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漢語兒童在同儕對話中的語言遊戲

Mandarin-speaking Children's Language Play in Peer Talk

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By
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論文提要內容：

過去的研究發現兒童會針對同伴來調整語言遊戲 (Duranti & Black, 2012; Carter, 2016; Cekaite, 2018)，然而較少研究探討兒童與同伴之間的年齡差距對兒童語言遊戲的影響。本論文旨在探討兒童在和同齡同儕與混齡同儕互動中如何產生和回應語言遊戲，研究問題如下：(一) 在同齡組和混齡組內，兒童分別產生哪些語言遊戲？(二) 在同齡組和混齡組內，兒童如何回應彼此的語言遊戲？

研究語料來自四歲十一個月至六歲兒童的自然對話。兒童被分為兩種組別：同齡組（由兩位年紀較小的兒童或兩位年紀較大的兒童組成）、混齡組（由一位年紀較小的兒童和一位年紀較大的兒童組成），研究框架主要採用 Ely 和 McCabe (1994) 與 Cekaite 和 Aronsson (2014) 的分析方式。

研究結果發現同齡組和混齡組產出的語言遊戲數量相似，但兒童在同齡組和混齡組的互動不同——在混齡組內，較大的兒童傾向擁有主導權，較小的兒童則趨向屈居弱勢；在同齡組內，較小的兒童反而擁有更多產生語言遊戲的機會。同齡組也顯示出較小和較大的兒童喜歡運用的語言遊戲和回應不同，較小的兒童常用獨創文字遊戲 (original word play) 和回溯 (recycling)；較大的兒童則常用言語幽默 (verbal humour) 和笑 (laughter)。本研究也發現兒童會運用語言遊戲來互動溝通，例如：協調地位和展現身分。研究結果反映兒童有能力產生語言遊戲和運用語言遊戲達到社交功能，另外，年齡差距也會在同儕互動裡形成階級，而有不平等的情况。

Abstract

Previous studies have investigated children's language play (LP) and found that children attune their LP to their co-participants (Carter, 2016; Cekaite, 2018). Nevertheless, few studies have targeted the impact of age difference between co-participants on their LP. The present study aimed to understand how children produce LP and respond to LP in interactions with peers at the same age and different ages. The research questions are: (1) What categories of language play do children produce in same-age dyads and mixed-age dyads? (2) How do children respond to each other's language play in same-age dyads and mixed-age dyads?

The present study examined LP production in natural conversations produced by children aged 4;11 to 6;0. The children were paired in two kinds of dyads: same-age dyads (two younger children or two older children) and mixed-age dyads (a younger child and an older child). The children's performances of LP were analysed based on the frameworks of Ely and McCabe (1994) and Cekaite and Aronsson (2014).

The results showed that the LP tokens produced by the same-age dyads and the mixed-age dyads were similar; however, the interactions in the same-age and mixed-age dyads were different. In the mixed-age setting, the older children tended to be dominant in LP production, while the younger children were inferior. In the same-age setting, the younger children had more chances to produce more LP. The findings of the same-age dyads also showed that the younger dyads and the older dyads preferred different LP and uptakes. The younger dyads used original word play and recycling frequently, whereas the older dyads generally produced verbal humour and laughter. Finally, the data demonstrated that the children were able to exploit their LP to accomplish various social functions, such as social positioning and identity display. The results also reflected the children's language ability to generate LP and use it to perform social functions. Moreover, it was revealed that age difference resulted in hierarchies and created unequal environments.

Chapter 1

Introduction

Language is a commonly used medium in society and is an important means for communicating, negotiating, expressing thoughts, etc. People use language not only for communication, they also play with language. Language play (LP) is used to manipulate linguistic elements at several levels, such as the phonological level and the lexical level. Crystal (1998) elaborated how LP works: “[W]e take some linguistic feature—such as a word, a phrase, a sentence, a part of a word, a group of sounds, a series of letters—and make it do things it does not normally do” (p. 1). Language play appears in many forms, and it has been observed in all societies (Sherzer, 1993). Different studies have categorized LP differently. For example, Garvey (1977) categorized it into three main categories—play with noises and sounds, play with the linguistic system, and social play—while Ely and McCabe’s (1994) categorization differentiated sound play and word play into six subcategories—intrinsic sound play, onomatopoeic sound play, original word play, traditional word play, role play, and verbal humour.

Children, as language beginners, start to receive language inputs from more experienced language speakers when they are infants, and step by step, they gradually acquire linguistic and communicative competence in using language correctly in their interactions with others. During their acquirement of language, children also like to play with the language which they have not yet mastered, as many studies have shown that children are likely to play within the zone of proximal development. This notion was proposed by Vygotsky (1978)—children “always [behave] beyond [their] average age, above [their] daily behavior” (p. 102). With this exploration of play, children

sharpen their skills in language use and nurture their linguistic competence. As reported by previous studies, children as young as three are able to produce sequences of sound with melodies, and children at the age of three to five display joke-telling, repetition of words, creation of neologisms, and so forth.

Ely and McCabe (1994) suggested that children's LP occurs more commonly in natural discourse than in experimental settings or settings where an adult is present. However, before the 1970s, children's researches were mostly conducted in controlled experiment settings. In the 1970s to the 1980s, there was a shift in children's researches from traditional experimental and interviewing methods to more interpretive approaches. Researchers now recognize the uniqueness of the children's world, rather than comparing their world with that of adults presented in previous studies, as their interests have turned from children's production of correct and grammatical utterances to their social and cognitive development through language. Peer interaction and peer culture have also been a focus, and children's social competence and communication skills are now an investigative trend. Regarding peer interaction, some studies have found age-graded hierarchies (Griswold, 2007; Reynolds, 2007), while others have revealed that age difference results in more cooperation (Gray, 2011; Liu & LaFreniere, 2014).

Preschool children need to learn how to interact with peers, which involves a great deal of negotiation, alignment, inclusion, exclusion, etc. Many studies have found that children's LP not only builds up their linguistic competence but also enhances their communicative competence. Language play can itself be the target of play in peer interactions, as Cekaite (2018) has suggested: "Children's language play [is] a cultural activity with social and distributed aesthetics, where creative, incongruent, and unexpected speech and action [are] valorized, appreciated or criticized" (p. 34). Language play can serve several social functions as well. A variety of studies have

revealed that children are able to use LP to align viewpoints (Carter, 2016), create membership (Carter, 2016; Cekaite, 2018), build alliances (Carter, 2004; Maybin, 2016), display identity (Kyratzis, 2004; Maybin, 2016), negotiate (Moore, 2012), and even subvert social order (Cook, 2000; Carter, 2016). All of these studies demonstrated the collective and social nature of language play.

Huth (2017) stated that “[l]anguage play is implicated in the social and cognitive processes relevant for language development over time” (p. 47). From the literature reviewed, researchers know that it is important to look at the social interactions displayed by children in language play. As peer culture contributes to “children’s acquisition of language practice and how language works to effect social goals” (Nelson, 2014, p. 245), and many studies have proved that there is more language play in peer talk, children’s LP in peer interactions should be a focus of study.

