collecting parent-child interactional data and thus this setting would not be included in the investigation of interactions involving children with ASD in Study 2. It was decided that the free play context alone would be sufficient for collecting interactional samples in Study 2. To permit a consistent interactional setting and context, it was determined that the data from the free play sessions in both Study 1 and Study 2 would be treated as the *key* data set in this thesis.

The data viewing also revealed that the child participants tended to move around while playing and frequently moved beyond the camera's view. As a result, visual data of the children's behaviours during these instances were not available. It was therefore decided that two cameras would be used in Study 2 to allow for ample space for the participants' movements during play while ensuring that their actions could still be recorded.

Interactional data preparation and reviewing process

For both Study 1 and Study 2, the parent-child interactional data were analysed by using CA approach. The examination of the interactional data from free plays between Malay-speaking mothers and their TD children was instigated prior to the commencement of the data collection involving children with ASD and their mothers in Study 2. The initially 'unmotivated looking' (Ten Have, 2007, p.121) of the dyads' sequences of talk have led to the interest to focus specifically on *joint engagement* between the mothers and children for the primary investigation of the current project. The data from the free play interactions involving TD children gathered in Study 1 would serve as a comparative data to the ASD data and thus would be treated and presented in Chapters 4, 5 and 6 as part of the primary work.

Transcription work

Transcription is particularly important for qualitative studies, and is fundamental to data analysis in CA (Davidson, 2009; Sidnell, 2010). Transcription is generally regarded as 'a process that is theoretical, selective, interpretive, and representational' although the 'distinctive theoretical and methodological positions about how transcription should represent language and how researchers approach transcribing language to understand the world' may differ across disciplines (Davidson, 2009, p.37, own emphasis). Selectivity in doing transcription, rather than a drawback, is actually a necessity to allow indepth, focused analyses

of particular pieces of data (Davidson, 2009; Ochs, 1979). As aforementioned, in the current work all video data were initially reviewed without pre-set focus although the review might have been guided by the particular interest on how parent and child were *doing interaction* while playing. Typical to CA approach (Sidnell, 2010), specific patterns or phenomena which then became the main analysis focuses began to emerge following the *unmotivated* review. Subsequent to this, the data were then examined to gather instances when these phenomena occurred, before they were transcribed.

The Jefferson's Transcription Convention was developed in the 1960s but was first published in 1974 by Gail Jefferson (Bezemer & Mavers, 2011; Hepburn & Bolden, 2012). Eversince, it has been used by conversation analysts worldwide in their studies on natural discourse. The convention consists of symbols and notations that work, and 'continues to evolve', for representing audio and video data (Atkinson & Heritage, 1985, p.ix). The Jefferson's Convention is already thorough, precise and systematic for representing verbal actions, but nonetheless adaptable according to the focus or requirement of analysis particularly those that involve non-verbal actions (see for example, Goodwin, 2000). As such, the main difference between the Jefferson's transcription convention and other transcription systems or common orthography is how Jefferson's makes possible documentation of the fine details of not only *what* are being said by participants but also *how* these are said (Hepburn & Bolden, 2012; Jefferson, 2004). These specific symbols to represent different aspects of an ongoing interaction may appear meticulous, but necessary, considering the basis of CA that emphasises on investigating and documenting data as naturally occurring and in situated interactions (Mondada, 2012). CA transcripts must therefore accurately reflect what is actually produced by the participants, not what shall be said or what is inferred to be said (cf. Jefferson, 1996). Also, CA transcripts employ 'vertical scriptlike display' (Ochs, 1979, p.48) of

the turns-at-talk; a design of transcription lay out that is consistent with the basic principle of CA that assumes talk as organised sequentially (Sacks et al., 1974; Schegloff, 1968).

In many CA studies, transcripts consist of documentations of participants' talk as these investigations typically focus on interactions that relied primarily on verbal acts, such as telephone calls (see for example Bolden, 2006; Schegloff & Sacks, 1973). There is also, however, an increasing trend of multimodality analyses in CA which include examinations of both verbal and non verbal actions (Deppermann, 2013; Stivers & Sidnell, 2005). Transcriptions in these studies may appear complex and multifaceted but are useful as a rich source for both non-vocal and vocal information. As such, multimodal transcriptions thus allow conversation analysts to scrutinise the participants' ongoing, embodied course of actions such as seen in Goodwin's work (2000). Without such objectified documentations of the participants' behaviors, many non verbal aspects of the interaction may be missed during an analysis (cf. Jefferson, 2010). By conducting multimodality analysis in his study, Goodwin (2000) for instance has illustrated the import of talk and accompanying gestures as equally crucial as interactional tools in performing different social actions.

The collected instances in the current work were transcribed using a system informed by Jefferson's transcription convention (2004) (list of the symbols in Appendix J). As described, the focus of the current investigation involved parent and child interacting during play thus meant that the dyads were likely to be doing more than just talk. To ensure that sufficient and transparent information were provided in the transcriptions (Davidson, 2010) therefore, it was considered crucial that the transcriptions included the non verbal behaviors of the participants to ascertain that all interactional behaviors could be inspected. In child language studies, particularly involving children with atypical language development, examining their non verbal behaviors is imperative as these behaviors may be an alternative interactional modality, rather

than an accompaniment (cf. Rendle-Short, Cobb-Moore, & Danby, 2014). In order to examine the parent-child engagement establishment therefore, non verbal behaviors that occurred as well as the particular juncture of the interaction when they actually occurred would be noted. Additional symbols and marks were employed to the transcriptions to detail these aspects of interaction as exemplified in the following Example 1 that was taken from Extract 5.8 of Chapter 5.

Example 1

5 = ((Amin holds M's index finger and pushes M's
 6 hand [away/ Frame 2])=
 7 M: [h i : [: d u n g
 nose
 8 A: = [(y e y)
 yey
 --2/ Frame3-

((² Amin moves forward to take another piece of puzzle))



Frame 2



Frame 3

Screen grabs may also be provided as necessary and they would be labelled with Frame X (e.g., Frame 2). These screen grabs are provided to ensure that the readers would have the exact illustration of the participants' positioning and/or actions at marked instance (Bezemer & Mavers, 2011). Also, during a turn, a participant may produce a non-vocal action which will be marked by a superscripted number (e.g., ² following line 8 in the given example) and the action will be explained within the double brackets that follow. Also note that the dotted lines and the bracket across the lines marked where certain talk and/or behaviours actually overlapped. In Example 1, it could be seen that M's '*dung*' in line 7 is produced as Amin pushes her hand away (line 6), as well as in overlapped with his '*yey*' in line 8 and the non-vocal actions indicated by superscript ² and Frame 3. A superscript or a frame label that are placed at a particular point of a talk would indicate that *that* is when the particular action *actually occurs* such as shown in line 5 in the following Example 2 which is taken from Extract 5.5.

Example 2

5 M: ²Tu apa tu?^{3/Frame2}[>(ni-
That what that? this-
That what (is) that? [this-
 ((² Hetty takes her hand off goat))
 ((³M picks goat up; Hetty looks at the animals on the table, smiling))

6 H: → [Banyaknya haiwan⁴hai↑wa[n
 [(the) abundance of animal[s



Frame 2

As exemplified in the extracts, the transcription presented in the following chapters included the English translation of the participants' talk provided directly below the line of the turn. Translation is indispensable in multilingual studies such as the present work, although transcription with translation may pose additional challenges (Davidson, 2009; Egbert, Yufu, & Hirataka, 2016). For instance, in doing translation the translator needs to be proficient or native in the original language and the language the data are translated into. Also, additional lines for the translations will be created on a bi- or multi-lingual transcript, thus affecting its layout and potentially, its readability (Davidson, 2009; Egbert, Yufu, & Hirataka, 2016).

There are now many studies using CA that are conducted in languages other than English (cf. Moerman, 1996); the lingua franca of research disseminations in almost any given discipline. The aspects of translation-in-transcription such as its presentation, process, challenges, and effects on the analysis work (or its verification), however, have been scarcely addressed and under-researched. While aspects of translation in CA would be an interesting avenue for future research, this would not be a focus nor would it be discussed in great length in the current study. There are currently many variations as to how conversation analysts present their in-transcription translation. For example, some analysts may provide three-line transcripts that encompass a line of verbal data in the original language of investigation, a line of morpheme-by-morpheme English translation and another for the gloss of the data meaning in English (see for example, Park, 2016). Other analysts may utilise two-line transcripts that

consist of a line of the approximation of English translation following the line of the data in the original language (see for example, Klippi, 2014).

For the purpose of the present project, the translation included was that considered as sufficient to guide readers' understanding of the Malay data and arguments made. I translated all of the utterances that contained words in the Malay language word for word into English. The word for word translation was to avoid potentially preconceived interpretation of the meaning of the participants' talk being imposed on the English translation (see Jaffe, 2007, for her comments on translators' influence on translation). Such a direct translation, however, usually resulted in ungrammatical English, and in some instances the translated talk may be incomprehensible particularly for readers from the non-Malay speaking background. In these cases therefore an additional line is included in which the most possible meaning of the talk in the particular line was given. It is important to note however, that the analysis was based on the original Malay data.

2.4 Conclusion

The challenges and constraints noted from the adaptation and administration work of the Malay versions of the PLS-4 (Zimmerman, Steiner, & Pond, 2002) and the CCC-2 (Bishop, 2003) have emphasized the value and advantages of CA as a research method for use with an under-researched population, particularly those with limited local resources, such as the Malay-speaking. From the analysis and findings of Study 1, it was decided that the main study of this thesis would now deploy CA as the principal approach to focus on joint engagement in parent-child interactions during free play sessions. With the decision to pursue a detailed CA work on parent-child interaction during free play involving Malay-speaking children made, it was also determined that the questionnaire on maternal perceptions on parenting, children's learning and child-directed speech would not be included as a measure in the primary study. It

was also decided that only free play context would be employed as the setting for the interactional data elicitation in Study 2.

Chapter 3

METHODOLOGY OF STUDY 2

3.1 Introduction

The second and final phase of the current project (i.e., Study 2) involved the collection and analysis of data from mother-child interactions involving Malay-speaking children with ASD and their mothers. This study is cross-sectional, qualitative in design, and commenced after the preliminary analysis of Study 1. Study 2 focuses on exploring the interaction that occurs during dyadic free plays using the CA approach. In this chapter, the methodology of Study 2 will be detailed. Where there is an overlap in the methodology between Study 1 and Study 2, cross-reference to Chapter 2 will be made.

3.2 Participants

The participants in Study 2 were recruited based on convenience sampling. The recruitment process commenced after the ethical clearance was obtained from the University of Sheffield (a copy of the ethics clearance form in Appendix K). The participants were recruited through two avenues, the Autism Malaysia society, and the Hearing and Speech Clinic, Department of Audiology and Speech Language Pathology, International Islamic University of Malaysia (IIUM). Announcement of the study was made on the Facebook page of Autism Malaysia society with the permission of its founders. Following this, I was contacted through Facebook personal message or telephone by a number of parents indicating their interests in participating in the study. The parents who indicated willingness to be contacted were sent a message to thank them for their interests, and an explanation of the study and the participant's criteria were given. A copy of the Research Project Information Sheet and

Consent Form were also sent to them (sample of these in Appendix L and M). In the information sheet and consent form, description of the research team, the research background, participant criteria, data collection procedure and data management, and advantages and disadvantages for participating were provided. Also it was noted that they were free to withdraw their participation at any time. The participants were then contacted to further discuss their eligibility to participate as well as to provide them an opportunity to ask any questions. Eleven dyads were initially recruited; however, three mother-and-child dyads withdrew from the study before the commencement of the data collection.

At the same time the communication with the members of Autism Malaysia group took place, permission to conduct the study at the Hearing and Speech Clinic, IIUM was sought and gained from the Kulliyah of Allied Health Science, IIUM. Subsequent to this, the potential participants were identified from the patients list with the help of the staff of the Hearing and Speech Clinic. Parents of the potential child participants were contacted to be informed of the study, and those who were interested in participating were sent the Research Project Information Sheet and Consent Form. Two mother and child dyads were recruited through this means. As the child participants in Study 2 were also considered legally incompetent to give consent for participating in research (cf. Kelly, 2007), consent was sought from their mother. Their comfort and willingness to partake in the research activities, however, were closely monitored with the mother's assistance.

The children who participated in this Study 2 aged between three years to six years 11 months. This age range is a year more than the age range of the child participants in Study 1. The age range of the child participants was extended for Study 2 to encourage more dyads to take part in the study considering that it was difficult to recruit sufficient number of participants during Study 1. Despite the extension, the age range was still considered

preschool age in Malaysia. It was therefore decided that children older than five years 11 months with ASD would also be accepted for involvement in Study 2.

All of the child participants had been diagnosed with ASD by qualified professionals in Malaysia prior to their involvement in the current study. Due to the limitations in getting the access to the diagnosis reports, the information on the children’s diagnoses was gathered from parental accounts during an interview with the mothers prior to their participations in the study. At the initial stage of the study it was intended to only include children who were at the milder end of the spectrum. Due to the difficulty in participants recruitment, however, it was determined that any parents with children with ASD who volunteered or expressed their interest to participate would be accepted, provided that the other requirements were met. To verify the diagnosis, the Malay version of the Questionnaires for Parents of the Childhood Autism Rating Scales (CARS-2: adapted from Schopler, Van Bourgondien, Wellman, & Love, 2010) was administered. The child participants also had the Malay language as their primary language. This language requirement was also met by the adult participants for the dyads to be included in the project. The demographic details of Study 2 participants’ are presented in Tables 5 and 6.

Table 5: The demographic details of child participants in Study 2

Pseudonym	Age	Diagnosis	CARS-2 results	Research venue
Imanudin	4;6	Severe to profound	38 (Severe)	Home
Yusri	4;7	Mild to moderate	35.5 (Mild to moderate)	HSC
Irfan	5;7	Mild to moderate	31 (Mild to moderate)	Home
Ali	6;0	Autism (severity not confirmed)	33 (Mild to moderate)	Home
Damien	6;0	Mild to moderate	30 (Mild to moderate)	Home

Taufiq	6;1	Mild to moderate	26.5 (Minimal to no symptoms)	Home
Azam	6;2	Mild to moderate	30 (Mild to moderate)	Home
Amin	6;7	Mild to moderate	30 (Mild to moderate)	Home
Adi Hasnan	6;9	Mild to moderate	43 (Severe)	HSC
Amru Hadi	6;11	Severe to profound	40 (Severe)	Home

Note: HSC: Hearing and Speech Clinic

Table 6: The demographic details of adults participants in Study 2

Pseudonym	Age (years; months)	Occupation
Mother of Yusri	33;8	Lecturer
Mother of Amirudin	34;6	Homemaker
Mother of Irfan	37;2	Government officer
Mother of Damien	28;7	Homemaker
Mother of Ali	32;4	Homemaker
Mother of Taufiq	35;0	Assistant administrator
Mother of Azam	38;0	Government officer
Mother of Amin	39;11	Government officer
Mother of Amru Hadi	38;1	Homemaker
Mother of Adi Hasnan	35;11	Lecturer

3.3 Data collection

3.3.1 Settings

Similar to Study 1, the participants were also allowed to choose their preference for the data collection venue, either at the Hearing and Speech Clinic, IIUM, or at their own

homes. Such flexibility was necessary because as was also observed in Study 1, there were parents who were reluctant to be video recorded at home and requested to be seen at the clinic, while some preferred to be visited at home for reasons such as time or transportation constraint. Different from Study 1, the participants in Study 2 were seen twice; therefore the venue for the second data collection session was always (re)confirmed with the mother at the end of the first session. Two dyads were seen at the Hearing and Speech and Language Clinic, IUM, while the other eight dyads were visited at their homes.

3.3.2 Materials and equipment

The main aim of Study 2 was to conduct a detailed examination of the naturally-occurring interactions between the adult participants and their children with ASD during free play. To allow for such analyses to be undertaken, the dyads took part in two 30 minutes free play sessions; one in the first visit and another in the second, and these sessions were video recorded. Prior to the free play sessions in the first meeting, the CARS-2 (Schopler, et al., 2010) was administered to verify the child participants' diagnosis.

In this study, two video cameras were used for recording the free play activity instead of one as reported in Study 1. The use of two cameras was required to allow for better recording view as the cameras would be able to capture the participants from two different angles. The recorders used in this study were Sony HDR-XR260 and Sony HDR-PJ230E. Each video recorder was mounted on a tripod and was positioned at two corners of the room that were considered the most appropriate in the sense that they would not obstruct the participants' movements nor they would be too distracting for them. The arrangement of the video recorders was also determined by considering the optimal positions that would permit maximum and clearest view of the participants throughout the play. Similar to Study 1,

necessary precautions were taken to ensure that the participants were comfortable with having the machines around.

3.3.3 Data collection procedures

Study 2 involved two meetings with the dyads, which took place at either the participants' homes or at the Hearing and Speech Clinic, International Islamic University of Malaysia. The data collection was designed into two separate sessions to ensure that the duration of each meeting would not exceed one and half hours which could potentially be tiresome particularly for the child participants. The two free play sessions conducted over two separate meetings were also to ensure that the participants' performance was as natural as possible, given that they could be presumed to be entirely comfortable with the recording equipment and therefore would not be affected by its presence. In addition, it was also as a preventative measure in the case of uncooperativeness or behavioural issues demonstrated by the child participants.

At the start of the first meeting, the participants were briefed on the procedures of the data collection, and they were encouraged to ask any questions. Following this, the adult participants would complete the maternal background form. Next, the CARS-2 (Schopler, et al., 2010) was administered. The dyads were then given a bag of pre-determined toys prepared by me and the mothers were encouraged to play with their child as they normally would outside the research setting. In the second meeting, the dyads were once again asked to play together. Prior to the second meeting however, the mothers were requested to bring their child's favourite toys into the free play as an addition to the toys provided by me. This was to give more variability of the toys selection for the participants to play with. The inclusion of the child's own toys into the task was as per the suggestion made by Vismara and Lyons (2007)

who noted that such materials would be attractive to the child and expectedly able to encourage the child's participation. The free play sessions in both meetings were video recorded for later analysis.

3.3.4 Data preparation and analysis

The data collected from the administration of the Childhood Autism Rating Scales ([CARS-2] Schopler, et al., 2010) was analysed following the guidelines provided in the manual. Note that the results of the analysis were not meant to serve to diagnose the children, however they were used to gather as much evident as possible to corroborate the child's diagnosis that was reported by the parents and to confirm that the child was on the spectrum.

The primary data consisted of 10 hours of videotaped free-play interaction between the children with ASD and their mothers. The video data were viewed, transcribed and examined following the CA approach with some additions to the transcription conventions as previously described in Chapter 2. The data from the free play involving Ali and his mother however could not be included in the analysis. This is attributable to the poor quality of the recordings that has affected the clarity of the data. The analytical work into joint engagement in the interactions involving children with ASD will be presented in the next three chapters. The six hours video data of free play between TD children and their mothers were also analysed and presented as comparative data to allow a thorough understanding of the joint engagement phenomena.

Chapter 4

CHILDREN'S COMPLIANT UPTAKE OF MOTHERS' INITIATING ACTIONS IN JOINT ACTIVITY

This chapter considers how children with ASD's behaviours are organised, displayed, and oriented to as displays of compliance following mothers' introduction of a joint task. This chapter aims to use CA to delineate the organisation and design of children's talk, and the interactional use of body movements in participating in events that promote triadic JE. In particular, I will focus on the children with ASD's next-turns as recipients of engagement-initiating bids and the mothers' orientation to these. In order to investigate this area more thoroughly, data from both typically-developing (TD) children, and those with ASD groups will be analysed.

4.1 Introduction

During an interaction, a speaker usually performs actions that seek particular responses from the recipient (Pomerantz, 1984b). Past studies have detailed on the different ways one can display their reciprocity to the preceding interactional turns (e.g., Heath, 1985; Xu, 2014). In many occasions, receipts can be done vocally. Vocal productions as short as 'eh', 'hmm' or those that resemble sighs may be interactional tools when placed at the fitted juncture of a talk sequence (see for greater discussion Hayashi, 2009; Hoey, 2014). In his examinations of patient-physician interactions, Heath (1985) has also delineated how one's bodily displays can also be a marker of their reciprocity of future interaction. These bodily displays which may involve a repositioning or aligning with the co-participants have been shown to be important resources for the progressivity of interactions (Heath, 1985). There are many instances however, when a mere token of reciprocity may not be sufficient to be relevant

within the interaction. For example, recipients of directives will be expected to design their next turns to demonstrate their reciprocity and also, perhaps more essentially, to fulfil what has been required with the directives (Craven & Potter, 2010). Kent (2012a) shows how young neurotypical children are able to manipulate their talk and bodily behaviours to demonstrate compliance, non-compliance or even to delay compliance in response to parents' directives during mealtimes. It is important to reiterate however that these responsive actions are widely examined from typical perspectives. As such it is not clear how children with diagnoses such as ASD would design their reciprocity of other people's talk, or their responses to social bids.

Studies have shown that investigations on social engagement skills and performance in children with ASD that are conducted within their naturally-occurring communicative contexts are much needed. When examined within their interactional contexts, the behaviours demonstrated by children with ASD that are commonly referred to as *problematic* such as gaze aversion, idiosyncratic talk, echolalia, and repetitive behaviours may actually be signs of covert abilities (Geils & Knoetze, 2008; Korkiakangas, 2011; Sterponi & Shankey, 2014; Stribling, Rae, & Dickerson, 2009). In this chapter, I will examine in detail how children with ASD, with the resources or atypicalities that they may demonstrate, construct their next turns following maternal bids and come to participate in a joint activity with their mothers. The main concern of the analysis, in particular, is the children's displays of compliant uptakes that allow for engagement establishment.

4.2 Data

All video data collected from the children with ASD and TD children were reviewed, and instances of established engagements between the children and their mothers were

identified. In particular, I was interested in the instances when the engagement sequence was initiated by the mothers. These instances were then examined in greater detail to inspect the children's interactional behaviours within these sequences, and the sequences in which the children appeared to show compliant uptake were further scrutinised and included in this chapter.

Although the data from all participants were reviewed, the extracts included in this chapter are of those that are considered to clearly exemplify the phenomenon of interest; the children's compliant responses following their mothers' engagement initiating turns in free play sessions. The examples were extracted from the video data of five typically developing children and their mothers, and five children with ASD and their mothers. Typically developing children expectantly demonstrate typical abilities in communication and play. Their data is included to first identify what modalities they utilised in responding to their mothers, and second, to serve as comparative data that would allow relative analysis between their use of interactional modalities and those of children with ASD.

4.3 Analysis and findings

The analyses in this section will focus on exploring the children's next turns following the mothers' bids for a triadic interaction in instances where the engagement between them and a shared referent is successfully achieved. These next turns are designed by the children to project their compliant uptake in response to the bids. The analysis shows that the children's acts of compliance are done through the deployment of talk, bodily acts, or multimodal actions, which will be considered separately. In order to construe the interactional actions that the children's next-turns are designed to accomplish, I will also address, briefly, the organisation of the mothers' turns that preceded the children's turns. I will elucidate how the

mothers' turns are constructed to initiate JE with the children and the kind of responses these turns project. This aspect of maternal pursuits of JE will be explored in greater detail in Chapter 6. In the following subsections, I will start the analysis by explicating the children's use of talk in participating in JE, followed by their use of bodily behaviours, and multimodal actions.

4.3.1 Organisation of talk in doing compliance

4.3.1.1 Examples from typical data

To begin, I will consider two short instances derived from a longer extract of an interaction between a mother and her child (Hetty), as they involve in an object labelling activity. During the activity Hetty has been taking out the animals from a plastic bag container, one at a time, looks at them and puts them on the table. M who is seated on her right, looks on, and frequently asks the variations of 'apa tu' ('what's that') questions (e.g., *tu apa?* ('that is what?'); *apa tu?* ['what is that?']; *tu?* ['that?']), a design generally used by adults to elicit labelling sequences with children (cf. Tarplee, 1993), consistently immediately after Hetty takes out another animal for the bag. Using these two extracts, I will illustrate how the mother's initiating talk in the extracts receive different kinds of responses from the child, however, in both instances the child's actions are treated by the adult as in alignment with her project.

Extract 4.1 [Hetty 'Tiger']

- 1 M : Ini apa Hetty? ((touches tiger))
This is what Hetty?
- 2 (0.7) : (((Hetty looks at tiger)))
- 3 H : ↑ti↓ger ((looks at M))

- 4 M : H:a ((nods))
- 5 (1.6) : ((Hetty takes a turtle from bag))

Prior to line 1 of Extract 4.1, Hetty has just put a tiger toy down onto the table and turned to the bag of animals, seemingly disengaged from M. In line 1, M begins the engagement sequence with the child and the tiger which she has selected as the referent by touching it, by asking Hetty '*this is what Hetty?*'. Hetty does not answer this instantly, but looks at the toys for 0.7 seconds thus displaying her receipt of the question, then looks up to M and says ' \uparrow ti \downarrow ger' (line 3). Hetty's response is then receipted as correct by M in line 4. In her study on interactions during picture book-labelling task between adults and young children between 1;7 to 2;3 years, Tarplee (1993) commended a three-layer formation that underlies the sequential organisation of the task; *elicitation-label-receipt* (p. 119). Filipi (2009) has found similar organisation of the task in her study. While her findings show that the three-layer formation is used with very young children, my data suggests that its use may also be extended with much older children. This, however, is not the main concern of the analysis in this section. It is my interest to show, that this three-layer formation is a clear case of JE construction. As in Extract 4.1, M's talk in line 1 not only directs the child to a referent but also seeks for a contribution from the child to the JE framework. In line 2, the child visually orients to the toy and thus indicates her orientation to both the referent and the mother's initiating action; and her answer in line 3 is the display of her own participation within the triadic framework.

It is important to note though, M's '*this is what Hetty?*' in line 1 makes contingent a verbal response from the child. As such, should the child then turns away without saying anything, such as, any verbal productions that might be relevant as a name for the toy animal, it is likely that M will pursue for an answer from her, in spite of the fact that she has looked at

the referent. In other words, if Hetty looked away after line 2 and continued with her play, she would have been considered as being noncompliant to M’s projection for an answer. Hetty’s visual orientation to the object is relevant but it is not adequate as the response for the *kind* of engagement M has initiated. Hetty’s verbal reply in line 3 is what allows the triadic engagement to be achieved, as it makes evident of not only her orientation to both the referent and M, but also her alignment with the trajectory which the initiator, M, projects for.

The following example (Extract 4.2) occurs a few lines after the talk sequences shown in Extract 4.1. In this instance, the child responds to M’s initiating talk in a less affiliative manner than in Extract 4.1, however, her verbal response is nonetheless treated as sufficient as a sign of compliance by the mother.

Extract 4.2 [Hetty ‘Horse’]

13 (2.4) ((Hetty takes a horse out from the plastic bag and gazes at it))

14 M : ^{1/Frame 1}Tu apa?

That (is) what?

((¹Hetty puts the horse on the table, looking at it all the time; M looks at the horse))



Frame 1

15 H : ²tatau.

Don’t know

((²Hetty turns to the plastic bag))

- 16 (1.1) ((M picks up the horse while Hetty takes out a cow from its bag [Frame 2]))



Frame 2

- 17 M : tu kuda jug:ak ((Hetty looks at the cow))
That (is a) horse to:o
- 18 H : ni taktau jugak ((Hetty puts cow on the table))
This I don't know either

At the start of Extract 8, the child (Hetty) takes out a toy horse, stares at it and places it on the table (line 13). While both their gazes fixed on the horse (Frame 1), M initiates a triadic engagement between Hetty and herself, and the horse as the referent, as she asks *'tu apa?'* ('that (is) what?') (line 14). Note that Hetty has never gazed at M, at least from line 12. While it is observable from the recording that M is referring to the horse which is marked by her gaze to the toy (line 14), Hetty might not have this particular visual information of M's gaze line at that particular point. Nevertheless, it is evident in Hetty's talk in line 15 that such information is unnecessary. As she turns away from the horse, Hetty begins to respond to M's question with *'tatau'* ('don't know'[line 15]). Instead of providing a label for the toy as an answer to M's question, in line 15 Hetty accounts for her inability to do so, without looking at M to determine what *tu* (that) in M's talk in line 14 refers to. Hetty's *'dont know'* is certainly an option as a response to questions such as *'tu apa'* albeit a dispreferred one; the other alternative is a label for the toy that would be a preferred response to the question (Stivers and Robinson, 2006). Note too that while saying this, Hetty shifts his gaze from the horse to other object (the

animals' bag). As such, Hetty makes public to M that she is in the course of physically disengaging from the horse. Note that earlier of the extract M has noticed Hetty staring at the horse silently; a display of doing a visual examination of the object. Hetty then puts the horse down without naming it while they are still in the naming activity. While Hetty stares at the horse, M watches on the side but says nothing, and she only asks '*tu apa*' ('that's what') once Hetty appears to disengage with the horse without naming it. Obviously Hetty has taken her time to examine the horse but does not produce any label for it while they are clearly in the midst of a naming task which could be a sign of a problem; most probably that she does not recognise the animal. Considering this, and M's question that is produced subsequently, M's '*tu apa*' question may be seen as *not* a test of the child's vocabulary. Rather, I argue, it is a pre-sequence to M's own telling of the name. Notice that M tells the name despite Hetty's display of disengagement and without any delay or attempt of a repair or pursuit. This suggests that her '*tu apa*' is not so much of getting *Hetty* to name it, but it is about creating a juncture to produce the name, whether by herself or Hetty. Although Hetty's '*tatau*' ('don't know') and her bodily behaviours in line 15 may be seen as acts of resistance to the triadic engagement; the fact that line 15 is produced at that particular point of the talk sequence has made evident Hetty's orientation to the referent, albeit just briefly or even *ending*, and that is all required by M to continue with her initiated trajectory.

In M's next-turn following Hetty's reply at line 15, although delivered when Hetty is no longer physically orienting to the toy animal (as she is already orienting bodily and visually towards the toys bag), M labels the object *tu 'kuda jug:ak'* ('that (is a) horse to:o') in line 17. The use of '*jugak*' ('too') in line 17 reflects that M is making a reference to a previous event they have had. Minutes before this extract, Hetty has taken out a horse (which looked different than the current one) which she has been able to name. By designing her talk at line 17 as such, M is telling Hetty that *that* animal she *don't know* is also a horse, like the one they

have seen earlier. In so doing, not only that M shows her acceptance of Hetty’s inability to answer as genuine and not as an act of non-compliant (that is, rejecting her role to participate in the question-answer sequence by claiming of not having an answer), she has also proceeded to relate to a previous event. This also suggests that she is treating Hetty as being engaged (and therefore is able to understand her narration), despite the absence of Hetty’s physical orientation to the referent.

In the next extract, I will exemplify another instance when the child’s talk (in this case, it is affiliative) is treated as an act of *compliance* by the mother despite the child’s display of physical unreadiness to begin the projected joint play. Before line 1 of Extract 4.3, Amila stood and looked down at some toys on the floor. Amila had mentioned to the mother (M) that she wanted to sit on the floor and play with the toys there, however this was disagreed by M. M who was sitting on a chair at the table then picked up a colourful chain from the floor (Frame 1).

Extract 4.3 [Amila ‘Play colour’]



Frame 1

1 M : $\left. \begin{array}{l} \text{Amila} \\ \text{Amila} \\ \text{Amila} \\ \text{-1/Frame2-} \end{array} \right\} \begin{array}{l} \text{jom main colour colour nak? =} \\ \text{let's play colour colour want?} \\ \text{let's play colours (do you) want?} \end{array}$

((¹ M puts the chain down onto the table, and turns towards Amila;
Amila sits on the floor/ Frame 2))



Frame 2

2 Am : =((rises with her back to the camera))=

3 Am : =n:ak= ((stands with her back to the camera/Frame 3))

Want



Frame 3

4 M : =ni Amila te^{2/Frame 4}>ka(Amila teka cepat (.))
this Amila guess Amila guess quick
 -----3-----

((² Amila turns to look forward/ Frame 4))

((³ Amila turns fully to face forward then moves closer to the table))



Frame 4

- 5 M : ni colour apa? ((points to a green chain; Amila looks on/Frame 5))
this colour what?
what colour is this?



Frame 5

- 6 Am : <colour ijau>
colour green
green colour

As previously described, prior to line 1 Amila has attended to toys on the floor, and appeared to continue playing with them which was objected to by M. At this point, Amila does not orient, either bodily or visually to M and appears to be disengaged from M. In line 1, M produces the talk that she designs to initiate a joint activity with Amila. M begins her talk by summoning the child and proposes that they '*play colours (do you) want?*'. Even before she produces a verbal response, Amila has started to rise right after M finishes her initiating talk (line 2). In line 3 Amila says '*n:ak*' ('want') which is equivalent with '*yes*' in English, and as such indicates the child's agreement with (and therefore suggests her understanding of) M's proposal and what it involves. Amila's response also demonstrates her orientation to the new play (*play colours*) that M has suggested, as the referent. Although the child is still looking at the floor, thus seemingly not fully ready to start *play colours*, M proceeds with the joint play. In line 4, she continues to tell Amila '*ni Amila te >ka Amila teka cepat*' ('here/this Amila guess Amila guess quick'). By producing line 4, M displays that she accepts Amila's verbal reply in line 3 as affiliative with the projection of the activity she initiated. Arguably, Amila's talk in line 3 in

itself is affiliating with M's proposal; however suggestive from her bodily orientation, it does not necessarily mean that Amila wants to *play colour* promptly. Nonetheless, Amila's talk (=n:ak=) is treated as sufficient by M to continue with the joint activity she is instigating. Note that M in her talk refers to the colourful chain (apparently as the apparatus to achieve their joint '*play colour*'), and so, selects the colourful chain as the current shared referent. During M's talk in line 4, the child turns and gazes at the colourful chain. Amila visual and bodily re-positioning so as to orient to the chain demonstrates her full engagement with the referent (the colourful chain). After a brief pause, M launches a question '*ni colour apa?*' ('what colour is this?') which is then answered correctly by the child.

There are two points in each of these talk sequences (Extract 4.1 to 4.3) that I want to readdress. Firstly, the initiating turn by the mother (in line 1 of Extract 4.1 and 4.3, and line 14 in Extract 4.2), and secondly the children's verbal response to this (in line 3 of Extracts 4.1 and 4.3, and line 15 in Extract 4.2). The analysis indicates that, also as suggested from the analysis, a *dispreferred response* and *doing compliance* may co-occur, or at least treated as so by the participants, within a play interaction.

From the analysis, it is clear that the initiating turns by the mothers introduce the joint activity between the participants, and the children's verbal response sanction it to proceed. In the next section, I will examine the verbal responses by three children diagnosed with mild to moderate ASD (Azam, Amin and Yusri) that constitute compliance to the JE trajectory during play sessions with their mothers.

4.3.1.2 Talk as compliant response in children with ASD

Prior to Extract 4.4, M sat behind Azam (Frame 1) but repositioned herself by moving slightly forward so that she was seated next to him (Frame 2). The new position would allow her to have better view of the child's activity.

Extract 4.4 [Azam 'Alien']



Frame 1



Frame 2

1 M : Azam nak buat apa tu?

Azam wants (to) do what that?

Azam what is that you want to do?

2 (2.0) ((Azam continues playing with the blocks while M plays with and looks at
3 the blocks in her hands/Frame 3))



Frame 3

4 Az : Sa^{1/Frame 4}ya nak buat, ali↓en

I want (to) do, alien

((¹ Azam turns back to the Lego blocks in front of him))



Frame 4

- 5 M : Nak buat alien?
Want (to) do alien?
- 6 Az : It is the (ali-) um:: (.) four le:gs
- 7 (0.7) ((Azam continues playing with blocks as M watches))

The extract begins with M initiating an engagement with the child by asking about his play with 'Azam what is that you want to do' (line 1). Azam displays no orientation to M's question or respond to her in any way and continues manipulating the blocks (lines 2 and 3). Azam's response in line 4 is markedly delayed as he only talks after a lengthy 2.0 seconds of silence. By typical interactional pattern, this 2.0 lapse may be deemed as unusual as a recipient habitually takes approximately 1 second or less to reply (Jefferson, 1988). Nevertheless, his response is semantically acceptable as an answer to M's preceding talk. By providing the talk too, Azam shows that he is also oriented to his responsibility to talk at that particular sequential juncture (cf. Stivers and Robinson, 2006). Not only that his answer at line 4 indicates his receipt of M's question, Azam also demonstrates his understanding of it as a query for any information about what he is making with the blocks, and not what he *is doing*, without having to check her visual orientation to determine her referent to be able to respond fittingly. M in her next turn reformulates Azam's talk into another question '*Nak buat alien?*' ('Want (to) do alien?' [line 5]) which is hearable as seeking confirmation of his earlier talk, but nonetheless, extends the talk on the topic she initiated in line 1. In so doing, she appears to treat Azam's line 4 as fitted within the talk sequence. Azam's turn at line 4, despite being

delayed, does show his monitoring and undertaking as a participant in the triadic interaction involving M, a referent, and himself. In other words, M's line 1 pursues for the child's engagement, in this case verbally, and Azam's line 4 is a display of his engagement which with it in place, the joint (topical) engagement may now continue (lines 5 and 6).

The talk of the child (Azam) in the following extract reflects the child's atypical language, but it too is oriented to by the participants as acceptable in the accomplishment of their mutual engagement.

Extract 4.5 [Azam 'Roof Too Big']

1 ((Azam puts a red triangular shaped block on the blue blocks as M watches/Frame 1))



Frame 1

2 M : Oh biru tu ada- (.) ataplah (.) wow (.) >↑eh tak boleh<
Oh blue that has- (.) roof (.) wow (.) >↑eh cannot<
Oh the blue one has- (.) roof (.) wow (.) >↑eh cannot<

3 (1.9) ((Azam puts the red block onto the blue block as M watches))

4 M : oh jadi topi pulak. ↑Eh (.) ↑eh ni nak (mata)- nak letak mana ni?
oh becomes hat ↑Eh (.) ↑eh this want (mata)- want put where this?
oh it becomes hat ↑Eh (.) ↑eh this want (mata)-where do you want to
put it

((¹ Azam takes the red block off the blue one, puts it on the floor then back on

the blue block))

5 Az : Tapi its too ↑big:

But its too ↑big:

6 M : O: tak boleh masuklah:=

O: cannot fit in:=

Similar to the last extract, in this extract the mother does not participate in the play physically. Rather, she takes the role of an observer, but displays her orientation and offers her involvement by engaging the child in a talk, relating it with the ongoing play. At line 2 M prefaces her talk with discourse marker 'oh' (Bolden, 2006), followed by her commentary on the child's play. In line 2 alone, M uses three different surprise markers; oh, wow, and eh in accordance to Azam's play movement. Azam does not seem to take any notice of this and continues playing (line 3). At line 4, once again M prefaces her talk with 'oh' and demonstrates another series of surprises with her use 'oh' and 'eh' as she watches the block 'becomes hat' and Azam's difficulty in securing the red block with '↑Eh (.) ↑eh'. This is followed by her query about Azam's uncertainty in his play with 'this want (mata)- where do you want to put it?'. Certainly Azam does not treat this as a request for him to specify a location; he produces an assessment of the red block ('Tapi its too ↑big:' ('But its too ↑big:') at line 5. Azam starts the talk with what Maazel and Huiskes (2001) define as *resumptive 'but'* that links his current talk to M's previous talk, and displays his orientation to the object in question which he now refers to with 'its'. In so doing, line 5 is interpretable as Azam justifying as to why he faces the difficulty with the red block ('its too ↑big:').

Clearly M has treated Azam's line 5 as a sufficient and acceptable response to her preceding talk. Line 5 is however arguably atypical for two reasons. First, Azam appears to do reasoning in reply to the immediately prior talk (line 4) which imposes a 'where' query rather than 'why'. Second, he starts the talk with 'but' that signals a forthcoming disagreement to the

preceding talk, which as it turns out, is not what he sets to do. Although line 5 reflects the atypicality in the child's talk, it does not necessarily make it inappropriate or sequentially unfitted. As observed, both Azam and M do not indicate any problems with line 5. Also, M demonstrates her receipt of line 5 as informative which she marks with prolonged 'O:', and follows this with her own deduction on the limitation of the red block, which she has just accepted as being big, with '*tak boleh masuklah*' ('can fit in:=' [line 6]).

Extract 4.6 further exemplifies the use of a syntactically atypical verbal response by the child, but nonetheless demonstrates his orientation to the mother's preceding turn, which also contributes to an engagement being established. In this sequence of talk, Amin (6;7) is playing with a picture puzzle while being watched by his mother (M). At one time, Amin picks up a piece of puzzle with a picture of a bowl of spaghetti and looks at it as M starts to talk about it.

Extract 4.6 [Amin 'Mee Spagetti']

1 M : EE: sedapnya apa tu? ((Amin puts in the piece onto the board))

EE: very delicious what is that?

2 Amin : ↓ni: ((puts the piece onto the board/Frame 1))

this:



Frame 1

3 M : ¹↓mee:: spageti::=

Noodle:: spaghetti::

((¹Amin takes another piece of puzzle))

Extract 4.6 starts with M initiating a talk with the child on the particular puzzle piece at line 1. Specifically, M makes an assessment of what she sees the picture on the puzzle (*EE: very delicious*) and then produces a rhetorical question (*'what is that?'*). By asking the question, M is projecting her proposition for an engagement from Amin as she has now made relevant an answer from him. Although M's question will require a name for the picture on the puzzle as an answer, Amin does not offer any names in his next turn. Instead, he says '*ni:*' ('this' [line 2]) while keeping his gaze at the puzzle all the time. For the record, Amin has been observed to produce '*ni*' ('this') frequently and repetitively, and commonly in atypical sequential placement across the two play sessions of the data collection his mother and he have participated in.

It is not entirely clear if at line 2 Amin actually mispronounces '*mi*' ('noodle') or that he does say the demonstrative word '*ni*' ('this'). Note that M's talk in line 3 is designed to start with an stressed /m/, and includes only two but stretched words (*'meee:: spaghetti::*). As such, it is difficult to determine M's understanding and receipt of Amin's '*ni*' (this). It is possible that M has interpreted Amin's earlier turn as a mispronunciation -that she then offers a rectification by emphasising the /m/ sound. It is also possible that she treats Amin's line 2 as a display of his inability to provide a name for the picture, or to answer -that she offers two labels for it. As a response to M's question in line 1 Amin's talk in line 2 is problematic at its lexical level; however, it is produced without any delay, and while the child is bodily orienting to the referent (the puzzle piece). Amin's timely reply and his bodily and visual orientations in line 2 suggest that his '*ni*' do in fact refer to the puzzle piece, the same object attended to by M. By continuing to produce a label for the picture on the puzzle piece in her next turn, M displays her receipt of the child's response in line 2 as in alignment with her own focus.

Extract 4.7 further exemplifies the atypical use of language by a child which is nonetheless treated as a display of his compliant uptake following his mother's initiating talk. In the example, both the mother (M) and the child (Yusri) are seated facing each other across a low table. M is sitting on the small chair, and Yusri is standing up. At the starts of the extracts, M is arranging the alphabets on the table as Yusri looks on. During this, and the rest of the extract, Yusri's body is oriented towards his mother (M), and his gaze at the alphabets that M is manipulating. In so doing, he appears to orient towards M's current activity. In line 4, Yusri takes a few alphabets and appears to add on to the alphabets already arranged by M. While he is physically contributing to M's current play, he does not display any orientation to M by for instance, gazing at her. Therefore, although the dyad now appears to play the same set of toys, the play is seen as parallel rather than *shared*, or what is termed as *supported* play (Adamson et al., 2009).

M then asks Yusri to label what he sees from the arranged letters by producing '<apa>↑ ni' ('<what's> ↑this') in line 5. It is not particularly clear what Yusri is saying in line 6 but a listener might have guessed it as a poorly pronounced '*what's this*'. If this was true, although atypical for a response to the question (it is the translation of '*apa ni*' in English) and remarkably unfitted, the talk might have served as Yusri's receipt of M's preceding talk. Whatever it is that he actually says in line 6 is treated as incorrect by mother as the answer to her question in line 5. M waits for 0.6 seconds and when the anticipated answer is still not forthcoming (line 7), M produces the right answer she has been anticipating, *cho:↑kit* (line 8). 'Chowkit' is a name of place in Kuala Lumpur, Malaysia. Following this, Yusri produces a mispronounced version of the word in line 9. M acknowledges Yusri's '*co:↑chet*' as correct and praises him (line 10). In line 11, however, Yusri produces a self repair. This action shows that his talk in line 9 is not a meaningless parroting, and that he has been monitoring his own preceding talk that he is able to notice his error. Yusri's self repair also demonstrates his

orientation to the correct word; which he may have discerned from either M's earlier talk or from the arranged alphabets.

Extract 4.7 [Yusri 'Chowkit']

1 Y : (omacomacamni:)

2 (3.4) ((M arranges alphabets as Yusri looks on/Frame 1))



Frame 1

3 Y : (o:cadi(.) o:cadi)

4 (3.8) : ((Yusri arranges more alphabets as M looks on))

5 M : <apa>↑ ni ((points to the alphabets/Frame 2))

<what's> ↑this



Frame 2

6 Y : (<uwas>↑this)

7 (0.6) ((both look at the alphabets))

8 M : cho:↑kit

- 9 Y : co:↑chet
- 10 M : pandai:=
Clever:=
- 11 Y : =cho:↑kit
- 12 M : ha chowkit:

As noted, the initiating actions by the mothers in this section are questions in design. In the last three extracts (Extracts 4.5 to 4.7) all the mothers' initiating turns are responded to by the children with atypical talk, that seemingly are so unfitted as an answer to the questions that in the latter two extracts the mothers actually produce other-repair following the children's turns. Nevertheless, it is argued that these cases too support the analysis that the children's verbal responses are *aligned* and *in compliance* with the trajectory of the maternal engagement pursuits based on the orientation of the interactants. As such, it appears that despite the seemingly unfittedness of the children's embodied talk, due to the atypicalities in their linguistic and bodily behaviours within the engagement sequence, they have nonetheless demonstrated social understanding of what is required of them as the recipient of the mothers' talk at that particular juncture.

4.3.2 Bodily conducts as acts of compliance

From the analysis, it is revealed that bodily behaviours may be an alternative, or complementary modality to constitute children's compliant uptakes. In this section, I will show how these bodily behaviours are organised by the children in the absence of embodied verbal actions to work as fitted, compliant responses to the mothers' initiation for JE. I will start the analysis by examining the instances involving TD children.

4.3.2.1 Examples of bodily conducts from typical data

Extract 4.8 [Azlan 'Goat']

- 1 Az ((turns and plays with cars on the floor, his back towards M)
- 2 Hm: du:ng ee::[k ((M picks up a goat and gazes at it))
- 3 M : [Azlan look ((M holds goat with right hand, gazes at it [Frame 1]))



Frame 1

- 4 ((2.9) ((Azlan quickly rises from his prostrating position then turns as he sits
- 5 up while M moves the goat to the center of the table at the same time/
- [Frame 2]))



Frame 2

- 6 (1.6) ((M gazes at Azlan and smiles [Frame 3]))



Frame 3

7 Az : ^{Frame 4}Mama^{Frame 5} (1.2)



Frame 4



Frame 5

8 Az : Mama (0.5)

Just prior to Extract 4.8, the mother (M) and the child, Azlan play and talk about the animals on the table that is positioned between them. Azlan then turns around and starts to play with the cars (not visible in the recording) on the floor (line 1). Azlan also makes sounds as he plays alone with the cars (line 2). At this point, M picks up a goat figurine with her right hand and summons the child - a common action used to get a recipient's attention (Eriksson, 2009), to 'look' while maintaining her own gaze at the toy (line 3) (Frame 1). Note that she only says '*Azlan look*' without specifying what or where to look at. Consequently, M restricts the available option for the next turn for Azlan, and that is to actually physically turn and look at her, or at least towards the direction where she - the source that the summons originates from- is. Almost automatically, Azlan rises and starts to turn around. It is also worth noting that it is at the precise moment that Azlan shifts his body around, rather hurriedly in doing so, that M moves the goat closer towards his direction while keeping her gaze on the toy (Frame 2). By

making the goat the only thing that she moves on the scene and bringing it further towards the centre between Azlan and herself, M has thus clarified that the goat is what she is expecting him to look at.

Because M is the one who makes the call which has then been responded to by Azlan's bodily adjustment, it is relevant that she now produces a talk in the next turn. She does not say anything, instead she looks at Azlan and smiles while sustaining her hold of the goat. Note that the smile is directed at Azlan after he has looked at the goat. As an *interactive* facial expression, a smile may implicate different valence such as humour, happiness or even coyness (Terhi Kirsi Korhonen, 2011). It is not clear from this extract if there is anything particular about the goat that M finds amusing, or what about the goat that she actually wants to indicate to Azlan. Nonetheless, by sustaining her smile and gaze at Azlan, M demonstrates her positive receipt of Azlan's non-vocal behaviours as now projecting for a response from him.

Azlan does not say anything though, and both of them maintain the position as shown in Frame 3 for a few more milliseconds. It was presumable that at this point Azlan might have figured that no further talk is forthcoming from M (line 5) that he then looks down to his left and says 'Mama'. In so doing, he breaks the visual engagement already established between him, M and the goat, and starts a new talk sequence. M indicates no problems with the child's disengagement as she too then turns to her right and puts the goat back down onto the table. This further supports that with her directive '*Azlan look*' in line 3 she does want him to *only* look, at the goat, and that, Azlan's nonverbal action alone is sufficient as a display of his compliance which also completes the engagement sequence.