After observing children’s social performances in peer interactions, some researchers adopted cross-sectional studies on children’s LP development, while others chose ethnographic or longitudinal approaches. The former often grouped children into same-age peer play groups, while the latter observed them in natural mixed-age peer play groups. Previous studies have found that children in same-age peer groups produce rich forms of language play; however, in mixed-age groups, the younger children often play the active agents who try to initiate LP and interact with the older children. Furthermore, the social contexts and responses of different co-participants have been validated by previous studies which found that they influence children’s amount and categories of language play. With these findings, it was expected that different-age dyad pairs would affect LP in the current study.

Although a number of studies have investigated children’s LP and their social performances in peer interactions, few have targeted the impact of age difference between co-participants on their language play. Moreover, there is a gap in the

research in that children's LP has usually been explored in either same-age peer groups or mixed-age peer groups through different research methods, lacking the comparison of LP between these two types of groups. Since children produce collaborative language play, whether in interactions with same-age peers or mixed-age peers, the present study aimed to find out whether the amount and categories of LP they produced with same-age peers and mixed-age peers differed.

In addition, most of the previous studies that targeted language play in mixed-age peer groups concentrated on siblings' interactions, as Gray (2011) found that there were few studies on mixed-age play among non-siblings. The present study therefore focused on children's LP in same-age and mixed-age peer groups, hoping to contribute to ongoing research on children's language play.

This study examined the LP of Mandarin-speaking children in both same-age dyads and mixed-age dyads. Based on the premise that preschool is an important period in which children learn to get along with their peers, naturalistic data from preschool children at around five and six years old was collected and analysed. It was expected that the children would use diverse forms of language play with their peers and that there would be some differences in the amount and categories of LP between same-age dyads and mixed-age dyads. The research questions are presented as follows:

1. What categories of language play do children produce in same-age dyads and mixed-age dyads?
2. How do children respond to each other's language play in same-age dyads and mixed-age dyads?

Chapter 2

Literature Review

The literature review will cover the discussions on the definitions of language play, children's use of language play, and peer interactions. This chapter consists of five sections: Section 2.1 will present the terms and definitions of language play in previous studies; Section 2.2 will illustrate the children's developmental stages in language play and the purposes of language play; Section 2.3 will offer a review of the factors in children's language play in their social interactions; Section 2.4 will discuss the features and importance of children's peer interactions; and Section 2.5 will summarize the children's interactions with same-age peers and mixed-age peers.

2.1 Definitions of Language Play

Language play manipulates linguistic forms. Previous studies have referred to this phenomenon by using different terms—"speech play" (Sherzer, 2002), "metalinguistic play" (de León, 2007), "verbal play" (Aronsson, 2012), "verbal improvisation" (Duranti & Black, 2012), and "language play" (Garvey, 1977; Ely & McCabe, 1994; Maybin & Swann, 2007; Aronsson, 2012; Moore, 2012; Cekaite, 2018). Some studies on second language acquisition have also used the term "language play" (Broner & Tarone, 2001; Cekaite & Aronsson, 2004, 2005, 2014; Ahn, 2016). Different terms suggest different definitions and perspectives of language play. Sherzer's (2002) "speech play" refers to the manipulation of linguistic elements like sound, semantics, and discourse. Sherzer (2002) also regarded speech play as "a form of language use" (p. 4) that includes play languages, puns, jokes, put-ons, proverbs, riddles, and verbal duelling, all of which are widespread in different

cultures, and among these forms, riddles, jokes, and metajokes are popular in the children's world.

On the other hand, de León's (2007) "metalinguistic play" paid attention to the repetition and parallelism used by children, which demonstrated children's metalinguistic competence in reversing hierarchies through metalinguistic play. Unlike de León (2007), Duranti and Black (2012) captured the improvised nature of "verbal improvisation", comparing verbal improvisation to music and theatre improvisation. Duranti and Black (2012) discriminated the meaning of verbal improvisation between "flexibility" (p. 445), "performed creative behavior" (p. 448), and "patterned behavior" (p. 453), which covered repetition, verbal play, and joking. Aronsson (2012) also emphasized the improvisation nature of "verbal play" (also called "language play") as a performance, and a successful performance included "spontaneous collaborative play actions" (p. 474). Aronsson's (2012) definition of verbal play, which was adopted from Sullivan (2000), Broner and Tarone (2001), and Cekaite and Aronsson (2005), consists of rhyming, mislabelling, alliteration, puns, and repetitions.

Most researchers have used the term "language play". Moore (2012) characterized language play as "the use of rhyme, rhythm, alliteration, and other repeating patterns in language to amuse, delight, dispute, and confound" (p. 215). Cekaite's (2018) LP term involves "onomatopoeic embodied play: repetitive sound innovations" (p. 29), the "transformation of interactional routines" (p. 30), "scatological play as sound and lexical innovations" (p. 31), and "multilingual lexical innovations" (p. 33). Garvey's (1977) categorization of LP, on the other hand, made a distinction between non-social and social language play. The categorization of LP is shown in Table 1 below. Play with noises and sounds and play with the linguistic system are considered non-social, while social play is regarded as social.

Table 1. Categorization of language play (Garvey, 1977)

Play with noises and sounds

Repetitive, rhythmic vocalizations
Conventionalized noises
Distortion of normal articulation
Solitary singing/humming

Play with the linguistic system

Phonological aspect
Grammatical aspect
Semantic aspect

Social play

Spontaneous rhyming and word play
Play with fantasy and nonsense
Play with pragmatic aspects of language

Ely and McCabe's (1994) categorization of language play differentiated sound play and word play through its reorganization of several sources (i.e., Freud, 1960; Chukovsky, 1963; Garvey, 1977; Iwamura, 1980; McGhee & Kach, 1981; Kuczaj, 1982), which is shown in Table 2 below. Ely and McCabe's (1994) classification includes two main categories: (1) sound play; and (2) word play. The former represents the manipulation of sounds, and it contains two subcategories—*intrinsic sound play* and *onomatopoetic sound play*—while the latter involves playing with words, and it contains four subcategories—*original word play*, *traditional word play*, *role play*, and *verbal humour*. Each subcategory has different features and contents, such as repetition, neologisms, songs, nonsense, etc.

Table 2. Categorization of language play (Ely & McCabe, 1994)

Sound play	
Intrinsic	Repetitive, rhythmic and melodic phonation.
Onomatopoeic	Sound effects uttered in the course of gross motor, dramatic, or toy play.
Word play	
Original word play	Repetition, imitation, neologisms, rhyming, and alternations in prosody; embellishments such as metaphors, hyperboles.
Traditional word play	Standard nursery rhymes and children's songs and verse.
Role play	Utterances adopting another real or imagined voice.
Verbal humour	Riddles; "bathroom" jokes and humour-associated lines from popular culture; brief, intentional, original, and spontaneous retorts, teases, sarcasms, and "wise guy" remarks ; nonsense humour; and humorous descriptive accounts and narratives.

Unlike other studies, Cekaite and Aronsson (2014) did not provide categories for language play but instead proposed an analytical framework for it, of which the analytical unit was language play improvisation, including language play and uptake. The framework drew on their participants' perspectives—that is, what was considered humorous as defined by the participants—and language play was identified by peer responses (uptakes).

In the present study, the researcher used the term “language play” to refer to this kind of language use, as have most of the previous studies. Moreover, Ely and McCabe's (1994) categorization of language play and Cekaite and Aronsson's (2014) analytical framework were adopted.