The following extract further exemplifies the child's use of embodied actions to demonstrate his compliant response to the mother's initiating action. Just before Extract 4.9 commences, the child, Amir and his mother (M) have just finished playing with a shape sorter ball. Following this, Amir is ready to resume his play with a police car which he had played with earlier (not included in the current extract), as he readjusts his body to face the car and says 'okay' (line 1). M has been watching him, and reaches forward as he produces line 1. Amir then says [²main car] ('[play (the) car]') while gazing at the car (line 2, Frame 2) which makes public his intention to play with it. There is no indication whether he plans to include M or not in his next play; nevertheless M proceeds to touch the coil of which the 'siren' of the car is attached to, and says [¹i: :n g] toi::ng (line 4). Following this, Amir too holds his hand forward and touches the spring although he does so only to make the spring stop swinging (line 4). Amir's visual and bodily engagement with the coil is treated as a sign of engagement by M who then continues to refer to it with her *Ada spring⁵ lah (Has got (a) spring)* in her subsequent turn in line 5.

Note that M does not use any summons, nor does she address the child, as she advances into manipulating the coil and therefore disrupts the child's in-progress play trajectory. Understandably though, a visual attention-getting strategy such as a summons is unnecessary here, given that Amir has already gazed at the car. It is lucid that M is not pursuing a mere visual engagement with the child; rather, she is scheming a joint-play, which will involve herself, the child, and the coil. Note that she touches the coil while emphasising on its springiness as it swings with her *To¹i: :n g] toi::ng*. This has caused Amir to suspend his own play with the car he has intended to pursue (line 3), and become interested enough to join M's play by also touching the moving coil (line 4). By emulating M's behaviour (i.e., touching the coil), Amir has now not only visually attended to M's dealings with the coil, but also has physically aligned himself with the activity by taking a part in it.

Extract 4.9 [Amir 'Spring']



Frame 1

1 A : Okay ((Amir gazes at the car while M reaches her hand towards the spring
2 on the car/Frame 2))



Frame 2

3 [main car] ((gazes at car, swinging legs))
[play (the) car]

4 M : [To¹i: :n g] toi::ng^{2/Frame 3/Frame 4} (.)

((¹M touches the spring, causes it to swing; Amir gazes at the spring))

((² Amir reaches for the spring (Frame 3), then holds it with his finger causing it to stop moving, Amir's legs have stopped moving by now; M gazes at Amir then back at the spring Frame 4)))



Frame 3



Frame 4

5 Ada spring^{3/Frame 5} lah.

Has got (a) spring.

((³Amir pulls the spring with a finger then lets go, causing it to swing [Figure 5]))



Frame 5

6 (1.3) ((Amir gazes at the spring; M looks at him then at the spring))

7 M : ◦Ada ^{4/Frame 6}spring lah◦. Toing.

◦Has got (a) spring◦. Toing.

((⁴ Both M and Amir touch the spring [Frame 6]))



Frame 6

In the sequences just discussed, the children, Azlan and Amir demonstrate different degrees of physical involvement in the activities instigated by their mothers. These physical behaviours are oriented to by the participants as *the responses* that satisfy, not only the sequential structure of the interaction (initiating action-response), but also the *kind of engagement* actually projected by the mothers. It is also evident that the children's bodily and visual orientation towards the referent is important in the process of the establishment of JE with their mothers.

4.3.2.2 Bodily movements in children with ASD

Using the analysis of the data from typically-developing children, I have exemplified how the children manipulate gaze and bodily behaviours in accordance with the projection of their mothers' initiating actions. In this section, I will examine how the diagnosed children coordinate their bodily movements with what is framed for by the mothers's initiating turns and thus treated by them as *complying*; and this then contributes to the initiated joint task being established. In Extract 4.10, the mother (M) is sitting on the small chair while her child, Yusri is standing next to her at the low table. There are blocks, alphabets and cars on the table. In front of M is a bag of vehicles, and both of them are gazing at it.

Extract 4.10 [Yusri 'That']

- 1 Y : (↑ca↓ye°(.) jha:°) ((Yusri arranges a car as M moves the shape sorter ball
2 from the table into the toys bag/Frame 1))



Frame 1

- 3 ((Yusri sneezes then sits down; M sees a car under the table))
4 M : Yusri ((Yusri stands up while looking at the cars; M slides a hand in front of
5 him and points and looks towards under the table/Frame 2))



Frame 2

6 M : tu tu [^{1/Frame3}tu

that that that

((¹ Yusri looks down towards where M is pointing at))



Frame 3

7 Y : ((makes sounds))

8 Y : ((sits back down on the chair, looking to under the table))

9 M: tu satu lagi tengok tu ha:

that one more see that ha:

-----2/Frame 4-----

((² M points a finger to under the table and bends further downwards))



Frame 4

10 Y : ((gets down to under the table))
 11 °hm° (.) ha: ((M sits up))
 -----Frame 5-----



Frame 5

12 Y : ((Yusri takes car from under the table then sits back up))=
 13 Y : = (xxxxx) berjaya:: ((says in singing-like; puts car near other cars))
successful::
 14 M : [hm:: eh banyakNYA:::
hm:: eh SO many:::

In lines 4 and 5, Yusri looks at the cars he has arranged earlier (lines 1 and 2), seemingly ready to resume his play which has been halted when he sneezes (line 3). Having noticed that there is a car under the table (line 3), M summons Yusri, swiftly slides her hand in front of him, and points a finger towards under the table (line 4). By first summoning him in line 4 and distracting him from his current play trajectory, M secures his attention to her, and to then direct it to the referent with her repetitive talk of *'tu tu tu'* ('that that that') and nonverbal behaviours (hand pointing and eye gazing towards the car) (cf. Goodwin, 2007). These strategies to gain Yusri's attention appear to work as he aligns his behaviours with hers by also looking downwards in the direction of M's pointing (line 6). In so doing, Yusri displays his coordination with the newly-introduced *looking task*. His visual line is blocked by the table at this point (line 6), he then sits back down while continues gazing under the table (lines 7 and 8). M continues to navigate Yusri's visual orientation to the referent with her *'=[tu satu lagi tengok] tu ha'* ('that one more see that ha' [line 9]) as she bends her body more than she does before which in the course, she gently pushes Yusri along. Almost reflexively, Yusri too bends down and picks the car up.

Note that in her talk, M has never explicitly instructed Yusri to get the car. To reiterate, M does only use the demonstrative word *'tu'* ('that') while pointing to the referent (line 6). She then adds more information to her talk by identifying the referent with *'tu satu lagi'* ('that one more') and directs Yusri to *'tengok'* ['see', line 9]). This directive is vague, as she does not name the particular object she is addressing. It is also incomplete given that her subsequent behaviours reveal that her actual underlying motivation is more than just to make Yusri *'look'* at the car. Interestingly, such an ambiguous use of talk appears to be a common practice in Malay parent-child interactions as will be further discussed in Chapter 6. Nevertheless, using her bodily arrangement, M now physically obstructs Yusri from getting back to the cars he was playing with at the start of the extract (line 9). M also adds more emphasis to her current

pursuit by bending further down that she nudges Yusri softly in the way. Such a steering bodily movement is a gesture usually used by parents to navigate their children towards the targeted task-related-object (Cekaite, 2010; Goodwin & Cekaite, 2013) and it does in this case, restrict the available option for Yusri's next-turn to having to move along with mother. By directing Yusri to *look* at the car when he is readily and visibly doing so (line 9), it is implied by mother that the child's *looking-down* is not the targeted end-conduct of her directive. Given that he is seated closer to the referent than M, and the fact that the car under the table belongs to the group of the cars he has been playing with, it is contextually and sequentially fitted that he picks it up and put it together with the other cars. Yusri then slips under the table and collects the car (line 10). To this, M displays her approval by appearing more relaxed that she abandons her bending posture to sit upright and acknowledges with 'ha' (line 11). Considering, Yusri's bodily act and its sequential placement in line 10, and the mother's treatment to these; what he does in line 10 therefore is indicative of at least three points; his understanding of what is expected of him at that interactional juncture, his full engagement within the triadic task, and his compliance with the task projected by M. Yusri's talk in line 13 ('xxx berja[ya:: ['successful:']) further shows his orientation to his contribution to the joint activity he has just participated in.

While immediate responses in-lined with a speaker's initiating talk are considered preferable (Kent, 2012a), this is not always automatic in adult-child interaction. Extract 4.11 illustrates an instance when the child's compliant response is delayed, and thus pursued by the mother. Just prior to this extract, Irfan started to play with a train which he made from the Lego blocks while his mother (M) watched. M then picked up an arch-shaped block and brought it towards the Lego blocks in front of her while Irfan continued playing with the train (Frame 1).

Extract 4.11 [Irfan 'Bridge']

1



Frame 1

2 M : Tengok dia ¹ada bri:::dge

Look it has a bridge

((¹ M puts the arch-shaped block onto the blocks/Frame 2))



Frame 2



Frame 3

3 (1.6) ((M connects the arch-shaped block to the stack of blocks as Irfan looks at

4 the train))

5 M : Dia ada bridge

It has a bridge

6 (1.8) ((Irfan pulls the train, M looks up at him then back down at the 'bridge'.

7 M then moves the blocks around as Irfan keeps looking down at the train))

8 M : Ha ((Both M and Irfan look at their own blocks/Frame 4))



Frame 4

9 ((Irfan looks to his left))

10 : He:y boleh ke mama buat macam ni?
He:y can mama do like this?

((²M holds the arch-shaped-block with right hand then disconnects it from the stack of blocks))

((³M turns and brings the arch-shaped clock on her right; Irfan looks up and gazes at the blocks in front of M))

11 ((Irfan throws a block, M gazes at him))

12 : Boleh ke mama buat macam ni? ((looks at the blocks on her right

13 *Can mama do like this?* while Irfan gazes back at his train))

14 (1.4) ((M picks a red block up, turns, and brings the block towards the stack of
 15 blocks in front of her))

16 : Tengok (.)
Look ((puts the red block onto the stack/Frame 5))

17 wow:



Frame 5

18 (2.5) ((Irfan makes sounds as he moves the train; M picks up the doll and puts it
 19 on her right))

20 M : Tiba- ti b a : :
Suddenly::
 --4/Frame 6--

((⁴ M and Irfan turn towards each other and maintain the gaze (although Irfan is potentially gazing at the toys M is holding at that point)/Frame 6))



Frame 6

21 ((M brings Ultraman and Godzilla in her right hand close to Irfan as he
 watches=))

22 M : =Dia tengah ⁵tidur >tiba-tiba< God^{6/Frame7} zilla datang (0.7)
 =he is sleeping >suddenly< Godzilla comes
 -----7-----

((⁵ M puts Ultraman on the carpet))

((⁶ M puts Godzilla onto the floor on her left as Irfan watches/Frame 7))

((⁷ M makes the Godzilla jumps towards Irfan))



Frame 7

23 M : Arg[h:: ((M makes Godzilla jumps onto the train))

24 Irf [(a:::: ((squats while gazing at Godzilla))

25 M : A a a aw (habih ketapi):
A a a aw (done train)
≈A a a aw (the train is done in)
-----8-----

((⁸ M hits the train with Godzilla as Irfan takes the dolls an brings it towards the train))

26 ((Irfan lets go of the doll then holds the train while making sounds))

27 ((Irfan takes Ultraman and holds it up, then puts it down))

28 Irf : Cececece ((pulls the train while making sounds as M makes Godzilla go

29 after it/Frame 8))



Frame 8

30 M : Dia kejar dia kejar dia kejar dia kejar ((makes Godzilla go after the train as
 31 *It is chasing it is chasing it is chasing it is chasing* Irfan pulls it, smiling))

In Extract 4.11, I intend to first address the series of initiating turns issued by M (lines 2, 5, 8, 10, 12, 16 and 17). These turns, despite their designs that make relevant a response from the child, are not oriented to by him. M's follow up pursuit for the child's engagement will not be examined in great detail here as it is not the main focus of the current analysis, and it will be further discussed in Chapter 6. It is important, however, to highlight that up to line 17 the child does not coordinate his behaviour either bodily or verbally towards M and continues playing with *his* train instead. M's initiating action includes directives (*'tengok'* ['look'] in lines 2 and 16, and questions in lines 10 and 12 - the examples of turn designs that makes conditionally relevant an accommodating, specific type of responses as preferred next turns, but such responses are not produced by the child. This results in M continuing to formulate and reformulate her embodied talk, for example, M's talk of line 2 is shortened into line 5; and her question in line 10 is shortened in line 12) to exert for Irfan's response. In other words, the absent of the child's clear reactions in alignment with what M's embodied talk projected has led M to persist on pursuing relevant response to her turns.

In line 18, M finally stops manipulating and talking about the blocks (she has been doing so since the start of the extract. She then takes a doll, puts it down and says -with dramatic and suspense effect in her voice- *'Tiba- ti ba : :'* ('Suddenly:: ') (lines 18 to 20). During this, Irfan appears to react to her, as he now directs his gaze towards her. Note that, after this particular embodied action displayed by Irfan, M does not reformulate her talk. Rather, she continues to talk on what appears to be the more developed version of play involving the doll, 'Ultraman' and 'Godzilla' toys (lines 21 onwards). In other words, at the earlier part of the

interaction when Irfan displays no orientation to M (prior to line 20), M persists on getting relevant responses from him. Subsequent to his display of transparent, fitted visual and bodily orientation to M's embodied actions in line 20, M gets to progress with the play she is projecting. This analysis supports that not only is a compliant uptake more preferable over a non-compliant act; it will also permit the continuation of the projected engagement between the interactants (Craven and Potter, 2010).

The following extract further exemplifies a demonstration of delayed compliance by the child, Amru, who is a nonverbal child with severe to profound ASD which results in the mother's continuous attempt to elicit a response from him. Preceding to Extract 4.12, Amru lies on the couch with M sitting close to him; his face is not visible to the camera. He then takes a Sponge Bob toy and holds it while M holds the colourful rings above him, gazing and smiling at him the whole time (Frame 1).

Extract 4.12 [Amru 'Toy searching']



Frame 1

1 Amru : hek aaaaa[aa aaa aa a] aa:::=

2 M : [sini turun turun meh]
here get down get down come
-----1-----

((¹M moves the colourful chain from directly above Amru forward towards the space between the couch and the table))

3 M : =Meh la:: ambik ni (.) cepat ni^{Frame2}
Come :: take this (.)quick this
-----2-----

((²M pulls the bag closer to Amru, looking at him the whole time))



Frame 2

4 Amru : ([]):: ::↓: ((makes soft but high pitch sound))

5 M : [rindu kat bear ye?
missing the bears, yes?

6 (3.22) ((M looks at Amru, then removes a teddy bear from under Amru))

7 M : meh. Bangun=
Come. Get up

8 Amru : =heek:: ((M begins to pull Amru's hand))

9 ((M continues pulling Amru's left hand, Amru gets up and laughs))

10 ((Amru stands up from the couch then sits on M's lap,

11 [laughing and looking at the bag])

12 [((M smiles then laughs))

13 M : .hhhmalas la malas ((Frame 3))

.hhhlazy lazy

-----³-----

((³ Both Amru and M look at the bag while smiling))



Frame 3

14 Amru : ee:::::: ((M starts to bring out toys from bag))

In this example, M attempts to get Amru to leave his current position on the sofa, and physically attend to the toys bag on the floor on M's left through multiple turns (between lines 2 to 9) involving both verbal and bodily actions. In line 2, M asks Amru to '*sini turun turun meh get*' ('here get down get down') as she identifies '*sini*' ('here') by relocating the chain she is holding from above Amru towards the bag. Amru does not comply to this directives. In line 3, M pulls the toys bag- the object she wants Amru to attend to- closer to them both and tells him to 'take this (.) quick this'. Amru does not do as told but remains in his reclining position,

and hugging the SpongeBob toy. M does display her notice of the Spongebob toy by asking '*rindu kat bear ye?*' ('missing the bears, yes?' (line 5). She does not, however, pursue Amru's answer; instead she continues to remove another soft toy from near Amru and pulls him to rise (line 7 and 8). This indicates that, despite the *side talk* in line 5- an insertion sequence, M is still visibly devoted to getting Amru to move towards the toys bag. By moving the toys from under Amru, she eliminates any potential distraction or obstruction that might hinder Amru's movement. M then produces another directive, this time she tells Amru to rise with her '*meh. Bangun=*' ('come. Get up=') (line 7). Again, Amru resists M's directives by not moving (line 8). Following a child resistance to a command, parents are commonly found to escalate their directives by employing bodily modalities in shaping the anticipated response from the child (Goodwin & Cekaite, 2013). This is observable in this extract as M physically prompts Amru to rise by pulling his hand (line 8). To this, Amru complies and sits on M's lap while gazing towards the bag - the nominated focal object- the entire time (lines 10 and 11). It is also noteworthy that his gaze is directed towards the bag immediately as he begins to leave the couch.

Taking into account his well-timed laugh as he stands up (line 10), and M's orientation to this as she too laughs and assesses Amru as *lazy* (lines 12 and 13); Amru's earlier 'failure' to comply with M's instructions is interpretable as intentionally and not due to, for example, a lack in understanding of an instruction which might be caused by, for example, poor language comprehension. There are two points that are important to highlight from this extract. First is how M persistently pursues Amru's engagement initially by talk, and when this fails to get appropriate response from Amru, she employs physical actions - by steering and domineering Amru physically to establish his bodily alignment with the referent (cf. Cekaite, 2010). Second, it is only after the child's bodily alignment has been achieved, and his visual and bodily

orientations to the referent are secured (line 10 and 11) that the mother is able to, and does, advance with her activity (line 14).

So far I have analysed sequences to show the instances when the children organise their verbal production, or bodily conduct that display their engagement with the activity projected in the mothers' initiating talk. Their behaviours constitute the acts of compliant uptake of what the mothers instigated. However, in many other cases across the datasets of typically developing children and those with ASD, I have noted that talk alone, or gesture alone, may not be sufficient as a compliant uptake following the mothers' initiating actions. In the following section, I aim to examine the children's use and design of multimodal actions in responding to the mothers' engagement-initiating talk.

4.3.3 Multimodal actions as the display of compliance

4.3.3.1 An example from typical data

Extract 4.13 [Difa 'Chain']

- 1 ((M takes out the colourful chain from the bag and holds it up, looking at it
[Frame 1]))



[Frame 1]

- 2 Difa : ha yang ni yang- [
ha this is that-

3 M : ^{Frame 2}[Difa ni apa Difa?^{Frame 3}

Difa this is what is Difa?



Frame 2



Frame 3

4 ((Difa sits upright and holds the lower end of the colourful chain from M))

5 DiFa : $\left(\begin{array}{c} \text{pajang (.)} \\ \text{long} \\ \text{Frame4} \end{array} \right)$



Frame 4

6 M : pan↑jang:

long

7 ((Difa continues examining the chains))

8 M : ni apa:?

this is what?

9 D : pan:↑jang=

long

10 M : =warna p (.) purple ada berapa?

Colour purple has how many?

How many purple (hooks) are there?

11 Cuba tengok ada- kira warna purple ada berapa?

Try see has- count colour purple how many?

Try see has- count how many are the purple (hooks)

As the mother (M) in Extract 5 takes out a colourful chain from the toys bag, the child, Difa (D) plays and looks at a doll. In her play, Difa produces a talk in line 2. Before Difa could finish her talk M summons her while holding the chain up in the air (Frame 2) and asks '*ni apa Difa?*' ('this is what Difa?' [line 3]). This causes the child to stop talking at once and turns to the referent (Frame 3 line 3). Difa then repositions herself, takes hold of the bottom end of the chain (Frame 4) and states the attribute of the object she now sees as 'long' with '*pa:jang*' line 4. In her talk at line 4, Difa has made a pronunciation error by omitting /n/ for the exact word is '*panjang*'. In turn, M responds by repeating '*pan[↑]jang:?*' ('[↑]long?' [line 6]). It could be because of Difa's pronunciation error, or the fact that the child does not really name the object and therefore fails to provide an answer to M's '*ni apa Difa*' ('what's this Difa' [line 3]), or both- that M treats Difa's line 5 as problematic. The error and the attempt for its rectification put aside, Difa's talk in line 5 gets responded to by M, not her earlier, non-verbal behaviours.

Note that in the first instance that M summons Difa and asks her to label the object, before M has actually completed her talk (line 3), Difa has oriented to her instantly. The child's bodily movement and gesture in line 4 further display her orientation to the selected, shared referent. During this however, M holds her posture and gazes at Difa. Evidently, the progressivity of the reciprocal interaction is halted at that point. It is only after Difa has responded to her question, that M resumes taking her next turn. This shows that, Difa's behaviours in line 3 and 4, although exhibit her coordination with M's which suggests her willingness for an extended engagement, are neither comprehensive nor adequate as a compliant response to M's initiating turn. Arguably, a standalone verbal production may not

be sufficient either. Consider, for example, that following M’s talk in line 3 the child produces ‘yes’ without orienting to the object but gazing at M; or that, for any reasons she manages to answer ‘chain’ without even glancing to either M or the object, or that she does look at M or the referent or both, but resumes her own play instantly. Most probably, I suspect, M will pursue the child’s embodied orientation to the object. This presumption is driven by the fact that M places the object behind the child, instead of in front of her, that automatically causes the child to have to turn to be able to identify it. Moreover, note that M does not repair the child’s wrong answer, or end the sequence after the child’s response to her question, but progresses to the colour naming activity. As such, I argue that M’s question in line 8 is *not* designed to *only* get the child to name the object, but to actually get the child to attend, and subsequently play with the chain. A mere verbal response which does not encompass embodied acts, or vice versa, produced by a recipient in an interactional juncture, such as after line 3, in this instance may be fitted as a reaction to the initiating talk, but it will not satisfy the engagement framework proposed by the speaker.

Next, I will explore this phenomenon in children with ASD.

4.3.3.2 Embodied display of compliant uptake for JE children with ASD

Extract 4.14 [Irfan ‘Shape Sorter Ball’]

- 1 M : ((reaches over and picks up the shape sorter ball while Irfan plays with
- 2 the blocks/ Frame 1))



Frame 1

3 M : ((picks the shape sorter ball up, Irfan shifts gaze towards the ball/ Frame 2))



Frame 2

4 =Irfan:^{Frame3} pandai tak buat yang ↓ni ?, (.) jom^{Frame4} buat ↑ni

=Irfan:^{Frame3} know not do this (.) let's do this

=Irfan:^{Frame3} do you know how to do this? Let's do this



Frame 3



Frame 4

5 C : Mama bukak ((holds the ball on the floor/Frame 5))

Mama open



Frame 5

6 M : Ha bukak dulu: (.) ((M opens the shape sorter ball as Irfan watches))

Ha open (it) first: (.)

At the start of Extract 4.14 Irfan plays with the Lego blocks in front of him, while M reaches forwards to her right and picks up the shape sorter ball. As M picks up the shape sorter ball, Irfan shifts his gaze, albeit just using the corner of his eyes, from the blocks he is playing with towards the direction of the ball. This timely gaze shift shows that he at this point

notices the ball. M's initiation for a joint play with Irfan occurs in line 4. M first summons him and produces '*pandai tak buat yang ↓ni?, (.) jom^{Frame4} buat ↑ni*' ('do you know how to do this? (.) Let's do this'). At the point of her summons, Irfan already moves his body closer to the ball, and then proceeds to touch the ball before M completes her talk in line 4. His actions show that he is oriented to engage with the ball. In line 5, Irfan directs M to unbolt the ball with his '*Mama buka*' ('mama open'). This act does not only mark the launch of the new play task, he also coordinates his actions with M as to orient to M as a co-participant in the play. By producing the directives '*Mama buka*', Irfan necessitates a compliance from M and in effect treats M as obligated to contribute to the interaction, specifically in the course he has stipulated (i.e., opening the ball).

Irfan's actions from lines 3 to 4 suggest that he has already noticed and oriented to the shape sorter ball before M bids for his engagement (line 4). Therefore debatably Irfan's line 5 is not a response to M's talk in line 4 (i.e., as the second pair part of the proposal-acceptance sequence). Rather, the turn is designed as a first-pair part within a directives-compliance sequence. Although there is seemingly a missing verbal reply from Irfan where he could have produced in response to M's suggestion in line 4 (e.g., a verbal acceptance) and thus would have improvised the interactional reciprocity, this does not appear to cause any problems or disruptions in the sequence. Evidently, despite the constraint in the child's talk, he has managed to organise embodied actions to align with M's within the talk sequence, and consequently contributed to the establishment of the triadic engagement.

It has been addressed in the analysis of Extract 4.14 that the child (Irfan) exhibits his bodily orientation to both the referent (shape-sorter ball) and M; before producing talk that further confirms his participation in the triadic engagement (himself-M-the shape sorter ball). In the next extract, the child (Amin) is also seen to initially demonstrate bodily and visual

orientations to the selected referent, but as the interaction progresses he produces talks that displays his orientation to M as an accomplice in the interaction sequence. In addition, there is evidence of the child's monitoring and repairing his problematic turn in the interaction.

Extract 4.15 [Amin 'Hat']

1 ((Amin put blocks onto the train he is making/Frame 1))



Frame 1

2 Amin : yey:

3 M : Pastu:?. (.) ((M holds a cone-shaped block))
then?

4 ↓ni: ((M picks the cone-shaped block up and puts it closer to Amin))
this

5 (1.2) ((Amin finishes putting blocks onto the train then picks up the cone-shaped
6 block))

7 Amin : to:pi ((puts the cone-shaped blocks onto the train, looking down at it))
hat

8 (0.7) ((Amin finishes putting the cone-shaped block onto the train))

9 Amin : ^{Frame2}ni to:pi/topik ^{Frame3} =
this hat



Frame 2



Frame 3

- 10 M : =t(hh)op(hh)i ((M looks at Amin)
ha(hh)t (hh)
- 11 (1.4) ((Amin puts the block onto the train, looking down))

The extract begins with the completion of a task of putting a block onto a Lego train (line 1) by Amin which he marks with 'yey' (line 2). This is followed by M's query 'pastu' ('then') in line 3. M sustains her gaze towards the blocks, then picks a cone-shaped block up and puts it near Amin; addressing it minimally with demonstrative 'ni' ('this') ('this' [line 4]). During this, Amin appears occupied with the task of putting another block onto the train, and continues to complete the action before he picks up the cone-shaped block without looking up to M. Given that there are other blocks available on set and that Amin could have chosen any other blocks, by picking up the one M's has just selected Amin displays his reciprocity of M's initiation for a manipulative play with the particular block (line 4), albeit only bodily and demonstrates no acknowledgement to M as the speaker. With his gaze fixed on the block, Amin brings the cone-shaped block to the train and says 'topik' - a slightly mispronounced version of 'topi' (hat [line 7]). He then proceeds to put the block onto the train as M continues to watch silently (line 8).

Due to the absence of eye gaze that Amin could have used to demonstrate that his talk in line 7 is addressed to M (cf. Korkiakangas, 2011), M may have received Amin's talk in line 7 as a self-talk that she does not respond to in the next turn (line 8). Another possible

explanation is that M may have noticed the error, but avoids doing other-repair. M's silence is treated as problematic by Amin, as he then halts his play, looks up to M with the cone-shaped block clasped in his hand, points it to his head and reformulates his earlier talk into ^{Frame2}*ni to:pi/topik*^{Frame3} ('this hat' [line 9]). The talk in line 9 is now clearly addressed to M, and worked in mobilising a response from M (Butler & Wilkinson, 2013; Stivers & Rossano, 2010). In turn, M attends to Amin and orients to his embodied talk, as she looks at him, laughs and produces '=t(hh)op(hh)j' ('ha(hh)t(hh)' [line 10]). Amin demonstrates his approval of M's response that he then resumes his suspended play (line 11).

From the analysis, it is revealed that Amin's minimal talk in line 7 is actually addressed to M and is projecting for a response from her. As such, this is problematic given that he never gazes to M prior to and during line 7, thus provides no clue that he has in fact selected her as the next speaker (Lerner, 2003). When M fails to take the next turn (line 8), Amin launches a self-repair of his talk in line 7, this time making clear that he is selecting M as the recipient of his talk by gazing at her. His talk in line 9 demonstrates his orientation to M as a co-participant in the interaction from whom a contribution is expected. It is also evident that although the child plays with the blocks on his own, he is nevertheless demonstrating an orientation to M as attending to him as he plays, and to the cone-shaped block as the focal object thus displays his conscious involvement in the triadic engagement.

The analysis of Extract 4.16 will further exemplify how embodied orientation towards the referent serves as a sufficient marker of the child's compliant uptake of the engagement trajectory put forth by M. In the extract, M and her child (Yusri) are seated beside each other (Frame 1).

Extract 4.16 [Yusri 'Atukjik']

1



Frame 1

2 Y : (bubolbali:::) ((M continues to arrange the alphabets as Y looks on))

3 (1.1) ((M turns to Yusri/Frame 2))



Frame 2

4 M : A^{1/Frame3}:tuk:

Grandpa

((¹Yusri stands up and stretches his left hand out/Frame 3))



Frame 3

5 Y : $\left(\begin{array}{l} \text{°°a °°tuk=} \\ \text{Grandpa} \\ \text{-----2-----} \end{array} \right)$

((²Yusri pulls the alphabets J, I and K))

6 M : =((laughs))

- 7 .hhhatuk j:ik.
.hhhgrandpa j:ik.
- 8 (1.2)
- 9 M : mana ada atuk j:ik (0.5) atukjik kat kampung la:
where got grandpa j:ik (0.5) grandpa jik at village
there is no grandpa j:ik (0.5) grandpa jik is at the village
- 10 Y : ATUKjik: ((pushes the alphabets))
GRANPAjik
- 11 M : hm:

In lines 1 and 2, M arranges the alphabets on the table as Yusri watches. M then turns to Yusri, and produces ‘A¹:tuk:’ (‘Grandpa’ [line 4]). Considering the dyad’s very close sitting arrangement it is possible that M is able to monitor Yusri’s behaviour with her peripheral vision. However, M’s head turn and gaze towards Yusri at lines 3 and 4 emphasize that he is now selected to take the next turn. At this point, Yusri is already attending to the alphabets arranged by M, bodily and visually, which suggests his monitoring of the ongoing activity (i.e., M’s arrangement of the alphabets). M certainly treats Yusri as already oriented to the arranged alphabets, that she does not have to direct the child to it. Instead, with the child’s established orientation to the objects, it is sufficient that she gazes at him, so as to mark the forthcoming talk as addressed to him. Before M finishes her talk in line 4, Yusri stands up, and begins to manipulate the alphabets. In response, Yusri repeats ‘^{oo}a^{oo}tuk=’ (‘grandpa’ [line 5]), while adding more alphabets to the spelt words. As such, he is seen as further contributing to the activity instigated by M. M demonstrates her orientation to Yusri’s behaviours as acceptable, and humorous (lines 6 and 7). M then explains that ‘*mana ada atuk j:ik (0.5) atukjik kat kampung la:*’ (‘there is no grandpa j:ik (0.5) grandpa jik is at the village’ [line 9]). In line 10, Yusri produces a minimal talk ‘ATUKjik:’ and pushes the alphabets away.

Note that in line 7 M has produced ‘*hhhatuk j:ik.*’, thus makes her talk on *atukjik* in line 9 the second occurrence in the sequence. Note too that Yusri does not say anything in the next turn after line 7. This, and Yusri’s act of pushing the alphabets away suggest that his talk in line 10 is not an act echolalia that is common in children with ASD. Instead, it is interpretable as a receipt of M’s explanation about *atukjik* in line 9, and it marks the end of the play sequence. The analysis of this extract has disclosed the child’s embodied verbal and nonverbal actions within the sequence as well-coordinated with M’s as his interactive partner thus signifying his orientation to the activity as a joint activity.

4.4 Discussion

In the present chapter, I have used CA to examine instances when JE is initiated, pursued and established between mothers and their children in play sessions. In essence I have shown that JE is a perceivable, social, and collaborative event between the participants of an interaction, and is established in a sequence of actions. The data analysis of the current chapter has detailed the work of talk and bodily actions of the adult and child participants within the mutual engagement framework. As shown, the orientations of the interactants to a shared referent, evidence of their receipt of each other’s orientation to the referent, and coordination with each other’s behaviours were essential for the establishment of JE, and were made visible within the interactional sequence.

The detailed sequential analysis of the extracts presented in this chapter focuses on how children organise their actions into ‘*displaying compliant uptakes*’ following their mothers’ initiations for JE. The findings reveal how three resources were deployed by the children in demonstrating their compliance to mothers; talk, bodily conducts, or multimodal actions. I have shown that, these modalities were utilised accordingly in a fashion that were *in*

alignment with and *satisfied* the project of the elicitation acts. The children's compliant uptakes permitted the pursued engagement to establish, and the instigated tasks or events to continue. In this chapter too, I have shown that the IETs produced by mothers in play sessions were variable in design, and in the degree of 'sequential implicativeness' (Korkiakangas, 2011, p. 184; Stivers & Rossano, 2010). With regards to this, the children in the study were demonstratively capable of *meeting* the requirements of what these different initiating actions have made conditionally relevant. In these instances too the children were capable of demonstrating their reciprocity with their 'orientation and sensitivity to the particular other(s) who are the coparticipants' (Sacks et al., 1974, p.727).

In section 4.3.1 I have shown how the children with and without ASD organised and manipulated their *talk* in reacting, compliantly and fittedly, to their mothers' initiating actions. I started the section with three examples from neurotypical children. In Extract 4.1, I presented a short but obvious instance of JE being instigated by the adult participant, and complied by the TD child in an object-labelling task. The interactional process of the establishment of the triadic engagement that involved the two participants and a shared referent were evidently identifiable and explicable from the sequential analysis. Recall how the mother's '*This is what Hetty?*' served as an initiating action that directed the child (Hetty) towards the referent (a toy tiger) as well as questioned her about the object's name in the same turn. Also recall how in Hetty's brief next turns (she looked at the referent, then produced one word utterance, '*Tiger*' while gazing at the mother), Hetty has displayed her uptake as the recipient of the engagement initiation. With her short answer ('tiger'), Hetty demonstrated her orientations to the mother, the particular toy tiger selected as the shared referent, and the projection of the engagement; and that these orientations were constructive to the triadic engagement framework. In Extract 4.2, I examined a case where the child responded, but did not answer the mother's question. Such a non-answer reply to a question is dispreferred compared to an

answer (Stivers & Robinson, 2006), however, by providing the response albeit an account of her inability to answer, Hetty has indeed displayed her orientation to M's preceding talk that has placed her in the position of the next speaker, and to the referent as the object which they now mutually focused on; this turned out to be fitted with M's projection. Arguably, whatever that Hetty might have done following M's talk in line 14 of Extract 4.2 (for example, shrugged her shoulders in place of *'don't know'*, or misnamed the toy, and so on), would have been treated by M as acceptable as the next turn, *as long as* the child's doings indicated that she was responding to M, that she attended to the toy as their shared referent, *and* that she was not rejecting the sharing trajectory in any ways. In Extract 4.3, the shared activity initiated by the mother was a joint play with a chain, and this was done through the mother's proposal. The child's immediate verbal acceptance of the mother's proposal has demonstrated, and treated as, her compliance in participating in the joint play instantly despite the absence of her *physical* orientation towards the mother or the referent.

In the three examples from the TD children dataset (Extracts 4.1 to 4.3), I have identified the mothers' initiating-action turns, and the children's compliant, verbal responses to these. I have illustrated how the children's talk display their accepting uptake of the projected, shared trajectory and as such, work as their act of *'doing engagement'*. The analysis of the data of children with ASD revealed that they too used talk to show their affiliative participation within the triadic framework despite their atypicalities in communication skills. Azam in Extracts 4.4 and 4.5 responded to his mother's questions, with clear, sequentially fitted talk in the former; but with idiosyncratic talk in the latter. Amin in Extract 4.6 too used idiosyncratic talk in his next turn following his mother's question. His response ($\downarrow ni$: ['this:']) was clearly *not* an answer to the mother's query (*'EE: sedapnya apa tu?'* ['EE: very delicious what is that?']), and it was not making sense as a verbal turn either. Amin's mother did attempt to repair this, something that Azam's mother did not do in Extract 4.5. However, what

was similar across these three extracts was the adults' treatment of the children's talk as an acceptable response; a second pair part to their own turns that serve as the first pair part in the sequence.

In Extract 4.7, the first clear display of Yusri's involvement of the shared task was when he imitated the mother, which might have been misunderstood as an instance of echolalia, or a repetition of a prior talk. Past studies have categorised echolalia in children with ASD as meaningless, and without any clear function (Fay, 1969). More recent studies, however, have begun to unfold the functionalities of echolalia, and its distinctive character as an interactional *ability* of an affected child, rather than a *disability* (Sterponi et al., 2014; Wootton, 1999). As made evident by the interactional exchanges between Yusri and his mother, it was argued that Yusri's imitation was a product of conscious act, and worked as not only a response to his mother's talk, but also as a fragment of his participation in the interactional sequence. His brief repetition demonstrated that he has discerned the mother's immediately preceding talk as projecting for a specific verbal behaviour from him that was a repetition which he has fulfilled. While Yusri's repetition after his mother indicated his orientation to the mother and what her talk framed for, his self-repair which he produced while gazing at the alphabets further confirmed his recognition of their shared referent and the activity as a whole.

Next, I have explored the children's non verbal behaviours featured as compliant uptakes following the mothers' initiating-engagement turns. I have used examples from two TD children, Azlan and Amir to illustrate how they manipulated different, but adequate actions, in coordination with their mother's verbal and non verbal behaviours, to accomplish 'doing compliance' in the interactional sequences they were involved in. Recall that Azlan responded to his mother's directives by *looking* and Amir by *playing along*. What the children's responses have in common was that in these reactions they have performed what

their mothers' initiating actions have schemed for, as also supported by the maternal receipts of the children's turns. Comparable to the findings of the analysis of TD data, the examination of the data from children with ASD (Extracts 4.10 to 4.12) also showed their sensitivity to the *kind* of bodily phenomena they must produce to match the type of responses been made relevant by their mothers' turns. In the last two extracts included in that section, I have analysed how the children's non-forthcoming physical orientation and aligned bodily behaviours were treated as displays of non-compliance by the mothers, and the adults' persistently pursuing the children's engagement in reaction to the resistance. The mothers only ceased the pursuit, and in turn progressed with the activity, after the children rearranged their bodily position to coordinate with the mothers'.

In the last section of the chapter, I considered the children's multimodal behaviours that were packaged into compliant responses to the mothers' initiating actions. In Extract 4.13 of a TD child with her mother, I illustrated how the mother's initiating turn started a triadic engagement between herself, the child (Difa), and an object the mother has selected as their focal referent, and which was extended into a sequence of questions and answers, within which the engagement was sustained. More importantly, I have shown how Difa participated in the engagement sequence: she oriented and coordinated *not only* her talk although that would have satisfied the question-answer sequence structure, but also her gaze, and bodily actions so as to accept a role as a participant in the joint task involving the chain. The children with ASD in this study too were found to organise both verbal and nonverbal behaviours to respond to their mother's preceding turns as well as to display engagement with the triadic activity although the children with ASD may have limitations in their linguistic abilities. It was observed how the display of their alignment both bodily and verbally to the mothers aid the establishment of the projected engagement despite their linguistic atypicalities. This suggests that the children with ASD, of any severity, may have the social understanding skills that allow

them to identify and orient to what was expected of them as a recipient, and the competencies to 'make do' with the different resources accessible to them as interactional tools.

The analysis also revealed how interactional abilities and behaviours may be different between neurotypical children and children with ASD, and across children with ASD with different severity. Clearly, all interactional modalities –vocal and non vocal are available and exploitable by TD children; this however may not be the case for children with diagnoses such as ASD. As also exemplified in this chapter, children with ASD at the milder end of the spectrum may appear as more competent interactants than those at the severe end of the spectrum. However, even children with ASD with verbal abilities may demonstrate linguistic and non-linguistic *differences*, qualitatively and quantitatively when compared to neurotypical children. The current investigation has examined these differences as they manifested in a natural mother-child interaction and have shown how they were locally managed by the participants and oriented as interactional, rather than as problematic autistic symptoms.

Chapter 5

CHILDREN'S RESISTANCE IN JE SEQUENCES

As presented in Chapter 4, children with autism spectrum disorders (ASD) are able to exhibit their cooperativeness to a prospective reciprocal undertaking within an interaction instigated by their mother's preceding turns by organising their next turns as to display their orientation to performing what has been dictated to them, or aligning their actions to correspond with the proposed trajectory of joint action. Alternatively, as will be elucidated in this section, they may also stall their compliance or co-participation, or refuse to co-operate with the initiation for an engagement altogether. In this chapter, I aim to explore how children with autism display their non-compliance during free play with their mother. I will also draw on the data from typically-developing (TD) children where possible to consider their display of non-compliance within the consistent scope of investigation to that of the children with ASD.

5.1 Introduction

Initiating actions by a speaker make contingent a response from the recipient, some will mobilise a response in a higher degree than the others (Stivers & Rossano, 2010). In establishing JE with their children in the context of free play as in the current study, the mothers' initiating actions usually include directives, questions, assessment and noticings. These are used to elicit different kind of responses from the children – directives will anticipate a compliant act either verbally or nonverbally; questions project for an answer; assessment and noticing make relevant some sort of an agreement, confirmation or acknowledgement from their recipient (Kent, 2012b; Pomerantz, 1984b; Stivers & Rossano, 2010). Commonly non-compliance, rejection and resistance to these initiating actions are seen as disaffiliative and dispreferred. Studies on the design of dispreferred responses show that in many social

occasions, dispreferred responses such as disagreement are designed to start with a preface, and are usually delayed or 'softened' so as to reduce the offence the talk might incur (Pomerantz, 1984b; Sifianou, 2012, p. 1555). When a person is in the position of having to reject or decline a speaker's initiating talk, the person is likely to give an account for doing so (Raevaara, 2011).

Children too are capable of displaying rejection or non-compliance by manipulating both their verbal and bodily actions (Kent, 2012a; Lowi, 2013). For examples, they may avert their gaze to avoid an extended visual engagement or to demonstrate their disagreement with a speaker (Lowi, 2013). Children have also been observed to disalign their bodily orientation and/or actions as part of their resistance to a speaker's attempt, for example, to establish joint action with them (Lowi, 2013). The current project aims to extend the investigation by examining the acts of non compliance and refusal displayed by children with ASD, whom are generally reported as exhibiting *atypical* interactional behaviours, following their mothers' initiating actions to secure JE with them. In particular, the analysis will focus on exploring the different verbal and bodily behaviours displayed by children with ASD to display non compliance or resistance to maternal bids for an engagement. The interactional functions of these behaviours and their implications will also be considered.

5.2 Data

The video data was reviewed to identify the occurrences of non compliance and resistance demonstrated by the children. The main purpose of the current work was not to make any distributional or numerical investigation of any of the phenomenon in question. Therefore the data would not be coded or counted as per the phenomenon. It was noted that the children recurrently employ talk and bodily actions to express their refusal of the initiated

engagement. In many other occasions, the children were seen to gaze at the referent but show no orientation to the mothers as the speakers. It was also noted, that the children might also appear to not produce any contingent actions following the mothers talk. It was decided that these four behavioural patterns of the children would be the focus of the current chapter. Where applicable, data from typically developing children were also included to enhance the understanding of the phenomena seen in the dataset of children with ASD by cross-referencing with the TD children.

5.3 Analysis

The analysis of this chapter primarily focuses on the instances in which the children display resistance to the establishment of JE while playing with their mothers. I will scrutinize how they manipulate their verbal and non-verbal behaviours in rejecting an initiated engagement. I will also examine the instances in which the children appear to produce less explicit resistance by *not* producing appropriate responses within the engagement sequences. Specifically, I am interested in two phenomena related to this. In the first phenomenon, the children withhold contingent responses within the pursuit for an engagement sequence and in the second, the children do not produce any responses within the pursuit for an engagement sequences. These behaviours as will be shown- may be treated as the children's resistance to mothers' projected triadic JE, which typically result in a delayed, or non-established, engagement.

5.3.1 Embodied Organisation of talk in rejecting a JE

I start the analysis of with Extract 5.1, in which the child, Taufiq, and his mother sit facing each other with toys scattered between and beside them. At the start of the extract,

Taufiq looks to his left and reaches for the bag of toys, making clear that he is about to pick it up and potentially play with toys vehicles in it. M who has been watching Taufiq gets hold of the bag with her right hand which prompted him to stop his undertaking, as she herself directs her gaze to the soft toys on her left as she says '↑*ni*' ('↑this') (Frame 2). In so doing, M does *not* only stop Taufiq's play trajectory, she also directs the child to a new referent which the child may play with.

Taufiq follows M's gaze and looks at the soft toys (line 3). In line 4, M repeats '↑*ni*' ('↑this') as she moves the bag of vehicles further from Taufiq and the soft toys closer to him. It is clear at this point that M is initiating that Taufiq plays with the soft toys. Taufiq remains silent while maintaining his gaze at the soft toys, which is already indicating a resistance to M's initiation is forthcoming. Sequentially, M continues to pursue his acceptance of the soft toys by moving them much closer to him and then says '*Car with dino*↑*saur*' (line 6). Taufiq does not reply instantly to this, rather he continues to gaze at the toys for another 0.8 seconds before he produces a clear refusal of the toys by shaking his head and says ('°*n[o/takmau]*°') ('°no/don't want°') in line 8. M overlaps his talk by producing talk in line 9 which she uses to also include a *giraffe* into the trajectory.

In line 10, Taufiq does not only shake his head but also demonstrates gaze disengagement by looking down. Such a shift of gaze indicates the child's withdrawing his visual attention from the current referent, thus indicating his retreat from the engagement and his refusal for any further engagement with it. M continues to prompt for the child to accept the giraffe as she hands it to him (line 11) and proceed to upgrade her pursuit for his co-operation by employing a directive talk, rather an extreme one, that he '*masak giraffe*' ('cook giraffe' [line 13]). Taufiq once again rejects this with '[(*no:/takmau:*)]' ('°no/don't want°') in line 12 but finally gives in and accepts the toy from M.

Taufiq’s change of stance seen in this interaction sequence may be, in part, attributable to the mother’s upgraded and persistent design of engagement pursuit (Kent, 2012b). It is plausible that Taufiq’s body organisation may have augmented the continuity in the mother’s pursuit. (Note that in the extract he is visibly re-orienting both visually and bodily to mother following her talk in line 12, and thus making him *accessible* for her persistent turns). M’s persistence leads us to the aspect of adult’s authoritativeness in parent-child interaction (Kent, 2012b) however, this is not the focus of the analysis and therefore will not be further discussed here. What is of more interest here is the child’s exhibitions of embodied behaviours in displaying his rejection to his mother’s initiation for an engagement. The analysis shows that these behaviours are fitted as a rejection, and are treated as such by M whom in turn has to resort to deploying a coercive approach in her pursuit for the child’s compliance.

Extract 5.1 [Taufiq ‘Dinasour and Giraffe’]

1 T : ((holds a bag of vehicles on his left with his right hand as M watches /Frame 1))



Frame 1

2 M : $\left(\begin{array}{c} \uparrow \text{Ni} \\ \uparrow \text{This} \\ \text{--1/Frame 2--} \end{array} \right)$

((¹M holds the bag of vehicles with right hand and turns to her left))



Frame 2

- 3 (0.8) ((M looks at the pile of soft toys and starts to push it with left hand as Taufiq turns towards her/Frame 3))



Frame 3

- 4 M :
 ↑Ni:
 ↑This:
2.....

((² M pulls the bag of vehicles away from Taufiq, and pushes the pile of soft toys towards him as he watches))

- 5 (1.0) ((M continues pushing the toys as Taufiq watches))

- 6 M : car dengan dino↑saur

Car with dino↑saur

- 7 (0.8) ((M holds giraffe))

- 8 T : (°n[o/takmau°) ((shakes head once))

- (°no/don't want°)
- 9 M : [dengan gi↑raffe
with gi↑raffe
- 10 T : ((shakes head while looking down))
- 11 M : nah ((picks giraffe up and holds it out to Taufiq))
- ≈here
- 12 T : $\left(\begin{array}{l} (n[o:/takmau \quad :]) \\ (°no/don't want°) \\ \text{-----}3\text{-----} \end{array} \right)$
- ((³Taufiq shakes head while looking at giraffe))
- 13 M : [masak giraffe
cook giraffe
- 14 T : ((takes giraffe from M and hugs it))

In contrast to Extract 5.1 in which the child demonstrates a proficient use of talk as he produces a rejection to his mother pursuit for a triadic engagement with soft toys; Extract 5.2 exemplifies how the child's talk and bodily orientation might be the source of the recipient's misunderstanding. In addition, the extract will also provide an example how the child uses embodied talk to rectify the problem.

Extract 5.2 [Irfan 'Play fight']

Context: Just before the start of the extract, Mother (M) and the child (Irfan) talked about the pictures in the book.