2.2 Developmental Trajectory and Purposes of Children's Language Play

Children's acquisition of language play begins in the infant period, which takes place during their earliest interactions with their parents. Parents' LP has been observed in child-directed speech in their children's first year, for example, “frequent use of nonsense vocalizations of endearment” (Crystal, 1998, p. 160) and singing of “tickling rhymes” (Cook, 2000, p. 13). While parents produce various types of LP,

children's performances reflect their acquisition of them.

It has been reported that at a very early age—between 0;6 and 0;10—children are able to play with sounds and produce phonation, which is “the most primitive level” of language play (Garvey, 1977, p. 30). According to Stern (1974), prelinguistic children can produce various sounds when babbling. When children are at the age of 10 to 12 months, as Garvey (1977) has pointed out, “[i]t is possible to identify episodes of verbal play with sound” since children can distinguish between “making vocal noises and speaking” (p. 30). Garvey (1977) further suggested that children at age one can already generate long episodes of rising and falling melody of a single vowel. When children reach two to three years old, their language play makes rapid progress as they pick up the use of “conventionalized noises” and start to use these noises to “identify certain events and actions,” especially in play with peers (p. 31). According to Garvey (1977), children past the age of three can already play with all levels of language, from sound play to word play and pragmatic play.

Children at the age of three to five years old have been observed producing more word play than younger ones. As children around the age of three to five grasp more complex linguistic structures, they have also been found to display morphological play (Crystal, 1998), joke-telling, and enjoyment of humour (Apte, 1985). As children become more mature, their word play becomes more skilful. In an investigation by Ely and McCabe (1994), children at around age five engaged in the repetition of words with melodies and the use of others' names to create neologisms in a free time activity. For six-year-old children, language play appears in many forms and becomes more and more sophisticated in the following few years (Crystal, 1998). To summarize, children's acquisition of language play occurs earliest in their interactions with their parents, and the developmental trajectory of language play is from sound play to word play.

Children produce language play for multiple purposes, but their primary purpose is for fun, as Crystal (1998) stated: “We play with language when we manipulate it as a source of enjoyment, either for ourselves or for the benefit of others.... And if someone were to ask why we do it, the answer is simply: for fun” (p. 1). Norrick (2017) shared the same view in his further remarks on LP in conversation: “Playing with language aims to elicit amusement and good feelings” (p. 27).

One of the commonest uses of children’s language play listed by Crystal (1998, p. 177) is “just for fun,” which can be observed in jingles, tongue-twisters, nonsense rhymes, parodies of popular songs, and ridiculing of events. Children’s fun play has also been signalled by repetition (Aronsson, 2012). In addition, word play, as “humorous delight in sounds and word combinations,” was found in nursery school children’s productive humour type in Groch’s (1974, p. 1099) study, which assessed three forms of humour—responsive, productive, and hostile—in children aged three to five years old. Children also enjoy making noises, which was discovered by Garvey (1977), who found that playing with noises can be “an absorbing motor activity in itself, or can be used to provide special sound effects” (p. 30). The above findings have thus pointed out the main purposes of children’s language play—for enjoyment, amusement, and humour.

Children’s enjoyment of language play has often been found in interactions with others. Broner and Tarone (2001) suggested that the primary purpose of LP “seems to be the having of fun, and any impact on social relationships follows from that” (p. 365), namely, children play with language primarily for fun, but their LP also has some social functions. Unlike Broner and Tarone (2001), Cekaite’s (2018) study found that a stronger intention of LP was to amuse others, as “various forms of incongruence were used as a resource for constructing entertaining improvisations for the peer group” (p. 29), which consisted of interactions between peers who were three

to six years old.

Besides the view that children's language play is for fun, another notion has advocated that children's LP is for learning and rehearsing linguistic forms not yet mastered (Broner & Tarone, 2001). In fact, the relationship between enjoyment and mastery is complementary, as illustrated in Kuczaj (1982), who pointed out that when language play is regarded as play, the primary function is enjoyment, while the secondary function is mastery. On the other hand, if LP is considered practice, the primary function is mastery, while the secondary function is enjoyment. Whatever the primary function or goal of language play is, it has been widely recognized that children play with the target forms that they acquire. Kuczaj (1982) claimed that "children seem most likely to play with those behaviors which they are in the process of acquiring" (p. 211). This claim is in accordance with Weir's (1962) study on her son Anthony's behavior (age: 2;10)—she found that he often repeated and varied newly learned linguistic structures in his speech at bedtime. A variety of previous studies have also agreed that LP fosters children's language skills (Kuczaj, 1982; Nelson, 1989; Lantolf, 1997; Moore, 2012; Cekaite & Aronsson, 2014). Language play provides children with an opportunity to practice and rehearse linguistic patterns "by making particular linguistic features salient" (Moore, 2012, p. 216), and this activity helps children "become aware of and display knowledge of language use" (Cekaite & Aronsson, 2014, p. 194). Language play supports children's language development at all levels, as Cekaite and Aronsson (2014) further elaborated that children's LP is "important for their development of lexicon, grammar, and phonology, as well as for their appropriation of sociocultural norms" (p. 194).

Language play is also used by children to regulate and monitor themselves, for example, to "regulat[e] the activities within a game" like "skipping with a rope" (Crystal, 1998, p. 173). Children can use LP for self-rehearsal, self-monitoring, self-

guidance, and self-thinking (Kirby, 1998; Han, 2015; Han & Qin, 2016). It was found that children's sound play was used to "identify certain events and actions" and "elaborate the context of pretending and always occur[s] with the appropriate physical activity" (Garvey, 1977, p. 31). For instance, humming can offer children rhythmic and temporal regulation when banging on an object (Garvey, 1977).

Another vital function of LP that has been explored by many studies is for social and communicative purposes. Crystal (1998) suggested that when children are around three to four years of age, "[they] start using each other's play language¹ as a trigger for further variations" (p. 169), a finding that has been proved by many other studies which discovered that children three to four years old start to produce language play socially and collaboratively (Garvey, 1977; Kuczaj, 1982; Kyratzis, 2004; Cekaite, 2018). It has been reported that children recycle and modify each other's prior utterances in word play and sound play (Keenan & Klein, 1975; Garvey, 1977; Iwamura, 1980; Kuczaj, 1982; Howard, 2009; Cekaite, 2018). For example, in Garvey's (1977) report, a boy (5;2) said, "Grandmother...grandmother...grandmother," and a girl (5;4) varied his utterances with a new word shape: "Grandmomma...grandmomma...grandmomma."

As Valentine (1942) stated, "[t]he response to another's vocalization [is] motivated by children's desire for social relations" (p. 213), and numerous studies have explored how children utilize language play to maintain their relationships with others. Cekaite and Aronsson (2014) pointed out that children's LP "establishes a play frame, inviting audience laughter or other playful uptakes" (p. 211). Keenan (1974) found that imitation is used by children to acknowledge their attention to others' utterances, which functions as a way to "establish and maintain communication"

¹ Play language: Linguistic codes derived by a small set of rules from a language in use in a particular speech community (Sherzer, 2002).