1 M

habis cerita ↓ dia: >kita main ni nak?< la ↓ wan=

finish its story: >we play this want?< fight=

the story is finished: >we play this (do you) want? <fight>

-----1/Frame 1-----

-----2-----



Frame 1

((¹ M turns to her left and reaches for the Godzilla and Ultraman, Irfan looking at the book/Frame 1))

((² Irfan begins to turn to his right))

2

=kita lawan

=we fight

-----3/Frame 2-----



Frame 2

((³ M puts Ultraman close to Irfan while holding Godzilla in right hand, Irfan looks at Ultraman while closing the book))

3 (0.8)

((M takes a plastic bag from behind Irfan and puts it near other toys as Irfan watches))

4 Irf :

main main main main ^{Frame3}

play play play play

-----4-----5-----

((⁴ Irfan holds the Ultraman briefly then lets go))

((⁵ Irfan turns to face forwards (seemingly towards toys)/Frame 3))



Frame 3

5 M : okay ((M holds Godzilla and Ultraman up))

6 Irf :

main tu	um: to:ys
<i>play that um: to:ys</i>	
-----6-----	-----7-----

((⁶ Irfan points to toys with right hand))

((⁷ Irfan bends and moves forward))

7 M :

main toys?, (.)	main ni taknak?	Main ultraman?,
<i>Play toys?. (.)</i>	<i>play this (you) don't want?</i>	<i>Play (with) ultraman?</i>
-----8-----	-----9-----	-----10-----

((⁸ Irfan picks up some blocks))

((⁹ M shows Ultraman and Godzilla to Irfan))

((¹⁰ Irfan turns to Ultraman and Godzilla))

8 Irf : taknak ((looks down to the blocks/Frame 4))

don't want



Frame 4

- 9 M : < tak[nak:>
<don't [want:>
- 10 Irf : [mama susun
mama arrange
- 11 M : okay susun. Jom
okay arrange. Lets

After going through a pictured-story book together with her child (Irfan), mother (M) turns to two toys, which she calls Godzilla and Ultraman, and initiates a '*lawan*' ('fight') game with Irfan (lines 1 and 2). Similar to the child (Taufiq) in the previous extract who remained silent after the mother's initiating talk, Irfan does not immediately say anything in his next turn, but continues to watch M as she removes a plastic bag from near the two toys. He then says '*Main main main main*' ('play play play play' [line 4]). Following this, M produces '*Okay*' while holding Ultraman and Godzilla in both hands; seemingly ready to start the fight. Instead of beginning to have a fight with the toys, Irfan produces '*main tu um: to:ys*' ('play that um: toy:s') in line 6 as he points and takes a few blocks from the pile of toys in front of him. There are at least two possible perspectives in analysing and interpreting line 6.

Firstly, this is arguably the child's self repair. M's embodied talk in line 5 clearly demonstrates that she has understood Irfan's talk in line 4 as an agreement to her suggestion

for them to play combat with the toys she has selected (Ultraman and Godzilla), when at the same time it is possible that Irfan might have been referring to the other toys located in front of him instead. M's misunderstanding is reasonable given that the child has been orienting to her, bodily and visually, and his talk in line 4 is aligned with her previous talks. Secondly, there is no indication that he is pursuing another play trajectory, or even attending to other objects, at least until he has reached the end of his talk in line 4 when he appears to gaze at the piles of toys (shown in Frame 3). Irfan notices the misunderstanding, and thus provides a repair to his earlier turn by making clear which toys he has chosen to play with (line 6). On another note, it is also possible that in line 4 Irfan does actually align with M's idea of playing combat with Ultraman and Godzilla; but that he only decides that he wants to play with other toys instead as he gazes forward at the end of line line 4 (and therefore notices the toys). In other words, Irfan's line 6 can either be a repair, or a sign of a change of mind.

In spite of what line 6 really is, it is following the talk that M begins to realise the mismatch between her own and Irfan's play trajectory, which she displays as she produces a chain of questions, '*main toys?, (.) main ni taknak? Main ultraman?*' ('Play toys?, (.) play this don't want? play ultraman?' [line 7]). In his next turn, Irfan responds with '*taknak*' ('don't want' [line 8]) as he starts to play with the blocks. At this point, his body and gaze are fully oriented to the blocks; such bodily orientation displays his engagement with the blocks and that he is no longer available for any further action with the Ultraman and Godzilla (Frame 4). This thus emanates his clear rejection to M's initiated play with the Ultraman. Irfan's embodied talk in line 8 transpires as successful in demonstrating his refusal of the triadic engagement with the Ultraman and Godzilla as initiated by M. M then produces a receipt of his rejection in line 9 and they continue to play jointly with the toys chosen by Irfan, as shown in lines 10 and 11.

From the analysis it is clear that the child's talk and bodily behaviours in the earlier section of the sequence suggest his orientation to M's initiation turns. His display of alignment with M's preceding talk may have consequently contributed to M's misunderstanding of his consent for a mutual play with Ultraman and Godzilla. The error is then resolved by Irfan through his employment of more explicit talk and bodily behaviours that unambiguously display his non-orientation to M's selected referent. As such, he demonstrates his noncompliance to partake in the suggested fight play, and thus inhibits any further engagement with it.

Despite the children's resistance to their mothers' initiated trajectories in Extracts 5.1 and 5.2, three important elements can be identified from the participants' behaviours; 1) each of the participant's orientation to the shared referent; 2) their orientation to each other's orientation to the referent; and 3) their orientation towards each other. Arguably at this point *joint attention* has occurred. The children's explicit rejections to the mothers' initiating bid have however indicated their refusals to be part of the mothers' pursued joint engagement and have made clear their non-alignment with the mothers' engagement trajectory. As such the children's behaviours following the mothers' initiating bids have prevented the pursued joint engagement to establish.

In the following three extracts (Extracts 5.3 to 5.5), I consider the use of embodied talk in doing a rejection to the mother's bids for an engagement demonstrated by two typically-developing children, Hetty and Aina. In Extract 5.3, the child, Hetty has identified her choice of play as she opens the bag of kitchen sets when M asks *Ni tak nak main ¹dah?* (This don't want to play anymore?) (line 2). '*Ni*' ('this') in the question refers to the shape sorter ball which they have played with earlier in the free play session as demonstrated by M's gaze and hand placement. M's query in line 2 could easily be interpreted as a yes-no question designed to

seek confirmation whether Hetty does *not* want to play with the ball anymore. Hetty does seem to treat the question as a confirmation query that she looks briefly at the referent (shape sorter ball) and says '*taknak*' ('don't want') (line 5). However, M's subsequent turn in lines 6 and 7 which she quickly produces after Hetty has affirmed that she does not want to play with the ball (line 5) suggests that line 2 may be designed to initiate an engagement with Hetty in an activity involving the ball. To this, Hetty sticks to her refusal by saying '*taknak*' ('don't want') and mentions that *she* '*nak main masak- masak*'⁸ ('want to play cooking') instead, with her gaze and body oriented to the kitchen set toys (line 9). Similar to the previous two extracts, Hetty's mother accepts her talk and orientation (visual and bodily) as a refusal, and does not stretch her pursuit for an engagement with the referent (in this case, the shape sorter ball).

Extract 5.3 [Hetty 'Want to play cooking']

- 1 (1.9) ((Hetty opens the bag of kitchen tools))
- 2 M : >Ni tak nak main¹dah<? ((puts right hand on a shape sorter ball))
>*This don't want to play anymore*<?
(¹ M puts hand on the shape sorter ball; Hetty gazes at it))
- 3 ((M gazes at the shape sorter ball))
- 4 (0.7) ((Hetty looks at the shape sorter ball briefly then looks at the bag of kitchen set))
- 5 H : ²Taknak³ = ((reaches for fruit's bag))
Don't want=
(² Hetty turns gazes away from the shape sorter ball))
(³ Hetty reaches for fruit's bag))
- 6 M : =Macam ni lah (.)
= *like this lah* (.)
= *fine like this* (.)



Frame 1

2 M : =Eh ada buku ¹cerita la dik (Frame 2)

Eh has story book little sister

Eh (there is) a story book little sister



Frame 2

((¹ M holds the book with both hands, gazing down at it))

3 (1.2) ((Aina gazes down then picks up the toy chicken in the pot in front of her))

4 Ai : A:p = ((Aina puts the chicken close to her mouth))

5 M : ²=Buku yang ³be[sar

Book that big

A big book

((² M starts to flip open the book))

((³ M flips a page, Aina still gazes down))

6 Ai : [>Dah tau< da::h

Have known already

7 (1.0) ((Aina gazes at the toys and M at the book))

- 8 Ai : ⁴A:p⁵
 ((⁴ Aina picks a chili up and brings it near mouth))
 ((⁵ Aina puts the chili down))
- 9 (0.9) ((Aina gazes at the toys and M at the book))
- 10 Ai Dah
Done

In this extract, the mother (M) does not straightforwardly tell the child to look at any referent when apparently attempting to engage the child in a joint activity. Instead, M announces that there is a story book in a manner that demonstrates that she, too, has just noticed it '*Eh ada buku ¹cerita la dik*' ('Eh (there is) a story book little sister' [line 2]). Aina does not respond to this talk but fixes her gaze at a chicken, picks it up and 'eats' it (lines 3 and 4). In so doing, she appears to not orient to M, and not share 'the spirit of the announcement' with M (Antaki, 2004, p.676). Such a lack of a fitted response to an announcement is considered a dispreferred form of the next turn to an announcement.

M then resumes her talk by now commenting on the book's size (line 5). In line 6, Aina treats M's line 5 as a telling of something that she '*dah tau da::h*' ('has known already') without even gazing towards M and the referent in question, at a point before M finishes her talk. Specifically, Aina overlaps M's talk before M finishes stating the particular characteristic of the book. This conduct suggests that despite seemingly not orienting to M or her talk, it is likely that Aina has been monitoring M's that she is able to overlap M's talk at that specific time - when the talk is nearing to its completion (Oloff, 2013). Such monitoring of another person's behaviour is regularly done by participants of an interaction including in the instances when they appear to be not orienting towards each other (Goodwin, 1981). It may or may not be that Aina has in fact foreseen that M would be talking about the book's size (she has

interfered M before M completes the word 'besar'), nevertheless by jumping in at that point of M's talk, Aina displays, convincingly, that she has this particular knowledge of the book ahead of her mother, and that she does not have to wait for M to tell her about it. Aina has also therefore made it irrelevant for M to tell further on the book (see Schegloff, 1996), at least not in the way of talk she has been using (i.e., announcing details of the book). Note that Aina in her talk has noticeably stressed on 'tau' ('known') and stretched the talk towards the end. These behaviours – an absence of gaze orientation, claim of prior knowledge and talk that does not share the same enthusiasm with the speaker- put together thus give the impression that she is not interested in the book.

In this extract it is demonstrated that the rejection done by the child to the mother's initiating actions is by displaying her bodily non-orientation to the proposed shared referent as well as by using talk to produce a dispreferred reply to M's announcement of the big book. Following this M ceases talking, and allowing a generous gap between Aina's talk and her own (which occurs after line 11 and not included here). In so doing, M appears to tolerate Aina's resistance to her initiating actions, and lets the child continue with her on-going play trajectory.

The following extract will further exemplify how the child (Hetty) refuses her mother's projection for a triadic engagement less unequivocally as compared to the rejections done by the children in the previous examples. Rather than rejecting overtly, Hetty appears to delay her engagement and provides an account for doing so.

Extract 5.5 [Hetty 'Wait']

- 1 (3.7) ((Hetty takes a rhinoceros out from the plastic bag))
2 M : ^{1/Frame 1}itu apa?

That (is) what?



Frame 1

((¹ Hetty puts the rhinoceros on the table near M))

3 (4.0) ((Hetty turns the bag, glances back briefly towards the rhinoceros
4 then back at the bag and takes a goat out and puts it on the table))

5 M : ²Tu apa tu?^{3/Frame2}[>(ni-

That (is) what that? [this-

((² Hetty takes her hand off goat))

((³ M picks goat up; Hetty looks at the animals on the table, smiling))

6 H : [Banyaknya haiwan⁴hai↑wa[n

[(the) abundance of animal[s



Frame 2

((⁴ Hetty picks the plastic bag up))

7 M : [ini apa? (0.8)>Hetty< ((Frame 3))

[This (is) what? (0.8) Hetty.



Frame 3

- 8 (1.8) ((Hetty continues handling the plastic bag, M puts the goat down))
- 9 H : Nantila:h⁵Hetty nak buat banyak banyak ni. ((gazing forward, handling
- 10 Wait: *Hetty want to do more (of) this:* the plastic bag/Frame 4))
- ((⁵M puts right hand under her cheek))



Frame 4

- 11 M : uhuh
- 12 H : eah (.) iya:h ((opens a plastic bag))

At the start of Extract 5.5, the child, Hetty picks out a toy rhinoceros from the bag and places it on the table, which is available for M's viewing (Frame 1). M, who has been watching Hetty asks '*itu apa?*' ('that is what?'). Hetty does not answer this; instead she proceeds to take out another animal- a goat- from the bag. Before she obtains the goat, however, she appears to glance briefly towards the rhinoceros (line 3) a bodily act that suggests her orientation to M's talk in line 2 and that she recognises the referent of the talk.

Hetty continues to place the goat on the table close to the other toys. M takes the next turn by producing another question *'tu apa tu?'* ('that what is that?') (line 5). M does not stop here, rather she quickly adds on to that with another demonstrative *'ni'* (this) while picking up the goat (line 5) and thus making clear she is now referring to the goat instead of the rhinoceros. It is not clear whether M's talk has at that point completed, or whether it is actually interrupted by Hetty who now comments on the quantity of the animals (line 6). However, by designing her talk at line 6 to address the rest of the animals and not the goat, Hetty displays a different trajectory from M's, and her disorientation to M's talk.

Certainly M is not ready to drop her pursuit of getting Hetty to name the goat as she then renews her question into *[ini apa? (this (is) what?)* while holding the goat up, well parallel with Hetty's visual line should she gazes up. Hetty does not response to this either which then followed by M summoning her name, putting an emphasis with her firm intonation as she says *'Hetty'* (line 7). Hetty continues manipulating toys and the plastic bag, and in so doing providing no evidence of orientation to M. M then terminates her pursuit in getting Hetty to name the goat which she marks by putting the goat back onto the table (line 8). Subsequently, Hetty says *Nantila:h^[5] Hetty nak buat banyak banyak ni* ('Wait:, Hetty want to do more (of) this:.' (lines 8 and 9) which discloses her orientation to M's talk in line 7, and that her response is now due. Hetty's talk also shows that her preceding non-responses are deliberate. What she does in line 8 and 9 however, is not displaying a clear rejection. Rather than rejecting, Hetty *delays* the engagement with M (by asking her to wait) because at that moment, *'Hetty nak buat banyak banyak ni'* ('Hetty want to do more (of) this:'). In other words, by producing lines 8 and 9, Hetty has now made evident her receipt of M's previous actions and her acknowledgement that they warrant a particular response from her that she is not willing to provide just yet.

In sum, the analysis of these extracts from typically developing children shows the demonstration of the children's resistance to a pursuit for an engagement by the mother despite having noticed the bid, and having understood what it projects. These are also observed in the ASD dataset. The children do not supply the preferred responses to the mothers' preceding talk namely an acceptance of the offered objects or proposed play in Extracts 5.1, 5.2 and 5.3; demonstrate disinterest following an announcement in Extract 5.4, and a withhold of an answer in 5.5; and disalign their verbal and bodily actions from conforming to the trajectory that the mothers instigate. While the children from both groups are found to display unequivocal rejections, the typically developing children in this study are also seen to display an orientation to the accountability of their failures to provide preferred, anticipated reactions to their mothers.

5.3.2 Interactional use of bodily movements in displaying rejection to JE

In this section I will focus on how the children with ASD may rely on bodily behaviours to demonstrate non-compliance to their mother's pursuit for an engagement. These children's (re) organisation of gaze and body behaviours exhibit disalignment with the engagement trajectory, and embody the children's resistance to the course of the activity projected by the mothers.

In Extract 5.6, Mother (M) and the child; Imanudin (Iman) are sitting on the floor, with Imanudin sitting with both legs stretched out in front of him, and both hands upraised behind him on the sides supporting his body (Frame 1). On mother's left (Imanudin's right) is a truck which is placed on a magnetic board.

Extract 5.6 [Imanudin 'Redtruck']



Frame 1

1 M : jom kita main ni¹. (.)^{2/Frame2} > I ↑ man [< °kita main ni °]
Let us play this. Iman °we play this°

-----3/frame3 -----

((¹ M reaches for the toys))

((² Imanudin turns and gaze towards the toys, M picks the truck with left hand and the magnetic board with the right hand/Frame 2))

((³ M holds the magnetic board towards Imanudin))



Frame 2



Frame 3

2 I : [hm::][:↓::]=

3 M : [cepat]=
quick

4 I : =hmuhhh:: ((folds legs quickly and sits up))

5 I (↑ A H : :)
 (-4/Frame4)



Frame 4

((⁴ Imanudin looks to the right and stretches his right hand out ; M puts board in front of Imanudin, gazing at him/Frame 4))

6 M : ↑hm:. (0.4) [Kita main (yang ni)
 ↑hm:. (0.4) We play this one
 --5/Frame5--



Frame 5

((⁵ M taps the whiteboard, Imanudin moves to the right/Frame 5))

7 ((Imanudin takes the red truck then pushes it/Frame 6))



Frame 6

8 M : Iman nak main yang tu?
Iman want to play that one:?

9 (0.62) ((Imanudin continues pushing the red truck))

10 M : ok (0.6) Iman main yang tu.
ok (0.6) Iman play that one.

At the start of the extract, Imanudin appears to be in a relaxed position after just having played with the play dough with M. M then suggests that they play with yet another toy (line 1), which she first ambiguously refers to with '*ni*' ('this'). Following this, M picks the truck up with her left hand and the magnetic board with her right, which results in the truck being positioned further away from Imanudin and the board closer. It is now recognisable that she is selecting the magnetic board as the next focal object for their play. Immediately, Imanudin who has been gazing at the toys produces a sound in line 2 in overlap with M's ongoing talk in line 1 and sits up. By this, Imanudin demonstrates that he chooses not to wait until M has done talking completely, hence suggests that the turn he is producing must be delivered at that particular point of time when M shows the board to him, and not later. It is not entirely clear at this stage what he is trying to convey with his line 2, but regardless, M seems to treat it as an attempt to delay the progress of their activity that she promptly mends with her '*cepat*' ('quick' [line 3]). The sound Imanudin produces next with a notably louder voice (in lines 4 and 5) is suggestive of a distress on his behalf. Note, too, that Imanudin repositions himself, as he folds his legs and bends to the right with his hand reaching out. This does not only make apparent his non-orientation to the board, which is M's selected toy, but also that he is pursuing some other object.

Interestingly in line 6, M produces '*↑hm::*' which may serve as a request for a repair from Imanudin (Corrin, 2010). If this was true, this means that M might have not understood what Imanudin had been trying to convey and therefore warranted more information from

him. It might have initially been such a request, however, M does not wait for Iman to react to it accordingly as she then reformulates her talk from line 1 into *'kita main yang ini'* (We play this one [line 6]) as she taps the board with her hand. This particular fragment of her turn can be seen as her attempt to re-orient Imanudin to the magnetic board and therefore implies her understanding of his non-compliance with her play proposition.

It is worth reiteration that Imanudin begins the display of his non-compliance to M's play initiation by making noises. When this appears to be insufficient to restrain M from pursuing his engagement with the board, he upgrades his resistance to the instigated triadic interaction by relocating his body to orient to the truck instead and proceeds to play with it (line 7). In so doing, not only he clarifies his choice of object to play with, he has also occasioned no further prospect for M to dismiss his current trajectory. Accordingly but unsurprisingly, M then acknowledges his choice of toy and declares her agreement for him to continue playing with it (lines 8 to 10).

Extract 5.6 has provided a clear example of how bodily re-organisation works in doing non-compliance. However, when such a re-organisation is not feasible due to, for instance, a constraint physical accessibility as shown in Frame 1 in the following Extract 5.7, the child may launch an eradication of the object selected as the shared referent from the triadic framework of the proposed JE instead.

Extract 5.7 [Amin 'Dog']

- 1 M : OK kita cerita sikit. kita cerita sikit (.) ((bends forward and puts left
2 *OK we tell story a bit. We tell story a bit* hand around Amin/Frame 1))



Frame 1

3 ni apa ni? ((points to a picture on the puzzle/Frame 2))

this what is this?



Frame 2

4 (0.5) ((Both M and Amin continue looking at the puzzle))

5 M :



((¹ Amin picks up the puzzle board))

6 Amin : = ↑ak ((tilts the puzzle board upside down/ Frame 3))



Frame 3

7 M :

<p>(tsk)=taknaklah: (tsk)=don't want (tsk)=don't (be/do like that)</p> <p>-----2-----</p>	<p>= <jom kita> tengok auntie ada ^{Frame 4}mainan apa let us see auntie has toys what let us see what toys auntie has got</p> <p>-----3-----</p>
---	---

((² M sits up then gazes towards the toys bag))

((³ M reaches for the toys bag while Amin continues tipping the pieces puzzle off board))

Extract 5.7 starts with M proposing that the dyad tells a story together based on the puzzle (line 1). After a brief pause, she asks '*ni apa ni?*' ('this what is this?') with her finger pointing to the puzzle. The dyad looks at the puzzle quietly for 0.5 seconds, and when an answer from Amin is still not forthcoming, M takes the next turn by answering her own question by labelling the picture with 'dog::' (line 5). As she starts her talk in line 5, Amin begins to raise the puzzle before flipping the board over, spilling the puzzle pieces from the completed puzzle in line 6. In so doing, he has now broken the visual engagement they have had briefly established. By removing the referent too, he is no longer involved in the triadic engagement with M and the puzzle board and therefore no longer required to do anything with regards to the picture, such as by repeating 'dog::' after M. M shows her disagreement with his doing that she produces '*(tsk)=taknaklah:*' ('(tsk)=don't (be/do like that)') in line 7. Nonetheless, the removal of the puzzle has in effect led to a non-orientation to it, which may have caused M to then re-orient to another object (*<jom kita> tengok auntie ada* ^{Frame} ⁴*mainan apa*' ('let us see what toys auntie has got') in line 7. In other words, by eliminating the shared referent (the particular piece of the puzzle) an orientation to it could not be performed, thus both the participants could not progress with the activity with it, and results in the engagement involving the referent could not be established.

In the next extract, I will show another example of the use of embodied behaviours by the child (Amin) in refusing his mother's attempt to engage him with a new task. Here Amin relies on physical actions to resist M's initiating bid and utilises his minimal talk. Prior to line 1 of the extract, Amin has been playing with the puzzle. M has been observing him, and at the same time trying to get him to label a few body parts pictured on the puzzle (which she

identified by pointing to them). However, Amin did not label any pictures and continued on completing the puzzle, as M has had her finger remained pointed, seemingly ready to pursue another label from Amin.

Extract 5.8 [Amin' Nose']

- 1 ((Amin has just put a piece of puzzle as Mother (M) watches while pointing
- 2 to the puzzle with her index finger/ Frame 1))



Frame 1

- 3 Amin : [↑ Ni:] ((presses the piece))

↑*This:*

- 4 M : $\left[\begin{array}{l} \{>Ni\ apa <\} (.)\ ha\ ni\ apa\ \uparrow ni = \\ This\ what\ (.)\ ha\ this\ what\ is\ this \\ \dots\dots\dots 1 \dots\dots\dots \end{array} \right]$

((¹ M points to the piece of puzzle with index finger))

- 5 = ((Amin holds M's index finger and
- 6 pushes M's hand [away/ Frame 2))=

- 7 M : $\left[\begin{array}{l} [h\ i : [: \underline{d\ u\ n\ g} \\ nose \\ = [(y\ e\ y) \\ \mathbf{yey} \\ \dots\dots\dots 2 / \text{Frame3} \dots\dots\dots \end{array} \right]$
- 8 Amin :

((² Amin moves forward to take another piece of puzzle))



Frame 2



Frame 3

9 ((Amin picks up another puzzle))

10 Amin : ni: ((Amin puts the piece onto the puzzle wrongly))

this:

11 ((Amin holds the piece onto the puzzle board then looks to M/Frame 4))



Frame 4

In line 1, Amin puts a piece of puzzle and addresses it with 'Ni:' ('This') as he presses it to fit nicely onto its space (line 3). At the same time, M says ' $[>Ni\ apa<](.)\ ha\ ni\ apa\ \uparrow ni^2$ ' ('This what ha this what is this') as she points to a picture of a nose on a piece of puzzle (line 4). In so doing, rather than following on Amin's earlier turn, M now initiates a new engagement trajectory by selecting the particular puzzle piece (which she has identified with her finger pointing) as their shared referent and for Amin to label.

Clearly Amin treats M's action as in disalignment with his own trajectory to which he appears to object by grasping M's pointing finger (in lines 5) and physically removes M's hand from the puzzle (line 6). Note that although M has already been pointing from the start of the extract, Amin only shoves M's hand away *after* her talk in line 4. Therefore it is suggestive here

that Amin is reacting to the event that the talk in line 4 is projecting (picture naming), and not to the act of finger pointing per se. It is only when M asks what the thing she is pointing to is (thus makes relevant an answer from him) that the act of finger pointing becomes an interference to him. His behaviour also makes evident his monitoring of the mother's talk, and what it involves (among which – a projection for a reply from him) despite he seemingly pursuing his own play. By removing M's pointing hand he gets rid of the joint focus it implicates between them and the nose-pictured puzzle; and with the joint focus now eliminated, he is no longer accountable to produce the label (or follow along the trajectory it proposes) and free to continue with his own play.

M also treats Amin's behaviours in line 5 as a sign of deliberate non-compliant. Note that as soon as Amin's hand is away, she quickly continues to label the picture herself (*'hi:dung'* ['nose'] in line 7). This action suggests that she is treating Amin as being aware of the referent as it is communicatively relevant to offer a name of a referent when the recipient is able to identify it, or is already attending to it (see for example Hoff & Naigles, 2012). M's action also demonstrates her insistence in the pursuit of an engagement with Amin. Amin overlaps M's talk with 'yey' (line 8) and reaches forward to take another piece of puzzle (line 9); displaying no further orientation to the 'nose-pictured' puzzle. By this point, M has ceased her pursuit and watches in silence as Amin proceeds with his play (lines 9 onwards).

From the review of the data from TD children in this study, reliance on the body movements alone to display their rejection to a projected engagement is uncommon. As shown in the previous section, while the TD children do display their resistance by disaligning their body and visual orientation from the mothers and/or the proposed shared referents, it is more commonly observed than not that they produce talk to accompany this. However, as shown in the following extract, TD children may display their physical rejection of the referent

which is in similar fashion to what has been exemplified in the examples from children with ASD.

Extract 5.9 [Deena 'Play cooking']

1 D : HA >ni ni ni ada tukang<masak-masak(.) ((takes bag of kitchen set))

Ha >this this this has chef

2 M : Ni dik? ((opens a book and shows it to Dena, gazing at the book/Frame 1))

This little sister?



Frame 1

3 D : Ah: = ((jumps on the spot))

Ah

4 = [kejab ((pushes cover of book/Frame 2 and Frame 3))

Wait



Frame 2



Frame 3

5 M : [(baca ni)

read this

6 D : Sekejap ((faces forwards and holds a bag of toys/Frame 4))

Wait



Frame 4

- 7 (3.1) ((Deena continues playing with the kitchen set))
- 8 D Main masak.
- Play cook*
- Play cooking*

In Extract 5.9, the child (Deena) has just decided to play with the kitchen set in line 1 when the mother opens a book and says with '*Ni dik?*' ('This little sister?') and she moves it towards Deena (line 2). By producing the talk while placing the book -wide opened- towards Deena, M is displaying that she is now proposing an activity with it, such as looking at the pictures or reading its story. Deena gazes at the book, and jumps once and begins to push the book (lines 3 and 4). In so doing, Deena demonstrates that she understands that M is initiating another activity that is not aligned with her own trajectory (play cooking) which she is not willing to comply, and least not immediately. Similar to the child in the Extract 5.5, Deena too says 'wait' thus puts the activity anticipated by M on hold. She too does something additional – she pushes the one side of the book (Frames 2 and 3). This gives the impression that she is then working on closing the book. Deena's behaviour shows that she has identified M's selected referent, and that she is now deselecting it from her own course of action (cf. Korkiakangas, 2011). Deena is not successful in closing the book which may have led her to use

another strategy – repositioning herself to face forward as to quit orienting to the book but to the toys that would be involved in her own play instead.

The unavailability of an example of children from the typical group relying on bodily behaviours alone to display their rejection may also be attributable to the different levels of speech and language abilities of the children from the two groups, which influence the way they manipulate the resources they have in hand to interact. However, the effect of children's speech and language skills on their interactional performance is not of the main interest of the present study, nor that such analysis could be validly made considering the nature of the investigation. Nevertheless, given that the TD children are considered as following the *normal developmental process*, their data are used in this thesis to aid the exploration and understanding of the phenomena in question.

In the following subsections I will continue the analysis by focusing on the instances when the children appear to withhold their responses following their mothers' initiating actions. In these instances, the children are observed to orient to their mother's initiating talk, but do not produce explicit reciprocal responses in return.

5.3.3 Withholding of reciprocal behaviour in demonstrating non-compliance

In this subsection, I am particularly interested in instances when the children exhibit receipts of their mothers' initiating turns but fail to produce any reactive behaviours in their next turns. The following two extracts are chosen from the ASD data set because they clearly exemplify this phenomenon. In Extract 5.10, the child (Taufiq) and his mother (M) are seated facing each other. Prior to the extract, Taufiq kept the toy fruits into their bag after having

finished playing with them and handed the bag to M. M took the bag and put it on her right, and Taufiq got hold of a bag of vehicles. He then continued to open the bag.

Extract 5.10 [Taufiq ‘Taufiq’s Car’]

1 ((Taufiq opens the bag of toy vehicles, while M picks up a small car from
 2 her right and [brings it to her left/Frame 1])



Frame 1

3 M : [↑Ni
 ↑*this*

4 (0.7) ((M puts the car down together with other vehicles, gazing at them. The
 5 car then moves on its own))

6 M : Taufiq ^{1/Frame2}punya ↑^{2/Frame3}ni?

Taufiq’s ↑*this* (.)↑

Yours ↑ *this*(.)

((¹Taufiq turns and gazes at the car touched by mother))

((²M picks up the car again with left hand and picks up an orange car with right hand, then puts the car back with the other vehicles while gazing at it))



Frame 2



Frame 3

7 (.)

8 M : ↑Car: = ((M gazes at Taufiq, left hand gestures to the vehicles/ Frame 4))

↑Car:

↑Car:



Frame 4

9 = ((Taufiq gazes back towards the bag in his hand/Frame 5))



Frame 5

10 ((M turns to her right))

11 M : tak↑nak ((puts the orange car into its bag))

Don't want

12 ((M continues putting fruits into the bag, Taufiq takes out a vehicle))

While the child, Taufiq, is gazing at the bag of vehicles and opening it, M appears to orient to the vehicles on the floor. She then produces 'ni' ('this') as she picks up a car from the group of the vehicles. Taufiq does not say anything in the next turn (line 3). In line 6 M produces 'Taufiq ¹punya ↑²ni?' ('yours ↑this') and after a brief pause, she says '↑Car:' (line 8). In line 8 too, M places her hand over the vehicles and gazes at Taufiq (Frame 4), rather than on a particular car (for example, the one she has just picked). Her hand gesture combined with her talk thus clarify that what she refers to with 'ni' ('this') in her previous talks is actually the whole set of Taufiq's cars. M's gaze shift from the toys to Taufiq shows that as well as addressing her talk to him, she is now selecting him to take the next turn (Lerner, 2003; Rossano, 2012). However, Taufiq remains silent with his gaze fixed on the referents.

It is not entirely clear what M means with her talk in lines 3 to 8, and the kind of engagement she is projecting is not easily recognised. Although it is safe to claim that M's talk is an act of *referring* (Eriksson, 2009; Strauss, 2002), the analysis suggests that it actually does more than only addressing Taufiq's own car, or directing his attention to it. She understandably talks about the child's cars, however, the exact action that M is projecting is ambiguous at that point (for example, whether she is asking if the child *wants to play* with the vehicles, or if the child *wants* them to be left as they are or wants them removed as to follow on their earlier toys-keeping task). In order to infer what M does with her talk, we may need to consider what both of the participants are doing at the time. Note that when M produces line 2, Taufiq is at the verge of opening the bag of vehicles (brought into the set by the investigator as part of the research materials for use in the free play). It is apparent that he is about to play with the vehicles, and at the same time displays that he chooses them over his own set of cars available on set. Note too that M deploys an interrogative prosody (rising end-intonation (Hayano Kaory, 2012) in all of her talk in lines 3, 6 and 8. Given where line 3 is situated (when the talk on the child's cars started), and the design of M's talk within the talk sequences, her

talk may therefore be heard as her query to the child regarding his overlooked vehicles, which may be glossed into ‘what about these cars of yours?’.

M’s talk (lines 3 to 8) has made contingent a response from Taufiq. At this point, one could have produced an answer, for instance by indicating what they want to do with the cars. Alternatively, due to the talk’s vagueness, the recipient may initiate a repair to indicate a problem with the speaker’s earlier talk. However, Taufiq produces none of these. Taufiq has started to gaze at the cars in question as soon as M produces her line 3 which indicates his receipt of the talk and ability to identify the referents. Taufiq maintains his gaze until line 9 when he looks back at the bag of toys he is holding. However Taufiq does not say anything, so as to provide any response to M’s talk or alternatively, initiate a repair, and does not gaze up at M so as to demonstrate his orientation to her as the speaker. He then looks back down, thus demonstrating his visual disengagement from the referents (*his cars*). A visual orientation aversion from a focus point to another may indicate a discontinuation of one’s attention from prior focus (Schegloff, 2007). In this extract, the mother also treats the child’s gaze shift as a form of resistance to the engagement trajectory (Terhi Kirsi Korhonen, 2011) which she has initiated. She follows on the resistance as she too shifts her own gaze before voicing out her conclusion of Taufiq’s behaviours that Taufiq ‘don’t want’ the cars (line 6). In so doing, M now drops the pursuit for an engagement with the cars altogether.

In Extract 5.11, I analyse another instance when the child, Taufiq once again display a visual orientation to the referent following the mother’s bid (a question related to the referent) but withholds any verbal responses. From prior to the extract, Taufiq has been playing alone with the the vehicles scattered on the floor when his mother (M) takes a big sized book from the toys bag.

Extracts 5.11 [Taufiq 'Big Book']

1 ((Mother looks into the toys bag then brings out a book while Taufiq plays
 2 with the cars, gazes at them))

3 M : Tau↑[fiq] =

4 [[[M puts the book on her lap]]]=

5 (0.8) =((Taufiq gazes at the book then gazes back down/Frame 1))



Frame 1

6 M : ↑Ni?: (>burung a↑pa<?) ((looks briefly at the book then up at Taufiq))

↑ This (bird ↑what)
 -----1-----

↑ This (what ↑bird (is this?))

((¹Taufiq gazes back at the book))

7 (1.6) ((Taufiq maintains gaze at the book))

8 ((Taufiq looks back down at the toys))

9 M : tak↑nak ((shakes head slightly))

Don't ↑want

10 (3.7) ((Taufiq looks briefly at the book then looks back at the toys))

In line 3, M first summons Taufiq as she places the book on her lap. Almost instantly, Taufiq shifts his gaze from the cars to the book and then gazes back down. Following this, M produces '↑Ni?: (>burung a↑pa<?)' (↑This ('what ↑bird (is this?))' which makes conditionally relevant a reply from Taufiq (line 6). Towards the end of M's talk in line 6, Taufiq once again shifts his back to the book. He continues to gaze at the book for 1.6 seconds but does not produce any verbal responses (line 7). He then shifts his gaze from the book back to the vehicles on the floor. In line 9, M says 'tak↑nak' ('Don't ↑want'). Taufiq has been gazing quietly at the referent from lines 5 to 8, however, notice how mother only treats the child as rejecting her initiation action following his gaze shift.

In both Extracts 5.10 and 5.11, the child stares at the referent following the mother's turns that clearly projects for a response from him but does not produce any other actions that would serve as the response to the mother's talk. In both occasions, the mother does not attempt a repair thus demonstrates that she does not treat the absence of a verbal reply from the child as due to him having any difficulties in comprehending the talk (Jefferson 1988). In both instances too, the child suspends his own activities and gazes at the mother throughout the sequences, which might have indicated that he is at the moment 'contemplating' of a response thus fails to produce a response at the expected juncture (Terhi Kirsi Korhonen, 2011). As such, the child's visual withdrawal from the referents is fitted as a display of his disinterest in the referents and resistance to the extension of trajectory involving them.

In some instances however, children's gaze orientation and aversion may go unnoticed by their mothers and therefore may not be functional as the demonstration of the children's

resistance to the mothers as their interactive partners. In Extract 5.12 for example, the mother (M) does not monitor the child's visual orientation while she herself appears busy setting up for the event that she is pursuing. Similar to the previous two extracts, M also initiates a new activity when the child is already attending to his own play. As seen at the start of the extract, Damien is looking down and playing with small cars while his mother (M) watches (Frame 1).

Extract 5.12 [Damien 'Count cars']



Frame 1

1 M : ((moves closer to Damien and holds his right hand))

2 : Nak buat apa? (.)
Want to do what? (.)

What do you what to do? (.)

3 M : (Damien (.) Damien count car for (me ⇒)
Damien (.) Damien count the cars for me
 -----1/Frame 2-----
 -----2-----

((¹ M puts left hand on Damien's leg then gathers the small cars with right hand/ Frame 2))

((² Damien moves slightly backwards))



Frame 2

4 : =((Damien picks a small car and pick-up truck))

5 M : (Damien kira ada berapa kere↑ta?) =

-----3-----4-----
Damien count has how many cars?
Damien count how many cars are there?

((³Damien puts the small car close to the back of pick-up truck))

((⁴ Damien puts the small car on the floor))

6 D =(⁰⁰⁰hm[m⁰⁰⁰]) ((Damien turns slightly to the left and gazes towards

7 cars on the floor /Frame 3))



Frame 3

8 M : [Ki↑ra] ((M continues gathering the small cars, Damien

9 Count continues gazing at cars))

10 (1.4) ((M continues gathering the cars; Damien continues gazing at cars/Frame

4))



Frame 4

11 M : >Okay kira< = ((reaches forward and picks another car with right hand))

Okay count

12 (1.1) =((Damien gazes back at cars he is holding and puts the pick up truck

13 down as M gathers more cars towards her/ Frame 5))



Frame 5

14 M : Kira (berapa kereta:) ((M reaches forward and gathers more cars))

-----5/Frame 6-----

Count how many cars

Count the number of cars



Frame 6

((⁵ Damien picks up a yellow car from the group of cars M gathers and looks at it/ Frame 6))

15 (.)

16 M : ↓Wah banyaknya kereta =

Wah so many cars

17 =((Damien puts the yellow car down, and looks to his left (Frame 7))



Frame 7

18 (1.8) ((M arranges small cars; Damien picks up the tow truck, gazes back

19 forward and hold tow truck up))

20 M : Damien bagi mummy kereta warna me↑rah

Damien give mummy car colour red

Damien give me red-coloured car

21 (1.0) ((Damien puts down the cars on the floor than reaches hand towards the

22 arranged cars))

23 D : Me[↑rah ((picks up a red car))

Red

At the start of the sequence, M positions herself closer to Damien, holds his hand, and asks '*Nak buat apa? (.)*' ('What do you what to do? (.)'). In so doing, she appears to orient to the child's ongoing activity. M however, does not wait for Damien to answer her question. In line 2, she holds Damien's leg and begins to gather the scattered cars towards herself, and directs '*Damien (.) Damien count car for me*' ('Damien (.) Damien count the cars for me'.) Damien moves slightly backwards but does not respond to M's directive and continues to play with a pick-up truck and a car. M then asks Damien to '*kira ada berapa kere↑ta?*' ('count

how many cars are there?' [line 5]). To this, Damien produces very soft ^{ooo}hm[m^{ooo}, turns slightly towards the left, and gazes at the cars of the floor. At this point, M is still collecting the cars and these cars that Damien is staring at are potentially to be gathered by M as well and included as the cars that he will have to count. At this point to, Damien freezes his own play. M does not appear to notice the child's visual orientation (she does not look up at Damien to be able to see this), however, her minimal directives 'Ki[↑]ra' ('Count') in line 8 suggests that she treats Damien as having attended to her initiating turns. Damien does not move or say anything but continues looking at the cars while M keeps on moving the cars so that they are gathered in one big group (line 10).

In line 11, M once again tells Damien to count but this time she prefaces her directives with 'okay'. Instead of complying by starting to count the cars, Damien remains silent but looks away from the cars and back to the vehicles in his hands (line 12). Following mother's directives in line 14, Damien who has already put down the pick-up truck and small car he was holding, now picks up a small yellow car from the group of cars collected by M, but does not say anything (line 17). Following this, M stops directing Damien to count and proceeds to direct him to pick up a red car instead, which he complies to almost instantly.

There are many instances in this extract that demonstrates that Damien is displaying resistance to his mother projection for him to count the cars. He has clearly recognised the mother's initiating talks, and the referents. These have made evident by his situated gaze orientation (line 6) and aversion (line 12). Despite the evidence of his orientations to M and the referents, the preferred, contingent response to M's directives (Schegloff, 1989) is not forthcoming from him. Also in line 17, he picks up the yellow car. Such an act displays that he is in the process of complying with M's talk, by appearing to do something that is relevant with the counting task that is by picking up one of the cars that he is supposed to count - without

actually counting anything. This phenomenon of delaying the exact projected response has been discussed as incipient compliant (Kent, 2012a; Schegloff, 1989, p.149). In this extract, Damien does not get to the point when he actually counts the cars. His absent of a preferred response may be influenced by M's in-progress work of *setting up* the avenue for the counting task she initiated by gathering the cars for him to count. Nevertheless, if he intended to comply with M directives, he has delayed providing a fitted response way too long and as such, his non-forthcoming response reflects a resistance from him towards M's trajectory.

In the next extract, the mother (M) and the child (Yusri) are positioned facing each other across a small, low table with mother sitting on a chair and Yusri standing. Both of them are gazing down towards the alphabets on the table which then selected by M as the shared referent (line 1). As such, the child appears to already orient both visually and bodily towards the selected shared referent at the time M produces the initiating turn. However as will be explicated in details, this extract is different than the previous three in a sense that there are no clear fitted behaviours produced by the child throughout the extract to indicate if he has received *the turn* as an initiation for an engagement that projects for *his* response. The absent of any fitted reactions from the child to the initiating turn despite his orientation to the same objects attended to by M raises more questions; whether this transpires from his conscious choice of doing a withhold of the anticipated response; or if it is attributable to his autistic condition.

Extract 5.13 [Yusri 'What's That']

1 M : nah ¹ni apa? (Dia) campur: (.) <cepat>
nah this what? (it) mix: (.) <quick>
 ((¹M points a finger to the alphabets on the table))

- 2 (1.02) ((M moves an alphabet))
- 3 M : Ha:
ha:
- 4 (2.21) ((Yusri moves a few alphabets around))
- 5 Y : bebebe:h. (love macam ni::) ((looks down at the alphabets))
bebebe:h. (love like this::)
- 6 M : apa tu? ((points to the alphabet then looks at Yusri))
What is that?
- 7 (1.6) ((M looks up at Yusri who is still gazing down at the alphabets))
- 8 Y : (foilolola[la la]lala↑la) ((looks up at mother))
- 9 M : [*apa dia?*] ((looks at Yusri))
what is it
- 10 Y : ((looks down))
- 11 M : Ni apa? ((Looks at the alphabet then at Yusri))
This is what?
- 12 (1.4) ((Yusri moves a few alphabets))
- 13 M : taikun: ((M looks down at the alphabets))
taikun:
- 14 ((Yusri gazes at M briefly then looks down))
- 15 Y : (em macam macam↑ni)
(em like like↑ this)

The extract starts with M arranging the available alphabets into a word and requesting Yusri to read it with her '*nah¹ni apa? (Dia) campur: (.) <cepat>*' ('nah this what? (it) mix: (.) <quick>') (line 1). M's query is explicable as an attempt to get Yusri to read the word formed by the arranged alphabets, given the fact that similar design of talk is also used a number of times

prior to and after this extract as they engage in the spelling task such as seen in Extract 2. In other words, line 1 is the bid designed by M to get Yusri to participate in yet another round of the spelling task. In addition, the query at line 1 is asked while Yusri is facing M in silent and appearing to watch her hand's movement; and considering their proximity it is unlikely that he misses *hearing* M's talk.

As described Yusri is not talking at the time, and the fact that he gazes towards where M is pointing to (line 1) suggests that he is at least physically orienting to M's current behaviour. He then appears to involve in the activity by moving the alphabets around (line 4), however this is not what M anticipates from him. When an answer to the question at line 1 is not forthcoming, M reinstates her query at line 6, this time by referring to the arranged alphabets with '*tu*' ('that'). At line 6, M reformulates her talk by replacing '*tu*' ('that') with '*dia*' ('it').

The use of 'this', 'that' and 'it' has been discussed in the literature, albeit mainly in relation to English (e.g., Diessel, 2006; Strauss, 2002). Strauss (2002) introduced a new model for examining the use of these words in interaction by relating them to the speakers and recipients' focus rather than the speakers' relative distance to the referent. Strauss argues that 'this' is usually indicating that the sharedness of information of a particular referent between a speaker and recipient/s is yet to be formed and that the recipient is required to highly focus towards the referent; while the use of 'that' and 'it' demonstrates already sustained sharing of information with the latter projecting higher degree of focus than the former but lower than 'this'. Interestingly, M in this extract is seen producing 'this', 'that' and 'it' in such order and manner that support and is supported by Strauss' proposals.

Note that at line 1 M uses *'ni'* ('this') which suggests that she is specifically addressing the referent (the arranged alphabets), and by also pointing M is leading Yusri to look at it. Also note that Yusri then appears to look at the referent, and it is following this that M produces *'apa tu?'* ('what is that?'). What this suggests is, in line with now that Yusri appears to have visually identified the referent and therefore shared some information of it with M, M uses 'that' that fittingly reflects this. When Yusri looks up and appears to make an eye-contact with her (line 6), M asks *'apa dia'* ('what is it?' [line 7]). This suggests that M now presumes that both of them had established a joint focus on the referent that she could at that point be less specific in addressing it. However, the anticipated answer to M's questions is still not made available by Yusri (line 8) which might have led M to re-specifies her questions by relocating the referent with *'ni'* ('this' [line 9]). Even this does not elicit an answer from Yusri, which then leads to M providing the answer herself at line 13.

It is apparent in this extract that M has been designing her talks to project the need for answers from Yusri. By designing a series of opportunities for Yusri to answer, M is creating junctures for Yusri to participate in the spelling task. Although it is arguably difficult to determine whether Yusri is aware of M's talk as requiring a reply from him, M's behaviours in this extract particularly up to line 9 do suggest that despite getting no affiliative nor disaffiliative contingency responses from him, she treats Yusri's available actions as a display of him having shared focus with her on the referent of her choices. This does not make the child actively participate in the projected engagement (either by accepting or rejecting explicitly), however M gets to present to Yusri her target response (*taikun*) before bringing the talk sequence to an end.

5.3.4 The absence of anticipated orientations in JE sequences

In this section, I will focus on the fourth phenomenon observed during the examination of the children's resistance to JE bids. The repetitive reviews of the dataset revealed that this kind of behaviours only recurrently seen in ASD data. The examples that will be discussed here are the instances when the children demonstrate no orientation to their mothers as the speakers and their initiating actions. In the examples, the children do not provide any relevant contingent responses - either preferred or dispreferred, following the mothers' sequence of turns. As will be shown, in some cases the mothers may treat these non-orientations as the children's display of resistance (Extracts 5.14 to 5.17), and in some as genuine non-orientation (5.18 and 5.20).

In Extract 5.14, the mother (M) and the child (Azam) are playing with blocks. Just prior to the extract, M has found a triangular-shaped block, and handed it to Azam.

Extract 5.14 [Azam 'This is a battle']

1 M : ((takes out blocks from the Lego basket))

2 Ha: there's another one= ((holds out a triangular block to Azam/Frame 1))



Frame 1

3 =y^{1/Frame 2}ah:: ((still holds out block to Azam))

((¹ Azam shifts gaze to the block M is holding))



Frame 2

4 (1.4) ((M puts the block into her right hand, Azam holds out left hand towards it))

5 M : Boleh buat dua rumah ni
Can make two houses this
Can build two houses

((² M puts the block on the floor, Azam takes it))

6 (1.0) ((M touses blocks in the Lego basket with right hand/Frame 3))



Frame 3

7 M : Ada dua rumah >kita boleh buat<
Have two houses we cat do
There are two houses we can build

((³ M looks into the Lego basket; Azam still looks down at blocks))

8 (1.9) ((M takes more blocks out))

9 M : Azam nak buat rumah tak?(.) tak↓nak ((puts the blocks on the

Azam wants to make house not? Don't ↓ want floor/Frame 4))

Azam wants to build houses or not (.) don't ↓ want



Frame 4

10 (1.5) ((the dyad remains as in Frame 4, manipulating toys at own hands))

11 Az : This is a ↑ba:↑ttle ((keeps gazing at the toys in front of him))

12 M : ↑O: ↓: (.) okay: that is interesting game

In line 5, M launches her initiation for an engagement with Azam by suggesting what they can do with the triangular-shaped blocks (*Can build two houses*) she has found earlier. When this receives no response from Azam who keeps playing with the blocks in his hands, M reformulates her talk in line 5 into '*Ada dua rumah >kita boleh buat<*' ('There are two houses we can build') in line 7. Azam continues with his activity with his gaze sustained towards his blocks; indicating no acknowledgement of M's talk. Following this, M asks '*Azam nak buat rumah tak?*' ('Azam wants to build houses or not?') and quickly adds '*tak nak*' ('don't ↓ want') which would have been a possible, fitted answer to her own question (line 9). In so doing, M also demonstrates that she treats Azam's non-response to her preceding talk as a rejection to her idea of building houses with the triangular-shaped blocks. By designing her line 9 as a question too, M does not only demonstrate that she is insisting a reply from Azam, she has also simplified the task for him by providing an answer ('*taknak*' ('don't want')) that he only has to confirm. Even so, Azam does not respond, or confirm that he does not want to make any houses. Rather Azam continues playing with his blocks. It is only after 1.5 seconds later

that he produces *'This is a ↑ba:↑ttle'* (L7), while keeping his gaze at the blocks he is playing with at the entire time.