(Rees, 1975, p. 347). Moving on from the discourse level, one can see that language play's social functions are multiple—it can “work as a cultural resource for establishing social alignments and solidarity, and it can simultaneously be used to delineate the social boundaries of a group” (Cekaite, 2018, p. 27). Many studies have confirmed that interactional language play is used by children to show alignment or criticism towards a peer group (Crystal, 1998; Cook, 2000; Kyratzis, 2004; Moore, 2012; Maybin, 2016; Cekaite, 2018). To be more specific, LP like repetition and sing-song intonation in jokes, songs, and sound play are popular among children for peer alignment and involvement, as well as peer social relation organization (Kyratzis, 2004; Cekaite, 2018).

The above studies probed the developmental stages and the purposes of children's language play. Their findings suggest that children's developmental trajectory is from sound play to word play and that children as early as three years old are able to play with linguistic elements at all levels. Children's acquisition of LP first appears during their interactions with their parents, and later, many instances of LP occur in their interactions with peers. In addition, children play with language for fun, for rehearsal, for regulation, and for social purposes. In social interactions, LP has various social functions, such as social alignment and criticism. Among these social functions, to sound funny, attract others' attention, and display identity are common goals for children.

2.3 Factors in Children's Language Play

Some researchers have been curious about the variables of language play in social interactions. Kuczaj (1982) claimed that social context has an effect on language play. There are three social situations of children's play, and children are aware of which one they are in. The three social situations are as follows:

- (a) solitary play: individual self-centered play which occurs in solitude
- (b) social context play: individual self-centered play which occurs in the presence of others
- (c) social play: interactive play

Solitary play and social context play are non-social, while social play is social.

Garvey (1977) found that play with noises and sounds and play with phonological, grammatical, and semantic aspects take place more often in solitary play and social context play than in social play; on the other hand, fantasy, nonsense, play with speech acts, and play with discourse conventions occur more often in social play.

Children's language play has been regarded by various studies as a performance—children design their LP for their audience (Garvey, 1977; Iwamura, 1980; Crystal, 1998; Maybin & Swann, 2007; Duranti & Black, 2012; Aronsson, 2012; Carter, 2016; Cekaite, 2018). A few studies have also pointed out that the presence of peers can prompt children's language play (Garvey, 1977; Iwamura, 1980; Broner & Tarone, 2001). Children, as performers who try to display their language competence, assume that they are responsible for their performance to show their competence in front of an audience. Children older than one year are already conscious of the presence of others and the need to show their language competence, for example, when they “find themselves in pairs or small groups, they often begin to ‘talk funny’” (Crystal, 1998, p. 165). Five-year-olds engaged in collaborative language play start to “outdo each other in verbal play, trying to score over the previous speaker, or maybe just trying to keep the game going” (Crystal, 1998, p. 169). This age group tries to make the language play last in the peer group by continuing to contribute some utterances to it, thus making it an interactive experience. The awareness of others also prompts children to display identity through LP, as Carter (2016) observed: “Speakers may signal that they like to be thought of as

individuals who are fun to be with or who can offer a new perspective on things” (p. 109). Moreover, children are sensitive to their audience’s responses. Cekaite (2018) found that children tend to adjust their LP upon others’ feedback.

Since children are sensitive to their audience’s feedback, co-participation is also a factor that influences children’s language play. Co-participants play an important role in a successful LP performance. As Aronsson (2012) noted, “[i]t is through co-participants’ uptake that players jointly create a truly successful performance” (p. 474). Co-participants’ assessments and their uptake of LP, along with negotiations of what is playful between each participant, are important factors for children in adjusting their language play.

A number of studies have further proved that the social roles of co-participants are critical and can influence the amount and categories of language play children produce. Martlew, Connolly, and McCleod (1978) observed a boy (5;6) in play with different co-participants—alone play, play with a friend, and play with his mother—and discovered that the boy’s rhyming production in his play with a friend was twice as frequent as that in alone play, while none was found in his play with his mother; a similar distribution was found in taboo play. Moreover, the boy played with noise four times more frequently in the alone situation than in his play with a friend and 10 times more frequently than in his play with his mother, resulting in a noise play frequency with a friend that was twice as high as that with his mother. Similar findings were claimed by Hiebert and Cherry (1978), who targeted language play in 14 children aged 2;6 with two types of co-participants—parents and familiar peers; after they examined the children’s interactions with these co-participants, they concluded that “[m]ore sound play was produced in the peer-child interactions than in the adult-child interactions” (p. 163). The above studies suggest that children are aware of how they can play in interactions with different social roles of

co-participants, again proving that children tend to be attuned to particular co-participants.

Both the role of the co-participants and the children's familiarity with them impact children's language play. Keenan and Klein (1975) reported that twin boys (2;9) were able to produce cooperative sound play by "attend[ing] closely to the phonological shape of one another's utterances and repeat[ing] or modify[ing] slightly a sequence of sounds just produced" (p. 374), which was rarely seen in dyads of a similar age in Garvey's (1977) investigation. Rubin, Hultsch, and Peters (1971) and Dickie (1973) also showed that when children's social context included a familiar person (either a friend or a parent), they generated more repetition and word play than with an unfamiliar person. Foregoing researches have all reflected that children produced more social language play in interactions with greatly acquainted others. Kuczaj (1982) took a closer look at the degree of which familiarity with co-participants had an effect on language play production and revealed that the less familiar the peer was, the less frequently children generated LP in social context play and social play.

To conclude, children consider language play a performance before others, and they may adjust their LP according to co-participants' feedback. Additionally, social contexts, co-participants' assessments, social roles, and familiarity may influence children's language play.

2.4 Children's Peer Interactions

In children's early childhood, caretakers are the primary people who interact with them. By the time they enter preschool, peer interactions make up a large proportion of their lives, as they learn how to make friends, play, and negotiate with others. Some elaborations of children's preschool time have been found in Fabes,

Martin, and Hanish (2009), for example, “[p]reschool is a time when many children are first exposed to large numbers of peers outside of their family.... Preschool also is a period when children move from playing alone or alongside other children toward true interactive play” (p. 47). Preschool is an important period for most children because they need to learn how to get along with peers other than family members (such as parents and siblings) and develop their behaviors and attitudes in their interactions with them. A great number of studies have stated the importance of peer interactions in children’s language development, communication skills, and social competence (Blum-Kulka & Snow, 2004; Kyratzis, 2004; Goodwin & Kyratzis, 2007; Duranti & Black, 2012; Cekaite, Blum-Kulka, Grøver, & Teubal, 2014).

This fostering of skills is often carried out through peer talk, in which children socialize with each other through their conversations, as in the “language as social action” view suggested by Kyratzis (2004). Children’s peer talk has the distinct feature of a “collaborative, multi-party, symmetrical participation structure” (Blum-Kulka & Snow, 2004, p. 291) that builds up a co-constructed childhood culture which is different from that of adults (Cook-Gumperz & Kyratzis, 2001). Peer culture involves “a stable set of activities or routines, artifacts, values, and concerns that children produce and share in interaction with peers” (Corsaro, 2012, p. 10). In peer culture, children are social agents who are active in building their values, norms, identities, and valued behaviors in their peer groups (Kyratzis, 2004; Goodwin & Kyratzis, 2007), and peer talk contributes to maintaining these ideologies. The “agentive use of language” of peers is always involved in setting social orders and moral standards, as well as managing hierarchies (Goodwin & Kyratzis, 2007, p. 280).

Furthermore, peer talk is a great occasion in which children can practice collaborative social conversations and language play (Cekaite et al., 2014).

Spontaneous LP occurs most commonly in children's free play sessions, where they are relaxed and happy playing with their playmates (Groch, 1974; Hiebert & Cherry, 1978). Duranti and Black (2012) proved that "peer-group interactions are full of verbal improvisation" (p. 448). As Biber (1972) stated, "[l]earning [is] soundest when the environment encourage[s] the child in his impulse to 'experiment' with the exercise of his growing powers" (p. xi), and it is in this encouraging environment that children's creativity and imagination in LP can be seen (Cekaite, 2018). Language play is commonly seen in peer talk, as Duranti and Black (2012) verified that "children interacting among themselves seem to naturally engage in creative behavior" compared with adult-child talk (p. 447). For example, children can take advantage of the prior speaker's utterances by recombining the linguistic elements to overthrow the social order and to demonstrate their ideas. Teasing is also a category of LP used for the negotiation of norms in peer groups (Kyratzis, 2004).

Children, as active members in peer groups, are concerned about their social status and their relationships with others, and these concerns are often confirmed by play, as suggested by Fabes et al. (2009): "Play is essentially the method by which children communicate with each other in social settings" (p. 43). With their interactions with peers, children acquire the skills to "sustain interactive and reciprocal play" (Fabes et al., 2009, p. 47). In play, children achieve their goals in peer groups by "negotiat[ing] their social positions and accomplish[ing] the social organization" (Goodwin & Kyratzis, 2007, p. 286).

Previous studies have shown that children's peer interactions result in hierarchies (Goodwin, 2001; Kyratzis, Marx, & Wade, 2001; Evaldsson, 2004; Kyratzis, 2004). In peer groups, some children are dominant and authoritative, while others are submissive. Kyratzis (2004) stated that children are able to "enact power" by manipulating different linguistic elements (p. 642); in many cases, they strive for

more superior social roles by using powerful language like directly claiming their roles and maintaining the frame and regulating the rules of games. Moreover, some studies have pointed out that hierarchies are “age-graded” (de León, 2007; Goodwin & Kyratzis, 2007; Reynolds, 2007). Reynolds (2007) investigated Mayan children’s conflict talk² in peer talk and found that an older child (14;0) used greeting routines in a sarcastic way towards a younger child (11;0) and sarcastic greetings plus insulting nicknames towards an even younger one (9;0). Moreover, in one occasion, the youngest child (2;0) was regarded by all the other children as the least competent one, who “parroted [an older child’s] words and acts” (p. 458). Griswold (2007), on the other hand, conducted an analysis of Russian girls’ nonconflictual talk and discovered that “children establish hierarchies of authority by placing themselves in positions subordinate to a dominant peer” (p. 296). For example, younger children (6;0 and 7;0) gave an older child (9;0) a more powerful familial role as their mother, putting themselves into submissive positions. Furthermore, the older child (9;0) was sought out by the younger children for role-play assignments and solving disputes.

The above findings show that there are hierarchies in peer interactions and that the hierarchies are attributed to age. Younger children tend to have a lower status, while older children tend to be the dominant or prestigious party.

2.5 Same-age Peers and Mixed-age Peers

As previous descriptions have indicated, the social contexts, social roles, and familiarity with co-participants can influence the amount and categories of children’s language play. Children can become attuned to co-participants depending on their different roles and responses. It has been suggested that children are aware of the

² Conflict talk: Teasing, shaming, and insulting nicknames (Reynolds, 2007).

relative age of each other and that there are “age-graded hierarchies” (de León, 2007; Reynolds, 2007), so age might make a difference in children’s interactions. The following review will illustrate some studies on children’s language play with same-age peers and some with mixed-age peers.

Garvey (1977) provided evidence for children’s language play with same-age peers in a cross-sectional study in which LP in 48 dyads of three age groups was observed: 12 dyads were 2;10 to 3;3 years old (youngest), 12 were 3;6 to 4;4 (young), and 24 were 4;7 to 5;7 (old) (p. 29). Both young dyads (3;6 to 4;4) and old dyads (4;7 to 5;7) played with rhyme (e.g., high/sky) and dirty words (e.g., Mrs. Poop). On the other hand, in play with pragmatic aspects of language, misnaming referents and words was a source of fun for the old dyads, while the young dyads and the youngest dyads preferred correct forms of labelling.

Blum-Kulka, Huck-Taglicht, and Avni (2004) observed 20 preschoolers’ discourse events and found that there was rich sound play, rhyme play, and word play among these same-age peers (five-year-old dyads and six-year-old dyads). For example, they used other children’s names for rhyme play (e.g., “Sam kasam”); they made nonce words and listed parallel constructions (e.g., “a silver key, a golden key, and a blue key”); they repeated foreign-sounding names and produced playful recyclings of patriotic songs (e.g., “My shit is blue and white today”); and they role-played the Pokémon characters.

Ely and McCabe (1994) explored language play among 20 kindergarten children (average age: 5;10). The children’s interactions with their same-age peers included sound play (e.g., “B b b b b”), repetition, role play (e.g., baby talk), teasing (e.g., “Duffy Muffin”), nonsense exchanges, etc., and 23.2% of their utterances included language play, sound play accounted for 7.7%, and word play was 15.5%.

Concerning children’s speech events, Kyratzis (2004) claimed that in same-age

peer interactions, younger children were good at “turn-taking”, “responding quickly”, and “building on and topping their partners”, while older children were observed to be adept in “collaborative storytelling”, “humorous stories”, and “gossip talk” (p. 630).

From the above studies, it can be concluded that when interacting with same-age peers, children around five years old are likely to play with rhyme, dirty words, nonsense words, parallel constructions or repetition, and role play. Furthermore, according to Ely and McCabe (1994), around one-quarter of their utterances involve language play.

On the other hand, several studies focused on children’s LP in a mixed-age peer environment. De León (2007) explored Zinacantec Mayan siblings’ culture in a two-decade-long study of Mayan children’s language acquisition. In an extract, de León (2007) presented a young child (2;2) who initiated a greeting game with an older brother (4;0), where the younger one used the “are you there (y)?” format and the older one responded with the “I am here (x)” format, where x and y were open slots to be filled in by some objects seen in their domestic lives (e.g., x: chair, y: table). The parallelism³ of the adjacency pair with “semantic substitution and counterpointing” not only showed “playful opposition” (p. 415) and an argumentative structure in the Mayan siblings’ culture but also displayed the active role of the younger child in interacting with the older child.

Howard (2009) discovered that repetition was popular among Thai children’s mixed-age play groups after spending 10 months videotaping the children’s interactions at home, in school, and in play groups. Howard (2009) focused on their language play and presented an example of a mixed-age play group that was comprised of a target child aged 5;5 with a brother (7;5), a cousin (8;0), and two

³ Parallelism: Consists of couplets of parallel lines that repeat syntactically with substitutions of words or phrases (de León, 2007).

neighbouring children (8;0 and 4;0). The results showed that repetition was a frequently used form for both the older children and the younger children. The older children often “recycle[d] and buil[t] upon each other’s contributions” for “new and increasingly complex language play” (p. 350), while the young target child, though with a peripheral and subordinate position in the mixed-age peer group, tried to repeat others’ prior utterances and earlier utterances to successfully participate in their LP and break into the social group.