It is interesting that Azam produces such a talk in line 11 after keeping quiet and missing his turns within the talk sequence. Considering the talk syntactically, it is possible that line 11 constitutes Azam's rejection to the whole idea of building houses with M as well as his justification for the rejection. As the talk in line 11 is produced after a series of talk by M (from lines 5 to 11), which Azam demonstrates not a single display of orientation to (except for his physical orientation to M when she holds the triangular-shaped block out to him (lines 4 and 5) - it may be used by Azam to do more than just making a statement of what the play he is playing really is. By stating that what he is involved in *'is a battle'*, Azam makes irrelevant M's suggestion of house building. In other words, he rejects M's idea, albeit implicitly, by clarifying his play trajectory, which is in disalignment with what M proposes. In that sense, Azam may have demonstrated his monitoring of M's preceding turns despite appearing not to orient to them.

However, note that in line 9, M has concluded, apparently from Azam's non-response that he does not want to build houses and continues to play with the blocks she is holding (line 10). In so doing, M appears to bring her pursuit for Azam's response to a closing. Thereof, Azam's talk in line 11 is hearable as an opening of a new sequence. Also, M's talk in line 12 does not seem to treat Azam's line 11 as a support for his rejection to her preceding initiating actions as much as it is a telling of new information (of the ongoing play). In her talk, M demonstrates her understanding of Azam's announcement regarding his play with her *'↑O:: ↓: (.)'*, and her acceptance of it with *'okay:'* before she then produces an assessment of it as an *'interesting game'* (line 12). There is, however, no evidence in her talk in line 12, or in any of the following talk (that are not included in the extract as the dyad proceeds to talk about the

battle), that demonstrates either M or Azam's orientation to line 11 as related to M's idea of house building.

From the analysis of the participants' behaviours, it is difficult to ascertain what Azam is actually doing with his line 11. It is noteworthy however, despite the child's lack of observable orientations to M's initiating actions from lines 5 to 9; M appears to treat him as orienting to her, but resisting her bid for them to build houses. In the next Extract 5.15, I will analyse another extract that further exemplify how the child (Taufiq) appears to not orient to his mother (M) nor her talk until much later in the sequence to suggest that he might have been listening.

Extract 5.15 [Taufiq 'Pick-up truck']

In this extract, Taufiq and mother (M) are sitting facing each other. Taufiq is manipulating a toy vehicle, while mother watches. Taufiq then puts the toy vehicle down, and picks a toy tow truck up. He looks down at the vehicles at all time until line 10.

- 1 M : Itu a↑pa?,
That is w↑hat?
- 2 (3.5) ((Taufiq turns to the right and puts the tow truck on the floor))
- 3 M : Ha tu apa tu?
Ha that's what is that?
- 4 (4.6) ((Taufiq picks a small car and starts to attach it to the tow truck))
- 5 M : Pick up truck
- 6 (2.7) : ((Taufiq works on attaching the car to tow truck))
- 7 M : Tak boleh:=
Can not:

8 = ((Taufiq finishes attaching the car to the tow truck))

9 Taufiq : Huuh huh huh ((Taufiq sits up and makes a sound while putting his

10 hands together towards the tow truck and the car/Frame 1))



Frame 1

11 ((Taufiq looks at M/Frame 2))



Frame 2

12 M : ((laughs))

13 Taufiq : Ha: ((looks back at the tow truck and begins to pull it))

In Extract 5.15, M watches Taufiq closely as he plays with the vehicles. When he picks a tow truck, M asks Taufiq to name the vehicle with *'Itu a↑pa?'* ('That is w↑hat?'). Taufiq does not answer this question and continues to place the truck on the floor. In line 3, M reformulates her unanswered question into *'Ha tu apa tu?'* ('Ha that's what is that?') which still receives no reaction from Taufiq. M allows 4.6 seconds to pass for Taufiq to answer this, during which the child takes a car and tries to hook it the tow truck. In line 5, M produces *'Pick-up truck'*, the label she has been waiting for Taufiq to provide.

In this sequence, Taufiq does not display any orientation to M's talk. Nonetheless, the design of M's lines 1, 3 and 5 suggest that she treats the child as having oriented to her from the start. She does not summons him to get his attention or uses any gesture to identify the referent of her talk as she launches her question in line. This suggests her orientation to the child as having the awareness of her talk and what she refers to with *'tu'* ('that'). In line 3, M acknowledges Taufiq's preceding behaviours by producing *'ha'* at the start of her talk. The use of *'ha'* in the Malay language has not been studied, however from my personal observation as a Malay speaker, I have found that *'ha'* being commonly utilised to serve many functions, such as as a receipt or acknowledgment token (cf. Gardner, 1997). In so doing, M seems to accept Taufiq's behaviours in line 3 as relevant with her trajectory, but does not answer her earlier question in line 1 that she reproduces the question in line 3. The anticipated answer is not forthcoming from Taufiq despite M's generous allowance of 4.6 seconds for him to do so. Following this, M names the vehicle herself (line 5). By labelling the referent, M displays that she considers Taufiq as attending to it as well as to her talk, that he has the capability to perceive the label and attaches it to the object in question. As such, M's behaviours make evident that- at least from her point of view, Taufiq is aware of her talk and thus, the absence of any responses from him is a display of a deliberate act of non compliant, rather than due to his lack of orientation. The preceding section of this extract seems to support this analysis. Note that in line 7, M says *'Tak boleh:='* ('Can not:'). Considering that she produces this while witnessing Taufiq works on connecting the car to the tow truck, M's talk is therefore hearable as a tease, or a premature conclusion of what Taufiq may achieve. Taufiq manages to hook the car to the tow truck, and vocalises 'Huh huh huh' with his hand gesturing towards the vehicles and looks at M who then laughs (lines 9 and 10). In so doing, Taufiq refutes M's earlier remark (*'cannot'*) by showing his achievement (the attached car and tow truck). This too, demonstrates that he understands what M refers to with her talk in line 7, which also reflects his recognition of M's orientation towards him and his play. Taufiq's behaviours in lines 9 and

10 may not serve as the evident to claim that Taufiq has actually oriented to M during the earlier part of the talks sequence, however, it does show the child's capability to orient to M despite the absent of physical or verbal actions to indicate so at the time of the event.

In the following extract, the child (Azam) too appears to not orient to his mother's initiating talk. However, the analysis reveals that he may have demonstrated his potential monitoring of what has been going on in the interaction.

Extract 5.16 [Azam 'Make Hands']



Frame 1

- 1 M : Di di di:: di di di:: ((sings))
- 2 (1.8) ((M plays with block in her hands; Azam in his. Both are looking at toys
3 in own hands))
- 4 M : Apa tu Azam nak buat apa?
What is that Azam wants to do what?
- 5 (4.7) ((Azam picks up a block on the floor then attaches it to the blocks in his
6 hands; M continues attaching blocks too))
- 7 Az : (°di di: di di di di:°) ((sings softly))
- 8 M : DI DI DI ↑DI:: ((sings))
- 9 (.)

- 10 M : Azam nak buat a[↑]PA:?
Azam wants to do what?
- 11 Az : >Saya (nak) buat< tangan dia (.) (^o<besar>^o)
I want to do its/his hand. Big
- 12 M : Tangan dia besar? Tangan dia besar macam[↓]na:? ((looks towards the
13 *His hand is big? His hand is big how? blocks in Azam's hand))*
14 ((The robot Azam's building breaks and half of it falls off))
- 15 Ak : [↑]OW=

As described both the mother (M) and Azam in Extract 5.16 play with blocks, but separately. There is no indication throughout the extract that the mother or the child appears to coordinate their play with the other, or to engage the other in their own. In line 4 after singing a short, wordless song *Di di di:: di di di::'* (line 1) and a 1.8 seconds of silence (line 2), M initiates a verbal engagement with Azam by producing a question '*Apa tu Azam nak buat apa?*' ('What is that Azam wants to do what?'). She does not gaze towards Azam when she says this; rather, she appears occupied both visually and bodily with the blocks in her hands. While she does not appear to attempt for a physical play engagement with the child, her line 4 initiates a talk on a shared topic with Azam. To gloss, the talk in line 4 is interpretable as a query of what Azam wants to make of the blocks which in itself will require the child to do some explanation of his activity. Azam does not take the next verbal turn, and both M and Azam proceed with their own activities silently for the next 4.7 seconds.

In line 7, Azam sings very softly what appears to be an imitation of M's prior song. M picks up on this that she too resumes her singing, rather louder in volume this time compared to her own singing in line 1, or Azam's line 7. Note that up until this point, Azam does not demonstrate any receipt of M's earlier question. In line 10, M reproduces her earlier question

'Azam nak buat a[↑]pa:?' ('Azam wants to do ↑what?'). Immediately after this, Azam takes the next verbal turn (line 11) and says that he wants to 'buat< tangan dia (.) (^o<besar>^o)' ('want to do its/his hand. Big').

M's voice in her pursuit for Azam's engagement in line 10 is relatively louder than her voice in line 4. Also there is a noticeable emphasis on 'apa' (what') thus demonstrating her increased demand for Azam's to answer as well as that Azam's earlier non-response as problematic. In spite of Azam's lack of response and seemingly lack of orientation to M's question in line 4, his singing in line 7 suggests that he has been listening to M before she launches her question. M's talk in line 10 which is a shortened but escalated in urgency version of her question in line 4 demonstrates that she treats Azam as having heard her question as well.

In the dataset of typically-developing children, I have also instances when the children's displays of non-orientation and absent responses to M's initiating actions are treated as conscious doings by M. Consider for example, the interaction between a child (Aina) and her mother (M) in Extract 5.17. At the beginning of the extract, the child, Aina is standing next to the bag of toys, holding a doll she has just picked out from the bag. Her mother (M) is sitting on the floor, keeping the toys they played with before the extract back into their bags (Frame 1).

Extract 5.17 [Aina 'Doll']



Frame 1

- 1 A : ni anak pa:tung (.) anak pa:tung ((Aina says this in singsong manner, while
 2 This *is doll.* *doll* swinging the doll left and right))
 3 (4.6) ((Aina gazes at the doll and its hair))
 4 M : ¹cuba adik baca cerita ↓ni >apa ^{2/Frame 2}[↓ni
try little sister read story this what this
try you read what story this is



Frame 2

((¹ Aina starts to walk away from the bag, looking at the doll; M gazes at the book))

((² M touches the book on the floor with her right hand/Frame 2))

- 5 A : [*anak pa:tung*]=
 [*doll*]
 6 M : =Cerita ANGsa³ ↓ni. Dalam ceri[ta >angsa ni ada kuraKURA la DIK⁴<]
 =*Story swan this.* *In stor[y swan this has tortoise little sister.*]

This swan story. [in this swan story there is a tortoise little sister]

((³ Aina kneels on the floor then sits down near the book, looking at the doll; M opens the book))

((⁴ Aina turns to the book))

7 A : [<Anak pa:tung>]
[Doll]

8 ((Aina turns to look at the book then turns her body towards it))

9 M : °↑ni° (0.5) °Kura-↑kura°

↑*This. (0.5)Tortoise*

((⁵ Aina kneels up and turns her body to face the book))

10 M : Ni dia (.)

This is it

At line 4, Aina starts to walk away from the toys bag as M launches her talk ¹*cuba adik baca cerita* ↓ni >a[pa ^{2/Frame 2} ↓ni' ('try you read what story this is'). M starts her turn with 'cuba' ('try') and so instead of making it a directive that Aina reads the book; she delivers it as a request that Aina *attempts* to do so. However, note that she does not stop with this request, rather she also produces a question-in design talk 'apa ni' ('what is this') in her turn, which is now making it sequentially relevant for Aina to provide an answer. While a request invites for the recipient's compliance as the preferred response although a decline is also possible as the next-turn (Curl & Drew, 2008; Davidson, 1984), an interrogative talk further increases the relevance for a reply- an answer in particular, as the next action from the recipient (Craven & Potter, 2010; Stivers & Rossano, 2010). In her next turn, Aina does not provide a fitted response to M's request, or an answer to her question, rather she re-produces her singsong talk of '<anak pa:tung>' ('doll' [line 5]) in overlaps with the end portion of M's line 4.

It is noteworthy that the overlap in line 5 actually occurs at a point where M could have possibly completed her turn (line 4), thus suggests that Aina has actually attended to M's. In other words, she may have been aware of M's talk, but by saying '*anak pa:tung*' ('doll') Aina makes clear that her choice of focus now is on the doll without having to acknowledge or reject M's bid explicitly. M then continues her talk by now addressing the content of the book in latching with Aina's preceding turn (line 6). As M appears to maintain her talk on the book, Aina once again produces her talk in line 7 in overlap with her mother's talk. Similar to her previous turn at line 5, Aina interjects M's ongoing talk with *anak pa:tung* (doll) (line 7) which is neither a preferred nor fitted response to M's preceding turn, although it does highlight her own play trajectory. In addition, Aina prolonged talk in line 7 seems to match the length of M's thus suggests that Aina unfitting talk may be intentional.

M's talk in line 6 in particular shows that M designs her talk to compete with Aina's talk line 7. M speeds up her talk when Aina's talk begins to overlap hers, and increases her voice towards the end of her talk. This shows that M sees Aina as resisting, rather than not attending. In addition, M calls the child's name at the end of her talk- rather than at the start, which would have made the name calling a summons that is always used to attract a non-attending recipient - thus making clear that her talk is addressed at Aina and that Aina is now accountable for the next turn. In line 8, Aina demonstrates her receipt of M's talk, that she ceases her singsong talk immediately and finally shifts her attention from the doll to the book (line 8).

It is noteworthy that although Aina seems to not respond to M from lines 1 to 7, her behaviours in the talk sequence provide perceivable evidence of her co-ordinated talk with her mother's. As such, it is evident that she has been monitoring, and orientating to M's talk throughout the sequence. In other words, the child is actually responding to M by *not*

responding. This is contrary to Extracts 5.14 and 5.15 in which the children do not display any orientations to their mothers *during* the particular engagement pursuit sequence, thus makes it difficult to determine their exact state of awareness. In Extract 5.16, the child (Azam) does demonstrate that he has oriented to his mother's turn (line 1) however, it would be risky to also assume that he has received the engagement bid (line 4) due to the lack of evident deducible from his behaviours.

Next I will consider three extracts when the mothers abandon their engagement pursuits following the children's non-responses. These analyses of the extracts extend the examination on how the children's absence of fitted reactions to M's talk may hinder the progression of the interaction. In the instances, the mothers may treat the children as simply not orienting to the initiating turns. Although in some instances the mothers may be able to presume the contributing factors for the children's non-orientations from the children's behaviours (such as being distracted), such a clue is not always available. What is clear from these extracts is that the children's lack of orientations and responses impede the progressivity of the engagement establishment sequences that the mothers have instigated.

As exemplified in Extract 5.18, a child may produce some actions (as in this case, some verbal actions) following the mother's initiating talk that may be received by the mother (as suggested by M's behaviours) as the child's active participation in the interaction. However, as discovered by M later in the sequence, this has been a misperception by the mother and that the child has not been *concentrating* on her talk at all.

Extract 5.18 [Azam 'Does not Concentrate']

In this extract, Azam is building something with the Lego blocks. Prior to the extract, Azam had been picking up blocks and labelling the colour for each block. He then continues manipulating the blocks as his mother (M) sits quietly on his left and looks on.

1 Az : (Yang)(.) this ((picks up a red block then puts on the on the stack of blocks))

2 (2.7) ((M looks at Azam as he continues manipulating blocks; at 0.9 M starts
3 to adjust sitting [position])

4 M : Re:d

5 (0.8) ((M continues looking at Azam as he continues manipulating the
blocks))

6 M : Red bahasa Melayu apa? ((Frame 1))

What is red in the Malay language?



Frame 1

7 (1.3) ((M continues looking at Azam as he continues manipulating the
blocks))

8 Az : Blu[^]e ((picks up a blue block then attaches it to other block up as

9 M watches/ Frame 2))



Frame 2

- 10 M : ↑Ha: Takkan la red bahasa Melayu blue:
 ↑*Ha Red can't be blue in the Malay language*
- 11 (1.6) ((M continues looking at Azam as he continues manipulating the blocks))
- 12 M : Blue bahasa Melayu apa? ((leans forward towards Azam))
What is blue in the Malay language?
- 13 (1.4) ((M continues looking at Azam as he continues manipulating blocks))
- 14 Az : Blue and [green: (.) Red and yellow. ((picks a block with left hand; still
 15 gazing at the blocks))
- 16 M [(smiles))
- 17 M : Okaylah Azam tak concentrate. Okay.
Okay Azam does not concentrate. Okay

The extract follows on the child's self talk on the colours of the blocks he picked and played with. In line 1, Azam picks a red block and addresses it with 'this' without mentioning its colour. In line 4, M who has been watching him says 'Re:d'. This talk is apparent as M continuing the child's colour-naming task. M's line 4 is potentially an IET, however the talk's design does not make contingent any response from Azam, and none is forthcoming from him. M's next talk clearly shows that she is escalating her pursuit of an engagement with the child. In line 6, M says 'Red bahasa Melayu apa?' ('What is red in the Malay language?'). By designing her talk as a question, she now makes relevant a response from Azam. Specifically, she is

asking the Malay word for 'red' (i.e., '*merah*'). After 1.3 seconds gap, Azam says 'Blu[↑]e'. Considering that he has demonstrated no orientation to M insofar, and that he produces the talk in line 8 as he picks up a blue block, it is perceptible that he is naming the colour of the block he is attending to rather than answering M's question.

It is possible that M sees what is going on (that Azam is doing a self-talk by labelling the colour of a block and not talking to her), however she demonstrates no evidence of this. Instead, she displays an orientation to Azam's line 8 as a response to her earlier talk. She indicates the unfittedness of Azam's talk as an answer to her question by saying that '*Takkan la red bahasa Melayu blue:*' ('Red can't be blue in the Malay language' [line 10]). If Azam has actually produced line 8 as a reply to M's line 6 and presumably too that he has attended to M's line 10, he could have taken the next turn to rectify this error. However, he does not do this or demonstrate any acknowledgement of M's line 8. After a silent interval of 1.6 seconds, M continues her pursuit for Azam's engagement by asking '*Blue bahasa Melayu apa?*' ('What is blue in the Malay language?'). It is only after another long gap that Azam produces a talk '*Blue and [green: (.) Red and yellow.*' (line 14). Contingent to this, M smiles and accepts that Azam has not been attending to her '*Okaylah Azam tak concentrate. Okay.*' ('Okay Azam does not concentrate. Okay').

The next extract exemplifies the phenomenon in an instance involving a non-verbal child with ASD, Imanudin.

Extract 5.19 [Imanudin 'Colourful Chain']

- 1 M : ((takes out a colourful chain and brings it towards Imanudin who is
- 2 yawning/Frame 1))



Frame 1

3 M : Ngantuk ke?

Are you sleepy?

4 Iman ((turns briefly to his left then gazes back at the cars))

5 (1.12)

6 M : Iman nak ni tak?

Iman wants this (or) not?

7 (1.5) ((Imanudin continues playing with the cars as M watches/Frame 2))



Frame 2

8 M : Cepat

Quick

9 (0.3)

10 M : Iman

11 (0.7)

12 M : Iman: nak ni tak?

Iman wants this (or) not?

13 (1.2) ((Imanudin continues playing as M watches))

- 14 ((Imanudin turns to left and picks up a yellow car))=
- 15 M : =nak ni tak? ((M shakes the colourful chain))=
wants this (or) not?
- 16 =((Imanudin puts the car near the arranged cars as M watches))
- 17 ((Imanudin picks up the last car and puts it near other cars as M watches))
- 18 M : ↓Ha: ((puts the colourful chain down/Frame 3))



Frame 3

- 19 M : Hu:: banyaknya Iman susun::
Hu:: so many Iman arranges::

In Extract 5.19, the mother (M) produces her initiating engagement talk in line 6. Imanudin does not respond to this or display any behaviour to suggest that he has received M's IET (line 6). Instead, he continues arranging the cars which he has been playing with since prior to the extract. In reaction to his non-response, M launches a follow-up pursuit (lines 8, 10, 12 and 15), however, Imanudin maintains his display of non-orientation to both M's talk and to the referent (the colourful chain).

In Extract 5.20, we will consider an extract when the child does not react to his mother's initiating actions despite the deliberate attempts made by the mother to gain his engagement when there is no clear interference that might have hindered him to do so.

Extract 5.20 [Irfan 'This Has What']

- 1 M : Ni apa ni? ((M takes out a corn for a toys bag and holds the corn
2 *This what is this?* in front of Irfan's face; Irfan is looking down))
3 (0.7) : ((M holds the corn close to Irfan's face, gazing at him; Irfan continues
4 looking down/ Frame 1))
5 M : Irfan ni apa ni? ((places corn closer to Irfan's eyes))
Irfan this what is this?
6 (0.8)
7 M : Ir↓fan
8 ((M puts the corn back into the bag and then looks into the toys bag))

In Extract 5.20, M asks the child, Irfan to name the object she is holding (a toy corn) with her '*Ni apa ni?*' ('This what is this?') (line 1). Irfan has been holding a toy and has been gazing down towards it from prior to the extract. He remains in that position as M produces her line 1. M waits for 0.7 seconds for Irfan to answer her and re-asks her question in line 5 when there is no bodily or verbal response from him. M starts her line 5 by summoning the child- an act that reflects that she treats him as not readily orienting to her, and by repeating her earlier talk verbatim, M displays that she considers Irfan as having not heard her question the first time. M then waits for 0.8 seconds and when Irfan continues to not display any reactions to her, M withdraws the corn and puts it into its bag thus ceases the JE pursuit sequence. Irfan does not demonstrate any visible actions throughout the extract and appears to be oblivious to his mother's attempt to engage him. As described, his mother too treats him as not attending to her throughout the sequence.

5.4 Discussion

In the current chapter, I have analysed instances when children with ASD display non-compliance or resistance to the projections for JE by their mothers. Four kind of behaviours were recurrently observed deployed by the children in resisting their mothers' initiating actions during the engagement episodes – they might manipulate embodied talk, rely on bodily behaviours, withhold the anticipated responses, or fail to produce the relevant orientations.

The examinations of the extracts in Sections 5.3.1 and 5.3.2 reveal that in many occasions the children display their resistance through the use of talk and bodily behaviours. In these examples, the children demonstrated active participation within the talk sequence – they first display clear orientations; verbally, visually, and/or bodily to both the mother and the selected shared referent for the engagement and followed by visible behaviours that display their non-alignment with the JE trajectories.

The examination of extracts collected from TD children shows similar display of non-compliance. It was noted, however, that the design and organisation of the embodied talk of the children with ASD might have materialised as problematic, as exemplified in Extract 5.2 – something that was not seen in the data set of the TD children in the current project. While this finding does not necessarily mean that the TD children do not produce any error in their talk-in-interaction, it certainly reflects the interactional challenges that one might face in an interaction with children with limited or impaired communicative skills. The examination of both data sets has also revealed that while TD children provided reasons to justify their rejection to the mothers' bid for an engagement, I did not find any similar use of talk by the children with ASD. As exemplified in Extracts 5.3 and 5.5, the child (Hetty) did not only reject

her mother initiating actions, she also made clear of her own trajectory of play by indicating what she wanted to play with instead. In so doing, Hetty has resisted the mother's projection for an engagement with particular referents (of the mother's choice) as well as prevented the mother from advancing her pursuit (Childs, 2012).

Postural shift, bodily re-orientation and eye-gaze aversion emerged as noteworthy behaviours in the display of the children's disalignment with the mothers' trajectories. In the cases when these adjustments of oneself might not be efficient or feasible (for instance, due to the position of the participants during the interaction as shown in Extract 5.7), the children might be left with another option which they have demonstrated to use – physically removing and deselecting the selected referent from the triadic interaction, thus eliminated the shared focus from the engagement pursuit. It is noteworthy though, that although in these instances the children appeared to rely on their non-verbal actions to resist an engagement, which might be reflecting their limited verbal abilities, they have also displayed situated orientations to both the mothers and the referents before rejecting the extension of the engagement trajectory. This indicates their skilful monitoring of the mothers' turns, as well as their capabilities of manipulating their resources to manage the different engagement projections. The bodily behaviours have clearly been important and primary resources for the non-verbal children with ASD, but alternative and/or complementary for verbal ASD and TD children.

In the next section of the analysis (5.3.3), I have examined the instances when the children with ASD demonstrated the actions of withholding sequentially-relevant responses following their mother's initiating actions. In these examples the children displayed fitted visual orientation in their next turns following the IETs; however, the anticipated responses were actually not produced. Withholding of a projected response following an initiating turn is usually considered as dispreferred and disaffiliative, however, it may also be used to perform

different actions (Filipi, 2009, 2013). Filipi (2013) presents an analysis on withholding by parents in her study and shows that withholding or delaying a response is an important interactional tool utilised by the adults in displaying their monitoring and scaffolding of their children's talk. In the current work, I have focused on the occasions when the children with ASD did not produce the responses that were made contingent by the IETs rather than merely delaying them despite having demonstrated fitted orientation to their mother's bids for an engagement, thus reflecting the understanding of the initiation as such.

The findings show that the children deployed the acts of withholding the preferred responses projected by the mother's talk so as to avoid any further engagements within the trajectory. The mothers' initiating actions were designed to mobilise responses of different forms from the children (i.e., in Extract 5.10 the anticipated response was an act of accepting the toys vehicles from the child which could have constituted either verbal, or non-verbal behaviours; in Extract 5.11, an answer to the mother's question regarding the bird on the book; in Extract 5.12 an act of counting the cars, and in Extract 5.13 an act of reading the arranged alphabets. The children were evidently seen to orient to these initiating talks by attending to the referent, however, such a visual display was not sufficient as the fitted response to the mother's bids and for the intended JE to establish. In all of the extracts examined, the mothers pursued the children's responses which resulted in different sequential closings. As shown, in Extracts 5.10 and 5.11 Taufiq's mother inferred his rejection which she expressed verbally; in Extract 5.12 Damien's mother abandoned her engagement-pursuit altogether following the child's non-response and Yusri's mother in Extract 5.13 treated him as attending but resisting providing a response which then led to her producing the anticipated answer herself before ending the engagement pursuit sequence.

In the last part of the analysis on the children's non-compliance, I examined the instances when the children's orientations to the mothers as the speakers and the objects selected as the shared referent, and the children's responses, were both absent from the talk sequences. In these extracts, the children did not display any observable orientation to the mothers' initiating engagement turns and to the referent and this was commonly followed by the mothers' follow up pursuits for their responses. The children's next-turns which have been made relevant by the mothers' initiating talk left untaken, despite some of the mothers' persistent pursuits for their responses. In some instances, the children might produce a response at a much later juncture of the pursuit of JE (e.g., Extract 5.16) or none at all (e.g., Extract 5.18). The examination of the extracts revealed that the absence of active participation and/or contribution from the children as the recipients of the mothers' talk were treated by the mothers as either a deliberate display of their resistance to the projected engagement (seen in Extracts 5.14, 5.15 and 5.17), or due to the children's inattention (exemplified in Extracts 5.18 and 5.19).

On the one hand, the analysis demonstrated how the absence of any responses from the children's might reflect their *atypical* participation in a social interaction. For example, they did not conform to the turn sequence organisation (Schegloff, 2007) that they appeared to not orient to being in the position of the next speakers. By failing to take their turns and to then not display any awareness or accountability for that, whether intentionally or otherwise, these children appeared to have different if not impaired interactional skills. On the other hand, the absence of anticipated reactions might be intentional and functional as to avoid further engagement with the mothers without the children having to exhibit explicit rejections. It is worth a reiteration that the analysis of the example from the TD child (Aina) showed that she has deliberately ignored her mother's talk. However, it was more difficult to determine what the children with ASD were actually doing when they failed to produce a response to the

mothers due to the lack of perceivable evidence in the interaction. One can infer the other's mental state, but it is not always provable from extracts such as those included in this section. Therefore, assumptions such as whether the recipient is ignoring a speaker's talk or being genuinely oblivious, particularly in cases involving speakers with communication disabilities history, may potentially be arguable, biased, and unfair. Although it was suggestive from the analysis that the children with ASD were resisting their mothers' initiating actions, this claim is speculative at this point due to the lack of evidence from the participants' behaviours and orientation in the limited data I have included.

Comparable events of the findings in Sections 5.3.3 and 5.3.4, however, were not observed in the TD children's dataset. Indeed a non response following a receipt of a bid does happen in typical interaction (cf. Jefferson, 1998; Pomerantz, 1984b). The findings of the current work therefore do not necessarily suggest that TD children never withhold a response following clear noticings of engagement bids or remain oblivious to a bid due to inattentiveness. However, the findings may as well reflect what kind of behaviours that may be *more commonly* demonstrated in the different groups of children. Arguably, this might also reflect the children with ASD's limited interactional tools that they can deploy to resist, and conversely that TD children have more useful vocal and nonvocal resources, to resist.

Chapter 6

MATERNAL INITIATING-ENGAGEMENT TURNS IN FREE PLAY WITH PRESCHOOL AGED CHILDREN

This chapter examines maternal initiating engagement turns (IET) and how they are used to pursue and secure the children's engagement. I will use CA methodology to investigate the different designs used by the Malay mothers during play with their children and how these designs might work for joint engagement establishment with children with ASD. The data examined involve nine mothers interacting with their children with ASD. In order to provide a thorough inspection of the maternal IETs, examples from mothers of TD children are also included.

6.1 Introduction

In an interaction, a speaker commonly pursues a recipient response (Pomerantz, 1984b). Speakers may deploy various designs of talk such as assertions, questions, noticings and directives in their pursuits for a response (Pomerantz, 1984b; Stivers & Rossano, 2010; Szymanski, 1999). A talk sequence that pursues a response from the recipient has certain characteristics including being a first pair part (FPP) that makes relevant a reply or a second pair part (SPP) (for a greater discussion, see Stivers and Rossano, 2010) and deploying resources to mobilise the recipients' 'reciency and engagement' (Butler & Wilkinson, 2013, p.38). Szymanski (1999) explicates how during children group activities, IETs commonly emanate from the local contexts or the presently-occurring tasks. For instance, participants in her study commonly deploy questions pertaining to the task at hand and are consistently successful in gaining a response from their fellow group members this way (Szymanski, 1999).

In an ongoing interaction, however, a non-response from a recipient is always possible to occur. In instances when the speakers produce assertions for example, there can be instances when the recipients receive the engaging talk but remain irresponsive or delay a response (Pomerantz, 1984b). This can be due to many reasons such as non-understanding, confusion due to the lack of prior knowledge or disagreement with the asserted matter (Pomerantz, 1984b). If a non-response happens after an assertive talk, Pomerantz (1984b) note that the speakers may take the next turns to elucidate the matter of their assertion to ensure the recipients' understanding, to reconsider the supposed shared knowledge with the recipient or adjust their own, preceding assertion. In other instances such as when questions are asked or directives are issued, the relevant and preferred next actions of the recipients' would be to produce an answer in the former (Pomerantz and Heritage, 2012; Sacks, 1995), and to demonstrate their compliance uptake in the latter (Cekaite, 2010; Goodwin, 2006). Following a non-response, non-fitted response or a non-compliance, the speakers may deploy various pursuing resources such as repetitions or reformulations of the prior talk, or may even resort to embodied directive acts (Cekaite, 2010).

Obtaining recipients' fitted responses or engagement may not always be straightforward particularly when the interaction involves individuals with diagnoses. As an interactional partner to a person with communication disabilities for example, one must be able to adjust to the person's *atypical* behaviours in order to make the interaction successful. For example, consider how an interactive partner of an aphasic patient with limited verbal ability will have to be proactive and mindful in following and identifying with the patient's pointing gestures during the talk sequence (cf. Klippi, 2014). Implicatively, the next turns produced by the patient following an IET may be qualitatively different than those produced by neurotypical individuals and therefore will require the interactive partner to collaborate

with the patient to establish mutual understanding of the unfolding interaction (Auer & Bauer, 2011).

Given that individuals with ASD are generally reported to have impairments in verbal and non-verbal skills such as eye-gaze, gestures and bodily behaviours, it is expected that they may display atypical interactional behaviours when compared to TD children as shown in the previous two chapters. It is less clear however, how their parents *deal* with these *atypicalities* when they interact with the children. In Chapter 1 I have reviewed investigations that focused on parental influences on children's language and communication development and achievement, including those with ASD. These studies, which provided mainly quantitative evidence, have clearly shown that social engagement between parents and children are advantageous in encouraging the children's interactional abilities. However, *how* parental interactional actions are actually affecting the children's during ongoing interactions is not well-researched. In order to fill in this research gap, I will use CA to examine maternal IETs during free play with their children with ASD.

6.2 Data

The main aim of the analysis was to investigate how the mothers of children with ASD engage their children during free plays. To achieve this, all of the data from children with ASD were reviewed, and the mothers' initiating engagement turns were identified and examined. It was found that the mothers commonly utilised talk designs that projected for a response from the children - questions, proposals, directives, noticings, assessments and announcements; both in design (structural) and functional (as social actions). The data from TD children were also reviewed, and where applicable examples from this group will also be provided in the analysis to explore how the findings reflected in the typical data.

For the purpose of the present study, IET refers to turns produced by the speaker (a mother) to engage the recipient (a child) with a particular referent. However, this does not mean that a dyad must be in the state of a complete non-engagement prior to a *re-engaging* turn for the turn to be considered as an IET. As such, a mother-child pair may have already been engaged with a particular something which could be an object, activity, or a topic. In the middle of a talk sequence, a speaker may then choose a new referent and perform an action to direct a recipient's orientation towards this *new* referent; this too, is considered as 'initiating engagement'. Also note that the term 'joint engagement' in the present study refers to a triadic engagement involving the participants and a shared referent. This means that, when a new referent is selected by one of the talk participants as a shared referent between herself and a recipient, a new triadic engagement is initiated. In this chapter, I am interested in initiating turns produced by the mothers and only these turns will be the focus of the analysis. In this chapter, these initiating turns are examined to identify the different social actions mothers may exhibit and how these are materialised within the free plays with the children.

6.3 Analysis

The following section will be organised into the different forms of the IETS used by the mothers in the current study. In the analysis, I will examine how these initiating turns are organised to pursue an engagement with the children in the play session. I will also analyse the different actions performed by the IETs, and explicate their relevant features.

6.3.1 Question

In the ASD data, the mothers were seen to initiate engagement sequences with their children predominantly using turns-at-talk that are constructed as questions. The question-in-design turns produced by mothers are found to perform different social actions; seeking

information, instigating a labelling task, testing the children’s knowledge and proposing a new referent, task or play. Talk that is question in design are also found used by the mothers to accomplish ‘doing proposals’ at the engagement- initiating junctures. In order to ensure the clarity and to avoid redundancies in the presentation of the analysis and discussion, the questions used to propose will be analysed in section 6.3.2 (Proposing a new trajectory for an engagement) and not in the current section.

6.3.1.1 Questions to seek information of the child’s play

In Extract 6.1, the child, Irfan plays with the cars and trees without explicitly involving his mother (M) in the play. Irfan produces line 1 which is then overlapped by M’s question ‘*Pokok buat pa? (.) pokok kenapa?*’ (*What does the tree do? (.) What is with the tree?*). The question seeks to know what the tree (in the child’s play) has done; as well as what has happened to it. In other words, M is asking the child about his own pretend play. In asking the question, M selects the tree as a shared referent and now makes relevant an answer from Irfan that would explain about the tree. Using line 2, M creates a place for JE between them in otherwise a single-player game the child has been playing.

Extract 6.1 [Irfan ‘What does the tree do?’]

- 1 Irf : u↑u↓u:↓LA:: ↓u: ↑[u:
- 2 M : [Pokok buat pa? (.) pokok kenapa?
The tree does what? (.) The tree why?
What does the tree do? (.)What is with the tree?
- 3 Irf : dia nak jatuh keta terbalik
- 4 It wants to fall the car turns upside-down.
 -----1-----

((¹ Irfan holds red car up, turns to the right briefly. Irfan then stands up and walks away))

5 M : terbalik kereta merah?

Turns upside-down the red car

The red car turns upside-down?

6 (0.58) ((turns towards the camera than looks towards Irfan))

7 M : sini sini. (1.0) sini. ((looks towards Irfan))

here here. (1.0) here.

8 Irf : dia nak jatuh dia balik terbakar:

It wants to fall it turns upside-down burns:

9 M : terbakar::

Burns

In the dataset it is commonly observed that the mothers use questions to ask the children to tell about their on-going play, which do not involve the mothers. In Extract 6.2, the mother (M) has been watching the child playing with the Lego blocks (Frame 1) for quite sometime. She then readjusts her sitting posture and has thus made visible her visual orientation to the child's activity (Frame 2). She then asks '*Azam nak buat apa tu?*' ('*Azam what is that you want to do?*') with her body bending forward (Frame 2). As the child is manipulating LEGO blocks at the time, therefore '*tu*' ('*that*') in M's talk is understandably referring to the blocks. The question shows that M seeks to know what Azam is going to make with the blocks he is playing with. Although she is not physically involved with the play, her question now necessitates a verbal answer in the next turn by the child. As such, M now creates an avenue that makes possible an engagement between them albeit only verbally.

Extract 6.2 [Azam 'Alien'] (previously analysed as Extract 4.4)



Frame 1



Frame 2

1 M : Azam nak buat apa tu? ((Frame 2))

Azam wants (to) do what that?

Azam what is that you want to do?

2 (2.0) ((Azam continues playing with the blocks while M plays with and looks at

3 the blocks in her hands/Frame 3))



Frame 3

4 Az : Sa^{1/Frame 4}ya nak buat, ali↓en

I want (to) do, alien

((¹Azam turns back to the Lego blocks in front of him))



Frame 4

5 M : Nak buat alien?

Want (to) do alien?

6 Az : It is the (ali-) um:: (.) four le:gs

7 (0.7) ((Azam continues playing with blocks as M watches))

Information seeking talk is also regularly seen used by mothers of the typically-developing children in this study. I include the following two extracts from a TD boy, Razi, and his mother to exemplify how his mother uses information-seeking talk to initiate a topical engagement with him. In the first example (Extract 6.3), M asks Razi about his play (line 1). In other words, M does not attempt to participate in the play physically; rather, she uses her talk to engage the child verbally.

Extract 6.3 [Razi 'Goose']



Frame 1

- 1 M : Razi (.) Ni Razi susun macamana ni? ((gestures to animals on the table))
Razi (.) This Razi arranges how this?
Razi (.) How are you arranging this?
- 2 (0.7) ((Razi sits down on chair with his left leg folded on the chair and looks at
3 the animals))
- 4 M : Macam ni je susun? ((Razi looks towards M's hand, and nods briefly))
Like this just arrange?
Arrange just like this?
- 5 R : saya <nak turtl:e> ni ((looks at and takes turtle))
I want turtle this
I want this turtle
- 6 R : Tur↑tle: jatuhkan se[mu:a tu]
Turtle: fall down all that
Turtle: push all that down
- 7 ((Razi puts turtle at the end of the animals row and 'sweeps' the animals
8 with it))
- 9 M : [o : : o] main macam tu hhhehhh[ee
[O: : o] play like that hhhehhh[ee
- 10 R : [woo woo¹.
((¹A toy animal falls onto the floor, Razi gazes down at it))

Prior to the extract, Razi has been playing with the toy animals which he then left lined up on the table to find other toys from the toys bag to play with. Mother (M) pointed out to him that he had to keep the animals before he could play with the other toys. Following this, Razi discontinued his quest for the toys and returned to his chair (Frame 1). Just as Razi is

about to sit, M launches her talk at line 1. Note that she summons him first, and then produces the talk she designed to include a ‘how’ word and delivered with an increased intonation that are consistent with a question, gesturing her hand towards the animals indicating that her ‘*ni*’ (this) is referring to them. Razi does not say anything at his next-turn although he does look at the animals, displaying visual attention to it as the referent. When no answer is forthcoming from Razi, M asks another question ‘*Macam ni je susun?*’ (‘Arrange just like this?’), which appears to confirm whether the existing arrangement of the toy animals is final. This follow-up question can be seen as a downgraded version of her first, as she now seeks a yes-no response from Razi instead of some explanation from him should he decide to answer her earlier question. Demonstrating established engagement with M’s talk, Razi nods and announces that he wants a turtle figurine before pushing the animals with it (lines 7 and 8). M receives this as a relevant reply to her question with her [o : : o] *main macam tu hhhehhh[ee* ([O: : o] play like that [line 9]). As such she displays that she understands now *how* Razi plays.

In the next extract which was collected from the same dyad, M asks Razi what he wants to do with the toys he is manipulating. This is comparable to Extract 6.2 in which the mother asked her child (Azam) about what he was doing with the blocks he was playing with. As shown in the extracts, the questions lead to an engagement sequence turns with the child, albeit verbally.

Extract 6.4 [Razi ‘What do you want to do?’]

- 1 R : kokkoko::k ((Razi picks up a chicken figurine, while M continues fixing a
- 2 tree))
- 3 ((Razi puts the chicken down and picks up a cow, M finished fixing the tree
- 4 and puts it down))
- 5 (5.1) ((Razi manipulates the cow as M watches [Frame 1]))



Frame 1

6 M : Razi nak buat apa ni?

Razi want to do what this?

What Razi want to do?

7 (0.8)

8 R : susun:

Arrange

9 (1.4)

10 M : susun ikut apa?

Arrange according what?

Arrange according to what?

11 ((sound of the door being opened and closed in the background; Razi

12 glances at door then continues arranging animals))

13 (9.3)

14 M : Susun susun je?

Arrange arrange just?

Simply arrange?

15 (1.5)

16 R : kat school tak boleh- .hhh <tak boleh susun zirafah>

At school cant- .hhh <can't arrange giraffes

17 ((Razi gazes at giraffe and tries to make it stand but unsuccessful))

Extract 6.4 starts with the child, Razi makes chicken sounds as he looks at the chicken figurine. During this, M is fixing a tree which Razi had tried to erect prior to the extract (line 1). While M is finishing her task and puts the tree near to the other trees, Razi now directs his attention to yet another animal -this time the cow figurine- and adjusts its position (line 3). He proceeds to work on steadying the cow on its feet while M watches (Frame 1). It is at this point that M produces her line 6, *'Razi nak buat apa ni?'* ('What Razi want to do?') which is designed to include the Wh- word (*'Apa'* [what]) and delivered with an increased end-intonation; consistent with a design of a question. With the question, M asks Razi about his play motive, which would be known to him only and thus makes the question a genuine pursuit of information rather than a test of the child's knowledge as also seen in the last four extracts. It is not clear from this extract the influence of such a question with open-ended design on the child's ability to design his next-turn, nevertheless, his answer (i.e., *'susun'* ['arrange']) in line 8 appears to be problematic and is treated as unsatisfactory by M in her next turn in line 10. Note that M only produces her next turn after the 1.4 seconds gap, potentially deliberately to provide the opportunity for Razi to repair his talk. When a self-repair from Razi is not forthcoming, M pursues a clarification on the child's preceding talk with her *'susun ikut apa?'* ('arrange according to what?' [line 10]) and *'Susun susun je?'* ('simply arrange?' [line 14]). These pursuits for a repair from Razi turn out unsuccessful; however it is seen from the analysis that M's question at line 6 is usable as an apparatus for M to engage the child in a sequence of talk about his ongoing activity.

The investigation into questions in this section has shown that the use of these questions has led to more turns for the mothers as the speakers after the recipients' (Sacks, 1992, p.49). As such, the questions work as initiating action as they allow the mothers to stay on a particular topic whether or not their children display their co-operation in the question-answer sequences. From the analyses of both datasets (of the TD children and those with ASD)

too, I found that talk that is designed as question is not always used to *question* by the mothers when engaging the children during free play. Talk designed as a question is also commonly seen utilised by the mothers to start a labelling task. One very frequently used question that starts a labelling task observed in the ASD dataset is ‘*ni apa*’ (‘this is what’), as exemplified in Extracts 6.5 to 6.9 in the following subsection.

6.3.1.2 Questions in labelling task

The following extract illustrates a prototypical sequence of a labelling task (Tarplee, 1993). The *elicitation-label-receipt* sequence shown in this extract revolves around a toy helicopter as the shared referent (from line 2). In line 1, the preceding set of labelling sequence involving a toy crane as the referent is coming to a closure. Following a brief pause, the mother (M) then quickly adds ‘*ni?*’ (‘this’). Note that at the start of line 1, the child, Irfan takes the toy crane from M and looks away and as such, signals that he is disengaging from M and the talk sequence they both had participated in. At that point, M has already picked up the new referent; a toy helicopter and holds it up as she says ‘*ni*’ (‘this’). In so doing, M appears to renew the previously established engagement with the child by directing the focus of her talk from the toy crane to the toy helicopter which she now selects as their new shared referent.

Extract 6.5 [Irfan ‘Helicopter’]

- 1 M : Ha? ¹↓crane: ²pan↑dai:: (.) ni?
ha? ↓crane: clever:: This?
 ((¹ Irfan takes the crane from M then looks away, M looks down))
 ((² M picks up a helicopter))
- 2 (0.8) ((M holds the helicopter up))
- 3 M : Ir↑fan: ni apa? (0.5) ↓Ir↑fan

Irfan: this (is) what? (0.5) irfan

4 ((Irfan turns to M))

5 Irf : ³Apa tu: /elikopte/?

What (is) that: /elikopte/?

((³ M maintains gaze at Irfan and smiles))

6 M : Hmm:

7 ((the dyad continues talking about the helicopter))

The next example (Extract 6.6) further shows how the mother uses ‘*ni apa*’ (‘what’s this?’) question to establish an engagement sequence with her child, Amin. Similar to the last extract, the question is produced at a juncture where a disengagement may have occurred. At the start of the extract, Amin has just finished putting all of the puzzle pieces together. Next, he says ‘*neh:*’ (line 2) which is overlapped with M’s [*Ni apa ni?*] (‘this what is this?’) (line 3). M does not orient to Amin’s talk in line 2, instead she reformulates her talk into ‘*dia main apa¹ni?*’ (‘what does he play with?’) which specifies the referent she has mentioned in the earlier bit of her talk in line 3. Amin gazes towards the direction where M is pointing to, and in so doing appears to engage with M’s talk and the referent, but he does not produce any answer to her question (line 4). M does not pursue an answer from Amin after her question in line 4, instead she produces the answer herself (line 5) while the child continues gazing at the puzzle. This suggests that M may treat Amin’s behaviours (gazing towards the referent but not answering) as an indicator that he is not able to answer her question. Following line 5 there is still no reply from Amin, and in line 7 M repeats ‘*Gi:tar*’ to elicit a response from the child, possibly an imitation. Extract 6.6 also exemplifies how a label-seeking question may work in extending the child’s engagement by selecting another referent as the next shared focus.

Extract 6.6 [Amin 'Guitar']

1 M : Good job:: ((Amin picks up the puzzle board, both M and him look at it))

2 Amin : [Neh:]

neh:

3 M : [Ni apa ni?] dia main apa ¹ni? ((points to puzzle))

This what is this? he plays what this?

This what is this? what does he play with?

((¹ Amin gazes towards the direction of where M is pointing))

4 ((Amin gazes at the puzzle, M still pointing at it))

5 M : Gi:tar

gui:tar

6 ((smiles then puts the puzzle down))

7 M : Gi:tar

gui:tar

8 Amin : Ni ((turns the puzzle upside down))

this

9 M : Terbalikkan?

flip?

Next, I will include Extract 6.7 to illustrate that a label-seeking question such as 'ni apa' ('what is this') does not always turn to be a successful tool to establish JE with a child, despite the child seemingly already visually orients to the referent. In the extract, Amin has been playing while his mother (M) who sits on his side watches. It is clear that both Amin and M are on different play or task trajectory. While Amin is in the midst of completing the puzzle, M has already started to pursue a labeling activity with him (lines 1 and 2). In line 3 Amin says [[↑] *Ni:*] ('[↑] *This:*') as he puts a piece of puzzle down onto the puzzle board. At the same time, M says

'[>Ni apa <] (.) ha ni apa [↑]ni =' ('This what (.) ha this what is this') as she points to a particular picture on the puzzle (line 4). In so doing, M demonstrates her different play trajectory from Amin's, by asking him a label for the referent that seemingly within his view, but apparently inconsistent with his own play. It is exemplified in this extract that M's question is designed to direct the child to her selection of a referent which in turn requires a reciprocal response from him. It is shown in this example, however, that the child rejects M's initiation for an engagement (see the more detailed analysis on this in Section 5.3.2 [Extract 5.8])

Extract 6.7 [Amin 'Nose'] (previously analysed as Extract 5.8)

- 1 ((Amin has just put a piece of puzzle as Mother (M) watches while pointing
- 2 to the puzzle with her index finger/ Frame 1))



Frame 1

- 3 Amin : [[↑]NI:] ((presses the piece))

[↑]*This:*

- 4 M
 [>Ni apa <] (.) ha ni apa [↑]ni =
This what (.) ha this what is this
 -----1-----

((¹ M points to the piece of puzzle with index finger))

- 5 = ((Amin holds M's index finger
- 6 and pushes M's hand [away/ Frame 2))=

In Extract 6.8 which was taken from a larger excerpt, the mother (M) produces a variation of *'ni apa'* question (line 11). Rather than asking for a label, M asks the child (Azam) the colour of a referent she selected- a LEGO block. In seeking the label for the particular block, M has pointed to it thus makes clear the target object of her talk. Note that M asks her question in line 11 while Azam is already in his course of taking some blocks in front of him. Azam does not gaze towards M's finger or answer M's question, but takes the next turn by talking about another blocks he has picked up from the floor (line 14).