Cekaite (2018) observed Swedish children, three to six years old, in a preschool for 3.5 months. Repetition with or without variation was also popular among both the older children and the younger children. A younger child (4;5) exploited repetitive sound play to repair a friendship with another younger child (4;5), who announced that an older child (6;0) was her buddy, but not the younger one. In another example, an older child (6;0) objected to a younger child’s (5;0) sound play and proposed a new sound element (“mi mi”), which sounded like the younger child’s innovative sound play (“bibibi”). Though sound play was reported in young children’s (1;0~3;0) private language play as explorations of linguistic forms by many studies, Cekaite (2018) found that sound play was also used by the three- to six-year-olds “as a social interactional resource to organize peer group social relations, and to repair a friendship trouble” (p. 29).

In conclusion, children in mixed-age peer groups tended to exploit sound play and repetition when interacting with children at different ages. As for the older children in the mixed-age peer groups, they either built upon each other’s complex language play (Howard, 2009) or objected to the younger ones’ language play (Cekaite, 2018), granting the younger children a peripheral position. On the contrary, the younger children played a rather active role in the mixed-age peer groups. They initiated a greeting game (de León, 2007), repeated the older children’s utterances and

successfully broke into the older group (Howard, 2009), and transformed the older ones' sound elements in sound play (Cekaite, 2018).

Some studies have provided evidence that children act differently when interacting with same-age peers and mixed-age peers. Younger children are drawn by older children into social play (Gray, 2011). Fagan (2009) also pointed out that older children can attract younger children, and when given a choice, "children demonstrate a preference for imitating an older model or one that is perceived to be more experienced rather than same age, younger or less experienced model" (Fagan, 2009, p. 27). Similar findings can be seen in Goldman (1981), who compared three classes of three-year-olds, three classes of four-year-olds, and three mixed-age classes (three-year-olds and four-year-olds) and found that "social participation in mixed-age classes differed from social participation in same-age classes" (p. 644). The children in the mixed-age classes, compared with the children in the same-age classes, tended to spend less time in parallel play⁴ and more time in interactive social play. Both the three-year-olds and four-year-olds were more sociable in the mixed-age group, proving that a mixed-age group can facilitate social participation for both older and younger children.

Gray (2011) and Liu and LaFreniere (2014) revealed that children's mixed-age play was more cooperative, more creative, and more playful than that in same-age play. Compared with the interactions between the same-age peers, much scaffolding and learning took place between the mixed-age peers. Howes and Farver (1987) and Maynard (2002) both found that older children provided models, helped younger children engage in social cooperative play, and increased the level of complexity and sociability of play. This proves what Cekaite et al. (2014) stated: "Children can learn

⁴ Parallel play: The child is playing in a project area with other children and is working with similar materials but is not interacting with them (Goldman, 1981).

from each other, fluidly switching between expert and novice roles, because they operate within one another's proximal zones of development" (p. 9).

To summarize, there are various definitions for language play, among which the present study adopted the term "language play" and exploited Ely and McCabe's (1994) categorization of language play and Cekaite and Aronsson's (2014) analytical framework. Previous research has shown that children play with language for four main purposes: for fun, for rehearsal, for regulation, and for social communication. Moreover, it was found that children produce more language play in peer talk. Furthermore, co-participants may influence children's language play production. The present study targeted the age difference between co-participants to compare language play production in same-age and mixed-age interactions. Children's natural peer talk was observed, and their language play was analysed.

Chapter 3

Methodology

To find out whether there were differences between language play in same-age and in mixed-age children's interactions, and how children in these two kinds of groups reacted to each other's language play, this study collected natural conversations between peers at their kindergarten. The participants and data will be presented in Section 3.1, the data collection procedure will be explained in Section 3.2, and the analytical frameworks that were applied for data analysis will be introduced in Section 3.3.

3.1 Participants and Data

The data were drawn from the Child Language Acquisition Lab directed by professor Chiung-chih Huang in the Graduate Institute of Linguistics, National Chengchi University, Taipei, Taiwan. The data in this study came from eight children in total (4;11~6;0), the ages and sex distribution of which are shown in Table 3 below:

Table 3. Information of participants

Code	Age at Recording	Sex
GJL _y [*]	4;11	male
CKC _y	5;0	male
XBX _y	5;2	male
CPA _y	5;4	female
LHU _o	5;9	male
LHY _o	5;11	male
PYC _o	5;11	female
ZJR _o	6;0	female

^{*}Subscript y stands for "younger"; o for "older."

As shown in Table 3, the first four children (GJL_y, CKC_y, XBX_y, and CPA_y) were around five years old (4;11~5;4) and they were regarded as the younger children. The last four children (LHU_o, LHY_o, PYC_o, and ZJR_o) were about six (5;9~6;0) and they were considered the older children. All eight participants attended the same class in the kindergarten, meaning that they were familiar and usually played with each other. As for the children's language, all of the participants' native language was Mandarin Chinese, and all were normal in both cognition development and language development.

The reason why children older than four were chosen was that children in that age group were reported in previous studies as having the ability to play with both sounds and words and even to tell a joke and enjoy the humour (Groch, 1974; Garvey, 1977; Apte, 1985; Ely & McCabe, 1994; Crystal, 1998). Moreover, Garvey (1977) discovered that social language play appeared after the age of three, and at around 3;4 to 3;6, "all levels of language structure [are] used as a basis for social play" (p. 35).

The children were paired into eight same-age dyads and eight mixed-age dyads according to the suggestions given by their teachers. Each same-age dyad included two younger children or two older children. The children in the same-age dyads were less than five months apart in age, and the average age disparity between two children was two months. A same-age dyad of two younger children was defined as a younger dyad, while a same-age dyad of two older children was considered an older dyad. In the eight same-age dyads, four of them were younger dyads (average age: 5;1) and four of them were older dyads (average age: 5;10). On the other hand, each mixed-age dyad consisted of a younger child and an older child. In the eight mixed-age dyads, the children were more than seven months apart in age, and the average age disparity between the older child and the younger child was 9.5 months. Though the age

disparity was not as great as that in previous research, the children in the current study were aware of each other's age difference in the mixed-age interactions, as shown in the following conversation:

- ZJR_o: 你幾歲?
ni3 ji3 sui4?
“How old are you?”
- GJL_y: <滿> [!] 五歲耶。
man3 wu3 sui4 ye2.
“I’m just five years old.”
- ZJR_o: 我六歲。
wo3 liu4 sui4.
“I’m six years old.”