Extract 6.8 [Azam 'What colour is this?']

- 8 M : O↓kay:
- 9 Az : (nak: yang [ni] ((both M and Azam are gazing downwards, Azam
 10 (want this) reaches forward and picks up a block))
- 11 M : [↑ni. ni warna apa ni? ((points to a block on the floor))
this. this colour what this?
- 12 (2.1) : ((M points to the LEGO block while Azam looks at blocks in his hand))
- 13 M : [Ni warna apa?
this colour what?
- 14 Az : [Ibu: its smaller that fit ((shows blocks to M))
mother:its smaller that fit
- 15 M : Ya:
yes
- 16 Az : Will thats smaller fit
- 17 M : I don't know:

Now let us consider the use of question that instigates a labelling sequence in free play between a mother and her neurotypical child.

In Extract 6.9, the mother (M) asks a question about an object already being attended to by the child (Hetty). It will be explicated that when the child appears to already display attentiveness to the referent, the mother may not have to deliberately steer the child to the referent either physically or verbally. As seen in Extract 6.9, M produces her question while sitting back and providing no physical indication of the object she is referring to. Note that here M only uses demonstrative 'tu' ('that') to refer to her selected referent. Nonetheless, her talk has been successfully understood by the seemingly non attending Hetty as addressed to her, regarding the object in her hand, and awaiting an answer. This is rarely observed in the ASD dataset as the mothers are more commonly seen to actively direct their children to the selected shared referent.

Extract 6.9 [Hetty 'Lion']

1 H : ((turns to the toys bag, takes tiger out and gazes at it as M watches))

2 M : Tu apa? ((Frame 1))

that what?



Frame 1

3 H : Lion ((Frame 2))



Frame 2

- 4 M H:a
- 5 H Lion
- 6 M : Ap:a
- What:

Prior to Extract 6.9, Hetty has already been playing with the toys animals. Her play was stopped when she found a bent tree which could not stand. Her mother (M) has helped her fix the tree by manipulating the tree's frame and made it more balanced as Hetty watched. Following this, Hetty turns her gaze back to the toy bag and resumes her play by taking out a tiger figurine (line 1). In line 2, M asks '*Tu apa?*' ('What's that?'). Hetty does not gaze towards M, but it is safe to say that it is likely that she could have monitored M's behaviour with her peripheral vision and presupposed that M is watching her. Hetty displays no difficulty in recognising the question as directed to her and has made contingent a label for the object that she is holding (and not anything else). Promptly Hetty answers the question, albeit incorrectly ('lion' [line 3]).

It is also noteworthy that the data review has revealed that mothers of children with ASD use '*ni*' ('this') more commonly than they do '*tu*' ('that') to start a new engagement with their children. While there are many instances involving children with ASD in which mothers use '*ni apa*', Hetty's mother in Extract 6.9 uses '*tu apa*' ('that's what'). Both the questions seek a label from their recipients; however, it is interesting to see the different word choice of the

speakers. There are many explanations that may justify the use of 'ni' (this) or 'tu' (that) by a speaker (Strauss, 2002), however, there is no known study on demonstrative words in the Malay language, hence no definite conclusion could be made. The difference in the word choice may be best explained by the proximity between the mothers as the speakers and the children as the recipients, *and* the referents of the talk. However, as presented in section 5.3.3, the word choice of the mothers may reflect the mothers' stance of the children status of engagement or their ability to establish an engagement at that particular juncture (cf. Strauss, 2002).

6.3.1.3 Testing the children's knowledge

From the data analysis, it is also regularly found that the mothers from ASD group produce questions that seek answers that the adult speakers are likely to have already known. As such in many cases such as those presented in this section it appears that the adults are asking the obvious. Arguably, the present phenomenon is similar to the phenomenon analysed in subsection 6.3.1.2 *Questions in Labelling Task*, however, the questions in the extracts investigated and included in the current section do not ask for the name of the referent. I begin the analysis with Extract 6.10 to introduce this phenomenon.

Prior to Extract 6.10, the child, Irfan arranged small cars into one line as the mother (M) looked on from behind him (Frame 1). When M starts her talk in line 1, Irfan appears to be disengaged from her, and does not include M in his play. M begins her talk in line 1 by summoning Irfan's name. This is likely due to the child's non-orientation to her and thus by calling his name, M may gain his attention. M's 'susun apa tu↑' ('arranges whats that') clearly refers to the child's ongoing activity, and the word 'tu' ('that') refers to a referent in some distance from herself, but closer to the child as the recipient. Irfan does not respond to the

question (line 2) which leads M to repeat her question in line 3. Following this, Irfan answers fittingly ('kereta' ['car']) without turning to M, thus demonstrates his receipt of M's talk as relating to the objects and the activity he is involved with at the moment. This example therefore illustrates how a query of something known to the adult speaker may be used to initiate an engagement with the child.

Extract 6.10 [Irfan 'What are you arranging?']



Frame 1

- 1 M : Irfan susun apa tu:↑
Irfan arranges what that
Irfan what are you arranging?
- 2 (2.0) : ((Irfan continues arranging the cars))
- 3 M : Irfan susun apa?
Irfan arranges what?
- 4 Irfan : Kereta
Car
- 5 M : Kereta:: (.) kereta langgar pokok la. Habis pokok.
Car:: (.) car hit the tree.
- 6 ((Irfan picks up a car))
- 7 Irfan : Tiba-ti↑ba:

Sudden↑ly:

8 M : Tiba-tiba:

Sudden↑ly:

In Extract 6.11 the mother (M) also produces questions that relate to the child's ongoing play. Here the mother quizzes the child of the number of the vehicles he is playing with (line 1). In response to M's question, Taufiq counts the cars and says, '(*ha. lapan je:*)' ('ha. Eight only:'[line 3]). Subsequent to Taufiq's reply in line 3, M asks '*Lapan je:?*' ('eight only?') that questions the correctness of the child's counting. Taufiq replies with 'ha' to confirm his prior answer. This leads to M picking up more small cars and putting them near the eight cars that Taufiq has been playing with and asks repetitively '*Ni?*' ('This?') as the child looks on (lines 6 and 7). In so doing M appears to indicate the wrongness of Taufiq's answer and that there are more than eight cars. Both the questions in line 1 of Extract 6.11 and the previous Extract 6.10 query the children of something that the adults are likely to already have the answer for. Nonetheless, as will be analysed, the mothers from both extracts use these questions to start a reciprocal talk sequence with the children. Using these questions too, the mothers get to establish an engagement with the children and avoid the children from continuing play on their own.

Extract 6.11 [Taufiq 'How many cars?']

1 M : Ada berapa tu?, (↑Car:) (.) <cuba count:>

Has how many that? Car. Try count

How many are there? Car. Try count

2 Taufiq : ((counting the cars))

- 3 : (ha. lapan je:)
(*ha. Eight only:*)
- 4 M : Lapan je:?,
Eight only?
- 5 Taufiq : ha
yes
- 6 M : ↑Ni? (M picks a small car up)
↑*This?*
- 7 : ↑Ni? ((M puts small car together with other cars))
↑*This?*
- 8 : Ni la↑gi?
This some more

In the next example (Extract 6.12), I will illustrate how a series of questions is used by the mother to pursue the child's response.

Extract 6.12 [Taufiq 'Silver Car']

In this extract, Taufiq is looking down at the cars and arranging them, while M who is sitting facing him bending forward (Frame 1).



Frame 1

- 1 Taufiq : ((picks up a yellow car and pushes it as M looks closely/Frame 2))



Frame 2

2 M : Tu warna a↑pa? ((looks at yellow car))

That colour what?

What colour is that?

3 (2.1)

4 M : Mana warna silver?

Where colour silver?

Where is silver car?

5 (1.8) ((looks up to Taufiq then looks back down))

6 M : Ada tak warna silver?

Has not colour silver?

Is there a silver car?

7 (1.9) ((M looks up at Taufiq then holds her right hand out halfway but folds it

8 back))

9 Taufiq : °↑hm°

In Extract 6.12, the child, Taufiq plays with the small cars as his mother (M) sits facing him and watches. At this point, M displays her visual orientation towards the yellow car as she bends forward and follows the movement of the car as Taufiq pushes it. In line 2 M produces 'Tu warna a↑pa?' ('What colour is that?'). M uses 'tu' ('that') here; indicating that she is treating Taufiq as able to identify the referent she is referring to. As such, it also demonstrates that she presumes that Taufiq is aware of her shared orientation to the object. Note that prior

to this extract, the dyad has not been talking about the colours of the cars which makes 'colour' as a newly introduced topic at this stage. The question '*Tu warna apa?*' ('What colour is that?') makes relevant a verbal reply from the child. M's question in line 2 enquires him to provide the colour of the selected shared referent. If he provided the answer, JE will be established between them. Taufiq however remains silent, and after 2.1 seconds, M asks another question, '*Mana warna silver?*' ('Where is silver car?'). His non-answer may be perceivable as a non-compliance rather than a failure to receive the talk due to non hearing or non-orientation. This is made evident by M producing the question '*Mana warna silver?*' ('Where is silver [car?']') in line 4 rather than repeating the earlier question (line 2) following Taufiq's non-response (line 3). The question in line 4 now projects for an *easier* reaction from the child for example by finger pointing to, or producing any kind of behaviours verbally or nonverbally to identify a silver coloured car, compared to the question in line 2 which demands the child to *name* the colour of the car in order to respond to the query fittingly. Following this, there is still a non-reply from Taufiq. During the 1.8 second gap in the following turn, M gazes at Taufiq, thus shows that he is to take the next turn.

Gaze is one of the tools commonly employed by speakers to select the next speaker or to indicate a problem within the talk sequence such as in untaken turn. However, right after gazing at Taufiq, M then looks back down at the cars, and formulates her talk into '*Ada tak warna silver?*' ('Is there a silver car?'). She does not repeat her earlier question, nor does she summons the child in line 6. This question in line 6 seeks a yes/no respond from the child- and as such appears to be a simplest type of response compared to what the preceding two questions projected for. This suggests that she treats the child as having noticed and perceived her earlier talk, but does not comply as the recipient of a question. Following this, Taufiq maintains silent and only produces ^o↑*hm*^o in line 9, after M's another gaze towards him, and a hand movement that seems to be an attempt to touch the cars before she retracts her hand

(lines 7 and 8). These behaviours may have been a prompt for Taufiq's verbal production. What I want to highlight here however is the sequences of questions produced by the mother. While the child maintains his non-orientation and acknowledgement towards M as the speaker or the cars as shared referent, M's behaviours and talk design indicate that she perceives the child as having received her questions, and thus designs her talk as to project for a reaction from him by creating junctures for his replies. As such, M displays her persistence in pursuing a response from the child.

While the mother in Extract 6.12 appears to be more of an audience of her child's play, and produces her questions without physically interfering with the child's play; the mother in the next extract (Extract 6.13) takes a more active, almost dominative part in the play. Note that the child, Damien, is also a verbal child with mild autism.

Extract 6.13 [Damien 'What car is this?']

Prior to the extract, the child (Damien) has readily attended to the toys cars. With his right hand, Damien holds a brown car and pushes it a little. M has just peered into the toys bag and talked briefly about its content. Damien does not orient to the bag and continues looking at the cars. M then sits up and turns towards Damien.

1 M : °OK° te↑ngok= ((pushes the toys bag and moves forward))

°OK° look

2 : =ni kereta apa:?, ((bends forward and picks up the brown car/Frame 1))

this car what?

what car is this?



Frame 1

3 D : Kere↑ta: ((M holds the car up/Frame 2))

Car



Frame 2

4 M : Ni kereta apa:?, ((examines the car/ Frame 3))

This car what?

What car is this?



Frame 3

5 D : Aa:: ((looks at the car))

6 ((rises from sitting position, moves forward and reaches for the toys bag))

7 M : Besar¹ke kecil (.)²nak te[ngok ha

Big or small (.) want to see ha

((¹ M gazes towards the bag))

((² Both M and Damien look inside the bag))

8 D :

[Ha besar (.)]

Ha big

As has been described, the mother (M) first directs her orientation towards the bag. Damien does not display any interest towards the bag, which might have prompted M to abandon it and orient to the objects readily oriented to by Damien- the cars. M starts her talk with 'Ok' and says 'te↑ngok' ('look'). It is important to highlight that 'te↑ngok' ('look') as produced by M here is not a directive for the child to look- given that the child is already looking at it so such a directive would be irrelevant. Arguably, the talk is more of a marker of her upcoming action as she prepares to reach and gets hold of the object. M then picks up the brown car and produces 'ni kereta apa:?', ('What car is this?') line 2. By holding up the car, M makes public that it now has become a shared referent between them, as she refers to it with a minimal 'ni' ('this'). By asking the question, not only M starts a new topic involving the car, M has also made relevant a reply from Damien. As such, she has now passed the next turn to him, and should he reply to it, an engagement will be secured between them. In line 3, Damien says 'kere↑ta:' ('Car') which is not fitted as a correct answer to M's question. Nonetheless, such a reply suggests his orientation to, and receipt of M's prior talk. M dismisses his line 3, and repeats 'ni kereta apa:?' ('What car is this?') in line 4. Next, Damien says 'a::' and repositions himself as to now move closer to the toys bag. Although his verbal production in line 5 appears to show that he is doing thinking of an answer to M's question, his physical actions demonstrate the change of his orientation. Also, his non answer suggests a difficulty of coming up with one (otherwise he would already have answered the question). Next, M asks 'Besar ¹ke kecil' ('Big or small') which now queries about the size of the car and as such changes the focus of the previous question to a new one. She also provides the answer for Damien to make use- and thus lessen the complexity of the enquiry she has been making. In

his next turn, Damien finally produces a fitted answer as a reaction to M's question (*'ha besar'* [*'ha Big'*]) despite his displayed physical orientation has clearly been directed towards the bag.

The analysis of Extract 6.13 re-highlights a few points that were also noted from the analysis of the last extract. First, the mother uses questions to project for a response from the child. Second, she lessens the complexity of her questions following the child's non-answer, but nonetheless sticking to the question-in design talk throughout the extract.

Next I include an example from the TD group to sample the phenomenon in the group. The child in the extract is a 3;2 year old boy, Amir. In the extract (Extract 6.14), the mother (M) uses a summons (*'HA: Amir'*) before she produces a question (line 34). The summons is sufficient to steer the child's focus to attend to the referent (Eriksson, 2009); however, as also shown in the previous examples, the summons alone does not warrant a response from the child that will secure an engagement sequence. What is needed now is a talk that will further project for a contribution from the child. As demonstrated in Extract 6.14, the question *'sama tak'* ('same or not?' [line 34) as well as its reformulation and reuse (line 36 and 39) are utilized by M to pursue a reply from Amir that would have established the engagement she is after. Although the child eventually responds to M, this is not shown in the extract.

Extract 6.14 [Amir 'Similar cars']

- 32 (7.5) ((Amir turns slowly to gaze at the grey car in his hand and puts it on the
33 table; M takes out more cars and lines them up))
34 M : ¹HA: Amir² (.)Sama tak?
HA: Amir (.) *Similar (or) not?*
((¹ M takes out yellow car from the bag and holds it up mid air))
((² Amir's gazes changes from the car in his hand to the yellow car in M's

hand.))

35 (0.4)

36 M ³ni sama ↑tak dengan ni.

(is) this similar (or) ↑not with this.

((³ M puts the yellow car on the table as Amir looks on))

37 ((M moves her index finger over the yellow car then looks at Amir))

38 (2.5)

39 M sama tak?

similar (or) not?

So far I have analysed the designs of questions implemented into different activities (namely, seeking information, labelling activity, and testing of existing knowledge) that are utilised by mothers as initiating-engagement actions. In the following section, I will investigate other methods used by them to engage their children during free play.

6.3.2 Proposing a new trajectory for an engagement

Another design of the IET used by the mothers in the dataset is proposal. These proposals are utilised by mothers to suggest a new focus for interaction with the children, which make possible an acceptance or a rejection from the recipient in their next turn (J. Davidson, 1984). From the review of the data it was found that there are three designs that are recurrently used by mothers at the initiating engagement junctures. The first two are questions in design; that are the variations of 'X wants Y no' ('X nak Y tak?') and 'We (do) Y (do you) want?' ('Kita Y nak?'), and the third is talk that contains 'let's' ('jom'). As will be explicated, these different designs of proposal vary in terms of the degree of compliance expected from the children.

6.3.2.1 'X nak Y tak?' ('X wants Y no?')

To start, let us consider Extract 6.15. In the extract, the child, Amin, is keeping the blocks into its box and says 'kemas' ('keep') which he produces with phonological errors by omitting /k/ sound (line 1). Amin's behaviours in line 1 mark the end of the previous activity his mother (M) and him were involved in.

Extract 6.15 [Amin 'Colour']

- 1 Amin : e:mas¹ ((puts blocks into the Lego basket))
keep
((¹ M turns to the colouring book on her left and picks it up))
- 2 M : Amin nak colour tak²?
Amin wants to colour no?
Do you want to colour?
((² Amin turns to his right, gazing downwards))
- 3 Amin : (yeh)³ ((puts more blocks into the basket while looking at the
colouring book))
((³ M picks up the colouring book))
- 4 M : nak colour? ((shows colouring book to Amin)
want to colour?
- 5 Amin : () =((looks at the book while continuing to put
6 blocks into basket))
- 7 M : =>ni apa ni?< ((looks at Amin))
>this what is this?
- 8 (1.9) ((Amin looks at book then looks down))=
- 9 Amin : =o:ren

o:range

10 M : ↑mango:((looks at Amin))

mango

In line 2 of Extract 6.15, Amin's mother (M) asks '*Amin nak colour tak?*'. The direct translation of this would be 'Amin wants to colour no?'. In the Malay language, it is very common that one uses their own name to replace '*I*' and '*me*' when interacting with other people, or uses the recipient's name when addressing them to replace '*you*'. While saying this, M turns and picks up the referent of her talk – the colouring book (line 2). The talk therefore directs the child to the selected referent (the colouring book), as well as to the activity that he can do next – colouring. To this, Amin turns and gazes at the book while continuing with his task of putting the LEGO blocks into its basket and says '*yeh*'. Although Amin does not immediately start with the colouring activity, his verbal and non verbal behaviours in line 3 clearly show that he has received her talk in line 2 and is engaged with M.

In other context, the question 'Amin wants to colour no?' which can be glossed into 'Do you want to colour?' as produced by M in line 2 might be a genuine *question*. However, I argue that the question-in design talk in this setting is used by the adult to propose a new activity. Note that at the start of the extract the dyad has just finished playing with the LEGO set that the child is now putting the blocks back into its container. As such, they are now available and almost ready to move to another activity or task. By producing line 2, M asks Amin whether he wants to colour- an activity of her choice-, the colouring book she has just picked up – thus makes it her selection of a referent. As such, the talk is not a *checking* whether Amin wants to colour (or otherwise they could put it away too like what they are doing to the LEGO blocks), but to put forth a new task for the child to consider. M's initiating talk in line 2 steers the child to the colouring book and to the new activity he could do with it,

as well as makes relevant a reaction from him which in turn may lead to a sequence of talk exchanges between the dyad. By doing a proposal, M will get the next turn to pursue the engagement she introduces either in the case of the child being responsive to the initiating talk such as in lines 3 and 4, and lines 5 and 6 in this extract, or in the case of non-answer such as shown in Extract 6.16.

In Extract 6.16 too, the mother (M) produces a question in design talk to initiate a new trajectory within the play sequence. At the start of the extract Damien has just finished playing with a colourful chain, which he then gave to M to keep. Both M and Damien then looked down towards the toys in front of them (Frame 1), seemingly disengaged from each other, at least for a brief moment. Even when M asks the question '*Okay: do you want to sing a song? Damien nak nyanyi tak?*' ('Okay: do you want to sing a song? Damien wants to sing not?'), both of them are still looking down, and appear to visually attend to the different toys (line 1). In this example, it is clearly exemplified how M uses the talk in line 1 to refer to the new activity that Damien can do (if he wants) after the previous one (playing with the colourful chain) has been completed. Different from the last extract, the referent in the current one does not involve an object but a task (singing a song). In this extract, Damien does not respond to M. In line 2, at the juncture where he could have answered whether he does want to sing or otherwise (thus accepts or rejects M's proposal), Damien continues with his own play instead. When he breaks the blocks, however, he does look at M. This indicates that he addresses his '*ops*' (line 2) to her, and in so doing, demonstrates that he is already involved with playing with the blocks but acknowledges M as co-present and potentially attending to him. He does not however, display any orientation to M's question in line 1. Nonetheless, following his non-answer, M continues to pursue an answer from him (line 3) and again in line 6. Note too that while saying her line 1, M does not look at Damien. Although this may seem that M is not fully attending to the child, by designing her talk as a question M has made conditionally-relevant

for Damien to take the next turn. Damien’s non-orientation to M in this extract may be seen as him being non-compliant to the new trajectory put forth by the mother. However, it is illustrated how M uses questions to propose an activity that requires Damien’s approval to proceed, and when Damien’s response to the proposal is not forthcoming, M pursues it. However, due to Damien’s persistent non-reply, M eventually drops the pursuit for the singing task (line 11).

Extract 6.16 [Damien ‘Sing’]



Frame 1

- 1 M : Okay: do you want to sing a song? Damien nak nyanyi tak?,
Okay: do you want to sing a song? Damien wants to sing not?,
Okay: do you want to sing a song? Do you want to sing?,
- 2 D : ↑(ops) ((breaks the Lego blocks then looks up to M))
- 3 M : Damien nak nyanyi tak:? ((looks up to Damien then
4 *Damien wants to sing or not:?* reaches forward))
Damien do you want to sing?
- 5 (0.7) : ((M takes the Lego basket and looks into it))
- 6 M : ↑ha Damien? ((puts the Lego basket on the floor and looks at
7 Damien/ Frame 2))



Frame 2

- | | | |
|---|---|--|
| <p>8 (2.4) : ((M looks down))</p> <p>9 M : Damien: :</p> <p>10 (3.2)</p> <p>11 M : Cho cho:: chocho::</p> | } | <p>((both M and Damien look down))</p> |
|---|---|--|

The next extract will provide another example of how the maternal initiating turn is used to propose a new trajectory in the dyadic interaction, with the mother deliberately selecting the child as the active agent for the proposed task.

Extract 6.17 [Imanudin 'There are animals']

Prior to the extract, M asked Imanudin (Iman) to take a car which was at a corner of the room (outside the viewing range of the camera), and bring it close to M.

- | |
|---|
| <p>1 M : <OK: pandainya:> ((Iman puts the car he has just picked up close to M))</p> <p style="padding-left: 40px;"><i><OK: so clever></i></p> <p>2 (0.9) : ((M moves some toys, Iman sits in front of her))</p> <p>3 M : OK (.)</p> <p>4 M : I↑man (.) Kita:- (.) Iman nak tengok yang ni tak? ((holds bag of animals</p> <p>5 <i>Iman (.) We:- Iman wants to see this not? towards Iman))</i></p> <p style="padding-left: 40px;"><i>Iman (.) We:- Do you want to see this?</i></p> <p>6 (0.8) : ((M gazes at Iman/Frame 1))</p> |
|---|



Frame 1

7 M : Iman nak tengok yang ni tak? ((Iman moves towards M))

Iman wants see this not?

Do you want to see this?

8 Iman : ((Holds the bag of animals/ Frame 2))



Frame 2

9 M : Nak:[↑]

Want

10 (1.0) : ((Both gaze at the bag of animals))

11 M : OK (.) Keluarkan

OK (.) Take out

In Extract 6.17, the mother's (M) initiating talk occurs in line 4. Note that after the name calling '*I↑man*' M produces '*kita*' ('we') but restarts her talk with the child's name (Iman) before proceeding to ask him if he 'wants to see this no'. As such, similar to the previous extracts, M has selected the child as the active agent for the initiated action. Iman does not respond to M's initiating turn (line 4) and this is followed by M's pursuit of a reply

from the child (lines 6 and 7). In line 7, Iman moves closer to M and the referent (the bag of animals) and looks into the animals' bag. This is treated by M as the child's compliant uptake of her proposal (line 9). Only with the child's approval, the activity involving the toys animals can now continue (line 10 onwards).

It is notable that M restarts her talk in line 4 to begin with the child's name instead of 'we'. Similar to the last two extracts, by using the child's name, the mothers put the role of providing an approval for the proposed action ('see this') solely on the child as the recipient of the talk, and allows more power for the child to choose. As such, without the child's approval the proposed tasks would not take place (such as exemplified in Extract 6.16). The use of 'we' such as what the mother in Extract 6.17 almost did would suggest a collaborative work, which is not done by a proposal that begins with the recipient's name included in the current section. This will be further analysed in Section 6.3.2.2.

6.3.2.2 'Kita buat Y nak?' ('We do Y (do you) want?')

In this section, I will analyse instances when the mothers initiate an engagement with their children using variations of '*Kita buat Y nak?*' ('*We do Y (do you) want?*') with 'Do Y' refers to a proposed action. I will show how the IET is usually used to initiate for a collaboration between the mother and the child. I will also show that although proposals are for the recipient to accept or decline and that only with the recipient's acceptance of the proposed activity could take place, the child's resistance or non-agreement to the proposal might lead to a sequence of a follow-up pursuit. To begin, let us consider Extract 6.18. In the extract, the mother (M) and Imanudin (Iman) are seated facing each other. They have just finished playing with a toy.

Extract 6.18 [Imanudin 'Mickey Mouse']

- 1 M : ((turns around and look at the toys behind her))
2 : Iman (.)
3 : Kita buat ni nak? ((turns to Iman while picking up a box of puzzle
4 *We do this want?* with right hand/ Frame 1))
We do this (do you) want?



Frame 1

- 5 : ((M shows the box to Iman, Iman moves slightly forward/Frame 2))



Frame 2

- 6 M : Ha: <Mickey Mou:se:> ((smiles and begins to open the box))

At the start of Extract 6.18, M disengages from Iman as she turns and looks at the toys behind her. In line 3, M produces '*Kita buat ni nak*' ('We do this (do you) want'). While saying this, M looks at Imanudin, as her right hand reaches for the object she refers to with '*ni*' ('this') behind her. At this point of talk, it is unclear what the object is, and what action M means with her '*buat*' ('do') (line 3). For the child to make some, or full sense of M's initiating talk, he will

have to have visual information of the object or referent. In line 5, M shows the object – a box of Mickey Mouse puzzle- to the child. Considering that the puzzle belongs to the child, it is presumable that the child has had experience playing with it and therefore already knows what kind of action is doable with it. This is probably the reason M does not specify the particular activity they can carry out with the object in her talk in line 3 or later in line 6. Nonetheless it is worth noting that in this extract, with the use of *'kita'* ('we') the initiation talk in line 3 instigates an action for both of the participants to perform. While the proposals produced by the mothers in Extracts 6.15 to 6.17 in the previous section select the child as the active agent, or the *doer* of the proposed action, the initiating talk in the current extract proposed a collaborative work between the adult and the child.

In line 5, Iman appears to move his body closer towards the mother and the referent, while maintaining his gaze to the referent. This is treated as a compliant uptake by M made evident by her talk (*'Ha:: <Mickey Mou:se:>'*) and non-verbal actions (smile and opening the box). In so doing, M appears to be ready to begin the activity with the Mickey Mouse puzzle. Note that this only happens after the child displays his orientation to the referent. Although the child has actually moved forward in the course of standing up and moving away from M (not included in the extract), his behaviours in line 5 suggest (although misleadingly) his approval of the proposed collaborative play with M. This illustrates that only with the child's approval that the proposed joint task may commence. This is further illustrated in Extract 6.19.

Extract 6.19 [Irfan 'Play Fight'] (previously analysed as Extract 5.2)

1	M	Habis cerita ↓ dia: >kita main ni nak? <fa ↓ wan=
	Finish its story:	>we play this want? < fight=
	The story is finished:	>we play this (do you) want? <fight>
		<div style="display: flex; justify-content: space-around; width: 100%;"> <div style="border-left: 1px solid black; border-right: 1px solid black; border-bottom: 1px solid black; padding: 5px; margin: 0 10px;"> -----1/Frame 1----- </div> <div style="border-left: 1px solid black; border-right: 1px solid black; border-bottom: 1px solid black; padding: 5px; margin: 0 10px;"> -----2----- </div> </div>



Frame 1

((¹ M turns to her left and reaches for the Godzilla and Ultraman, Irfan looking at the book/Frame 1))

((² Irfan begins to turn to his right))

2

(=kita lawan
=we fight
-----3/Frame 2-----)



Frame 2

((³ M puts Ultraman close to Irfan while holding Godzilla in right hand, Irfan looks at Ultraman while closing the book))

3 (0.8)

((M takes a plastic bag from behind Irfan and puts it near other toys as Irfan watches))

4 Irf :

Main main	main main
<i>Play play</i>	<i>play play</i>
-----4-----	-----5-----

^{Frame 3}

((⁴ Irfan holds the Ultraman briefly then lets go))

((⁵ Irfan turns to face forwards (seemingly towards toys)/Frame 3))



Frame 3

5 M : Okay ((M holds Godzilla and Ultraman up))

6 Irf :

Main tu	um: to:ys
<i>Play that</i>	<i>um: to:ys</i>
-----6-----	-----7-----

((⁶ Irfan points to toys with right hand))

((⁷ Irfan bends and moves forward))

7 M :

Main toys?, (.)	main ni taknak?	Main ultraman?,
<i>Play toys?. (.)</i>	<i>play this (you) don't want?</i>	<i>Play (with) ultraman?</i>
-----8-----	-----9-----	-----10-----

((⁸ Irfan picks up some blocks))

((⁹ M shows Ultraman and Godzilla to Irfan))

((¹⁰ Irfan turns to Ultraman and Godzilla))

8 Irf : Taknak ((looks down to the blocks/Frame 4))

don't want



Frame 4

9 M : < Tak[nak:>

<Don't [want:>

The mother (M) starts line 1 of Extract 6.19 by producing a remark about their prior reading activity (*habis cerita* ↓*dia*: ['the story is finished:']). Without any lapse, she continues to say '>kita main ni nak?< la↓wan=' : ('>we play this(do you) want? <fight>'). Note that as she says '>kita main ni nak?<' ('>we play this(do you) want?'), M turns to the left to pick up the toys she addresses as 'ni' which are the toys Godzilla and Ultraman. Note too, that at that point, Irfan is still gazing at the book. Therefore, for Irfan to identify what 'ni' ('this') refers to, he has to follow the direction of M's physical orientation and leaves the book, which he eventually does in line 2. By producing the talk in line 1 as such, M announces that the story they have been reading has now ended (thus suggests that the reading activity itself has ended), and therefore a new activity will be relevant. M has also then sought the child's agreement to play with another object which she refers to with 'ni' ('this') and specifies the particular game that *they* can play with it – a *fighting game*. This example illustrates how the adult uses a question-in-design talk to initiate a new joint-activity with the child. M's line 1 might be responded to by Irfan with a 'yes' or 'no', however such a verbal answer is not imperative. What will be sufficient as a fitted reaction is any verbal or non verbal action to indicate his agreement or disagreement of the proposal. In other words, in line 1 M is not merely asking for a verbal response from Irfan to indicate his agreement of the proposed

activity. A full agreement to a suggestion to play with some objects when the objects have been made available within the play setting is to actually play with the selected referent. Irfan says '*main main main main*' ('play play play play' [line4]) and this is treated by M as a compliant uptake following her proposal (line 5). However, it turns out that the child's talk in line 4 is not an approval to play with the referent selected by mother (line 6) and therefore the proposed joint play could not take place (see Extract 5.2 for a longer version of this extract). Although Irfan has made clear the toys that he wants to play with, M asks for his confirmation that he does *not* want to play with the Ultraman (line 8). When Irfan confirms this, M displays her disappointment in line 9.

Mothers may also use a variation of '*Kita buat Y nak?*' ('We do Y (do you) want?') as exemplified in the next extract. In Extract 6.20, the mother (M) and her child (Damien) are seated on the floor, with a toys bag placed in front of Damien on M's right. Just prior to Extract 6.20, M puts a Makaton box into the toys bag while Damien plays with some Lego blocks which he had built into a train. In line 1, M begins her talk by summoning the child with '*Damien*' while her right hand is still in the toys bag. Following this, Damien looks up and gazes towards her hand. Next, M indicates that more talk is coming with '*Ha::*' as she brings her right hand out from the bag and touches the Lego blocks on the floor in front of her. This is followed by M's '*we do ca↑stle*' (line 4). This may be received as a proposal as it appears that M is suggesting that they built a castle with the Lego blocks. At this point M is already gazing at Damien who remains silent. Next, M produces a clear proposal, '*Buat castle nak?*' ('Make a castle, (do you) want?') (line 6) that projects for a 'yes' or 'no' kind of reply from the child. It is not entirely clear as to why this is necessary, however, it is possible that the child's lack of reaction that prompts M to reformulate her earlier proposal into the second one. Alternatively, considering that M's talk is actually disrupting Damien's ongoing play, it is also possible that M expects some resistance from him to her first proposal and therefore quickly

backs it up with her line 6. Rather consistent with the latter presumption, it is only after 0.8 seconds that Damien responds to M's with his less than enthusiastic agreement 'iyeh' ('yes') in line 8.

Now let us reconsider the two proposals in this example. In the first one ('*we do ca↑stle.*'), M suggests that they both make a castle. In the second, '*Buat castle nak?*' ('Make a castle, want?') M has now omitted 'we' thus makes it unclear whether she is going to be directly involved in the 'making a castle' task. After Damien's delayed acceptance of the proposed activity (making a castle), M produces '*ok nah. Do castle.*' ('Ok here. Make a castle') thus directs the child alone to make the castle rather than actually doing the task together with him. As such it appears that although M has initially suggested that they perform the castle-making activity together, she then changes it to dictate Damien to carry out the task, and therefore implicating her authority in the talk sequence.

Extract 6.20 [Damien 'Castle Train']

((M puts a Makaton box into the toys bag and starts producing line 1 while her right hand is still in the toys bag))

- 1 M : Damien.=
Damien.
- 2 M : = Ha:: (.) ((Damien looks up towards M's hand as she takes out her right
3 =Ha:: (.) hand then puts both hands on the blocks on the floor))
- 4 M : We do ca↑stle. ((looks at Damien as he stares at the block))
We do ca↑stle.
- 5 (.)
- 6 M : Buat castle nak? ((Damien looks back down at the toys))
Make a castle, (do you) want?

- 7 (0.8)
- 8 D : i:[↑ye
yes
- 9 M : [Castle. Ok nah. nah. Do castle (.) buat castle. Nah. Ni: (2.42)
Castle. Ok here. Here. Do castle. Make castle. Here. Here.

The next extract is an example of an interaction between a mother and her typically developing child in which the mother uses a similar IET to the last extract. In the extract the child (Aina) also displays a resistance to the mother's initiating action. As did the mother in the previous extract, the mother in the present example also displays her authority within the engagement pursuit.

Extract 6.21 [Aina 'Do like this']

- 1 Ai : <Pada masa dahulu: di tepi sebatang sunga:i (.) tinggal, lah
Once upon a time: near a river lives
- 2 (0.8) se se se (0.9)kor
a a a
- 3 [kura kura:>]
tortoise
- 4 M [>Buat macam ni nak?< ni sunga:i](.). ((pushes the book slightly while
5 *Do like this want? this river: making two trees stand/Frame 1)*
Do like this (do you) want? this is river:

12 (0.4)

13 Ni ada kura kura kan: (.) ((picks the tortoise off the book and puts it near
14 the trees))

15 Tengok¹ni²/Frame 4.

This got tortoise right: (.) look this

This (we) have a tortoise right (.) look at this



Frame 4

¹ M shifts gaze towards Aina

² M gazes at Aina as Aina rubs her eye

In Extract 6.21, Aina is in the midst of book reading (lines 1 and 2), when M launches her talk with her '>Buat macam ni nak?< ni sungai:i' ('> Do like this (do you) want? < this is river:') at line 4. In her talk, M first appears to invite the child to consider whether she wants to do what M is about to propose (*Buat macam ni nak?* ('> Do like this (do you) want?') and that is to presume an imaginary river (*ni sungai:i* ['this is river']) which she physically marks with two plastic trees (lines 4 and 5). Note that M then pauses briefly at line 4 and quickly starts her next talk at line 6 before the child resumes talking. Such a rush would have resulted in insufficient time for the child to respond *if* she was going to. However, it reflects that M has assumed that her earlier talk at line 4 will not receive an agreeable respond from Aina that she does not have to wait before reformulating her earlier proposal into '↑Dik [*buat macam ni nak? Ni ada sungai*]' ('Little sister do like this (do you) want? Here is a river:') at line 6. Aina does not respond to this nor does she acknowledge the talk in any ways. Rather, Aina

continues her reading (line 7) which she commences right after M starts her line 6, causing both M's talk and her reading to overlap.

Potentially receiving Aina's behaviour as an indication of a refusal for an engagement from the child, or that any further attempts to engage the child will be problematic at this point (Schegloff, 1989), M now keeps quiet and is seen to only resume the floor to talk when the child has finished reading (line 11). Interestingly, rather than revising her proposal into a version that is more likely for her recipient to accept (J. Davidson, 1984), M actually uses a different design altogether (i.e., directive) for her subsequent talk (lines 11 to 15). Her talk starts with a discourse marker 'so' which prefaces the continuation of a previous interrupted talk (Bolden, 2006), and she proceeds to say '*Ni ada kura kura kan*' ('This (we) have a tortoise right') which by design, occasions an agreement from the child (line 13). M then looks up at Aina and tells her to look at the tortoise when she notices the child is potentially being inattentive as she rubs her eye (line 15). The change in the design of M's initiation turns further supports the analysis that the use of a proposal earlier in this extract is for pursuing an engagement with the child with a particular referent - in this extract being a pretend play-, that when an acceptance is delayed, M uses another design that is more authoritative in nature to get the child to comply.

From the analysis, I have explicated how the mothers use '*Kita buat Y nak?*' ('we do Y (do you) want?') and its variation to propose a future action to the children. I have also illustrated that, although the design implies that the future activity may be a collaborative task, this is not necessarily the case particularly when 'we' is not used in the talk.

6.3.2.3 *'jom'* in initiating new engagement

Another design of talk frequently used by the mothers in the current study to propose a future action to the child is turn design that contains *'jom'*. There is no known study conducted on *'jom'*, however, based on my experience and knowledge as a native Malay speaker, *'jom'* is a token that is commonly used to accomplish different social actions, such as to invite, to request or to propose another person to do something together (for instance, *'jom buat ini'* ('let's do this')).

All of the initiating turns that include *'jom'* in the data set are analysed. From the analysis, I found that these *'jom'* may be translated into *'let's'* which is usually used in future-oriented directives (cf. Goodwin & Cekaite, 2013), however, it is not an exact translation. This is because it is also possible for one to say *'jom kita X'* ('kita' literally means 'we/us') which is translatable into 'let us'. For this reason, I will not provide an alternative word for *'jom'* in the translation to avoid any inaccuracy in the analysis.

To begin, let us consider Extract 6.22 which has been previously analysed in Chapter 4. Recall that prior to the extract, the dyad sits facing each other but seemingly occupied with different plays. The child (Irfan) played with the LEGO blocks, while M displayed her orientation to a shape sorter ball on her right. M had to reach forward to pick the ball up, at which point Irfan turned and looked at it.

Extract 6.22 [Irfan 'Shape Sorter Ball'] (previously analysed as Extract 4.14)

- 4 M : =Irfan: pandai tak buat yang ↓ni ?, (.) jom buat ↑ni
=Irfan: know not do this (.) **jom** do this
=Irfan: (do you) know how to do this? **jom** do this
- 5 Irf : mama buka ((holds the ball on the floor))
mama open
- 6 M : ha bukak dulu: (.) ((M opens the shape sorter ball as Irfan watches))
ha open (it) first: (.)

In line 4 of Extract 6.22, M produces '*Irfan: pandai tak buat yang ↓ni ?*', ('Irfan: do you know how to do this'), pauses briefly then says '*jom buat ↑ni*' ('**jom** do this'). I argue that the former is not intended by M to serve as a real question based on at least two reasons. First, she does not allow an ample time for the child to 'answer', and second, following the non-answer from the child, M does not pursue an answer from the child. Also, at that point, M is holding the shape sorter ball towards Irfan, and as such *shows* the ball to him. In other occasions of course, adults could and might actually genuinely intend to know the answer for such questions and wait for children to provide one, however, at least as suggested by M's behaviours in this extract, an answer is unnecessary. Imagine, following the '*Irfan: pandai tak buat yang ↓ni?*', ('Irfan: do you know how to do this') turn, Irfan answers 'yes' and looks away, attending to some other toys. In such a situation it is very likely that M would do something to encourage the child to actually *play* with it. Also, it would be strange for an adult to introduce a toy into a free play, asks a child whether they *know* how to play with it and upon receiving a relevant response, keeps it away as compared to actually getting the child to engage with the object regardless whether he does or does not know how to. Therefore, I argue that '*Irfan: do you know how to do this*' question is comparable to what Schegloff (2007)

termed as pre-invitation. As such, the question-in-design talk is used as a bridge into the real, salient proposal that comes next in line 4 (*'jom buat ↑ni'* [**'jom** do ↑this']).

M produces *'jom buat ↑ni'* [**'jom** do ↑this']) while holding the ball and looks and maintains that position, before Irfan asks her to *'buka'* (*open*) the ball. By gazing at Irfan, M displays that she has selected him as the next speaker (Lerner, 2003) and that she *waits* for his response to her proposal of playing with the ball. In the talk, she does not name the active agent for the action of playing the ball. As a word, *'jom'* does not include 'we' explicitly as does 'let's' which is the contraction of 'let us', however, it does implicate a collaboration between the proposer and the recipient as it invites the recipient to participate in the performing of the future action that is in the interest of the proposer. As such, a proposal that includes *'jom'* prefers an agreement from the recipient as does 'let's'. Because the talk bids the child to 'do' the ball, and given the collaborativeness implicated by *'jom'*, the most relevant kind of a compliant uptake by the child as the recipient would be to 'do' the ball together. It is interesting that Irfan responds to M's *'jom buat ↑ni'* [**'jom** do ↑this']) by saying *'Mama buka'* ('Mama open') in line 5 which therefore marks his launch of the play and the inclusion of M in the course. In so doing, Irfan demonstrates an orientation to the directiveness of the proposal (to play with the ball), as well as to the collaboration that the talk implicates.

The child in the following extract, Adi Hasnan, who has displayed less expressive language abilities compared to Irfan in the study also displays similar orientation to his mother's proposal. In line 1, Adi Hasnan's mother (M) points to the tablet he has been holding and says *'Jom tengok cerita ↓ni (.).'* (**'jom** watch this movie') and appears to have a difficulty remembering the title of the movie (in line 2). In line 3, Adi Hasnan produces '↑Tony' while M continues to display *recalling* of the title, thus fits as completing M's unfinished talk (line 3). M then corrects him with '>Toby<' in line 4 (the movie is about a boy called Toby, not Tony). To

this, Adi Hasnan gazes towards the tablet (line 5), and corrects himself by repeating °To↓by° (line 6). It is not until more than 15 seconds, and many turns later than Adi Hasnan actually plays the movie, however, M's line 1 has instigated a talk sequence on Toby/Astro Boy. Towards the end of the talk sequence too (transcript not included here) the dyad finally gets to the point when the child positions himself close towards M and plays the Astro Boy movie (Frame 2).

Extract 6.23 [Adi Hasnan 'Cerita Toby']

Adi Hasnan stands near the low table, holding a tablet but looking towards the camera placed in a top cabinet.

1 M : Jom tengok cerita ↓ni (.) ((points at the tablet/Frame 1))

jom watch movie ↓this

jom watch this movie



Frame 1

2 : Cerit[a:

Movie:

3 AH : [↑Tony =

4 M : =>Toby<

5 AH : ((looks down at the tablet))

6 AH : °To↓by°

7 M : °°Ha. Toby°° =

8 =((Adi Hasnan looks at M))

9 M : Astro Boy }

10 AH : Astro Bo[y } ((Adi Hasnan looks at M))

11 M : ↓Ha: }

12 .. [few lines skipped]

 ..

13 ((Adi Hasnan plays the movie/Frame 2))



Frame 2

In the last two extracts, I have analysed how the initiating turns starting with ‘jom’ implied togetherness of the undertaking of the proposed actions and the mothers in the extracts appeared to pursue the children’s display of an alignment with the propositions made before the activities could take place. However, from the analysis of the data, I also found in many instances the parents appeared to be authoritative during the free play, as exemplified in Extracts 6.24 and 6.25.

Extract 6.24 [Amin ‘Let’s race’]

Context: Amin is looking at a small car as M watches him. M then moves a truck so that it is placed facing the camera which is recording the session.

1 M : kita lumba ^jom ((picks a brown car up and looks at it))

*We race **jom***

2 ((Amin looks down at small cars and plays with them, M puts the brown car

3 down))

4 ((M holds the brown car and a truck next to each other and puts them

5 aside))

6 M : ((puts the toys bag further to the side)) [jom kita lumba **jom**

[jom we race jom

7 (((picks up small cars and put them

8 side by side, Amin turns and looks at them))

9 M : jom ((takes small car from Amin)) lumba jom

Jom **race jom**

In Extract 6.24, M's proposal comes in line 1 while the child, Amin is orienting to the small cars. As she talks, she moves about a brown car then a truck, probably as the potential cars to 'race'. When Amin fails to orient to her proposal (lines 2 to 5), M reformulates her talk into '**[jom we race jom**' (line 6) and moves the small cars including those that the child is holding at the moment into a position that is fitting for a race (lines 7 and 8). In so doing, M now selects the small cars- the objects Amin has been focusing on, as the vehicles that will participate in the race. As such, M has imposed her play trajectory on the child by interrupting his own play, and taking hold of the child's focus objects to be the referents of her proposition.

Extract 6.25 which is a continuation of Extract 5.7 (Amin 'Dog') further illustrates the mother's directiveness and authority in the interaction with the child despite the suggestive nature of the initiating talk (line 1). Recall that in Extract 5.7, the child (Amin) refused to comply in the picture naming activity instigated by M and spoiled the puzzle they had been playing with. Following this, M shows her disapproval of Amin's behaviour with '*Taknaklah*' then continue to say '*jom kita tengok* ¹*auntie ada mainan apa*' ('**jom** we look auntie has toys what'). She does not check on Amin's reaction but straightaway moves the toys bag closer,

thus appearing ready to commence the future-action she has just put forth (lines 3 and 4). M then escalates the directiveness of her initiating action by directing the child to *'kita tengok ada toys apa'* ('we look what toys are there').

Extract 6.25 [Amin 'Auntie Has What Toys']

- 1 M : ((tsk then sits up and turns to her left and looks at the toys bag)) =
- 2 M : =Taknaklah: jom kita tengok ¹auntie ada mainan apa
 =*Don't want PRT-lah: jom we look auntie has toys what*
 =*Don't want PRT-lah: jom we look what toys does auntie have*
 ((¹Amin picks up the puzzle board))
- 3 ((M pulls the toys bag closer to herself, Amin then turns and looks towards
- 4 her direction))
- 5 M : Kita tengok ada toys apa.= (turns towards Amin))=²simpan- betulkan dulu
 We look has toys what. *keep- rearrange first*
 We look what toys are there *keep- rearrange first*
 ((²M points to the puzzle, Amin turns and looks at it))
- 6 Amin : Impa[n
 Keep

Next, I will analyse a sample (Extract 6.26) from the TD children's data to exemplify talk construction using *'jom'* in the group. Prior to the extract, the child (Razi) has been playing with toys, running back and forth around the table at times in his task of arranging the animals. His mother (M), although not being physically involved with the play, has been watching him and providing verbal contributions to the ongoing activity such as by making a statement (line 5) and asking him question (lines 9 and 13) regarding the animals.