The researcher consulted the children's teachers for dyad arrangement. Moreover, the researcher made sure that the participants were familiar with each other by asking them if they often played together so that every dyad met the requirement of pairing, ensuring that the children were familiar with each other. The interactions between the children in each dyad were recorded while they were playing with blocks in the kindergarten classroom. Blocks were chosen because they are social toys; as proved by Brito (2017), they induce “a higher frequency of peer interaction” (p. 5). By using blocks, it was ensured that the children would produce more utterances compared with other toys. The conversations of each same-age dyad were recorded for 30 minutes, and each child participated in two same-age dyads, giving rise to the 60-minute conversations of each child with their same-age peers. Similarly, the conversations of each mixed-age dyad were observed for 30 minutes, and each child participated in two mixed-age dyads, resulting in the 60-minute conversations of each child with their mixed-age peers. Thus, each child was recorded for a total of 120 minutes. The composition and recording time of each dyad is shown in Table 4 below:

Table 4. Information of dyads

	session	subjects	time duration (minutes)
same-age dyad			
	1	GJL _y & CKC _y	30
	2	CKC _y & XBX _y	30
	3	XBX _y & CPA _y	30
	4	CPA _y & GJL _y	30
	5	LHY _o & LHU _o	30
	6	LHU _o & PYC _o	30
	7	ZJR _o & LHY _o	30
	8	ZJR _o & PYC _o	30
mixed-age dyad			
	9	GJL _y & LHY _o	30
	10	GJL _y & ZJR _o	30
	11	CKC _y & PYC _o	30
	12	CKC _y & LHU _o	30
	13	XBX _y & LHU _o	30
	14	XBX _y & ZJR _o	30
	15	CPA _y & LHY _o	30
	16	CPA _y & PYC _o	30
Total			480

As shown in Table 4, there were 16 recordings in total; the time duration of each recording was 30 minutes, so the total recording length was 480 minutes.

3.2 Procedures

All the participants had signed consent forms for participation in this research from their parents. The kindergarten teachers helped arrange a free play time for the children. Each dyad of children was asked to play with blocks prepared by the

teachers and the researcher in the classrooms during their break time after dessert. Each dyad's natural utterances and actions were recorded with a video camera by the researcher. After all the dyads' interactions were recorded, the recordings were then transcribed and analysed.

It was not an issue that some dyads were same-sex and some were mixed-sex since Bainum, Lounsbury, and Pollio (1984) suggested in their research that there were "no differences between boys and girls" in verbal humour events regarding mode, pattern, style, intention, and setting (p. 1955). Moreover, Ely and McCabe (1994) also pointed out in their research targeting kindergarten children that "there were no significant gender differences in the proportions of utterances containing language play" (p. 24).

3.3 Data Analysis

The recordings were transcribed following the CHAT Transcription Format (MacWhinney, 2000),⁵ and then the children's language play was identified. In this study, the analytical unit was language play improvisation (LPI), which was taken from Cekaite and Aronsson's (2014) framework. LPI involves two turns: "laughable" and "uptake". The concept of "laughable" is the same as "language play" in Cekaite and Aronsson (2014), so the term "language play (LP)" was used in this study. Figure 1 below shows the composition of language play improvisation:

$$\text{LPI} = \text{LP} + \text{uptake}$$

Figure 1. Composition of language play improvisation

⁵ See Appendix A.

An LP plus an uptake equated to an LPI, meaning that an LPI must include at least one LP turn and one uptake turn. LP is humorous words that arouse others' laughter or responses and the uptake is a response to the LP, like giggling and recycling. According to Cekaite and Aronsson (2014), language play is revealed by other peers' uptakes; in other words, what is funny and humorous depends on peer responses, not on one's own speech or a researcher's definitions. In the current study, only when another peer laughed at or responded to the LP was it deemed an LP, as the researcher defined what was humorous from the participants' perspectives. Therefore, in this study, one child's LP was identified by the other's uptake. Example 1 below explains how an LPI is formed. First, LHU_o's LP (verbal humour) was identified by LHY_o's uptake (laughter), and together their LP and uptake constituted an LPI. Note that sometimes an LP may be followed by more than one uptake; likewise, an uptake may be a response to more than one LP.

Example 1

LHU_o is using the blocks to make a spaceship.

*LHU_o: 它可能會放臭屁嗎? [LP]

ta1 ke3 neng2 hui4 fang4 chou4 pi4 ma?

"Will it fart?"

*LHY_o: 哈哈。 [uptake]

ha1 ha1 ha1.

"Ha ha ha."

There were two reasons for using Cekaite and Aronsson's (2014) framework. First, since 2000, there has been a trend in which language play in social interactions is the focus (Cekaite & Aronsson, 2004; Maybin & Swann, 2007; Cekaite, 2018). The present study agreed with Cekaite and Aronsson's (2014) idea that LP occurs in interactions: what is humorous should be judged by the participants. Additionally, according to previous research, children will adjust their LP based on the assessments

of the co-participants. Consequently, the co-participants' responses are also important. Cekaite and Aronsson's (2014) framework targeted both language play and uptake, namely, the co-participants' responses were not missed. Second, though Cekaite and Aronsson (2014) applied the framework to LP among children aged seven to ten, the data in the present study showed that the framework was also applicable to children aged five to six. Therefore, it was used in the present study.

3.3.1 Coding Schemes for LP

After identifying the LP of the LPI, it was further coded according to Garvey's (1977), Ely and McCabe's (1994), and Laing's (2014) categorization of language play. In this study, there were two main categories of children's language play—sound play and word play. Sound play was further categorized into two subcategories: intrinsic sound play and onomatopoeic sound play, while word play was classified into four subcategories—original word play, traditional word play, role play, and verbal humour. Each subcategory was supplemented with manipulated aspects of language in the present study. Moreover, the definition of traditional word play was adjusted to differentiate it from intrinsic sound play. Ely and McCabe's (1994) categorization of language play was used because there is a distinction between sound play and word play, which is more specific than other categorizations and is suitable for the analysis of children's developmental trajectory of language play.

Because an LP may include manipulations of different levels of language, it may contain more than one subcategory. When more than one subcategory was found in an LP, each subcategory was counted once; thus, an LP was coded with more than one subcategory. For example, when an LP involved original word play and role play, original word play and role play were respectively counted one time each. In the following description, all the categories and subcategories are defined and examples

are provided:

I. Sound Play

Sound play is repetitive, rhythmic, and melodic phonation or onomatopoeia (sound effects), including intrinsic sound play and onomatopoetic sound play.

(a) Intrinsic Sound Play

Intrinsic sound play is the manipulation of meaningless sounds at the phonological and prosodic levels, including various kinds of sounds and loud vocalizations that are repetitive, rhythmic, and melodic.

Example 2*

WYT (6;2) and CQH (6;4) are playing a card game, and they find that some of the cards are torn.

*CQH: 破 &di 破 &di ° [LP-intrinsic sound play]

po4 di1 po4 di1.

“Broken *d* broken *d*.”

*WYT: 破 &di &li 破 &di &li °

po4 di1 li1 po4 di1 li1.

“Broken *d li* broken *d li*.”

In this example, CQH’s LP included the repetitive and rhythmic sound *di*, which was coded as intrinsic sound play.

(b) Onomatopoetic Sound Play

Onomatopoetic sound play is the manipulation of sounds at the phonological and prosodic levels and involves the imitation of sounds in the environment.

* See Appendix A for transcription symbols.

Example 3

ZWC (4;4) and JTA (4;3) are pretending to eat a peanut with a peanut toy.

*ZWC: amu@o amu@o amu@o. [LP-onomatopoetic sound play]

*JTA: amu@o amu@o amu@o amu@o amu@o.

In Example 3, ZWC produced eating sound effects during dramatic play in which he was holding a peanut toy and pretending to eat it. His LP was coded as onomatopoetic sound play.