Extract 6.26 [Razi 'Jom we play something else']

- 1 Razi : Eh ada sorang /ti[dia/] la
Eh has got one person [/tidia/] la
- 2 ((Razi moves closer back to table, takes another tiger and put both tigers next to each other))
- 3 M : [hmm]
- 4 (1.0)
- 5 M : Dia dia dia kawan baik, best friends.
They they they are best friends, best friends
- 6 (0.5)
- 7 Razi : ↑a ↓ah
Yes
- 8 (0.6)
- 9 M : tu abang ngan adik ke?
Those elder brother and younger brother?
- 10 (0.5)
- 11 Razi : ↑a ↓ah.
Yes
- 12 ((walks away from table))
- 13 M : abang ngan adik ah? ((gazes at Razi then back at animals))
Elder brother and younger brother ah?
- 14 (3.4) : ((Razi runs to the opposite side of the table, his back to the camera))
- 15 Razi : (°so adik dia dekat dekat sini° (.)) Pastu dia gigit (baby)
(so it at at here) Then it bites baby
- 16 (3.9) : ((Razi runs back to his chair))

17 Razi : (turtle)

18 (3.7)

19 Razi : gajah.

Elephant

20 (4.9) ((Razi picks elephant up))

21 ((Razi runs back to the opposite side of the table and puts elephant down
[Frame 1]))



Frame 1

22 Razi : °gajah kat sini°

°elephant° at here

23 (1.8) : ((Razi runs back to his chair))

24 M : ↑eh: jom kita main bende la↑in = ((M looks at Razi as he runs [Frame 2]))

*eh **jom** we play something else=*



Frame 2

25 Razi : =¹ha. main↑ni (.) car: ((looks down to the floor, touches the bag of cars

26 *=ha play this (.) car* with his feet))

27 ((M moves slightly in her chair while gazing down towards the floor))

From line 14, however, M stops making any verbal offerings to the play, while Razi continues playing and talking with talks that are not explicitly addressed to M (lines 15, 17 and 19), which suggest that he is no longer engaged with his mother. At line 20, Razi picks the elephant figurine up and runs around the table again to put the toy on the other side, before running back towards his chair (lines 20 to 23). Before Razi arrives at his chair, M produces her proposal for the both of them to play with other toys with her ‘*↑eh: jom kita main bende la↑in*’ (‘*eh jom* we play something else’ [line 24]). Sequentially, Razi stops running and immediately selects the cars as the toys that he wants to play (line 25). The analysis shows that M uses her talk at line 24 not only to suggest a new play to the child, but also to now play *together*. With her talk, as can be seen, she manages to hold up the child’s ongoing solitary activity, re-directs his attention to herself and the availability of others toys around them, as well as engaging him in a talk -at least at that particular juncture-, around the proposed idea of considering a new play and choosing alternative, available toys.

6.3.3 Using directives

Another type of the initiation turn used by mothers participated in the present study is directives. Craven and Potter (2010) have demonstrated that directives project compliance as the preferred response from its recipient. In a parent-child interaction, directives are common occurrences (Craven & Potter, 2010; Goodwin & Cekaite, 2013). In the current analysis of interaction involving children with ASD, initiating talk that is designed as directives is one of the most frequent designs used in addition to question and proposal. In the examples where the mothers are seen using directives to initiate JE with their child, the following three elements materialised from the talk.

Specification of the referent and next relevant action

In the analysis of maternal directives, it is recurrently found that the mothers would identify explicitly the objects they select as the shared referents for the prospective engagement as well as the kind of engagement for the children to perform as exemplified in Extract 6.27. At the start of the extract, it is obvious to an observer that the child (Damien) is both physically and visually orienting to the toys vehicles. He is bending downwards, looking closely at the vehicles (line 1) and proceeds to move the vehicles as M produces her line 2. Clearly, M and Damien have different play trajectories at the time. The mother's directive begins with a name-calling ('Damien') - consistent with the practice of a speaker to gain a non-attending recipient's orientation. Next, M produces '*Give Mummy the fruit*' as she points to a bag of toy fruits located next to Damien (line 1). As such, M has specified the object that she has selected as a shared focus, and the kind of action that Damien is to perform following the talk, that is to *give* the bag of fruit to her. In reaction to the child's salient non-orientation, M continues to pursue the child's compliance by repeating her directives in lines 2 and 4.

Extract 6.27 [Damien 'Fruit']

Context: The mother (M) and the child (Damien) are positioned facing each other. Prior to the extract, Damien is playing with toys vehicles.

1 M : Damien give Mummy the fruit (.) ((points to a bag of toy fruits/Frame 1))



Frame 1

2 M : Bagi Mummy buah ((Damien pushes the car))

Give Mummy the fruit

3 (0.72) : ((M keeps pointing while Damien keeps pushing the car))

4 M : Bagi mummy buah ((Damien sits up))

give Mummy the fruit

5 : ((Damien gives the bag of fruit to M))

6 : ((M opens the bag while Damien moves towards the LEGO basket))

7 M : Damien¹ ni buah apa?

((¹ M takes an apple out from the bag and holds it up))

Specification of the active agents

Another important element that is embedded in maternal directives is the specification of the active agents (Aronsson & Cekaite, 2011) that identifies whom will be involved in the execution of the expected compliant acts. In many instances, the mothers selected and stated the child as the active agent of the compliant act, as shown in Extract 6.27. In the extract, the mother says '*Damien give Mummy the fruit*' while pointing to the bag of fruits. In so doing, M selects and tells *the child* to pick the bag at that particular time. Note too that the directive requires the child to perform an action that is not aligned with his play trajectory. Extract 6.28 further illustrates how a mother tells her child to perform a particular action that deviates from the child's current trajectory demonstrated by the display of his orientation to an IKEA catalogue.

Extract 6.28 [Adi Hasnan 'Wooden puzzle']

Context: The dyad walks towards the table. The child (Adi Hasnan) then sits on a chair and looks at the IKEA catalogue while the mother (M) looks into the big toys bag.

- 1 M : E ee:: banyaknya toys aunty: ((bends towards the toys bag near the table but
2 E ee:: a lot toys aunty: invincible to the camera))
E ee:: aunty's toys are a lot
- 3 (.)
- 4 M : eh
- 5 M : ((takes a box of wooden puzzle from the bag))
- 6 M : Adi (.) tengok ni
Adi (.) look this
Adi (.) look at this
- 7 M : ((puts the box on the table and sits down))
- 8 : ((opens the box))
- 9 : Ada toy baru ah
Has toys new ah
There are new toys

Similar to the child in the previous extract, the child in Extract 6.28 (Adi Hasnan) also displays non-orientation at the time his mother (M) attempts an engagement with him. At the start of the extract, M comments about the quantity of the toys as she examines the toys bag, which had been brought into the session by the investigator whom M refers to as 'aunty'. In Malaysian culture, it is acceptable and considered as a sign of respect for a much younger person to refer to a mature lady as 'aunty' although the persons involved have no family relationship with each other. As such, and considering the young age of Adi Hasnan, it is appropriate for the child to address the investigator as 'aunty'. By using 'aunty' in her talk in line 1, it is understandable that M is addressing the talk to Adi Hasnan and not to herself. Although the talk is addressed to him, Adi Hasnan does not orient to it. In line 4, M produces 'Eh' which indicates a surprise on her behalf upon seeing something in the bag. In line 6, M

says 'Adi (.) *tengok ni*' (Adi (.) look at this). While the surprise 'eh' invites a reaction from a listener, Adi Hasnan remains non-reactive to M, and continues looking at the catalogue. It could be for this reason that M produces the directives in line 6 that explicitly instruct Adi Hasnan to orient to the object of her surprise (the wooden puzzle). In so doing, M too has made clear that she has selected Adi Hasnan as the active agent to execute the expected, particular action that is to look at the wooden puzzle.

Directives produced by the mothers might also identify both of the participants as the active agents. This means that that the directives are designed as less authoritative, and that the expected next actions as an explicit collaborative work (Aronsson & Cekaite, 2011). This is exemplified in Extract 6.29.

Extract 6.29 [Amin 'Dog'] (previously analysed as Extract 5.7)

Context: Just prior to line 1, Amin has just put a piece of puzzle on the puzzle board, and starts to hit it.

- 1 Amin : ↑yah. ↑Yah ↑yah ↑yah ((hits the puzzle))
- 2 M : Janganlah.< Sengaja> kan? (.)
Don't. Purposely right?
Don't (do that). (You do that) on purpose, right?
- 3 M : OK kita cerita sikit. Kita cerita sikit (.) ((M bends forward and points to the
4 *OK we tell a story a bit. We tell a story a bit. puzzle board in front of Amin))*
OK we talk a bit. We talk a bit
- 5 M : Ni apa ni?
This what is this?

- 6 (1.8) : ((Both M and Amin look down at the puzzle))
- 7 M : Dog:= ((Amin picks up the puzzle board))
- 8 Amin : ↑a: ((turns the puzzle board upside down))

In Extract 6.29, the mother (M) initiates a new activity with the child (Amin) with her ‘OK kita cerita sikit. Kita cerita sikit’ (‘OK we talk a bit. We talk a bit’) in line 3. As she says this M bends down towards the puzzle while gazing at it, thus makes clear that her talk refers to the object. There are pictures on the puzzle, thus it is logical that the dyad could talk about the pictures. Rather than instructing *Amin* to do the talking, M uses ‘we’ in her talk, thus demonstrates that the talk on the puzzle would be jointly done by the both of them. As such, it is hearable that M’s initiating talk in line 3 is less commanding than the initiating talk of the mother in the next two extracts, and projects for a collaborative task.

In addition to the previous two examples (Extracts 6.28 and 6.29) which illustrate mothers’ directives that selects the child alone, and both the mother and the child, as the active agent of the projected next-actions, mothers also produce directives without exhibiting the active agents, such as exemplified in the following Extract 6.30. In the extract, the mother (M) stops the child’s current play with her ‘*nanti dulu*’ (‘hold on’) and sets out what he must do first – count the numbers displayed on the lid of the LEGO basket (line 1). Note that M does not mention the child’s name (Amin) in her line 1; and because ‘counting’ can be done by more than a person at a time, it is not clear at that point if M actually selects Amin as the sole active agent, or whether she is projecting for a collaborative activity. Following this, Amin gazes at the lid thus displays his visual orientation to it, but does not begin to count. Amin does only begin to perform the act of counting following M’s further prompts in lines 3 and 5. This is possibly due to the lack of identification of himself as the active agent of the projected task in M’s directives in the sequence.

Extract 6.30 [Amin 'Count this first']

Context: Amin holds his hand out towards a LEGO box in front of him but M quickly takes the box aside, further from the child. There are numbers and arrows that resemble a clock on the lid.

- 1 M : Nanti dulu, count nanti dulu. Count ni dulu. Ni dulu =((points to the lid))
Hold on, count hold on. Count this first. This first
- 2 Amin: : ((looks at the LEGO basket))
- 3 M : =Count (.) count (.)
- 4 Amin : ((Amin looks at the lid))
- 5 M : Ni apa? ((points to the lid))
This is what?
- 6 Amin : One two

Adults' authoritative roles

The third important element embedded in the mothers' directives is the authoritative roles of the adult. The adult's authority in the directives seen in the data set was manifested in at least three ways. First is in the design of the directives; second, at the juncture when it is produced, and third, in the embodied behaviours of the adults.

To illustrate the design of the directives that reflects the adults' authority in the sequence, let us revisit Extract 6.30. Recall how the child (Amin) has already begun to play with the toys of his choice (the LEGO blocks) when his mother halts him with her '*Nanti dulu, count nanti dulu. Count ni dulu. Ni dulu*' ('Hold on, count hold on. Count this first. This first' [line 1]). Not only does the mother delay the child's play trajectory, she has also imposed a new task for

the child to accomplish, despite the child's physical display of his own pursuit of a play. By stating that the child needs to 'count this first', the mother also makes clear that the counting task must be done first before the child can proceed with the task.

Also, the adult speakers can compel the child's recipient to quicken in carrying out the task projected by the speakers; as illustrated in Extract 6.31. In the extract, the mother (M) calls out for the child (Amruhadi) to come closer to her and the toys (line 1) but is not complied by him (line 2). M then selects the soft toy which she refers to as 'bear' as the referent for an engagement with Amru Hadi, and says '*Cepat ni main be[ar*' ('Quick play with this bear' [line 3]). As such, M imposes for Amru Hadi to now play with the selected toys as well as to speed up his reaction in complying with her directives.

Extract 6.31 [Amru Hadi 'Quick play with the bear']

Prior to the extract, the dyad has just finished looking at picture cards. Amru Hadi (A) then walked away from his mother (M) and sat on the couch invisible to the camera.

- 1 M : Sini meh
Here come
- 2 A : (aa: :)
- 3 M : Cepat ni main be[ar ((turns and takes a soft toy)
Quick this play bear
Quick play with this bear
- 4 A : [↑ak:
- 5 M : ↑Nah. ↑Dik. Ni:
Here. Little brother. This.

Next, I will analyse how the junctures of which the directives are delivered reflect the adults' power over the child participants. In almost all of the instances when directives are used by the mothers to start an engagement with their children, the children have already been attending to some referents, or play trajectories, which are different from the ones selected by the mothers. For instance, let us re-consider Extract 6.27 in which the child (Damien) has been directed by his mother to pick a bag of fruits and hand it to her while he is playing with some vehicles. In Extract 6.28, the child (Adi Hasnan) is visually orienting to an IKEA catalogue when the mother asked him to look at the box of the wooden puzzle she had picked from the toys bag. Similar phenomenon of the adults directing a new trajectory to the children is seen in Extracts 6.29 to 6.31 presented so far.

The adult speakers' authority is also demonstrated in their embodied behaviours observed in the sequence. For example, in Extract 6.32 the mother wraps her hands around the child in a hugging manner, and physically moves him away from the couch following his non-compliance to her directives '*turun turun*' ['get down get down'] (line 2). Also in line 5, M physically aids the child so as to maintain his current position facing the LEGO basket which is needed in order to get him to put all the LEGO into the basket.

Extract 6.32 [Amru Hadi 'Keeping LEGO blocks']

Context: Amru Hadi stands on the couch while the mother (M) tries to get him down and keeps the LEGO blocks they had been playing with.

1. M : Turun turun
Get down get down
2. [(M physically carries Amru Hadi down the couch)]

3. A : [((makes unintelligible sounds))
4. M : Ok. Simpan ((the dyad faces the LEGO basket on the coffee table in front of the couch, M holds Amru Hadi from behind))
5. *Ok. keep*
6. M : Simpan masuk ni ((takes the LEGO basket))
Keep put in this
Keep put this in

Directives in the interactions involving typically-developing children

The three elements (specification of the referent and next relevant action, specification of the active agent, and adults power) identified from the analysis of the directives produced by mothers of children with ASD are also seen produced by those of TD children. For instance, let us consider the following Extract 6.33 that presents an interaction between a mother and her 6 year-old boy, Azlan which has been previously analysed as Extract 4.8.

Extract 6.33 [Azlan 'Goat'] (previously analysed as Extract 4.8)

- 1 Az ((turns and plays with cars on the floor, his back towards M)
- 2 Hm: du:ng ee:::[k ((M picks up a goat and gazes at it))
- 3 M : [Azlan look ((M holds goat with right hand, gazes at it [Frame 1]))



Frame 1

- 4 ((2.9) ((Azlan quickly rises from his prostrating position then turns as he sits
5 up while M moves the goat to the center of the table at the same time/
[Frame 2]))



Frame 2

- 6 (1.6) ((M gazes at Azlan and smiles [Frame 3]))



Frame 3

In the extract, the mother (M) produces her directive in line 3 that summons the child (Azlan) to *look* when it is obvious that Azlan is already playing with some other toys (line 1). The directive includes the child's name and the specification of the action that is required from

the child, namely, to *look*, which is then responded with compliance by Azlan as he turns around and gazes at the object that has been selected by M as the shared referent.

From the analysis of the extract, it is demonstrated that Azlan's mother uses her talk ('Azlan look') to summon Azlan, exhibit the kind of behaviour she expects Azlan to perform, and direct him to the referent she has selected while he is clearly oriented to another play trajectory. By using a directive, the mother thus interrupts the child's play with her own without much leeway for a response from the child.

Next in Extract 6.34, a girl (Aina) aged four years and three months at the time of the recording is playing with a doll and a horse while her mother (M) who sits to her right, watches (Frame 1). In the extract, the mother is observed to organise her initiating talk in the way that displays her orientation to the potential resistance from the child while at the same time exhibits the three elements of maternal directives in her talk (line 3).

Extract 6.34 [Aina 'Put this in']



Frame 1

1 M : ↑Dik¹

Little sister

((¹ M takes shape sorter ball out from bag))

- 2 (1.1) ((M puts the shape sorter ball on the floor))
- 3 M : ^{2/Frame2}>Masuk ni ↑dik< ((Aina turns to face M))

put this in little ↑sister.



Frame 2

((² M opens the shape sorter ball and spills its content (shaped blocks) on the floor; Aina *starts* to turn to M/ Frame2))

- 4 (1.5) ((M opens the ball completely as Aina watches/Frame 3))



Frame 3

- 5 Ai : hm: <main main main:> (**^o: mainan hmm::^o **) ((looks at shape sorter
O: play play play: o toys hmm:: ball, sings the word))
- 6 M : [>nah< cuba masukkan]³.

[>Here< try put in]

((³M puts the shape sorter ball near Aina, then pushes the shaped blocks towards Aina; her eyes gazing at the blocks all the time.))

Just prior to the extract, M has turned to look inside the toy bag. In line 1, M summons Aina by calling her nickname, 'Adik' ('little sister') as she gazes at the toys bag and takes out the shape sorter ball. During the 1.1 second gap at line 2, M puts the ball on the floor, making some noise in the process (line 2). Despite the summons in line 1 and the noises M produces as

she puts the ball down in line 2, Aina continues playing and does not orient to M's call, either with talk or embodiment. Following the non-response, M then takes the next turn by saying '*Masuk ni ↑dik*' (put this in little ↑sister [line 3]). It is obvious from the design of her talk at line 3 that M now dictates the task for Aina to carry out and that is to 'put something into' ('*masuk*') the specific referent she has identified rather ambiguously with '*ni*' (this).

Note again that M merely refers to the referent with a non-specific demonstrative '*ni*' ('this'). The talk can be ambiguous for Aina given that the child has not seen the referent and therefore has no knowledge of what '*ni*' might refer to, and what she is supposed to 'put in'. By deploying such an ambiguity in the directive talk, M renews the need for the child to orient herself to the ongoing talk; for her to either choose to comply or otherwise. At the same time as M's talk in line 3 is delivered, Aina begins to reposition herself towards M's direction. It is only after she has fully turned to M and has the visual access to referent that she verbally responds with '*Hm: main main main::*' ('Hm: play play play:') (line 5). In so doing, Aina finally demonstrates that she has at that point come to identify the referent and has achieved the understanding of M's previous talk (cf. Keel, 2015) of what she has heard as related to something to play with. M has taken the child's behaviour as compliance to her directive that she then continues to give the shape sorter ball to Aina to play with (line 6).

Both Extracts 6.33 and 6.34 exemplify directives demonstrated by the mothers of TD children. In general, I do not see striking differences between the directives used by mothers from the ASD children and those of TD children. In their directives, the mothers from both groups specify their selected shared referents, the definite form of actions required from the children as the recipient of the directives, and the active agent whom will execute the expected next actions. In these directives too, the mothers impose their authoritative roles as adult speakers.

6.3.4 Noticing and assessment

In the following section, the mothers' deployment of 'noticing' in their initiation turns will be discussed. A noticing is a social action that may be used by a speaker to start a conversation with a recipient (Sacks, 1995, p. 87). Noticings can be comments of the 'passing world' which may also include some sort of assessments of the noticed beings (Sacks 1995:90; Stivers and Rossano, 2010). In particular, the analysis of noticings in this section will focus on how the mothers design their talk to *do noticings* in the course of instigating a JE with their children. The analyses of the available interaction samples provide preliminary evidence that noticings are also used by the mothers to pursue an engagement with their children during free play interaction, and are functional as a tool to attain the children's orientation towards the referents.

6.3.4.1 Noticing an object

Extract 6.35 exemplifies how the mother (M) produces a noticing to steer the child's visual orientation to the shared referent (a LEGO set). M's initiating turns occur in lines 1 to 3. Note that M has put her hands around Amru Hadi, and takes out the Lego box while sustaining that position. In so doing, the Lego box- which is the selected shared referent of the instigated engagement is well within the child's visual field. M starts her initiating action with directive '*ni*' (this), followed by a surprise token '*U::*' before she then places the box down on the table, and comments that the material '*is also present*'. Such a design and bodily positioning allow M to bring a new focal object into the free play, while ensuring an optimum visual and auditory information access for Amru Hadi. As a surprise noticing, M as the speaker invites a reaction from the child. Considering that Amru Hadi is a child with very limited linguistic abilities at the time of the study, a verbal reaction may not be expected from him. As the initiating talk only

comments about the object being available on scene, it would be sufficient for the recipient to display an acknowledgement of the object's existence. Although Amru Hadi does not say anything, he taps her finger on the LEGO box a few times as soon as M puts it on the table, thus shows his orientation to it. This is treated as an alignment by M with the comment she made as she then continues to propose that they open the box (line 5).

Extract 6.35 [Amru Hadi 'Lego basket']

Context: The mother (M) has just put a bag of toys fruit into the big toys bag. She looks into the bag and gets hold of a Lego set/Frame 1.



Frame 1

1 M : ↑ni (.)

this

2 : U:: ((M takes out the Lego set; AmruHadi looks at it/Frame 2))



Frame 2

3 M : ((puts the Lego on the table))= ni pun ada

=this also has

=this is also present

4 AH : ((taps the Lego basket with his fingers/Frame 3))



Frame 3

5 M : (Bukak jom) te↑ngok

(open jom) look

(let us open) look

The mother (M) in the next Extract 6.36 also uses a surprise token as she looks at the toys bag which she has selected as the next shared referent (line1) before making it visually available to the child (Yusri). M also holds the toys bag close to Yusri well within his visual field thus ensuring Yusri's orientation to the referent and her talk when she says '*animals you (sic)*' (line 3). Note that M then puts the toys bag on the child's leg and continues to pick the toys scattered on the floor. The child does nothing following this, which is followed by her question whether he wants the animals (line 5). From this analysis it is illustrated that M uses her surprise noticing to direct the child's orientation towards the referent, before she then secures the child's orientation by making the referent fully accessible to him, which in turn attracts him to manipulate it.

Extract 6.36 [Yusri 'Animals']

Context: M reaches across Yusri to get hold of the toys bag while the Yusri watches. M pulls the bag closer, then looks into the it (Frame 1). She then picks a small bag of toys.



Frame 1

1 M : Wow: ((takes out the bag of toy animals and holds it up))

2 ((the dyad looks at the bag of animals/Frame 2))



Frame 2

3 M : animals (kau) ((puts the bag on Yusri's leg then turns to the left))

animals (you)



Frame 3

4 (.)

5 : [(Nak) ↑tak <ani↓mals> ((turns to yusri, then turns to the left again))

Want no animals

Want the animals or not?

6 Y : [AA:

7 M : Ha ((bends towards the floor and picks up scattered toys))=

8 : =banyak ((returns to the seat))
=a lot

Now let us consider Extract 6.37 which will provide an example of maternal noticing in an interaction involving a TD child, Aina. This extract has been analysed previously as Extract 5.4.

Extract 6.37 [Aina 'Big book'] (analysed earlier as Extract 5.4)

1 A : (Bakcacekamakaa)= ((M turns to the toys bag, and looks inside [Frame 1]))



Frame 1

2 M : =Eh ada buku ¹cerita la dik (Frame 2)

Eh has story book little sister

Eh (there is) a story book little sister



Frame 2

((¹ M holds the book with both hands, gazing down at it))

3 (1.2) ((Aina gazes down then picks up the toy chicken in the pot in front of her))

4 A : A:p = ((Aina puts the chicken close to her mouth))

- 5 M : ²=Buku yang ³ be[sar
Book that big
A big book
 ((² M starts to flip open the book))
 ((³ M flips a page, Aina still gazes down))
- 6 A : [>Dah tau< da::h
Have known already
- 7 (1.0) ((Aina gazes at the toys and M at the book))

Consistent with Sacks' view (1995) that noticings are commonly produced by a speaker in 'interruptions' of the other (p. 91), the mother in the current extract delivers her talk which constitutes her noticing of the big book (line 2), in latching with Aina's previous turn (line 1). Following this, M displays her tolerance to the child's failure to do her next turn (Filipi, 2009), by allowing a 1.2 seconds-long gap without pursuing a response. Seemingly unaffected with M's earlier talk, Aina picks a toy chicken up and acts like taking a bite of it (line 4). It is however, presumable that Aina has in fact heard M's talk given that she is seated facing, and close to M, and that she withholds her own activities (bodily and verbally) during the talk (Frame 2). Hence, by not responding to it in anyways, she is exhibiting her non-compliance in participating with the conversation. Aina then produces a theatrical biting-like sound 'A:p' (line 4), and as soon as she completes this, M takes her next turn by providing an assessment of the book with her 'buku yang ^[5]be[sar' ('a big book' [line 5]). Aina maintains looking at the toys she is holding, but says '[Dah tau da::h' ('Have known already') which is in overlap with M's talk in the preceding turn. In so doing, Aina displays her orientation to M's talks on the book, as well as her refusal to engage with it.

The next example (Extract 6.38) will illustrate a noticing by a mother which is responded to in a matching enthusiasm by her child, Amila. At the start of the extract, Amila plays alone with a shape sorter ball, while M looks into the toys bag.

Extract 6.38 [Amila ‘Puppet’]

- 1 M : ((takes out a puppet))
 2 : Ya Alla:h ((holds the puppet and glance briefly towards Amila then back at
 3 *Oh Allah::* the puppet then back at Amila/Frame 1))=



Frame 1

- 4 : ((gazes back at the puppet, smiles))=¹Mila. =
 ((¹Amila turns to M))
 5 =((M turns slight to the left))
 6 ((M turns slightly to the left while putting right hand into the puppet as Amila
 7 watches/Frame 2))



Frame 2

- 8 Am : .hhh Ya Alla:h ((smiles and shakes head))=
 .hhh *Oh Alla:h*

9 M : =(looks at Amila, smiling))

After taking out the puppet, M says '*Ya Allah::*' which is a surprise token commonly used by Muslims upon seeing, hearing or knowing something new to their knowledge. Immediately after this, M glances briefly at Amila then gazes back at the puppet. At this point, Amila still does not shift her gaze from the shape sorter she is playing with. M then calls the child's name and turns slightly back towards her. This alternating of gaze direction is the evidence that M is checking the child's reciprocity of her talk upon noticing the puppet in line 2, and as such shows that her '*Ya Allah::*' is a deliberate talk produced to gain the child's reaction. When the child fails to respond to her, M summons the child's name. Note too that in line 4 that M first looks at the puppet before calling the child's name, and then turns slightly to the left which suggests that she is checking Amila's reaction to her summons. By looking at the puppet before summoning the child and maintaining the act of *looking* (line 4) make evident that the turn design is a deliberate action to steer the child's gaze towards the object of M's interest; the puppet. This appears to be successful as Amila shifts her gaze from the shape sorter ball to the puppet and says '*Ya Allah::*' while smiling and shaking head, appearing to also be amused with the puppet.

6.3.4.2 Assessments in noticing

There are instances in the data when mothers of children with ASD were observed to make assessment in their initiating-engagement turns. In Extract 6.39 for instance, a mother (M) has been watching her child (Azam) building up objects using Lego blocks. Azam has been making a structure with wheels, and has been adding more blocks to it. M looks at it and displays her surprise about the construction being tall with her '*Uih tingginya train Azam ni::*' ('Uih so tall this train of Azam's'). In a mundane adult conversation, an initial assessment by a

speaker is usually followed with a reaction from a recipient. A relevant reaction to an assessment could be a second assessment, or some sort of an agreement or rejection of the assessment from the recipient (Pomerantz, 1984a). However this is not observed in this extract. Following M's assessment of his construction, Azam does not respond nor does he display any orientation to M. After 2.6 seconds of silent M asks '<Train ke> apa ni Azam? (.) Rumah ke train ni?' ('<Train or> what is this Azam?(.) House or train is this?') in line 3. In response, Azam answers 'Super Ultimate Train'. By saying that what he is making is a 'Super Ultimate Train', Azam thus rejects that it is a (normal) train, or a house; and being 'super ultimate' justifies it being *so tall* (unlike a normal train). This suggests that despite his non-reaction in line 2, he may have in fact heard and understood M's talk in line 1.

M's talk in line 3 worked in mobilising the child's response; its occurrence also demonstrates that M's assessment in line 1 projects for the child's reply too that when such a reply is absent (line 2), it is pursued. Note that in line 3 M displays her puzzlement of what the thing Azam makes really is, which may arise from her surprise (marked by her 'uuh') for how tall the train is (line 1). By asking whether what Azam is constructing is actually a train or a house (line 3), M displays a pursuit for a clarification for why it is being '*so tall*' which is an extension of her assessment in line 1.

Extract 6.39 [Azam 'Super Ultimate Train']

- 1 M : Uih tingginya train Azam ni::
Uih so tall train Azam this:
Uih so tall this train of Azam's
- 2 (2.6) ((M watches as Azam continues playing))
- 3 M : <Train ke> apa ni Azam? (.) Rumah ke train ni?
 <Train or> what is this Azam? (.) House or train is this?

- 4 Az : Super ultimate train
Super ultimate train
- 5 M : .hhh super ultimate TRAIN:(.) WOW:
.hhh super ultimate TRAIN:(.) WOW:

A similar phenomenon involving an assessment to engage a child in a triadic interaction can be seen in Extract 6.40. Prior to the extract, M suggested that her child (Damien) make a castle, and upon gaining his acceptance she provides him with LEGO blocks (not presented in the extract). Damien proceeds to manipulate the blocks when M picks up a set of stacking cup from the toys bag (line 1).

Extract 6.40 [Damien ‘Stacking cup’]

- 1 ((Damien plays with the blocks, M looks at stacking cups set in a plastic bag
2 then takes it out from the bag))
- 3 M : ha Damien: very cute lah ((M examines the stacking cup set))
ha Damien. Very cute lah.
- 4 (2.2)
- 5 M : Apa ni?
What this?

The stacking cup set includes cups of different sizes from large to small that they could be stacked to build a tower. On the smallest cup, there is a small chick which has caught M’s attention (line 1). She looks at the chick, calls the child’s name and say’s ‘*very cute lah*’. This received no reaction from Damien and 2.2 seconds later, M asks ‘*What’s this?*’. The mother in this extract provides her assessment of the referent, and by addressing her talk to Damien she has therefore selected him as the next speaker. Similar to what happened following the child’s failure to come up with a relevant talk in the next turn in the last extract, M produces a

question that makes contingent a reply from him. From the analysis of both Extracts 6.39 and 6.40 too, it is observed that the assessments done by the mothers allow them to pursue an engagement sequence with the children in a trajectory determined by the mothers despite the children's apparent non-orientation to her or/and the referent at the time the assessments being made.

Next, I will analyse two examples collected from the dataset of TD children and their mothers to sample the use of assessments as initiating engagement actions by the adults. The analyses of the following two extracts suggest that the mothers pursue a triadic JE between the child, a referent and herself, by making her assessment about the referent known to the child.

In Extract 6.41, the mother (M) has been taking cars out from the bag, one by one, and arranging them on the table as her child, Amir watched (not included in the extract). Amir has just started pushing a colourful car with his left hand while holding a grey car in his right, humming as he does so (line 1), when M produces a surprise token 'Wa:::' and an assessment of one of the cars she sees in the bag (line 2). In her assessment, she compares the car to one of Amir's (not present in the play setting), and considers that it is 'just like Amir's' (line 2). Her talk does get Amir's attention as he now gazes at her, but he does not say anything. Following the silence, M produces a yes/no question (*kan?* ['right?']), and explicitly selects Amir as the recipient of her talk by gazing and smiling at him, thus confirming that she is pursuing an engagement with the child by seeking the child's contribution to the interaction, more specifically, to her initial assessment.

Extract 6.41 [Amir 'Just like your car']

1 A : ¹Hmm::[::

((¹ Amir pushes the big colourful car slightly with left hand and holds up a grey car in right hand.))

2 M : [WA::: ini macam car Amir je².

[Wa::: this like car Amir just

[wa::: this (is) just like Amir's car².

((² Amir pauses and gazes at M's direction))

3 ((M takes out a small, peach-colored car from bag and looks at it))

4 (0.7) ((Amir looks at the car))

5 M : Kan?

Right?

6 ((M smiles and gazes at Amir [Frame 1]))



Frame 1

In all of the extracts analysed so far the children (both TD and those with ASD) do not provide a fitted response to their mothers' assessment. I will now consider Extract 6.42 which is actually the continuation of Extract 6.26 (*Razi 'Jom we play something else'*) to exemplify a use of an assessment by a mother that receives her child's relevant response to it.

Extract 6.42 [Razi 'There are many animals']

25 R : =¹ha. main ↑ ni (.) car: ((looks down to the floor, touches the bag of cars

26 =*ha play this (.) car* with his feet))

((¹ Razi stops running))

27 ((M moves slightly in her chair while gazing down towards the floor))

28 M : eh² ni pun ada <banyak^{3/Frame 1} animals:>

eh this also has got many animals



Frame 1

((² M picks the other bag of animals up, gazing at it))

((³ Both M and Razi attends to the bag of animals))

29 (0.5)

30 R : [↑a↓ah]

yes

31 M : [yang ni besar] ((Razi stands closer to M; looks at the bag of animals))

this is big

Recall in Extract 6.26 the mother proposed to the child that they play with some other toys instead of the ones that the child had been occupied with at the moment. Displaying an acceptance of the proposal, the child then selects the toys that he is interested in by touching it with his feet and labelling it (line 25 of the present extract). Following this, M repositions herself and reaches for the bag of animals on the floor (line 27). She picks it up, and produces

'*eh*² ni *pun* ada <*banyak*^{3/Frame 1} *animals*:> ('this also has got many animals [line 28]). By launching her turn with '*eh*', she displays her surprise which appears to be instigated from her noticing of the content of the bag. M then specifies the surprise source with her assessment of the animals in the bag as '*many*'. Note that M uses '*pun*' ('also') in her talk, which implies that the amount of the animals is comparable to those that they have seen previously. By designing her talk this way, M does not only appear to be distracted by the numbers of the animals in the bag which justifies her not being able to respond to Razi's talk at line 25, she further projects for Razi's engagement by now providing him an avenue to provide his own assessment of the referent, or a second assessment (Pomerantz, 1984a). In response to this, Razi visually and bodily attends to the referent, and in his next turn produces '*↑a↓ah*' (line 30) which is commonly used by Malay speakers to indicate an agreement. As such, he provides an agreement with M's assessment of the animals being '*many*' albeit just a weak one.

6.3.5 Announcement

Another type of initiating engagement action utilised by the mothers in the data is announcement although the use is not as common as the other social actions. Announcement can occur at different positions of an interaction (Sacks, 1995: 87), however, only those that are produced by mothers at the beginning of an engagement sequence will be considered for the purpose of current analysis. The following extracts will illustrate the use of announcements in the mothers' initiating engagement turns in free plays with their children with ASD.

Extract 6.43 [Adi Hasnan 'Casio Japan']

Context: At the start of the extract, the mother (M) is sitting on a chair at the table, with her back to the camera. There is box of Makaton picture cards in front of M (Frame 1). Prior to the extract, the child (Adi Hasnan) has attempted to climb the table at the opposite end of the table but was stopped by M.



Frame 1

- 1 ((Adi Hasnan is climbing up a stool onto the table near the window, his
 2 back to M and the camera.))=
 3 M : =Adi Hasnan. Tudutudu- E: Mummy ada ¹casio japan lah.
Adi Hasnan. Tudutudu- E: Mummy has ¹casio japan
 ((¹ Adi Hasnan turns to face M, now sitting on the table))
 4 (1.9) ((Adi Hasnan looks at M and smiles))
 5 M : Ca²sio japan: ³casio japan⁴: aha::⁵
Ca²sio japan: ³casio japan⁴: aha::⁵
 ((² Adi Hasnan starts to swing his right leg, looking at M the whole time))
 ((³ M raises her right hand, showing the Casio watch to Adi Hasnan))
 ((⁴ Adi Hasnan stops swaying his legs, puts them on the stool while smiling
 at M))
 ((⁵ M nods head; Adi Hasnan puts his leg back down and swings them))
 6 (2.4)
 7 M : >Muhammad Adi Hasnan<⁶
 ((⁶ Adi Hasnan puts leg back on the stool))
 8 A : ()
 9 M : >Muhammad Adi Hasnan<
 10 A : (wo [o)
 11 M : [come down =

In Extract 6.43, the child (Adi Hasnan) are not sitting anywhere near his mother (M). From her seat (see Frame 1), M first summons the child and announces that '*Mummy ada ¹casio japan lah*' ('Mummy has ¹casio japan'). During the data session M wears a Casio wristwatch which Adi Hasnan loves to look and play with. Due to the limitation of the recording angle, we are not able to see clearly what M actually does at the point of the announcement being made. However, even after Adi Hasnan has looked and smiled at M (line 4), M continues to repeat '*casio japan*' twice, with the end of the words 'japan' prolonged thus makes her talk sounds like a coax and raises her hand to *show* the watch to him. It appears then, that gazing and smiling are not sufficient as a response to M's announcement in line 3. As such it seems that M seeks more than just an acknowledgement of her announcement. In this instance, it may be helpful to also consider the context when the talk sequence actually takes place. Note that just prior to the extract, M has attempted to stop Adi Hasnan from climbing up the table. Also note that later in the extract, M summons the child's name twice, and directs him to 'come down'. In the present context, it is arguable that M's announcement is not only to claim that she has the Casio watch, but to get the child to leave the table and play with the watch.

Next, let us consider Extract 6.44.

Extract 6.44 [Irfan 'Mama wants to make a bridge']

Prior to the extract, Irfan left the recording area to go play with his robots. He then returned and sat down, and the extract started. Their seating position is as shown in Frame 1.



Frame 1

- 1 M : OK. Mama nak buat bridge
OK. Mama wants to make a bridge
- 2 : Mama: (.)buat: (.)↑bridge:
Mama makes bridge
- 3 : ((M clears throat))
- 4 M : Mama nak buat bridge:
Mama wants to make a bridge
- 5 : ((Irfan moves and sits closer with M/Frame 2))



Frame 2

- 6 M : Keretapi boleh lalu tak?
Train can pass no?
Can the train pass through?
- 7 : Atas bridge?, ((Irfan looks at the 'bridge'/Frame 3))
On the bridge?



Frame 3

8 : Boleh tak keretapi lalu? ((takes a block from Irfan's hand))

Can not train pass through?

The mother's (M) initiating turn occurs in line 1 when she announces that '*Mama nak buat bridge*' ('*Mama wants to make a bridge*') with LEGO blocks. The child (Irfan) who has just sat down and now plays with LEGO blocks, separately from M, does not display any orientation to the mother's talk. In lines 2 and 4 M repeats her talk in line 1. An announcement seeks some sort of a reaction from its recipient (Stivers & Rossano, 2010) and when a response is not forthcoming, it may be pursued as demonstrated by M following her announcement in line 1. Finally in line 5, Irfan readjust himself to sit closer to M and this is treated by M as acceptable as she proceeds with her question in line 6. What is also noticeable in this extract is that, once the child attends to M, not only that M extends the initiating-engagement actions by asking Irfan whether a train would be able to pass through on the bridge she is making (lines 6 and 7), she also then treats Irfan as readily participating in the play itself by taking the blocks in his hand, without asking, to make the bridge. As such it appears that M's announcement in line 1 does not only seek the child's reaction to the announcement itself (in which case the child's visual and bodily orientations to M while she makes the bridge might be sufficient) but also to initiate a shared play between M and the child.

Extract 6.45 will further show the use of announcement in the initiating engagement turn by the mother. In the extract, it will be illustrated more explicitly how the mother begins

her turn with an announcement and uses this to establish an engagement with her child (Damien).

Extract 6.45 [Damien ‘Emily’]

Prior to the extract, M has asked Damien to reposition himself that he sits closer and facing her, and to pick and gather the scattered LEGO blocks and put them in between them.

- 1 M : ((looks into the toy bag and puts the puppet she is holding into the
 2 : bag))
 3 : I¹ got one more: = Da²mien ni apa?
I¹ got one more: = Da²mien what is this?
 ((¹ M takes out a doll; Damien turns to M))
 ((² M holds the doll in front of her with both hands as Damien watches))
 4 D : (↓doll) ((looks down, reaches for the LEGO train and pulls it))
 5 M : Da³mien ni a↑pa:?
Da³mien what is this:?
 ((³ M swings the doll))
 6 D : Emily: ((looks down at the LEGO train))
 7 M : Emi↑ly? ⁴(.) { Emily?
 8 : ((Damien and M gaze towards each other))
 ((⁴ M turns the doll to face her then turns it to face Damien again;
 Damien turns and gazes towards M/doll))

In line 3, the mother (M) announces that she has ‘one more’ after keeping the puppet into the toys bag. The announcement does not identify the referent and therefore requires its recipient (Damien) to look towards the announcer (M) to identify what actually the mother *has* now. Damien displays his receipt of M’s talk instantly as he looks up at M and gazes at the doll.

Right after the announcement M asks ‘*Damien this is what?*’. Following this, Damien shifts his gaze towards the train he has made using the LEGO blocks prior to the extract and starts playing with it, thus appears to disengage from the triadic engagement that is about to establish between the mother, himself and the doll. He does say something though that sounds like ‘doll’ (line 4). It could be because of the poor clarity of the child’s reply, or the fact that he appears to now disalign his behaviours with the mother’s engagement trajectory that she repeats her question in line 5, thus renewing the engagement pursuit. This extract thus shows that while the announcement gets the child to physically attend to the mother and the referent, the question gets him to participate more *actively* in the talk sequence.

6.4 Discussion

In this chapter, I have analysed the initiating engagement actions by the mothers of the children with ASD and TD children. In the analysis I have examined and discussed how the different engaging turns that took the form of questions, proposal, directives, noticings, assessments, and announcements are deployed by the mothers to pursue an engagement with their children. I have also analysed how these methods may or may not work in establishing joint engagement with the children at a particular interactional juncture. I have considered the sequences of attempts to engage demonstrated by mothers and how these may compare with what was seen in the TD dataset.

These engaging turns may be discussed in at least three characteristics. First, all of the IETs were first pair parts which thus projected for second pair parts (Schegloff, 2007; Stivers & Rossano, 2010). As shown in the analysis, although these IETs were always formatted verbally, they made relevant second pair parts that might be formatted either verbally, nonverbally/physically or multimodally. As first pair parts, these IETs made relevance a response although they might project for *different degrees* of conditional relevance (Stivers &

Rossano, 2010). Nonetheless, it is important to highlight that the IETs solicited the recipients' responses (Schegloff, 2010). Second, the maternal IETs made relevant restricted *kinds* of responses. For example, the IET in the format of question in Extract 6.5 sought a verbal response consisted of the name for the toy that the mother has picked up, and the directive in Extract 6.30 made relevant the child's embodied acts of counting the numbers on the clock identified by his mother. Third, the IETs have all been designed by the mothers to include identifications of the selected shared referents. Interestingly, the references made by the mothers in ASD were always *explicit*, as the mothers commonly embedded physical acts of a pointing, bringing the referent into the children's visual field in their talk, or physically steering the children's body towards the referent, while mothers of TD children may not necessarily do so (recall Extract 6.9 and Extract 6.38).

The analysis on the questions at initiating engagement junctures revealed that there were at least four different uses of question-in-design talk produced by the mothers; to seek information, to start a labelling task, to test the children's knowledge and to propose a new engagement trajectory with them. The utilisation of questions as a bid for an engagement with the children with ASD was advantageous to secure the children's orientation to the mothers' talk. A question makes contingent a response from its recipient that when a response is non-forthcoming, it may be pursued, as seen in the analysis. Also, the mothers were found to provide different kinds of scaffolding to occasion for the children's response. First, the mothers allowed a stretch of silence following their IET for the children to produce a fitted reply (for example, Extract 6.2), - usually much longer than the length of silence typically occurs in mundane conversation (Jefferson, 1988). Second, the mothers repeated the original question (for example, Extract 6.8), and third, they provided the answer for the children (for example Extract 6.6). From the analysis on the questions, it was found that questions that were designed to seek information and labels were far more frequently seen in the interaction

involving children with verbal abilities compared to those with limited verbal abilities. It would be inaccurate to conclude at this stage that parents do not use seeking-information and/or labels with their children with limited or no verbal abilities, however, such an observation may reflect the nature of the children's (dis)abilities and how these may influence an interaction the children are participating in.

Next I have investigated initiating turns in which proposals were being made by the mothers to establish an engagement with their children. Three designs of talk recurrently observed during the data review; '*X nak Y tak?*' ('*X wants Y no?*'), '*Kita buat Y nak?*' ('*We do Y (do you) want?*'), and talk that includes '*jom*'. There were similarities and differences noted from the utilisation of these talk designs. It is common that a proposal would specify the course of actions that are being suggested by the proposer (Stevanovic, 2012; Stevanovic & Peräkylä, 2012) and this were also observed in all of the proposal designs. However, while the '*X nak Y tak?*' ('*X wants Y no?*') design allowed more autonomy for the children to consider the suggestions made by the mothers, the other two designs were found to project for the children's compliance in a greater degree and reflected the mothers' authority in the engagement sequence.

Another method used by the mothers for initiating an engagement with the children was directives. Directives which are regularly utilised by adults in an interaction with children particularly during meal times prefer a compliant response (Craven & Potter, 2010; Kent, 2012). From the examination of the directives in the present study, it was found that in the talk the adults would always denote the referent and the next relevant action, and select who would be the agent for completing the directives. This is in addition to imposing their own trajectory onto the children's and showing no orientation to the children's inability or desire to

perform the directives (Craven & Potter, 2010, p.419) thus reflected the adults' authority as the producer of the directives.

The other methods used by the mothers to instigate an engagement during free play with their children were noticing, assessment and announcement. These methods may be projecting the relevance for responses at a lower degree when compared to questions, proposals, and directives; however they do pose for the recipient's responses and useful as initiating engagement actions (Keel, 2011; Stivers & Rossano, 2010). From the analysis, however, it was recurrently seen across the extracts that these social actions particularly assessments and announcements were less successful in getting the children's responses in their first productions. It was common to see in the data that the talk would then be repeated, or another mobilising-response talk would be produced by the mothers. As for the noticing, the children's responses were limited to visual orientation to the referent following the noticings. It was noteworthy that for the children with ASD, the examples of noticings at engagement initiation junctures were only found in the data of children with limited or no linguistic abilities. This might explain the limitation in the children's reaction to the noticings. The review of the typical data revealed that the children demonstrated sophisticated abilities in responding to the noticings; one girl rejected the noticing made by the mother by treating it as a telling of something she have already known, and the other imitated the mother's excitement upon seeing the 'interesting' toys.

The analysis of the IETs has highlighted interesting but important aspects of maternal talk. Consider for example the scaffolds demonstrated by the mothers in their follow-up pursuits across the extracts. The mothers of children with ASD could be seen deploying different interactional tools following the children's resistance to the engaging turns including repetitions and reformulations of the IETs, explicit identification of the referents and physical

steering of the children. These maternal actions have been shown as efficient in scaffolding for socially appropriate reactions from the children.

The designs of the IETs and the engagement follow-up pursuits also revealed maternal authority in the interaction. In Extract 6.30 for example, the mother has displayed her authority in the play trajectory, as she halted her child's (Amin) play trajectory by determining what he had to do before he could proceed with his play. There were also instances when the mothers demonstrated tolerance and sensitivity with the children's behaviours. Recall for example how the mother in Extract 6.2 waited for 2.0 seconds before her child (Azam) answered her question in the preceding talk. The lapse between her talk and the child's was considerably long and atypical, however, it seemed to provide the opportunity for the child to process the question while at the same time being physically occupied with his play. In addition, the mothers have also oriented to the children's behaviours as acceptable within the talk sequence although they might be atypical or potentially problematic. For instance, the mother in Extract 6.1 treated the ungrammatical talk of her child as a fitted response to her preceding question.

Clearly, the examinations of the maternal IETs have underscored different delicate aspects of maternal talk that have emerged from the detailed moment-to-moment analysis. As such, the findings did not only reveal interactional work the mothers have to perform in engaging their children, they also emphasised the feasibility of CA in exploring parent-child interaction.

Chapter 7

CONCLUSION

7.1 Introduction

In the current work I have examined joint engagement episodes between Malay speaking mothers and their children with and without autism spectrum disorders (ASD). The main aims of the investigation were to explore the responses and non-responses of children with ASD to JE initiations during free play, and their mothers' contributions and influences in the establishment of JE. Although an impairment in JE is one of the prominent characteristics of children with ASD (Kasari & Patterson, 2012) that reflects their affected skills in social interaction (American Psychiatric Association, 2013), in this thesis I have shown that a thorough analysis of JE in ASD reveals certain interactional competencies. To ensure a comprehensive understanding of the children's behaviours, I have also included comparative analysis of the data from play interactions between Malay-speaking typically-developing (TD) children and their mothers. In this chapter, I will summarise the key findings of the current project and consider how they inform us about children with ASD's interactional capabilities, as well as the influence of their mothers as the children's interactive partners. Following this, I will use the examples drawn from the analysis and findings of the mother-child interactions to explicate JE frameworks in the light of the Conversation Analysis (CA) approach deployed in the study. I will then consider the research analytic implications and the contributions of the current work to the clinical settings. Next, I will discuss the limitations of the study in view of the methodological aspects and suggest for improvement in the future work. Lastly, I will offer some prospects for future research.

7.2 Concluding remarks of the findings

7.2.1 Children's responses to engagement initiating actions

The first two analytical chapters of this thesis have focused on the responses and non responses of children with and without ASD to their mother's initiating actions during free play. In Chapter 4, I have examined the instances when the children, with and without ASD displayed compliant uptakes to initiations for JE. Through the analysis, I have explicated how talk, bodily behaviours, and/or multimodal actions could be useful interactional tools for the children from both data groups. The analysis has shown that the children including those with ASD have the competencies in displaying fitted orientations and reactions in alignment with the engagement trajectory, manifested through the different interactional modalities. In Chapter 5, I proceeded to examine instances when the children resisted their mother's initiating engagement actions. It was found that children with and without ASD relied on displaying disalignment with, and non orientation to maternal IETs exhibited through talk and bodily behaviours in *doing resistance* to JE pursuit. As discussed in Chapter 1, participating in social interaction is always reported as challenging for children with ASD. In addition to having poor ability to instigate an engagement, children with ASD are also commonly claimed to have difficulties in responding to other's social bids. However, less is known about how these problems actually manifest during ongoing interactions. The analyses in both Chapters 4 and 5 have therefore offered a reconsideration, and better understanding of the children with ASD's competencies and incompetencies in social interaction.

The analysis of the current work has suggested that speaking and non-speaking children with a range of severity on the ASD spectrum may have interactional resources to respond to bids for JE *competently*. Similar to the TD children, the children with ASD were

capable of utilising different modalities available to them to show their awareness, orientations and compliance to the mothers' initiating engagement turns (IETs). Different modalities may be deployed and worked for different engagement trajectories. For example, verbal actions alone were sufficient as a response to the mother's IET in Extract 4.4; bodily actions alone in Extract 4.11; and multimodalities in Extract 4.14. The fitted responses of the children suggest their capabilities in understanding the projections of the IETs and manipulating the interactional resources available to them adequately to meet the requirements or constraints implicated by the preceding IETs (Schegloff, 2007). It is noteworthy however that the children with ASD may use a different set of resources in different frequency and intensities compared to the TD children. As shown, they may have a limited set of resources than those of TD children. As such, in some cases the interactional behaviours of the children from both groups may appear different to an analyst, however, there can be considerable overlap.

The analysis revealed the children with ASD's capability to take advantage of the limited interactional resources accessible to them. Consider how they were shown to be able to manipulate their impaired or idiosyncratic talk to display compliant uptakes within the JE episodes as exemplified in Extract 4.6. Past studies have reported the feasibility of idiosyncratic talk as a functional interactional tool for children with ASD (e.g., Muskett et al., 2010). In the current work, Yusri in Extract 4.7 also used repetitions so as to indicate his alignment with the IET's trajectory, as well as to display his monitoring of his own problematic talk.

Bodily behaviours were also important resources for children with ASD in the display of compliant uptakes. Using the extracts in section 4.3.2.2 I have explicated how in the absence of accompanying talk, the bodily actions were organised by the children with ASD to

demonstrate orientations to and alignment with the engagement trajectories. Also, bodily actions were particularly important as key interactional tools for the children with ASD with no or very limited verbal abilities. It was found in the analysis that the actions accomplished by these non linguistic behaviours were fitted and sufficient responses given that they were aligned with the trajectories of the IETs. In other situations, multimodal behaviours comprised of talk and bodily conducts were deployed by the children with and without ASD to perform full compliance in the joint activities (see section 4.3.3). It was noted that the children managed to organise their verbal and bodily behaviours, despite being atypical by normative standard, as equally indispensable resources to demonstrate *the relevant* anticipated response to the IETs.

That the children with ASD oriented and organised their different actions; verbal, bodily, or multimodal behaviours fittingly indicated their capabilities in comprehending the *kind* and *extent* of engagement implicated by the maternal IETs and reacting accordingly which thus warranted the establishment of the mutual engagement. As such, this highlights the children's skills to identify and accomplish what was made relevant by the maternal IETs despite their restricted interactional abilities. This also might be implicative of the mothers' role as the first speaker- seemingly rather consistently that the mothers produced IETs that were *appropriate* to the children's interactional capacities. In other words, the maternal IETs projected for next actions that would be producible by the children. Mothers of speaking children might produce IETs that anticipated verbal replies, and mothers of non-speaking children commonly produced IETs that projected for non-verbal responses.

The analysis of the children with ASD's resistance to the mothers' initiating actions also revealed that different actions might be deployed by children with ASD to show their non-compliance with the IETs. Talk accompanied by bodily acts that demonstrated non orientation

such as bodily repositioning and gaze aversion were used by the capable children, and for the non-speaking children with ASD, they resorted to using bodily actions as the main interactive behaviours with or without vocal productions. While using talk in conveying information would work better than gestures in interactions between impaired and non-impaired individuals such as seen in interactions involving individuals with aphasia (cf. Auer & Bauer, 2011), I have shown in the examples how both modalities might work for the children with ASD albeit with challenges on their own (see analysis and discussion for Extracts 5.2 and 5.6). Misunderstanding might occur due to lack of clarity in the children's display of disalignment (e.g., ambiguous or misleading talk, or seemingly aligned bodily positioning) although the children demonstrated the capability to rectify the troubles.

The examinations of the children's next turns following the maternal IETs have identified the skills in JE in children with ASD's. The use of different modalities that constituted the children's responses also reflected the individual range of behaviours that were accessible to the children and their capabilities in manipulating these resources to make the interaction work. For TD children and children with ASD but with good verbal abilities, all of the modalities were at their disposal. It is noteworthy that for children with limited verbal abilities however, the choices of interactional means were limited to bodily actions and/or multimodalities that also involved gestures and non-verbal, vocal productions. The use of gestures and bodily actions in older individuals with limited or no speech such as those with aphasia have been found to be very practical and useful in making an interaction successful (Goodwin, 2004; Wilkinson, Beeke, & Maxim, 2010). The analysis of the current study showed that the children with ASD were also capable of utilising non-verbal actions as interactional resources, although it could be restrictive and potentially less effective than would have been verbal responses in many occasions, to partake or otherwise in the JE episodes with their mothers.

The findings in this study also highlighted the differences in the interactional skills displayed between the neurotypical group and the ASD group. It was found that the children in the neurotypical group displayed varying degrees of compliance in their participation in the instigated engagement using talk. One girl (Hetty) mentioned her inability to name a toy animal rather than a refusal to do so (Extract 4.2). Another girl (Amila) in Extract 4.3 declared her acceptance following her mother's suggestion for them to start another game - when she was clearly in the middle of her own activity - without actually beginning to play with her mother. TD children were also seen to provide reasons to account (Heritage, 1988) for their rejection of the mother's initiating engagement actions (see for example Extracts 5.4 and 5.5). Comparable ability, however, was not seen in the ASD group. No instances were found in this dataset of the children with ASD demonstrating *negotiating engagement* with their mothers such as that shown by the neurotypical children (see Extract 4.3). The absence of a demonstration of negotiating engagement in children with ASD might be reflecting the restricted skills of children with ASD's in doing *advance* interactional work such as producing 'incipient compliance' (Schegloff, 1989, p.146) which refers to an action that progresses towards the anticipated action without actually demonstrating full compliance (by conducting the anticipated action) (Kent, 2012a). In her study on neurotypical children's display of compliance and resistance as recipients of directives at mealtimes, Kent (2012a) found that these young children were capable of deploying incipient compliance thus avoiding or delaying a full compliance. It is not known however, at what age range such a skill is fully learned by a typically developing child. Given that it is rather a sophisticated skill for children that its deployment usually avoids escalated directives while preserving the 'autonomy over their own conduct' (Kent, 2012a,p.712) this skill might still be absent in the children with ASD in the present study.

The analysis of the children's *non responses* has also furthered the understanding of the atypicalities in communicative behaviours of children with ASD. In Chapter 5, two phenomena related to the lack of fitted responses from children with ASD following maternal initiating actions were examined. In the first phenomenon, despite having demonstrated receipts of the IETs the children with ASD failed to respond and left their next turns untaken. It was found that the mothers treated the children as having received the IETs so they pursued the children's responses, resulting in some of the children eventually responded with a clear rejection of an engagement. In the second phenomenon, in the instances when it was usually impossible for a recipient to *miss* an IET, these children were found *not* producing any signs that they have received, or even noticed the maternal IETs. It was possible that the children's non-responses were manifestations of their non-compliance uptakes of the IETs. If this was true, the non-responses would actually indicate the children's ability in doing rejection rather than a disability, albeit atypically done in social norms sense. However, this would remain speculative for now. The mothers treated the children's lack of orientations differently; in some instances the mothers perceived the children as purposely resisting a response and in the others they treated the children's behaviours as the outcome of insensitivity or unconsciousness to the IETs. The mothers' non-unanimous pursuits following the children's non-responses reflected the challenge they faced as the interactive partners of children with ASD. Without sufficient input from the children, it would be difficult for the interactive partner or even an observer or an analyst to determine objectively the extent of the children's (non)involvement within the interactional sequence or whether their non-responses were deliberate.

It is commonly reported that children with ASD react less to bids for social interaction than their TD peers, or those with disabilities such as mental retardation or Downs' syndrome (e.g., Adamson et al., 2010; Jackson et al., 2003), although the underlying reasons for this are

indistinct. Adamson et al. (2010) note that the lack of interest in people in children with ASD resulted in lower social engagement than the TD children or children with Downs' syndrome. Children with ASD are also found to experience disengagement (from inanimate stimulus) impairment (David, 2011) which negatively affects their ability to switch their attention swiftly from their current activities to another, such as responding to other people's talk addressed to them. Nonetheless, regardless of the causal factors for the children's lack of responses, the findings of the current work as presented in 5.3.4 suggest that what makes it difficult for the mothers (or an analyst) to determine what the children are actually doing in the interaction is the lack of perceivable 'cues' or fitted, responsive behaviours displayed by the children during the ongoing interaction. These also reflect the limitations in what one can say or *infer* about another's mind and that in an interaction, one can only deal with what has been *made public* to them.

The outcomes of the analysis on the children with ASD's behaviours following maternal IETs are twofold in the sense that they extend the understanding of the children's abilities *and* disabilities in social interaction. I have examined the children's abilities to manipulate their interactional resources while taking part in social interaction in Chapters 4 and 5. The children's well-organised compliant and non-compliant uptakes of a projected JE implicate the interactional competency of the children with ASD. This is the case even if their responses are not the same as the TD children. In the analysis I have also focused on the instances when JE fails to establish due to the children, as the recipients, withholding a response or failing to show any evidence of orientations to suggest their awareness to the pursuit for an engagement altogether. On the one hand, the latter two findings reflect the problem in responding to others' initiation for JE suffered by children with ASD as widely reported in the literature. On the other hand, they indicate the children's potential interactional capabilities within these atypical behaviours (cf. Fasulo & Fiore, 2007).

The present work demonstrates the significance of examining social interaction impairment in autism as situated interactional sequences. Studies that investigate social interactions in autism by centering on the cognitive processes have always found the children as being incompetent interactants (Fantasia, Jaegher, & Fasulo, 2014). However, such studies fail to address the most important aspect of the interaction; its interactional processes (De Jaegher, 2013). There is an increasing amount of research that focuses on the interactional processes and has been successful in identifying some interactional competencies in children with ASD even in children at the severe end of the spectrum (e.g., Fasulo & Fiore, 2007; Sterponi & Fasulo, 2010; Wootton, 1999). In line with these studies, the current work has reviewed social impairments in autism as they are situated in social interaction events to understand how autism manifests and is oriented to in ongoing interactions (cf. Fantasia, Jaegher, & Fasulo, 2014; Ochs & Solomon, 2010; Sterponi et al., 2014).

The findings of the current work have also accentuated how social interaction is less about making and relying on inferences about other people's mind than it is about coordinating with other people's interactive behaviours (cf. Fantasia et al., 2014). Nelson, Adamson, and Bakeman (2008) suggest that 'both observing a partner's actions on and reactions to shared objects during periods of coordinated JE and discussing shared objects during symbol-infused JE may provide vital information about other people's mental states' (p.851). As also shown through the analysis, social interaction involves aligning and/or disaligning, orienting and reacting to what is *displayed* by the other person. To be able to do this, the interactants must identify with their interactive partner – thus demonstrating the ability to monitor preceding behaviours, understand the social actions performed by the behaviours, as well as to understand the impact they and/or their own behaviours have on the unfolding interaction. To a certain extent the findings, therefore, oppose the common

assertions of social interaction impairments in children with ASD that attribute the problems to the inability to perceive and comprehend other people's intents; a claim that relates to the Theory of Mind impairment (Baron-Cohen, 2001). The findings have shown that children with ASD, at least those involved in this study, are able to respond fittingly to the mothers' IETs thus made evident their ability to understand the mothers' intentions. This is not to say that impairment in understanding other's mental states is totally absent in children with ASD. There is considerable evidence that individuals with ASD have difficulties in *dealing* with someone else's mental states in some ways. It is also noteworthy that the current work was not set out, nor was it designed to thoroughly review ToM or any other theories of social impairments in autism. The analysis of the current study however, has attempted to demonstrate that people's mental states that are particularly relevant with the unfolding interaction (e.g., what one sets to achieve with their social actions) are usually manifested through displays of talk and embodiment and that the children with ASD are capable of orienting to, and coordinating with these displays.

7.2.2 Maternal engagement initiating actions

Holding on to the view that an engagement in an interaction is always a co-ordinated and collaborative event between the involved participants, and that each participant has imperative contributions in the engagement establishment (Geils & Knoetze, 2008), the communicative behaviours of the mothers as the children's interactive partners were also examined in Chapter 6. The findings in the study have highlighted six forms of action recurrently produced by the mothers of the children with ASD in their initiating engagement turns (IETs) in the free play sessions; question, proposal, directive, noticing, assessment and announcement. Using the examples included in Chapter 6, I have examined how the IETs were designed by the mothers as the tool to pursue an engagement with the children in the play. It

was revealed that initiating actions were reliant on the response-mobilising design and organisation (Stivers & Rossano, 2010; Szymanski, 1999) of the IETs. These IETs have made relevant a response from the children, some with a greater degree (i.e., question, proposal, directive) than the others (i.e., noticing, assessment, announcement) (Bottema-Beutel, Louick, & White, 2015).

The analysis showed that question-in design talk was used recurrently by the mothers. The mothers might use questions to perform different actions during the play; seeking information about the child's play, asking the child to label, and testing the child's knowledge. Question-in design talk is known for its efficacy to mobilise a response from its recipient due to it being in the first pair part position, that makes contingent a second pair part. In addition, its interrogative-structure also makes relevant an answer from the recipient (see Englert, 2010; Rossano, 2010; Stivers, 2010; Yoon, 2010 for examples of studies on questions in different languages). In the current study, it was found that questions were feasible as a tool to establish an engagement with the children with ASD in play interaction. In the instances when questions were used as the IET, the mothers also clearly identified the shared referent- usually an object within the child's focus. Follow-up pursuits for an engagement were also commonly seen in the data set following a child's non-answer, making clear that the child was expected to respond. The organisation of the engagement-initiating turns might have aided the children to be engaged with the mothers albeit verbally. Using questions that would usually be responded to, preferably with an answer (Sacks, 1995:49; Stivers & Rossano, 2010), the mothers as the questioner creates an avenue for potential engagement with the children, even when the children appear to be playing on their own.

Proposal is another form of talk that was regularly deployed by the mothers in the current study to instigate an engagement with the children. It is established that like

questions, proposals also make contingent a response from the recipient, which could be an acceptance or rejection of the proposal (Siitonen & Wahlberg, 2015). I have examined three different syntactic forms of proposal produced by the mothers; each projected a different degree for an acceptance from the children. As shown, the deployment of the two proposal designs analysed in Sections 6.3.2.2 and 6.3.2.3 implicated a greater level of adult authority than the '*X nak Y tak?*' (*X wants Y no?*) design (in Section 6.3.2.1) as this design permitted more child's autonomy in accepting or otherwise. The data review revealed that the mothers regularly proposed a new task following a disengagement display by the children, thus further reflecting the mothers' insistence to renew or re-establish JE with the children.

In parent-child interactions, it is common for adults to issue directives to children to perform a particular next action (Aronsson & Cekaite, 2011; Cekaite, 2015). The analysis of the current study has also shown that directives could be deployed as a useful tool to get the children with ASD to comply with a joint task instigated by the mothers. The explicit projection for a compliant uptake exhibited through the mother's (as the speaker) verbal and embodied actions, accompanied by the detailing of the next relevant action and the nominated active agent/s (who is, in such a play setting, usually the child themselves), would augment a response from the child as the recipient. Arguably therefore, a directive might be considered an effective IET in interactions with children with ASD. This is considering its feasibility in steering a child's orientation towards the talk addressed to them and the demand placed upon them.

The analyses have also identified three other forms of initiating actions demonstrated by the mothers; noticing, assessment and announcement which are also resourceful tools in pursuing a recipient's response (Pomerantz, 1984a; Szymanski, 1999). In mundane interactions, these forms of initiating actions are typically responded to by the recipients with

some sort of an uptake. For example, an assessment can be followed with an agreement or disagreement or alternatively a second assessment; and an announcement or noticing with some sort of an acknowledgement (Pomerantz, 1984a; Stevanovic & Peräkylä, 2012; Stivers & Rossano, 2010). Different than questions, proposals and directives, however, these actions do not specifically or clearly identify what the recipients should do or say in the next turn. None of the children with ASD in the examples responded to the initiating actions with a verbal response in their immediate next turn although some might display bodily orientation to the IETs. Children with ASD, including those involved in the current project, have communication impairments. Therefore, I argue that to come up with agreeable verbal responses that were in line with the initiating actions might pose some challenges on the children with ASD. As found from the analysis, the noticing, assessment, and announcement in-design talk were not deployed by the mothers to engage the children at conversational level, rather the IETs are used primarily to manoeuvre their orientations towards the selected shared referent and eventually engage in a physical activity with it.

The analysis has identified the asymmetrical roles of the participants in the parent-child interaction (Forrester, 2002; Kent, 2012b) and maternal authority reflective by the mothers' perseverance in establishing an engagement with the children through the use of varying forms of IETs and follow-up pursuits. In chapter 6 I have explicated how mothers used questions for a range of functions including to get the children to name things, and to seek from the children some information that were already obvious. These examples demonstrate the mothers' superior status as someone who have readily possessed the information but nonetheless have the rights to *test* the children and to insist for an answer or alternatively *provide* them the answers.

That directives were used regularly by the mothers in the present work to initiate engagement with the children further suggests authority in the sequences (Stevanovic & Peräkylä, 2012). By using directives, mothers specified the children's next action and steered the children into performing the particular action. Consider too, how doing resistance successfully could be challenging for children with ASD as explicated in Extracts 5.1 and 5.6 of Chapter 5. In these examples, the difficulty in resisting the maternal IETs might partly be caused by the children's limited verbal acts that would have been very helpful to disambiguate their resisting actions. However, the children's verbal and/or bodily acts could have actually been easily seen as acts of resistance; therefore the mothers' non acceptance of the acts as such reflected the issue of potentially imbalanced participants' power in the talk sequence. This phenomenon might indicate the mothers' authority as the more superior interactant, age and competency wise, being exercised which in consequence reduced the children's agency and autonomy within the interaction (Fasulo & Fiore, 2007). It was inconclusive from the analysis however, whether this was only prominent in ASD. The extent of influence of a child's diagnosis on maternal authority and their persistence for the child's compliance in interactions also remain uncertain. Future research should explore how a child's diagnosis and severity of a disability affect the interactions that they participate in and their interactive partners' behaviours: this would deepen our understanding of adult-child interaction involving children with and without a diagnosis.

In some occasions explicated in the analysis in Chapters 4 to 6, the adults might display tolerance and adaptation with the children's inputs to the interaction, although at times the children's next turns might be problematic. For example, Irfan's talk in Extract 6.1 was syntactically problematic, and Azam's in Extract 4.5 was not particularly fitted as the reply to the preceding talk, however, none of the mothers problematised these. In these instances the mothers who were the more competent interactants treated the children as an (almost) equal

interactive partner rather than someone who needs correction or to be directed all the time. As such it appeared that the mothers' interactional style in these instances materialized as facilitative rather than authoritative or corrective. This finding is consistent with other studies that have also found neurotypical interactants orienting to the 'actions projected' by another interactant with communication impairments (e.g., Muskett et al., 2010, p.13). Although the children's behaviours were erroneous after which the mothers could have followed up with a request for repair, the mothers displayed receipt without raising any issues thus allowed the interaction to progress. By not problematising the potentially problematic turns, the mothers let the children with communication difficulties experience *successful* interaction albeit only in terms of its progressivity (Sterponi & Fasulo, 2010).

The findings of the analysis also implicate the importance of JE to the mothers in interaction with their children with ASD. The repetitive review of the data sets in the current work have suggested that IETs in the form of questions, proposals and directives were more regularly deployed by the mothers of children with ASD than noticings, assessments and announcements. This claim is, however, purely based on the observation that examples of which the IETs took the form of questions, proposals and directives were more repeatedly encountered in the data set than any noticings, assessments and announcements. As discussed, the 'different actions mobilize response to different degrees' (Stivers & Rossano, 2010, p.3) and questions, proposals and directives are particularly response-mobilising. Questions were also recurrently deployed in the follow-up pursuits following the children's non-response to mothers' noticings, assessments and announcements (see Sections 6.3.4 and 6.3.5). The findings reflect the mothers' inclination towards using particular IETs as to secure the children's engagement and as such, implicate their perseverance in establishing JE with the children. In their study on adult responsiveness during play with children, Walton and Ingersoll (2014) report that maternal language that makes any sort of a demand to the child, is more

likely to receive a response from their children with ASD than non-demanding language. Potentially, the inclination of the mothers in the current research on using the particular forms relates to the fact that these forms of IETs are more likely to receive a response. Although questions, proposals and directives are response-mobilising, however, whether the recipient actually responds to them is not automatically guaranteed (Schegloff, 2010). This is particularly relevant in atypical interaction involving children with ASD whom might not adhere to social rules as efficiently as neurotypical individuals. In determining whether the mothers use those forms of IETs because their children respond more, or whether this is due to other contributing factors, more investigations are thus necessary.

As seen in the analysis, when there was resistance from the children following the IETs, the mothers provided scaffolds for the pursued responses. In both groups the mothers allowed long gaps for the children to produce their next turn (cf. Filipi, 2013), and reformulated the IETs. The mothers of the children with ASD were also seen to provide physical aids particularly in instances when directives (cf. Cekaite, 2010) were used as the IET, more regularly than those of TD children. These findings highlight the importance of an established engagement for the mothers of both groups during play with their children. The similar kind of IETs employed by mothers in both groups reflects how the mothers started the engagement sequences with their children in comparable ways. Although this is an explorative finding, it suggests that even the mothers of children with ASD treat the interaction with the children as ordinary, at least at the beginning of the talk sequence.

The results of the current work highlight how JE is a concerted activity, achieved by all participants' 'mutual understanding and involvement' (Kidwell & Zimmerman, 2007, p. 594). As discussed, the maternal IETs did not only instigate an engagement but also occasioned for the engagement to actually take place (Kidwell & Zimmerman, 2007). It was also detailed

earlier that children, including those with a diagnosis, organised their actions prudently in the construction of JE, by either aligning or disaligning with the IETs' trajectories to show their stance as the recipients of the projected engagement. As such, this study elucidates the responsive and collaborative work between the mothers and the children as well as how JE is constructed moment-by-moment and sequentially unfolded, and that its constructional process is perceivable.

7.3 JE construct and Conversation Analysis

The analysis of mother-child interaction in this thesis has shown that JE is an extended, multifaceted social activity. In this section, I will discuss the JE framework constructed from the analysis done in this thesis. JE is a social interaction event that is achieved by its participants coordinating their interactional behaviours between each other and a focal referent, a skill that is reportedly impaired in children with ASD (Patterson et al., 2013). In the analysis, I have shown that JE usually, but not necessarily or exclusively, includes *visual JA*, a term widely used in the literature to refer to reciprocal visual attention shared between individuals (Gernsbacher et al., 2008; Skarabela et al., 2013; Tomasello & Hamann, 2012).

Kidwell and Zimmerman (2007) have argued that JA is not merely a psychological event but a social interaction activity. In their study that focuses on how young children accomplish the undertaking of showing objects to recipients and sustaining their attention to the objects, Kidwell and Zimmerman (2007) show that JA establishment requires more than just mutual visual orientation but also coordination of interactional behaviours -vocal and/or non-vocal-, between its participants. Using the analysis and findings of the current work, I have shown how this is also parallel with the construct of JE between mothers and their children. In

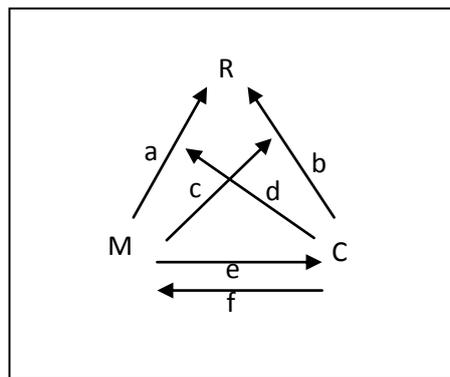
order for JE to establish, the participants must demonstrate orientations to the referent, to the other person's orientation to the referent, as well as towards each other as co-participants of the engagement. I have explicated how these orientations are manifested and observable in the participants' actions, vocally or non-vocally. JE, as emphasised in the current study, is therefore also a social event collaborated between its participants with a referent, which is not necessarily an object, rather it could be anything selected as a *shared focus* including an event, task or topic. Almost all of the shared referent in this study centered on an object or a collection of objects, except for Extracts 6.16 (the referent was a future activity '*singing*'), 6.23 (a movie downloaded onto a tablet), and 6.26 (topical).

Next, I will review how the established and non-established JE constructs are discernible not only to the participants but also to an 'outsider', such as an analyst. By deploying the CA approach for examining, turn-by-turn, the participants' behaviours from the point when an engagement is initiated, an analyst would be able to identify and argue the evidence gathered from the participants' actions during the interaction that contribute to JE being achieved or otherwise. Particularly an important advantage from this exercise is how one can locate the missing or problematic interactional elements within the construct. To illustrate the JE framework, I adapt the diagram of established JA (Skarabela et al., 2012) to highlight the social aspects of the activity such as shown in the following Figure 2. The arrows in the figure represent demonstrated orientations of the participants made evident from their actions in the sequences of turns within the JE episode. The arrow (a) refers to the mother's (M) orientation to the referent (R), arrow (b) refers to the child's (C) orientation to the referent, arrow (c) is the mother's orientation to the child's orientation to the referent, arrow (d) is the child's orientation to the mother's orientation to the referent. Additionally, arrow (e) refers to the mother's orientation to the child materialised in the initiation for an engagement (IET) and (f) refers to the child's orientation or response to the mother. The solid and dotted

lines refer to the occurring actions, with the latter indicates non-alignment; and the vague dotted lines refer to absent orientation. Note that the alphabets do not necessarily imply the order of occurrence.

In Figure 2, I illustrate the *established* JE framework with all of the elements (represented by the arrows) occurred. To explain how the framework works, let us re-consider Extract 4.14 (please refer the extract in Section 4.3.3.2). I will use the analysis of the extract to identify each arrow of the figure, as will be specified in the brackets.

Figure 2: Established JE

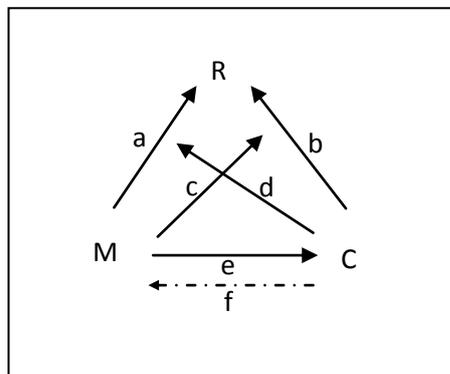


To re-iterate, in line 4 of the extract, the mother (M) produces the talk 'Irfan.^{Frame3} *do you know how to do this? Let's do this'* while looking at the shape sorter. At this point M is clearly displaying her gaze and bodily orientation to the shape sorter ball. M addresses her talk to Irfan as marked by the name calling and her action of taking the ball towards the child (arrow e). In so doing, M is now selecting the ball as the shared *referent* (arrow a). Irfan has also been positioning himself towards the shape sorter ball, thus demonstrating his physical orientation to it (arrow b). Note too that line 4 is produced while M moves towards Irfan with the ball in her hand, and that she addresses the ball with demonstrative '*ni*' ('*this*') which suggests that she is treating Irfan as already orienting to the ball (arrow c). In line 5, Irfan holds the ball and says '*Mama open*', unquestionably directing M to unbolt the shape sorter ball for him. His talk too is fitted as a positive response to M's proposal (*Let's do this' [line 4]*) which

also indicates his understanding of what is projected by the maternal IET (arrow f). That he does not mention a label for the ball displays that he is treating M as already orienting to the object in question (arrow d).

The instances when the children resisted JE were analysed in Sections 5.3.1 and 5.3.2. I have used Extracts 5.1 to 5.9 to exemplify the instances when the children rejected actively their mothers' bids for an engagement. The framework that illustrates the resisted engagement is illustrated in Figure 3. The children's explicit acts of rejections made evident their orientations to *all* of the elements within the JE framework; however with the production of the rejecting acts JE could not be achieved. A rejection turn produced by the children, either constructed vocally or non-vocally, is symbolised with the dotted line of 'arrow f' in Figure 3.

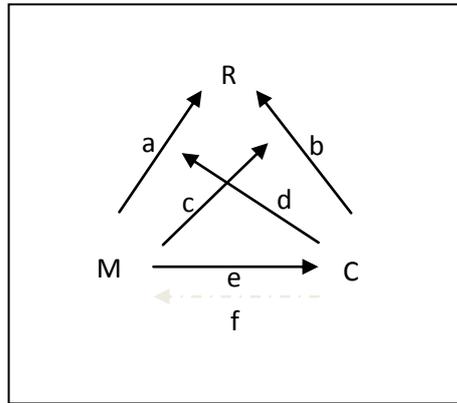
Figure 3: Non-established JE due to child's rejection



In the next phenomenon seen in the analysis of children's resistance to JE (see Section 5.3.3), it was found that the JE was not established due to the lack of the children's responses to the mothers. Let us re-consider Extract 5.11 (see Section 5.3.3) to examine how the phenomenon fits into the JE framework as illustrated in Figure 4.

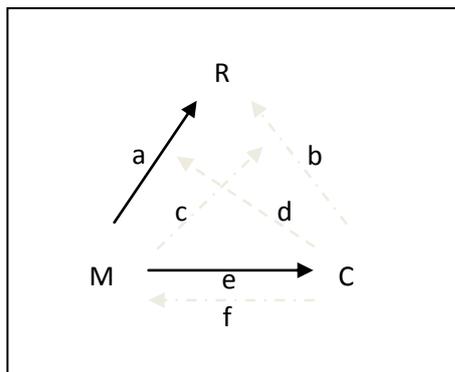
In Extract 5.11, the mother (M) puts a book on her lap, and as she does so she calls out to the child (Taufiq [line 3]). Taufiq promptly looks slight up as he shifts his gaze from the cars he is playing with to the book, before gazing back down. Lines 1 to 5 happen in seconds, and with only M producing a very brief talk, it appears that not much has happened then. However, a careful analysis reveals that within these lines 1 to 5, it is already evident that M is orienting to the selected referent (the book) (arrow a), before *bringing* it into the play setting thus made relevant the book as the focal referent for her talk, and making it noticeable by Taufiq (arrow e) which in turn made available the opportunity for Taufiq to attend to it. In line 5 we can see that M is gazing at Taufiq, which allows her to monitor Taufiq's visual orientation to the book (arrow c, arrow b). That Taufiq spontaneously looks at the book rather than at the mother's face following the summons suggests his awareness of M's calling as directing him to the book (arrow d). It is possible that Taufiq's awareness has been scaffolded by M's bodily positioning that has embodied directing the child to the book - M is seated fully facing Taufiq and she holds the book with both hands with its front cover shown to Taufiq and its upper side tilted (Cekaite, 2010; Terhi Kirsi Korhonen, 2011). As far as JA is concerned, it has in fact occurred by this point. However, that M produces line 6 following Taufiq disengagement (he looks back down at the cars on the floor) proves that M is not pursuing a shared visual attention with her son, rather, an extended JE with the book (see Section 5.3.3 for a detailed analysis of the extract). However, JE is never achieved in the talk sequence due to the child's absent responses to M (arrow f) resulting in the incomplete JE framework (Figure 4).

Figure 4: Non-established JE due to the children's withholding of responses to maternal IETs



Next, I will focus on the joint engagement framework that illustrates the final phenomenon related to the children's resistance to the mothers' initiation for JE presented in Section 5.3.4 of Chapter 5. In the section I have analysed the instances when the children failed to display the anticipated orientations following the mother's IETs. By re-using Extract 5.18 (see Section 5.3.4), I will discuss this last phenomenon in relation to the JE framework, and identify the evidence for each of the arrows that contribute to the framework (Figure 5).

Figure 5: Non-established JE due to the absence of anticipated orientations



Extract 5.18 exemplifies when the mother chooses a topic relating to the objects (i.e., LEGO blocks) *readily oriented* to by the child (Azam) as the shared referent. M begins to talk

about the blocks in line 4 by stating the colour of the particular red block Azam has just manipulated. Azam does not say anything in the subsequent turn, which M then follows with a question in line 6. When Azam eventually says 'Blue' as he picks up a blue block, M responds to this as if it was a reply to her preceding question (line 10) despite Azam's obvious orientation to the blue block and the extended 1.3 second of silence (line 7). M then continues to produce her next turn in line 12 by asking Azam to label the colour of the current block (blue). Again, there is a long lapse before Azam produces his talk (line 14). His talk in line 14 is unfitted as an answer to M's question (line 12) as he names the colour of the block he is picking up - clearly displaying his orientation to the blocks he is playing with rather than to M's talk. M finally accepts that '*Azam does not concentrate. Okay*' (line 17) thus ending the episode of the attempted JE.

The evidence of M's orientation to the colour of the block which she then selects as a shared referent (arrow a) and her orientation to Azam as the recipient of her IET (arrow e) are obvious from the sequence. However, it is noteworthy that although Azam appears to orient to the LEGO blocks and that he does talk of colours, there is no evidence that he is orienting to the block-colour-naming task instigated by M (arrow b). Azam has never displayed any signs that he has noticed M's orientation to the blocks or their colours (arrow d), and he has also never responded to M in any ways (arrow f). However, M's line 10 demonstrates that she is treating Azam as sharing the topical referent with her. When Azam does not say anything (line 11), M produces yet another question relating to the colour of the block he is manipulating at the moment (line 12) and in so doing, she appears to treat Azam as being capable of answering which is only possible if she thinks Azam has in fact, been listening to her. In other words, it is arguable that prior to line 16, M regards Azam as purposely ignoring her although she later 'admits' that he is not orienting to her or her talk. In summary, the only evident

'orientations' identified from the talk sequence of Extract 5.18 are those represented by arrows *a* and *f* as shown in Figure 5.

In the above discussion, I have shown how the sequential examination of CA is practical in detailing the frameworks of established and non-established JE episodes. The analysis of the JE frameworks highlights the interactional behaviours of the participants and social aspects of JE. An important consequence of the examination of the frameworks lies in the understanding of participants' relevant interactive behaviours, and how the behaviours, or their absence, contribute to JE (non)establishment.

7.4 Analytic implications of the research

The CA based examination of joint engagement in parent-child interaction involving children with and without ASD in this study has at least four implications. First, it emphasises the significance of reconsidering impairments in ASD from interactional perspectives. When regarded as an impairment, these behaviours usually concern with particular actions that a person *cannot do* or *does differently* relative to the norms. It is noteworthy, however, that in most cases these actions (or their absence) actually matter when they occur in an interactional setting where they are problematised, usually by other people. For discussion purpose, let us consider eye-gaze in children with ASD. Atypical eye-gaze such as the use of peripheral eye-gaze when observing objects is a common case in ASD. As atypical as it is, an act of peripheral gazing may go unnoticed (thus, non-problematised) when a child does it while no one is looking; but it becomes an issue when someone - such as the child's parent or therapist - notices it and reacts to it (e.g., verbally or physically prompts the child to perform a direct gaze). Also consider how idiosyncratic talk and echolalia are features of ASD, and how they influence other interlocutors within an interaction. While the discoveries of these features as

characteristics of ASD are undoubtedly of significant import in ASD data, the recent development of research has suggested that to extend our knowledge of ASD features, more studies on how these features unfold, perceived, and dealt with in interactions are needed (Local & Wootton, 1995; Muskett et al., 2010; Sterponi & Shankey, 2014; Wootton, 1999). In other words, the direction of research in ASD has now diverted from focusing on identifying particular behaviours - as an impairment (or skill) isolated from the interaction where it occurred - to examining them in ongoing, spontaneous interactions. The current work is in line with this direction of ASD study, and has provided more evidence of the benefits of investigations of impairments in ASD as situated, interactional phenomena.

Second, the study promotes a reconsideration of what actually makes an interaction atypical. Indeed, children with ASD generally have abnormal features and characteristics including in language (Sterponi et al., 2014). My analysis has shown, however, that to simply treat an interaction as atypical due to the fact that these abnormal behaviours occur in the interaction would be inaccurate. Rather, with the analysis I have demonstrated that how, for instance, an absence of a response or mutual orientation at a particular anticipated juncture might violate the conventional rules of interactional sequence organization; rather than a turn produced with an idiosyncratic talk. Also, as discussed earlier, the interlocutors' perspectives to the abnormal behaviors determined the typicality or atypicality of a talk-in-interaction. In the analysis of the extracts in Chapters 4 and 5, it was shown how the mothers did not problematise the child's idiosyncratic talk (Extract 4.5), or even the child's incongruous response (Extract 5.14), while the mother in Extract 5.18 did. Clearly, the examinations of ASD features must include sequential analyses of the interaction in which the features occur, by taking into consideration the doings of all interlocutors to make full sense of the (a)typicality of the interaction from the participants' perspective.

Third and perhaps a more important implication of the analytical work in this study is, therefore, it further promotes CA as a way to explore, understand and reconsider the features of autism. As presented in Chapters 4 to 6, the sequential analysis of the instances of established and non established JE has revealed a variety of interactional phenomena. The detailed examinations of these phenomena have then been beneficial in the re-consideration of the (a)typicalness of interactions. In addition, the analysis indicated that the instances of non establishment of JE might actually serve as the evidence of the children's interactional competencies - rather than automatically indicative of a disability in the children- despite their limited, or idiosyncratic use of communication means. Particularly attributable to CA approach that entails critical attention to the participants' perspective and orientation to one another's actions, these findings of the current project reflected the advantages of CA's feasibility, sensitivity and efficacy in examining social (inter)actions.

The fourth implication of this PhD work pertains to the fact that this project includes Malay data, and is the first known study to use CA to examine data of ASD in the Malay population. The findings have added to ASD data that is not based on the western culture. Also, the analysis and findings have provided new cross-cultural evidence of autistic communication: the Malay-speaking children with ASD in this study demonstrated capabilities in using different interactional resources and in displaying sensitivity to communication context and to other people's interactional behaviours. While the study did not specifically investigate the effects of Malay ethnicity or language on the unfolding interactions, it has further established the feasibility of CA for cross-linguistics and cross-cultural research particularly in atypical populations (cf. Burns, 2008; Korkeakangas & Rae, 2013).

7.5 Clinical implications of the research

The current study which is informed by CA can offer several potential contributions in the speech and language intervention practices for children with ASD specifically, and children with other diagnoses in general. As aforementioned discussed, investigations incorporating CA approach have the capability of identifying even subtle interactional abilities of children with ASD. As such, implicatively, the meticulous CA methodology may also be feasible for assessing children with ASD before conclusions of their true interactional and conversational capabilities or disabilities are made in the clinical setting, for purposes such as to determine a baseline for a particular intervention program. This will also be particularly useful for familiarising involved clinicians, carers and/or family members of a child's behaviours as interactive rather than negligible autistic features.

The moment-to-moment analysis of the parent-child interaction conducted in the current work has been productive in disclosing many interactional aspects of both mothers and the children while they were partaking in the play activity. This highlights the importance to investigate parent-child interaction, or any dyadic interaction for that matter, by considering what all participants *do* within an ongoing interaction. It is helpful to inspect the conducts of each participant as one's interactional performance has been found to be influenced by the co-participants' doings (Korkiakangas, 2011). In the analysis of the current work, I have delineated how a mother could influence the next action of a child in play interaction, and vice versa. The sequential examination of the participants' behaviours can be useful to 'determine "where" particular areas of difficulty might reside for the participants' (Korkiakangas, 2011, p. 378). Considering that an interactive partner could affect one's interactional performance, it is therefore recommended that an assessment procedure of children's communication includes a sequential examination such as CA that will allow a

scrutiny of the targeted skills or disabilities in a natural, interactive and reciprocal context.

The sensitivity and detailed analytical approach of CA can also make it a valuable clinical tool (Korkiakangas, 2011). The JE framework discussed previously in section 7.3, for instance, is an illustration that CA could be utilised for detailing, explicating, and identifying of the different elements in a complex joint action episode. The framework can be useful in JE intervention in potentially several ways. For example, the framework might serve as a guideline for clinicians when assessing JE skills in children. The JE framework may help clinicians to conduct an objective and *guided* observation of an interaction. More specifically, a clinician can use the framework to ascertain which *orientations* of which participant have occurred and/or failed to occur during the joint interaction. Clinicians can also use the framework and the transcripts of the interaction that has taken place in the JE activity as an explanatory tool to describe JE, or explicate the evidence for the identified disabilities to carers. The framework as a clinical tool however is still being developed. Also, there might be other aspects that might need consideration. For example, trainings on CA might be required for the clinicians before they can use the framework in their sessions. Nonetheless, with careful planning and further improvement the framework can be an invaluable clinical resource.

In countries that lack standardised and normative tests, or are still developing culturally-appropriate tests for assessing speech and language in local children, such as Malaysia, clinicians commonly resort to using translated, informal, or non-standardised tests (Lian & Abdullah, 2001; Singh, Iacono, & Gray, 2011). The validity of these adapted tests for examining the related skills in children in the intended populations may be questionable (Ooi & Wong, 2015). Consider for example, the many modifications needed to be made to the PLS-4

used in the pilot work of the current study that have consequently affected the applicability of the measure in the investigation of the children's skills. In speech and language clinics in Malaysia, language assessments such as Reynell Development Language Scales (RDLS; Reynell & Huntley, 1987) and Peabody Picture Vocabulary Test (PPVT; Dunn & Dunn, 1997) might be used informally with modifications made to the test items to suit the local context. Also consider how the present CA-informed investigation of Malay parent-child interaction has turned out to unravel more *in-depth* findings of the parents' *actual* interactional practice compared to what was identified from the quantitative findings of the Questionnaire on Parents' Perception of Parent-Child Interaction (adapted from Johnston and Wong, 2002) presented in Chapter 2. Implicatively therefore, conversation analytic framework might be useful as a complementary, or even an alternative investigation tool to the assessments to ensure the validity of the findings. It is undeniable that CA can be complex and time-consuming, particularly for someone who is not well-trained in CA, and therefore it might be argued as not suitable for Malaysian clinics that are usually busy (Singh et al., 2011). However, considering the great potentials CA might offer make it worth a consideration for an implementation in speech and language clinics.

The current work also adds to the limited studies on the relevant areas done in Malaysian setting. This study offers preliminary but meticulous accounts of mother-child interactions involving Malay speakers. The main findings have informed about JE skills in Malay-speaking children, how the Malay-speaking mothers engaged with their children as well as how the children with and without diagnosis participated in interactions. White et al. (2011) note that culture might have an influence on JA behaviours in young children. For instance, in Kung's culture in Botswana, exchanging objects is considered the primary JA act in infants which is different than that in western culture that usually focuses on mutual eye-gaze and following pointing, as widely reported in the literature (Bakeman, Adamson, Konner, & Barr,

1990; White et al., 2011). While the focus of the current work is not limited to JA nor does it include infants as participants, the analysis has not identified any culturally-specific behaviours of *responding to JE initiations* in the children. The study is however an exploratory work and therefore more investigations are needed to confirm the findings.

This study is the first work known to have conducted a sequential analysis of the interactional behaviours of Malay-speaking mothers from Malay ethnicity. The analysis has identified the different IETs used by the mothers of children with ASD and how these IETs seemed to work in instigating JEs with the children. In addition, the examination has pointed out the maternal interactional characteristics. The small number of participants in the current work may not allow a generalisation of the findings to the entire Malay-speaking population, however, the findings do provide for the much needed information of parent-child interaction and autism in Malaysia. These findings could be relevant for use in speech and language clinics in Malaysia which commonly involved mothers as the accompanying adults of child patients/clients. For instance, the data could be usable when a clinician devises a plan to stimulate a child's language production by encouraging the mother to use certain forms of IET to start an interaction with the child, or to promote the mother to use particular forms of IET and reduce the others to match certain therapeutic aims. Potentially too, that discussions could be held between a mother and clinician prior to the determination of therapeutic aims for a child, with the mother's interactional styles and wishes for the child are taken into account.

Play has been an important activity in speech and language clinical settings across cultures (Cogher, 1999) including in Malaysia. However, little is known about play in the local context. The present project has implications for understanding the feasibility of play as an avenue for eliciting and investigating adult-child interaction in Malaysian context. The analysis

has shown that play is efficacious not only for JE activity (White et al., 2011) but also as an activity for collecting naturally occurring interactional data in Malay-speaking population. The observations made in the course of the project have added to the existing studies that suggested the cross-culture universality of *playing with toys* among children with and without diagnosis (Trawick-Smith, Wolff, Koschel, & Vallarelli, 2015). This thus suggests the applicability of using toys in play as a therapeutic technique in Malaysian speech and language clinics. Not only that the parents and the children showed willingness to *play* with the toys, they were also seen to be occupied in the play activity for the full duration of the data collection, and demonstrated interests in being involved within the same setting. The anticipated interactions did take place, and the data was collectible with almost no intervention from me as the investigator, except in a few, rare occasions when the mothers asked to reconfirm which toys could be played or whether it was fine to do something (e.g., to start 'playing'). Perhaps more importantly, the study served as a preliminary exploration of play in Malay parent-child interaction. As implicated in the analysis, mothers might do more than simply playing with their children during free-play session. Instead, they also instilled some pedagogical elements, for example, to teach (including bilingual vocabulary), test or even to discipline their children, and so seemed to have a different agenda from the children during the play time. Children with ASD may appear to focus more on available objects rather than on their play partner which could lead to challenges for the play partner to achieve an engagement with them (Freeman & Kasari, 2013). It was not clear at this stage as to why the mothers opted to deploy pedagogical approach in a play situation and whether the children's preference on inanimate objects has actually contributed to the deployment of such a style. The extent of influence of the mothers' pedagogic style on the children during the *supposed* play interaction, and whether the kind of teaching was actually different than that which occurred in parent-child interaction involving TD children (see the report on the findings of the pilot study in Section

2.3.5.3) were also not determined thus far. Further investigations would be needed to explore these aspects.

7.6 Methodological consideration and limitations

The design of the research required the mother-child play sessions to be video-recorded. In each session, the recording equipment was set up in the same room and therefore was visible to the participants. Prior to the data recording, the participants were exposed to the recording equipment and were allowed to interact with the cameras before the recording started in the hope that they would become accustomed to the presence of the equipment. Although precautions have been taken to avoid any bias or discomfort, it is still possible that the presence of the recording equipments might have influenced the participants in one way or another (Hutchby, O'Reilly, & Parker, 2012). There is concern that as participants are aware of being filmed, they might not perform as *naturally* as they are hoped to (S. a. Speer & Hutchby, 2003). A situation like this might be considered as a methodological problem and the data considered 'contaminated' (Speer & Hutchby, 2003, p.317). It was noted that during the recordings the mothers and children might display sporadic awareness of the cameras, usually displayed by them glancing towards the direction of the camera or the mothers asking the children to be seated in certain angles or at particular places so as to face the camera (e.g., Extract 6.1). As such, the cameras here functioned as a tool that, in a way, facilitated the recording process itself (cf. Speer & Hutchby, 2003). I acknowledge that, presumably, the parents in particular *might* be cautious of the presence of the camera and thus *might* have spoken or done things with the children in certain ways or avoided another. This, however, may not be necessarily observable from the recordings. Similar claims made of the influence of recorders are also *not* based on 'systematic empirical research' (Hammersley, 2003, p.340). Nonetheless, I will not claim that there is no researcher or equipment effect or

that the data and the analysis of the current work are automatically generalisable to other settings (cf. Hammersley, 2003). Rather, the data and the analysis are only as they are - play interaction data with the recording equipment's present (cf. Speer & Hutchby, 2003) and should be treated as such.

In CA, the original video/audio data is the primary data (Deppermann, 2012). Nonetheless, the transcripts are also crucial as these are 'the subject of analysis' and thus must 'reflect as many authentic parts of the material as possible' (Ayaß, 2015, p. 508). During the preparation of the transcripts, it was noted that some talk was not easily translated from the Malay language into English so as to preserve their exact meanings to be understood by non-Malay speaking readers. Let us consider the following talk produced by a mother to her child called Damien from Extract 6.17:

'Damien nak nyanyi tak?'

The example may be translated word for word into *'Damien want sing not?'* which might not make sense to the readers. Alternatively, it may be translated into

(1) *'Damien (do you) want to sing (or) not?'* or

(2) *'Damien (do you) want to sing not?'*, or

(3) *'Damien (do you) want to sing?'*

Note that the words in brackets are those that are not in the Malay version but arise from what is interpreted from it. All of the translation options are considerably acceptable but none is accurate. Option (1) queries Damien of his selection from two options- whether he *wants to sing or does not want to sing*, which is not entirely consistent with the original talk. Option (2) is ungrammatical and so might be confusing and difficult to understand. Option (3) does not include *'tak' (no/not)* and thus fails to consider *'tak' (no/not)* in the analysis. In order to not imposing my own interpretation of the participants' talk while ensuring their accuracy, each talk was first translated word for word no matter how bizarre it might sound, and another line

of translation was also provided to offer the most suitable English version of the talk. Considering the design of the talk, and the preceding talk, the talk in question could be interpreted as the speaker asking Damien if he *wants* to sing. As such, for this example, I have gloss-translated it into '*Damien do you want to sing*' after also offering a word-for-word translation, and as such, what I offered was only, at best, an approximate translation for the talk.

Parents of children with ASD are reported to instigate interactions more with their children than those of TD children (Freeman & Kasari, 2013). This is partly attributable to the children with ASD's reduced communicative skills that impedes their ability to initiate an interaction themselves (Meindl & Cannella-Malone, 2011). Due to the scope and the exploratory and qualitative nature of the current project, however, no numerical analysis of the data was made. Therefore, it could not be determined how frequent the mothers initiated an engagement compared to the children; or mothers of which group actually initiated more than the other.

Another limitation of the project is that it only includes mothers as the children's interactive partners. Whilst this inclusion was a deliberate act made to achieve the research's aims, I acknowledge the restriction in the exploration of the *parent-child* interaction it might have caused. Differences in maternal and paternal styles of interaction, and the influences they have on their children's communication have been widely documented (Barachetti & Lavelli, 2010; de Falco, Venuti, Esposito, & Bornstein, 2011; Wilson & Durbin, 2013). Fathers are reported to have important influences and contributions on children development, including those with ASD (Flippin & Crais, 2011). However, without the involvement of fathers in the current work, the relevance of the findings might therefore be restricted to mothers

only. Further research on JE could involve Malay-speaking fathers in order to investigate Malay-speaking fathers' roles and contribution in interactions with children.

With regards to the data size, the number of participants of the study is considerably appropriate for the qualitative, micro-analytic investigation of CA (for a relevant discussion see Korkiakangas, 2011). The number is, however, *small* in the sense that the findings may not necessarily be generalisable to all mothers and children with ASD in Malaysia. Also, the age-range of the child participants are restricted to between 3 to 6 years 11 months. Therefore, it is important to highlight that findings of the current work may not be valid for younger or older children, as JE is a developed skill and thus changes over time. As such, the findings may not be representative of the children with ASD in general. Future studies that include a greater number of participants from other age range may be useful to establish the extent of applicability of the findings in this research.

7.7 Prospects for future research

The analysis and discussion of the findings in the current work have inevitably evoked questions and issues that were not answerable due to the constraint in the methodology and/or focus of the study. Consequently, they provide prospective avenues for future research. For instance, it would be particularly relevant for child language and development studies to explore the engagement-initiating actions used by different interactive partners (e.g., fathers, teachers, carers, therapists) of children particularly those with disabilities. Much work have been focusing on investigating mother-child interaction (Wilson & Durbin, 2013), however, findings from other studies have suggested that different interactive partners may have different styles in interacting with children and exhibit different roles and imports within the interaction (e.g., de Falco et al., 2011; Flippin & Crais, 2011; Maynard, McDonald, & Stickle, 2016).

Further studies are also needed to establish which forms of engagement-initiating actions are primarily employed in interactions between adults and children with ASD, and children with other diagnosis, given the different actions they projected for. It would be interesting to determine what influences such uses and how these engagement-initiating actions promote or demote interaction with children with interactional challenges. In depth turn-by-turn analysis of interactions may also lead to a better understanding of how different organisations of talk and social actions are devised in varied contexts and work as engagement initiations with children with diagnosis.

The influences of linguistics and non-linguistics (dis)abilities of the child participants on JE were only minimally explored in the present study. The findings clearly demonstrated the different interactional resources used by the children, partly due to their accessibility to these resources. It was not entirely clear however, *how* and to *what extent* did the linguistics and non-linguistics (dis)abilities affect the parent-child interaction. In addition, more in-depth CA examinations on the effects of children's diagnosis, severity and (dis)abilities on social interactions are required to enhance our understanding of the interactional phenomena that may occur and issues that the children and their interactional partners may experience. As suggested from past studies as well as from the current work, these three aspects related to an impairment have impacts on social interaction; for instance, they may give rise to interactional challenges, and influence the organisation and design of talk and the interactional activities played out in the interaction (cf. Fasulo & Fiore, 2007; Korkiakangas, Rae, & Dickerson, 2012; Stribling et al., 2007). Indeed, it would be useful to direct more future work into these areas to explore, for example, the manifestations of the different aspects of one's disability in an interaction, and the (in)congruencies between interactions which involve individuals with diagnosis and those which do not.

It may not be overemphasised that CA is a distinctive approach to investigate ASD features as an alternative or complement to commonly done psychological based studies. As presented elsewhere in the thesis, there is an increasing number of studies that incorporated CA method to (re)examine the different impairments in individuals with ASD. These include, but not limited to, idiosyncratic and repetitive behaviors, atypical eye gaze, and lack of global understanding; and have been, interestingly, discovering aspects that have not been noticed or explored before using psychological approach (Dickerson, Rae, Stribling, Dautenhahn, & Werry, 2005; Korkiakangas, 2011; Maynard, 2005; Muskett et al., 2010; Sterponi & Shankey, 2014; Stribling et al., 2009; Wootton, 1999). The current work has further contributed to this list by inspecting the sequential organisation of dyadic interactions to examine the social practices of joint engagement in ASD. Implicative of this, therefore, I suggest that future studies should consider deploying CA to scrutinise more features of ASD, given its immense potentials to perceive the manifestation of ASD as situated within the social world.

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Appendix A: Copy of Ethics Clearance Form (Study 1)

ETHICS REVIEWER'S COMMENTS FORM

This form is for use when ethically reviewing a research ethics application form.

1. Name of Ethics Reviewer:	Richard Body Silke Fricke Ruth Herbert
2. Research Project Title:	Parent child interaction in Malay
3. Principal Investigator (or Supervisor):	Nor Azrita Zain
4. Academic Department / School:	HCS

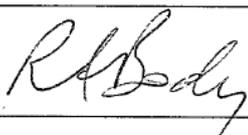
5. I confirm that I do not have a conflict of interest with the project application
--

6. I confirm that, in my judgment, the application should:			
Be approved:	Be approved with <i>suggested</i> amendments in '7' below:	and/or	Be approved providing <i>requirements</i> specified in '8' below are met:
✓			NOT be approved for the reason(s) given in '9' below:

7. Approved with the following suggested, optional amendments (i.e. it is left to the discretion of the applicant whether or not to accept the amendments and, if accepted, the ethics reviewers do not need to see the amendments):

8. Approved providing the following, compulsory requirements are met

9. Not approved for the following reason(s):

10. Date of Ethics Review: 4 April 2012	
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Appendix B: Research Information Sheet (Study 1)



Department of Human Communication Sciences
31, Claremont Crescent,
Sheffield, S10 2TA

Head of Department: Professor Shelagh Brumfitt

Research Project Information Sheet

Project title: Mother-child interaction in Malay-speaking population: An explorative study.

Researcher:

Nor Azrita Mohamed Zain



+447588817878
+60124958445 (in Malaysia)

Supervisors:

Dr. Hilary Gardner



+44 (0) 1142222456

Dr. Thomas Muskett



+44 (0)1142222443

This information sheet is about a study looking at mother-child interaction in Malay-speaking population. For further information, please contact the researcher, Nor Azrita Mohamed Zain.

The Research Team

Nor Azrita is a PhD student in the Department of Human Communication Sciences, The University of Sheffield. Dr Hilary Gardner and Dr Thomas Muskett are speech and language therapists and lecturers, and are supervising Nor Azrita's PhD.

Ethical approval

This study is approved by the Department of Human Communication Sciences' Ethics Review Panel.

What is the study about?

The study is looking at parent-child interaction involving Malay-speaking typically-developing children and their mothers. We hope to explore the mothers' and children's communication

during parent-child interaction, the influence they have on each other during the interaction and the mothers' perception on parent-child interaction.

Who is taking part?

Malay-speaking children and their mothers are invited to take part. The additional required criteria for the child participant would be:

- aged between 3 years to 5 years and 11 months
- has no known difficulties (i.e., mental, visual, physical, and/or hearing difficulties)
- has the Malay language as the primary language and use the language primarily at home

Deciding whether to take part

Everyone is free to choose whether they take part.

Mothers who decide to take part with their child will sign a consent form, but after that, if they do not wish to continue with the project they will be able to withdraw without any penalty. If a mother does withdraw from the study, any video-recordings already made of her and her child and other data collected from her and her child will be destroyed at that point.

What will happen after deciding to take part?

The mother who decides to take part will be expected to complete the consent form (provided together with this information sheet) after she has read this information sheet and has had the chance to ask any questions from Nor Azrita. The mother will then be expected to give her consent for Items 1 to 6 of the consent form and she may choose whether or not to also give her consent for Items 7 and 8. The consent form is then to be returned to the daycare center/nursery and Nor Azrita will collect it there. The mother can also scan the completed and signed form and e-mail a copy to Nor Azrita at azrita.zain@sheffield.ac.uk. Nor Azrita will then give the mother a call to discuss the project with her and arrange appointments for data collection.

What is involved?

The project will involve data gathering, which will be approximately one hour and forty-five minutes to two hours in duration, at the participants' home or at a clinic room at the Hearing and Speech Clinic, International Islamic University Malaysia. The latter venue option, however,

is available only for participants residing in Kuantan, Pahang. Unfortunately, expenses for travel to the clinic cannot be refunded.

The data collection session will progress in the following order:

- I. the researcher administers the Malay version of the Pre-school Language Scales (PLS-4) to the child to explore the child's language abilities
- II. the mother and child interact during a free-play session and mealtime; 15 minutes for each activity
- III. the mother completes a maternal background information form
- IV. the mother completes the Children Communication Checklist-2, a checklist containing questions regarding the child's language and behavior
- V. the mother answers a questionnaire which explores her perception on parent-child interaction.

(Activities I and II will be video-recorded for later analysis)

What will happen to the data and recordings?

All information will remain confidential and participants are assured that any data collected will not personally identify the mother and her child. Files will be kept under secure conditions within the Department of Human Communication Sciences, University of Sheffield.

The confidentiality of the data is assured. Nor Azrita will keep all of the paper data in a locked filing cabinet in her office in the Department of Human Communication Sciences. Consent forms will be stored separately from paper data and coded. Digital data (audio and video recordings) will be stored in the researcher's secure filespace on University networks.

Only Nor Azrita and her two supervisors will have access to the data (including recordings). Sections of the recordings might also be played during research and academic talks or conferences.

What will happen to the results of the study?

The results will be used as part of Nor Azrita's PhD thesis and may be published in scientific journals or presented at research conferences. The results may also be presented to local groups and organisations supporting people with language difficulties. The information collected through this study could possibly be used for future research.

What are the potential advantages of taking part?

This is a research project and not treatment. Therefore, there may be no direct benefit to the people who participate. It is hoped that the study will help to find out more about parent-child interaction in Malay-speaking population. This may later help in assessments and/or intervention in this area involving children with language impairments.

What are the potential disadvantages and risks of taking part?

There would be no risks, as the assessment and activities are those routinely used in speech pathology clinics or in home settings.

What if there is a problem or I want to make a complaint?

If you have any concerns, you are welcome to discuss these freely with Nor Azrita or her supervisors using the contact details given below. If you do not wish to continue with the project you will be able to withdraw at any point without penalty or having to explain why.

Nor Azrita Mohamed Zain
Department of Human Communication Sciences
University of Sheffield
31 Claremont Crescent
Sheffield, S10 2TA
Tel: +44 7588817878 (in the UK)
+60124958445 (in Malaysia)
Email: azrita.zain@sheffield.ac.uk

You can also discuss your concerns with Nor Azrita's supervisors:

Dr. Hilary Gardner
Tel: +44 (0) 114 222 2456
Email: h.gardner@sheffield.ac.uk

Dr. Thomas Muskett
Tel: +44 (0)114 22 22443
Email: t.muskett@sheffield.ac.uk

If you wish to speak to someone unrelated to the project you can contact the Head of the Department of Human Communication Sciences at the University of Sheffield:

Professor Shelagh Brumfitt
Tel: 0114 222 2406
Email: s.m.brumfitt@sheffield.ac.uk

If you are not satisfied your concerns have been dealt with satisfactorily by the people above, you can write to:

The Registrar and Secretary of the University of Sheffield, Western Bank, Sheffield, S10 2TN.

~Thank you for reading this project information sheet~

Appendix C: Consent Form (Study 1)



Research Project Consent Form

Borang Kebenaran Projek Kajian

MOTHER-CHILD INTERACTION IN MALAY-SPEAKING POPULATION: AN EXPLORATIVE STUDY.
INTERAKSI IBU-ANAK DALAM POPULASI BERBAHASA MELAYU: SATU KAJIAN EKSPLORASI

Dr. Hilary Gardner

Miss Nor Azrita Mohamed Zain

Dr. Thomas Muskett

Department of Human Communication Sciences

Department of Human Communication Sciences

University of Sheffield

University of Sheffield

Please INITIAL the boxes below to indicate consent, as appropriate. To enable you child and you to participate in this project, consents for items 1 to 7 ARE NEEDED.

Sila turunkan TANDATANGAN RINGKAS di dalam kotak di bawah untuk menunjukkan persetujuan, di mana berkenaan. Bagi membolehkan anda dan anak anda mengambil bahagian dalam kajian ini, persetujuan bagi item 1 hingga 7 adalah DIPERLUKAN.

1. I confirm that I have read and understood the information sheet for the project named above and that I have had the opportunity to ask questions about it.

Saya mengesahkan saya telah membaca dan memahami maklumat tentang projek yang dinyatakan di atas dan saya telah diberikan peluang untuk bertanyakan soalan tentangnya.

2. I understand that my participation and that of my child's are voluntary and that I am free to withdraw my consent at any time without giving a reason.
- Saya faham yang penglibatan saya dan anak saya adalah secara sukarela dan saya bebas untuk menarik persetujuan saya pada bila-bila masa tanpa memberikan sebab.*
3. I give permission for my child and myself to take part in the above research project at our home/ at the Hearing and Speech Clinic, International Islamic University Malaysia, Kuantan Pahang **(delete as appropriate)**.
- Saya membenarkan anak saya dan saya sendiri untuk mengambil bahagian dalam projek kajian di atas di rumah kami/ di Klinik Pendengaran dan Pertuturan, Universiti Islam Antarabangsa Malaysia, Kuantan Pahang **(potong mana yang tidak berkaitan)**.*
4. I understand that the video recordings and written information about my child and me will be given a code to keep us anonymous and our names will not be disclosed.
- Saya faham yang rakaman video dan informasi bertulis tentang anak saya dan saya sendiri akan dikod bagi memastikan kami kekal anonymous dan nama kami tidak didedahkan.*
5. I understand that the video footage of my child and myself will not be edited and our faces will not necessarily be anonymised on the video.
- Saya faham yang footage video tentang anak saya dan saya sendiri tidak akan diubahsuai dan wajah kami tidak semestinya dirahsiakan di dalam video.*
6. I give permission for the video and/or audio recordings collected for this study to be stored, securely and confidentially, for longer than the duration of the study.
- Saya membenarkan untuk rakaman video dan/atau audio yang diperolehi untuk kajian ini disimpan, secara terjamin dan sulit, lebih lama daripada jangkamasa kajian ini.*
7. I understand that all unpublished data and recordings of my child and myself will be destroyed when my child reach 18 years old or instantly

if I decided to withdraw from the study.

Saya faham yang semua data yang tidak diterbitkan dan rakaman anak saya dan saya akan dimusnahkan apabila anak saya berumur 18 tahun atau dengan segera jika saya mengambil keputusan untuk menarik diri dari kajian ini.

8. I give permission for video and/or audio recordings of my child and myself to be used for teaching purposes in the education of students in the Department of Human Communication Sciences, University of Sheffield, UK and Department of Audiology and Speech-Language Pathology, International Islamic University of Malaysia.

Saya membenarkan rakaman video dan/atau audio anak saya dan saya sendiri digunakan untuk tujuan pengajaran dalam pengajian pelajar di Jabatan Sains Komunikasi Manusia, Universiti Sheffield, UK dan Jabatan Audiology dan Patologi Pertuturan-bahasa, Universiti Islam Antarabangsa Malaysia.

9. I give permission for video recordings and/or audio recordings of my child and myself to be included in scientific presentations at conferences and meetings with other academics and professionals working in related area.

Saya membenarkan rakaman video dan/atau audio anak saya dan saya sendiri dimasukkan dalam pembentangan saintifik di persidangan dan mesyuarat dengan ahli akademik dan professional lain yang bekerja dalam bidang berkaitan.

10. I am willing to be contacted for potential participation in the follow-up study of this research project.

(Items 8, 9 and 10 are not compulsory for participation in the research)

Saya bersedia dihubungi mengenai kemungkinan penglibatan saya dalam kajian susulan projek ini.

(Item 8, 9 dan 10 tidak wajib untuk penyertaan dalam kajian ini)

Name of Participant>Nama peserta (or legal representative/atau wakil sah)	Date/tarikh	Signature/tandatangan
--	-------------	-----------------------

NOR AZRITA MOHAMED ZAIN

Primary RESEARCHER/penyelidik Utama

Date/tarikh

Signature/tandatangan

(To be signed and dated in the presence of the participant/*untuk ditandatangani di hadapan peserta*)

A copy of this form, once signed by all parties and dated, will be given to the parent, together with a project information sheet. A copy of the signed and dated form will be kept in the main project file, in a secure location, by the research project team.

Setelah ditandatangani, satu salinan borang ini akan diberikan kepada ibu bersama-sama dengan maklumat kajian. Satu salinan yang bertandatangan dan bertarikh akan disimpan di fail utama projek, di lokasi yang selamat, oleh kumpulan penyelidik.

Appendix D: The sample of the PLS-4 (Malay Version)

Skala Bahasa Pra sekolah – 4 (Preschool Language Scale-4)

Pemahaman auditori				Komunikasi ekspresif			
0:0 hingga 0:2 (Lahir hingga 2 bulan)							
1. Menoleh seketika ke arah orang yang bercakap dengannya (Lulus: menoleh kepada penutur selama 1 saat)	E	S	C	1. Mempunyai refleks hisap/telan Material: botol & puting, disediakan oleh penjaga (Lulus: Turutan hisap/telan berkoordinasi; tiada batuk/tercekik)	E	S	C
2. Menikmati perhatian penjaga (Lulus: Tersenyum, berkukur, bertenang)	E	S	C	2. Menyuarakan bunyi lembut, garau (Lulus: membuat bunyi lembut, garau, membual)	E	S	C
3. Berreaksi terhadap bunyi selain dari suara dalam persekitaran Material: mainan yang berkeriuat (Lulus: Terkejut, membuka mata, dll. sebagai respon kepada bunyi)	E	S	C	3. Respon kepada penutur dengan tersenyum..... (Lulus: Tersenyum sebagai respon kepada penutur yang bercakap dengannya)	E	S	C

<p>4. Merenung penutur..... (Lulus: Merenung selama dua saat atau lebih.)</p>	E	S	C				
0:3 hingga 0:5 (3 hingga 5 bulan)							
<p>5. Menoleh untuk mengenalpasti punca bunyi Material: Mainan berkeriut (Lulus: Menoleh ke arah bunyi)</p>	E	S	C	<p>4. Mengubah-ubah kelangsingan, kepanjangan, atau kekuatan tangisan (Lulus: Suara berbeza-beza kelangsingan, kepanjangan, atau kekuatan).</p>	E	S	C

Appendix E: Modifications Made To the Items of PLS-4

Modifications to the Auditory Comprehension assessment

- Items 34 and 61 were excluded. The exclusion was done because the former is meant to test children's ability to understand gender-specific pronouns which were not available in the Malay language; and the latter the four-season concepts (i.e., autumn, summer, spring, and winter) which did not happen in Malaysia.
- The names used in Item 37 (i.e., Annie and Charlie) were replaced with names that were considered more familiar in Malay-speaking population (i.e., Ani, and Ali).
- Item 45 in the original version of the PLS-4 was designed to test children's understanding on morpheme 'er' that follows a verb as indicating 'the one who does something'. In the Malay-language however, morpheme 'pe' is usually used instead, and positioned before the verb. This item was retained, using what was typical in the Malay language. This was given that such a modification did not invalidate the aim of the item.
- The targets words in Items 57 and 59 were not translated or used, but replaced with other words that were considered common for Malay-speaking children. The selection of these Malay words was made by also considering that they were consistent with the aims of the items.
- 'pennies' in Item 61 was replaced with *ringgit* which was the usual shorten form of Malaysian Ringgit, although it could be translated into 'sen' (cents). This was because, while 'three pennies' and 'two pennies' were normally used in Britain, three cents and two cents were not as familiar in Malaysia, since the smallest currency that is extensively used in Malaysia is five cents.

Modifications to the Expressive Communication assessment

- Items 34 and 54 were deleted because the former item tests on the use of ‘-ing’ and the latter past tense; both of which were not available in the Malay language.
- The word ‘pig’ in Item 49 was excluded from the question because the word might be considered as inappropriate for use with the Malay-speaking population.
- The aim of Item 53 of the original version was to assess children’s ability to use ‘-er’ to refer to ‘the person who does something’. As explained earlier in the Modifications to the Auditory Comprehension assessment, ‘*pe*’ was used in the Malay-language instead. The target word ‘teacher’ of the sub item *a* however, was no longer suitable for inclusion in the Malay-version because the Malay word for teacher (i.e., *cikgu*) does not root from the verb ‘*ajar*’ (teach). Therefore the target word for this sub item was replaced with ‘*penyanyi*’ (singer).
- The English name in Item 55 (i.e., Rachel) was replaced with a name that was deemed more familiar for Malay children (i.e., Ema).
- The target words of Items 63 and 64 were not translated because they were not widely used by Malay-speaking children, or their translation would not be of two words put together and would consequently invalidate the aim of the item. Therefore, words that were more familiar for Malay-speaking children were included. Specifically, ‘*hat*’, and ‘*bright*’ in Item 63 were replaced with ‘*lari*’ (run) and ‘*suka*’ (like), and ‘*playground*’, ‘*cowboy*’, ‘*bluebird*’, and ‘*teapot*’ with ‘*kapal terbang*’ (aeroplane), ‘*matahari*’ (sun), ‘*daripada*’ (from), and ‘*kakitangan*’ (staff).

Appendix F: The sample of the CCC-2 (Malay Version)

Tuliskan nombor di dalam kotak di ruangan sebelah kanan:

0 = Kurang dari sekali dalam seminggu (atau tidak pernah langsung);

1 = Sekurang-kurangnya sekali dalam seminggu, tapi bukan setiap hari

2 = Sekali atau dua kali dalam sehari

3 = Beberapa kali (lebih dari dua kali) dalam sehari (atau sentiasa)

1. Meringkaskan perkataan dengan meninggalkan beberapa bunyi contohnya: “koko krunch” disebut “koko kunch” , atau “telefon” sebagai “teifon”	
2. Kelihatan gelisah apabila berada di kalangan kanak-kanak lain.	
3. Membuat ‘salah mula’ , dan kelihatan mencari-cari perkataan yang sesuai contohnya: “Boleh tak – boleh tak – boleh – boleh – tak saya nak – nak ais krim”	
4. Bercakap berulang kali tentang sesuatu perkara yang tiada siapa berminat dengannya	
5. Lupa perkataan yang diketahui contohnya: daripada menyebut “badak” , mungkin menyebut “ ala, binatang yang ada tanduk atas hidung dia..”	
6. Kelihatan tidak memberikan perhatian, tidak mesra atau leka dengan orang dewasa yang dikenali	
7. Kelihatan termangu dalam sesuatu situasi di mana kanak-kanak lain akan menunjukkan ekspresi muka yang jelas- contohnya: apabila marah, ketakutan atau gembira	
8. Apabila diberi peluang untuk melakukan perkara yang disukai, dia akan memilih aktiviti kegemaran yang sama (contohnya: bermain permainan komputer yang tertentu)	
9. Menggunakan perkataan ‘dia’ tanpa menjelaskan tentang apa yang diperkatakan. Contohnya, apabila bercerita tentang sesebuah	

filem, dia mungkin berkata “Dia tu hebat” tanpa menjelaskan siapa ‘dia’.	
10. Berkata sesuatu yang dia sendiri seolah-olah kurang faham (mungkin mengulang sesuatu yang dia terdengar disebut oleh orang dewasa). Sebagai contoh, seorang kanak-kanak berusia 5 tahun mungkin mengatakan gurunya sebagai “mempunyai reputasi yang sangat baik”	

Appendix G: The Modifications Made To the CCC-2

- Four of the seven items in Scale B (Syntax) were not included in the Malay-version of CCC-2 as they are assessing on gender-specific pronouns (*he/she* (item 1) and *him/he and her/she* in item 17), past tense (item 36), and article '*is*' (item 43) which are not available in Malay. The other three items; items 27, 55 and 69 that ask on the structure and complexity of utterances were translated and included in the Malay-version of the CCC-2.
- The translation was made word for word for each item when it was possible and sensible to do so (e.g., items 5 and 6); however this was not always the case. For instance, the examples given in item 2 (i.e., *crocodile* and *stranger*) were replaced with two words that were considered more familiar to Malay-speaking children (i.e., *koko krunch* [coco crunch]) and *telefon* [telephone]). '*Summer*' in item 42 was translated into '*musim cuti*' (holiday season) because summer does not occur in Malaysia which is a tropical country and therefore would not be a common word for the participants particularly the children. Also, the English names in items 48 and 69 were both replaced with *Johan* to make it more culturally-appropriate for Malaysian context.

Appendix H: The Questionnaire On Mothers' Perception (Malay Version)

Borang soal selidik mengenai pendapat ibu tentang kanak-kanak kecil

Kami ingin mengetahui **idea anda tentang kanak-kanak kecil**. Bulatkan suatu angka untuk menunjukkan sejauh mana anda setuju dengan setiap pernyataan di bawah. Berikut adalah makna setiap angka:

- 1 = *Sangat tidak setuju* dengan pernyataan tersebut.
- 2 = *Agak tidak setuju* dengan pernyataan tersebut.
- 3 = Tidak pasti tentang pernyataan tersebut.
- 4 = *Agak setuju* dengan pernyataan tersebut.
- 5 = *Sangat setuju* dengan pernyataan tersebut.

Fikir terutamanya tentang anak anda yang berusia 2-4 tahun ketika menjawab.

Berikut adalah contoh

	Sangat				Sangat
	Tidak				Setuju
	Setuju				
Kanak-kanak kecil sepatutnya mempunyai masa rehat setiap hari.	1	2	3	4	5

Jika anda sangat setuju dengan pernyataan tersebut anda akan bulatkan angka 5. Jika anda agak tidak setuju dengan pernyataan tersebut, bulatkan angka 2.

Sila berikan pendapat anda mengenai pernyataan-pernyataan yang berikut:

	Sangat Tidak Setuju					Sangat Setuju
1. Kanak-kanak yang meluangkan masa memerhatikan sesuatu perkara dalam diam selalunya bijak.	1	2	3	4	5	
2. Adalah penting untuk mengambil tahu tentang perkara yang sedang difikirkan oleh kanak-kanak kecil.	1	2	3	4	5	
3. Ibubapa sepatutnya meminta kanak-kanak kecil mengulang perkataan baru untuk membantu mereka belajar bertutur.	1	2	3	4	5	
4. Pertuturan adalah penting kerana ia membantu kanak-kanak kecil mendapat kawan	1	2	3	4	5	
5. Kanak-kanak memahami beberapa perkataan walaupun sebelum mereka boleh bertutur.	1	2	3	4	5	
6. Ibubapa sepatutnya membiarkan kanak-kanak bereksperimentasi, walaupun mereka mungkin membuat kesilapan.	1	2	3	4	5	
7. Gelaran yang sesuai untuk seseorang ("Makcik" Salmah) adalah lebih penting untuk dipelajari daripada nama sesuatu benda.	1	2	3	4	5	
8. Ibubapa seharusnya tunggu sehingga kanak-kanak kecil meminta sebelum memberikan bantuan	1	2	3	4	5	
9. Adalah lebih penting untuk kanak-kanak kecil bercakap dengan jelas daripada bercakap dengan sopan.	1	2	3	4	5	
10. Jika ibubapa menggunakan "pertuturan bayi" (seperti "cucu" untuk susu dan "mamam" untuk makan) anak-anak mereka tidak dapat belajar bertutur dengan baik.	1	2	3	4	5	
11. Kanak-kanak berusia tiga tahun adalah terlalu muda untuk membantu membuat kerja-kerja rumah.	1	2	3	4	5	
12. Kanak-kanak kecil dapat belajar dengan paling baik sekiranya mereka diberikan arahan.	1	2	3	4	5	
13. Kanak-kanak kecil sepatutnya sentiasa digalakkan untuk berkomunikasi dengan perkataan berbanding gerak tubuh.	1	2	3	4	5	
14. Kanak-kanak kecil belajar perkara-perkara penting ketika bermain.	1	2	3	4	5	
15. Apabila bayi membebel, mereka sedang cuba berkomunikasi.	1	2	3	4	5	
16. Kanak-kanak kecil sepatutnya diberikan pilihan, bukannya diberitahu apa yang perlu dibuat.	1	2	3	4	5	
17. Kanak-kanak akan belajar bercakap dengan sendiri, selagi ada orang yang bertutur dengannya.	1	2	3	4	5	
18. Kanak-kanak kecil biasanya menyukai perkara yang sama dengan ibu bapa mereka.	1	2	3	4	5	
19. Kanak-kanak kecil sepatutnya dibenarkan turut mengambil giliran dalam perbualan yang melibatkan orang dewasa yang bukan kalangan ahli keluarga.	1	2	3	4	5	
20. Datuk nenek atau ahli keluarga yang lebih tua memberikan nasihat yang baik tentang bagaimana kanak-kanak membesar.	1	2	3	4	5	

Berikut adalah senarai **cara yang mungkin anda gunakan** untuk bercakap dengan anak kecil anda.

Sila bulatkan suatu angka untuk menyatakan berapa kerap anda melakukannya.

Fikir terutamanya tentang anak anda yang berusia 2-4 tahun ketika menjawab.

	Hampir tidak pernah	Kadang- kadang	Sangat kerap	Sentiasa
21. Beritahu anak saya jika dia menggunakan perkataan yang salah.	1	2	3	4
22. Membaca buku untuk anak saya ketika hendak tidur malam atau tidur siang.	1	2	3	4
23. Abaikan sahaja kenyataan yang saya tidak memahami sesuatu yang dituturkan oleh anak saya.	1	2	3	4
24. Mengikuti topik perbualan anak saya.	1	2	3	4
25. Mengulang apa yang dituturkan oleh anak saya dan menambahkan beberapa perkataan baru.	1	2	3	4
26. Bercakap tentang apa yang sedang berlaku ketika saya dan anak saya sedang bermain atau melakukan sesuatu bersama. <i>Contoh: Ketika bermain masak-masak, "Sekarang, ibu sedang menuang air. Adik sedang makan kek. Sedap?"</i>	1	2	3	4
27. Memberitahu anak saya jika dia tertinggal sesuatu perkataan dalam ayat.	1	2	3	4
28. Menukar perkataan atau ayat saya apabila anak saya tidak memahami saya.	1	2	3	4
29. Berbual dengan anak saya tentang apa yang berlaku pada hari tersebut semasa ketiadaan saya. <i>(contoh: di taska, atau di rumah semasa saya di tempat kerja)</i>	1	2	3	4
30. Menggunakan buku bergambar atau kad imbas untuk mengajar anak saya perkataan-perkataan baru.	1	2	3	4
31. Meminta anak saya mengulangi ayat selepas saya menyebutkannya.	1	2	3	4
32. Meminta anak saya menceritakan kepada ahli keluarga yang lain tentang apa yang telah kami lakukan bersama.	1	2	3	4

Terima kasih.

Appendix I: The Results for the Questionnaire on Mothers' Perception (adapted from Johnston & Wong, 2012)

Item (belief)	% (agreeing)		
	CHINESE (N:42)	ENGLISH (N:44)	MALAY (N:12)
1 Children who spend time quietly observing tend to be smart.	67	43	66.7
2 It is important to find out what young children are thinking.	93	86	100
3 Parents should ask young children to repeat new words in order to help them learn to talk.	76	73	83.3
4 Speech is especially important because it helps young children to make friends.	91	66	100
5 Children understand some words even before they can speak.	93	98	100
6 Parents should let children experiment, even if they might make mistakes.	90	95	100
7 The proper titles for people ("Aunt" Salmah) are more important to learn than the names of objects.	55	89	16.7
8 Parents should wait until young children ask before giving help.	38	41	33.3
9a It is more important for young children to speak clearly than to speak politely. If parents use "baby talk" (like "cucu" for susu, or "mamam" for makan) their child won't	57	36	25
10 learn to speak well.	26	43	66.7
11 Three-year-olds are too young to help with household chores.	60	91	16.7
12 Young children learn best when they are given instructions.	91	39	58.3
13 Young children should always be encouraged to communicate with words rather than gestures.	93	61	58.3
14 Young children learn important things while playing.	86	100	91.7
15 When babies babble, they are trying to communicate something.	88	86	91.7
16 Young children should be given choices instead of being told what to do.	71	82	83.3
17 Children will learn to talk on their own, as long as they are spoken to.	31	27	100
18a Young children generally like the same things as their parents.	62	64	16.7
19 Young children should be allowed to take a turn in conversations that include adults who are not family members.	50	86	50
20 Grandparents or older family members give good advice about the way that young children grow up.	71	36	66.7

Item (Practice)	% very often and almost always		
	CHINESE	WESTERN	MALAY
21 Tell my child if s/he uses the wrong word.	40	43	91.7
22 Read a book to my child at bedtime or naptime.	29	84	33.3
23 Ignore the fact that I do not understand something my child says.	31	59	0
24 Follow along with my child's topic of conversation.	7	55	100
25 Repeat what my child says, adding new words.	43	75	75
Talk about what is going on when my child and I are playing or doing things together. Example: When playing tea party, "Now, I'm pouring my tea. You're eating a tea cake. Is it			
26 good?"	69	82	66.7
27a Tell my child if s/he leaves some words out of a sentence.	57	66	33.3
28 Change my words or sentence when my child does not understand me.	79	91	91.7
Talk with my child about what happened that day when I wasn't there. Example: at			
29 preschool, or at home while I was at work.	52	91	83.3
30 Use picture books or flash cards to teach my child new words.	64	46	83.3
31 Ask my child to repeat a sentence after me.	2	21	58.3
32 Ask my child to tell another family member about something that we did together.	21	73	75

Note: Items marked with 'a' (i.e., 9a, 18a, and 27a) were the items of which the responses from the mothers were primarily negative in Johnston and Wong (2002). To produce a consistent results' display, therefore, the percentages for these items in the current study were also calculated for the negative responses.

Appendix J: Transcription Convention (Jefferson, 2004)

Symbol	Meaning
[The point of onset of overlapping utterances
]	The point at which two overlapping utterances end
=	continuous talk without break or gap
::	Prolongation of the immediately preceding sound
?	High rising intonation of the preceding talk
↑	Next talk goes up rapidly
↓	Next talk goes down rapidly
WORD (capitals)	Sounds that are louder relative to the surrounding talk
°word° (degree sign)	Sounds that are softer or quieter than the surrounding talk
<u>word</u> (underlining)	Part of talk spoken with emphasis
Hh	Audible out-breath
.hh	Audible in-breath
><	Speeding up of talk in between the symbols
<>	Slowing down of talk in between the symbols
()	Inaudible or unclear transcription
(.)	Very brief pause or interval
(h)	Laughter
(())	Description of non-vocal behaviors

Appendix K: Ethics Clearance Form (Study 2)

ETHICS REVIEWER'S COMMENTS FORM

This form is for use when ethically reviewing a research ethics application form.

1. Name of Ethics Reviewer:		Richard Body Ben Rutter Ray Wilkinson	
2. Research Project Title:		Interactions during play between Malay-speaking mothers and their children with autistic spectrum disorders	
3. Principal Investigator (or Supervisor):		Nor Azrita Mohamed Zain	
4. Academic Department / School:		Human Communication Sciences	
5. I confirm that I do not have a conflict of interest with the project application			
6. I confirm that, in my judgment, the application should:			
Be approved:	Be approved with <i>suggested</i> amendments in '7' below:	Be approved providing <i>requirements</i> specified in '8' below are met:	NOT be approved for the reason(s) given in '9' below:
x			
7. Approved with the following suggested, optional amendments (i.e. it is left to the discretion of the applicant whether or not to accept the amendments and, if accepted, the ethics reviewers do not need to see the amendments):			
8a. Approved providing the following, compulsory requirements are met (ethics reviewers <u>do not</u> need to see the required changes)			
8b. Approved providing the following, compulsory requirements are met (ethics reviewers <u>need to see the required changes, which should be highlighted in the resubmitted form</u>):			
9. Not approved for the following reason(s):			
10. Date of Ethics Review: 24.04.13			
Signature of reviewer: 			

Appendix L: Research Information Sheet (Study 2)



Department of Human Communication Sciences
31, Claremont Crescent,
Sheffield, S10 2TA

Head of Department: Professor Shelagh Brumfitt

Research Project Information Sheet

Interactions during play between Malay-speaking mothers and their children with autism spectrum disorders

Researcher:

Nor Azrita Mohamed Zain



+447588817878

+60124958445 (in Malaysia)

Supervisors:

Dr. Hilary Gardner



+44 (0) 1142222456

Dr. Thomas Muskett



+44 (0)1142222443

This information sheet is about a study looking at mother-child interaction in Malay-speaking population. For further information, please contact the researcher, Nor Azrita Mohamed Zain.

The Research Team

Nor Azrita is a PhD student in the Department of Human Communication Sciences, The University of Sheffield. Dr Hilary Gardner and Dr Thomas Muskett are speech and language therapists and lecturers, and are supervising Nor Azrita's PhD.

Ethical approval

This study is approved by the Department of Human Communication Sciences' Ethics Review Panel.

What is the study about?

The study is looking at interactions between Malay-speaking mothers and their children with autism. We hope to explore the mothers' and children's communication during mother-child interaction, and the influence they have on each other during the interaction.

Who is taking part?

Malay-speaking mothers and their children with autism are invited to take part. The additional REQUIRED CRITERIA for the child participant would be:

- Aged between 3 to 6 years 11 months.
- Mild to moderate autism spectrum disorder - received a formal diagnosis of ASD by a qualified professional.
- Has the Malay language as their primary language
- Uses at least 1-word utterances – this will be determined by parental report and observation by the investigator.

Deciding whether to take part

Everyone is FREE TO CHOOSE whether they take part.

Mothers who decide to take part with their child will sign a consent form, but after that, if they do not wish to continue with the project they will be able to withdraw without any penalty. If a mother does withdraw from the study, any video-recordings already made of her and her child and other data collected from her and her child will be destroyed at that point.

What will happen after deciding to take part?

The mother who decides to take part will be expected to complete the consent form (enclosed) after she has read this information sheet and has had the chance to ask any questions to Nor Azrita. The mother will then be expected to give her consent for Items 1 to 7 of the consent form and she may choose whether or not to also give her consent for Items 8 to 10. The mother will then complete and sign the consent form; and e-mail a copy to Nor Azrita at azrita.zain@sheffield.ac.uk. Nor Azrita will then give the mother a call to discuss the project with her and arrange appointments for data collection.

What is involved?

The project will involve TWO sessions of data gathering, which will be approximately 1 hour and 30 minutes in duration for the first session and 45 minutes for the second; at the participants' HOME or at a CLINIC ROOM at the Hearing and Speech Clinic, International Islamic University Malaysia. The latter venue option, however, is available only for participants residing in Kuantan, Pahang. Unfortunately, expenses for travel to the clinic cannot be refunded.

Data collection procedure:

The data collection sessions will be conducted at either the participants' home or at the Hearing and Speech Clinic. This study is divided into two sessions to ensure that each session is not too long and tiresome for the participants.

During the 1st visit, the session will progress as follows:

- the mother completes the maternal background form
- the researcher administers a questionnaire that enables her to understand the child's abilities and behaviors
- the mother completes a questionnaire about areas that the child might have difficulty in
- the mother and child will be video-recorded while playing together with a bag of unfamiliar toys (provided by the investigator) for 30 minutes.

During the 2nd visit, the mother and child will be video-recorded for another 30 minutes while playing with a bag of familiar and preferable toys/materials (prepared by the mother following a discussion with the investigator). Some toys from the free play in the first visit will also be made available during this session.

The data from the video-recordings will be transcribed and analysed using a method called Conversational analysis.

What will happen to the data and recordings?

All information and data will remain confidential and participants are assured that any data collected will not personally identify the mother and her child. Files will be kept under secure conditions within the Department of Human Communication Sciences, University of Sheffield. Consent forms will be stored separately from paper data and kept in secured cabinets.

When the lead researcher (Nor Azrita) leaves the University of Sheffield, digital data (audio and video recordings) will also be stored in the secure filespace of the International Islamic University of Malaysia. At all time, only Nor Azrita and her two supervisors will have access to the data (including recordings). The digital data will be stored in this way until they are destroyed.

With the participants' consent, sections of the recordings might also be played during research and academic talks or conferences, and be used for teaching purposes. The recordings will not be edited and the participants' faces will not necessarily be anonymised on the video. The data will be used in this way until they are destroyed.

Participants will be contacted when the child participant reaches 14 years old for a review of their consent with regards to the storage and use of video and audio data. All unpublished data and recordings will be destroyed when the child participant reaches 18 years old. Data of the participants who decide to withdraw from the study will be destroyed at the point of withdrawal.

What will happen to the results of the study?

The results will be used as part of Nor Azrita's PhD thesis and may be published in scientific journals or presented at research conferences. The results may also be presented to local groups and organisations supporting people with language difficulties. The information collected through this study could possibly be used for future research.

What are the potential advantages of taking part?

This is a research project and not treatment. Therefore, there may be no direct benefit to the people who participate. It is hoped that the study will help to find out more about mother-child interaction in Malay-speaking population. This may later help in assessments and/or intervention in this area involving children with language impairments.

What are the potential disadvantages and risks of taking part?

It is anticipated that there would be no risks, as the assessment and activities are those routinely used in speech pathology clinics or in home settings.

What if there is a problem or I want to make a complaint?

If you have any concerns, you are welcome to discuss these freely with Nor Azrita or her supervisors using the contact details given below. If you do not wish to continue with the project you will be able to withdraw at any point without penalty or having to explain why.

Deciding whether to take part in the next stage of this research project

Following this current study, there might be another study which would look further into the interactions between Malay-speaking mothers and their children and an intervention program might be involved. If you are interested in participating in the next stage of this research project, you will need to give your consent to be contacted again in the near future by the researcher. If you do not wish to continue with the project you will be able to withdraw at any point without penalty or having to explain why.

Nor Azrita Mohamed Zain
Department of Human Communication Sciences
University of Sheffield
31 Claremont Crescent
Sheffield, S10 2TA
Tel: +44 7588817878 (in the UK)
+60124958445 (in Malaysia)
Email: azrita.zain@sheffield.ac.uk

You can also discuss your concerns with Nor Azrita's supervisors:

- Dr. Hilary Gardner
Tel: +44 (0) 114 222 2456
Email: h.gardner@sheffield.ac.uk
- Dr. Thomas Muskett
Tel: +44 (0)114 22 22443
Email: t.muskett@sheffield.ac.uk

If you wish to speak to someone unrelated to the project you can contact the Head of the Department of Human Communication Sciences at the University of Sheffield:

- Professor Shelagh Brumfitt
Tel: 0114 222 2406
Email: s.m.brumfitt@sheffield.ac.uk

If you are not satisfied your concerns have been dealt with satisfactorily by the people above, you can write to

- The Registrar and Secretary of the University of Sheffield, Western Bank, Sheffield, S10 2TN.

~Thank you for reading this project information sheet~

Appendix M: Consent Form (Study 2)



Department of Human Communication Sciences
31, Claremont Crescent,
Sheffield, S10 2TA

Head of Department: Professor Shelagh Brumfitt

Research Project Consent Form

Borang Kebenaran Projek Kajian

Interactions during play between Malay-speaking mothers and their children with autism spectrum disorders

Interaksi semasa bermain antara ibu dan anak yang mengalami autisme berbahasa Melayu

Dr. Hilary Gardner

Miss Nor Azrita Mohamed Zain

Dr. Thomas Muskett

Department of Human Communication

Department of Human Communication Sciences

Sciences

University of Sheffield

University of Sheffield

Please INITIAL the boxes below to indicate consent, as appropriate. To enable you child and you to participate in this project, consents for items 1 to 7 ARE NEEDED.

Sila turunkan TANDATANGAN RINGKAS di dalam kotak di bawah untuk menunjukkan persetujuan, di mana berkenaan. Bagi membolehkan anda dan anak anda mengambil bahagian dalam kajian ini, persetujuan bagi item 1 hingga 7 adalah DIPERLUKAN.

1. I confirm that I have read and understood the information sheet for the project named above and that I have had the opportunity to ask questions about it.

Saya mengesahkan saya telah membaca dan memahami maklumat tentang projek yang dinyatakan di atas dan saya telah diberikan peluang untuk bertanyakan soalan tentangnya.

2. I understand that my participation and that of my child's are voluntary and that I am free to withdraw my consent at any time without giving a reason.

Saya faham yang penglibatan saya dan anak saya adalah secara sukarela dan saya bebas untuk menarik persetujuan saya pada bila-bila masa tanpa memberikan sebab.

3. I give permission for my child and myself to take part in the above research project at our home/ at the Hearing and Speech Clinic, International Islamic University Malaysia, Kuantan Pahang **(delete as appropriate)**.

*Saya membenarkan anak saya dan saya sendiri untuk mengambil bahagian dalam projek kajian di atas di rumah kami/ di Klinik Pendengaran dan Pertuturan, Universiti Islam Antarabangsa Malaysia, Kuantan Pahang **(potong mana yang tidak berkaitan)**.*

4. I understand that the video recordings and written information about my child and me will be given a code to keep us anonymous and our names will not be disclosed.

Saya faham yang rakaman video dan informasi bertulis tentang anak saya dan saya sendiri akan dikod bagi memastikan kami kekal anonymous dan nama kami tidak didedahkan.

5. I understand that the video footage of my child and myself will not be edited and our faces will not necessarily be anonymised on the video.

Saya faham yang footage video tentang anak saya dan saya sendiri tidak akan diubahsuai dan wajah kami tidak semestinya dirahsiakan di dalam video.

6. I give permission for the video and/or audio recordings collected for this study to be stored, securely and confidentially, for longer than the duration of the study.

Saya membenarkan untuk rakaman video dan/atau audio yang diperolehi untuk kajian ini disimpan, secara terjamin dan sulit, lebih lama daripada jangka masa kajian ini.

7. I understand that all unpublished data and recordings of my child and myself will be destroyed when my child reach 18 years old or instantly if I decided to withdraw from the study.

Saya faham yang semua data yang tidak diterbitkan dan rakaman anak saya dan saya akan dimusnahkan apabila anak saya berumur 18 tahun atau dengan segera jika saya mengambil keputusan untuk menarik diri dari kajian ini.

8. I give permission for video and/or audio recordings of my child and myself to be used for teaching purposes in the education of students in the Department of Human Communication Sciences, University of Sheffield, UK and Department of Audiology and Speech-Language Pathology, International Islamic University of Malaysia.

Saya membenarkan rakaman video dan/atau audio anak saya dan saya sendiri digunakan untuk tujuan pengajaran dalam pengajian pelajar di Jabatan Sains Komunikasi Manusia, Universiti Sheffield, UK dan Jabatan Audiology dan Patologi Pertuturan-bahasa, Universiti Islam Antarabangsa Malaysia.

9. I give permission for video recordings and/or audio recordings of my child and myself to be included in scientific presentations at conferences and meetings with other academics and professionals working in related area.

Saya membenarkan rakaman video dan/atau audio anak saya dan saya sendiri dimasukkan dalam pembentangan saintifik di persidangan dan mesyuarat dengan ahli akademik dan professional lain yang bekerja dalam bidang berkaitan.

10. I am willing to be contacted for potential participation in the follow-up study of this research project.

(Items 8, 9 and 10 are not compulsory for participation in the research)

Saya bersedia dihubungi mengenai kemungkinan penglibatan saya dalam kajian susulan projek ini.

(Item 8, 9 dan 10 tidak wajib untuk penyertaan dalam kajian ini)

NAME OF PARTICIPANT/NAMA PESERTA DATE/TARIKH SIGNATURE/TANDATANGAN
(or legal representative/atau wakil sah)

NOR AZRITA MOHAMED ZAIN _____ _____

Primary RESEARCHER/penyelidik Utama Date/tarikh Signature/tandatangan
(To be signed and dated in the presence of the participant/untuk ditandatangani di hadapan peserta)

A copy of this form, once signed by all parties and dated, will be given to the parent, together with a project information sheet. A copy of the signed and dated form will be kept in the main project file, in a secure location, by the research project team.

Setelah ditandatangani, satu salinan borang ini akan diberikan kepada ibu bersama-sama dengan maklumat kajian. Satu salinan yang bertandatangan dan bertarikh akan disimpan di fail utama projek, di lokasi yang selamat, oleh kumpulan penyelidik.