II. Word Play

Word play is playing with words, including playing with a word, a phrase, or an utterance. This category was subcategorized into original word play, traditional word play, role play, and verbal humour.

(a) Original Word Play

Original word play is the manipulation of a word at the lexical level. Sometimes it may also involve manipulations at the phonological level⁶ and prosodic level,⁷ such as imitation and prosody. This subcategory includes exploration in the form, prosody, and sound of words and word embellishments.

Example 4

PYC_o and CKC_y hear the teacher scolding their classmates.

*PYC_o: 又被罵了 [% speaking in a contemptuous voice] °

you4 bei4 ma4 le.

“They’re scolded again.”

*CKC_y: 又被罵了 [% speaking in a shriek] ° [LP-original word play]

you4 bei4 ma4 le.

“They’re scolded again.”

*PYC_o: 哈哈哈哈哈 °

ha1 ha1 ha1 ha1.

⁶ Examples: Rhyme and homophone.

⁷ Prosodic features: Tone, intonation, and stress.

“Ha ha ha ha.”

CKC_y repeated the preceding utterance of PYC_o in a different tone, which was an imitation and was thus regarded as original word play.

Example 5

GJL_y and LHY_o are playing with spinning tops made of blocks.

*GJL_y: 來'看: 我的吧。 [LP-original word play]

lai2 kan4 wo3 de ba.

“Watch me.”

*LHY_o: 來'看: 我的吧。

lai2 kan4 wo3 de ba.

“Watch me.”

In Example 5, GJL_y exaggerated and lengthened the word *kan4*, which was a prosodic exploration and was thus categorized as original word play.

(b) Traditional Word Play

Traditional word play is the manipulation of words at the prosodic level⁸ that are found in standard nursery rhymes, children’s songs, and humming, all of which must have lyrics.

Example 6

CKC_y and GJL_y are using blocks to make spinning tops.

*CKC_y: 小屁孩: [% humming]。 [LP-traditional word play]

xiao3 pi4 hai2.

“Little spoiled brat.”

*CKC_y: king@o.

*GJL_y: 小臭屁: [% humming]。

xiao3 chou4 pi4.

“Little stinky fart.”

⁸ Prosodic features: Rhythm, melody, and tempo.

CKC_y hummed the lyrics “little spoiled brat”, which was coded as traditional word play.

(c) Role Play

Role play is the adoption of another real or imagined voice and the manipulation of words at the pragmatic level.

Example 7

PYC_o is mimicking the voice for the school announcement in a nasal voice.

*PYC_o: WMY [= the classmate’s name] 下課囉。 [LP-role play]

WMY xia4 ke4 luo.

“WMY the class is over.”

*CKC_y: 哈哈。

ha1 ha1 ha1.

“Ha ha ha.”

PYC_o’s role play of the school announcement was an example of a child adopting a real voice, which was coded as role play.

(d) Verbal Humour

Verbal humour is the manipulation of words at the pragmatic level, including a variety of genres such as jokes and humorous descriptive accounts and narratives.

Example 8

LZT (4;2) accidentally announces that he can poop.

*LZT: 我可以大便秘了。 [LP-verbal humour]

wo3 ke3 yi3 da4 bian4 le.

“I can poop.”

*XZJ: 大便。

da4 bian4.

“Pooping.”

*XZJ: 什麼大便啊 [% laughing] ?

she2 me da4 bian4 a?

“What pooping?”

In Example 8, LZT accidentally announced that he could poop, which aroused XZJ’s laughter. LZT’s LP was a bathroom joke and was thus coded as verbal humour.

Example 9

LHU_o and LHY_o are talking about the security guard.

*LHY_o: <早> [/] 昨天早上是保全阿姨。

zao3 zuo2 tian1 zao3 shang4 shi4 bao3 quan2 a1 yi2.

“Yesterday it was the Mrs. security guard.”

*LHY_o: 可是今天就變成 +...

ke3 shi4 jin1 tian1 jiu4 bian4 cheng2 +...

“But today it has changed...”

*LHY_o: 奇怪的叔叔了。

qi2 guai4 de shu2 shu le.

“To a strange man.”

*LHU_o: 0 [=! laughing].

[LP-verbal
humour]

In Example 9, LHY_o recollected the past event that the Mrs. security guard had been on duty the day before, and then he humorously described the one on duty that day as “a strange man”, which amused LHU_o. LHY_o’s humorous descriptive narratives were coded as verbal humour.

The categories and subcategories of language play mentioned above are summarized in Figure 2 below:

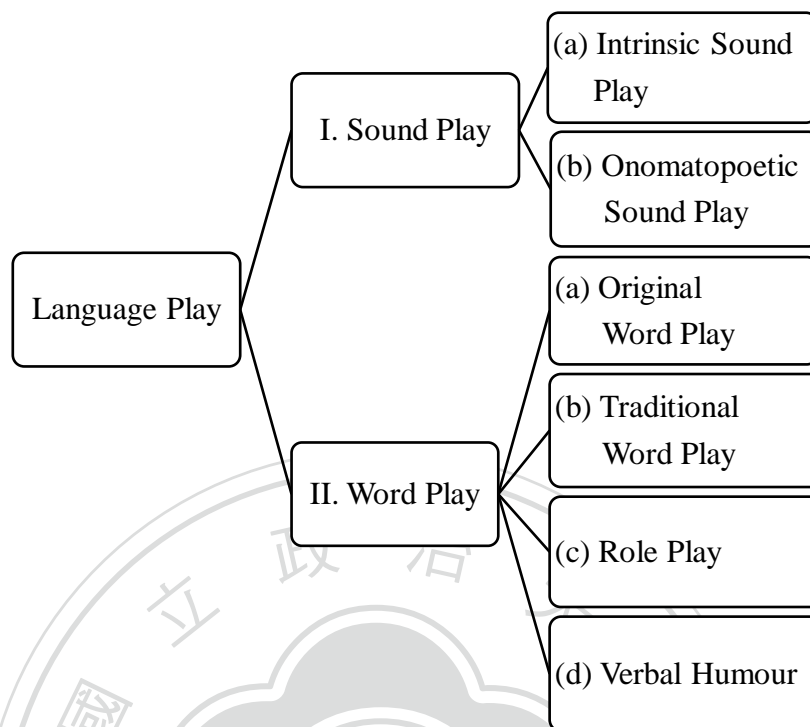


Figure 2. Categorization of language play

3.3.2 Coding Schemes for Uptakes

As for the uptakes, they were further coded according to the following coding schemes, which were adopted from Cekaite and Aronsson (2014). There were five types of uptakes: giggle, laughter, recycling, playful comment, second improvisation/second joke. When more than one type was found in an uptake, each type was counted once. For instance, when an uptake involved second improvisation and laughter, second improvisation and laughter were respectively counted one time each. The five types of uptakes are presented below:

(a) Giggle

Child A is announcing that Child B's spinning tops are very weak.

A: GJL [% slowly and clearly pronouncing B's name].

B: 嘻。
xi1.
“Hee.” [uptake-giggle]

Child A slowly pronounced Child B's name, which was original word play. Child B replied to Child A's original word play with “hee”, which was coded as giggle.

(b) Laughter

Child A is mimicking frogs' croaks.

A: 呱呱呱。
gual gual gual.
“Croak croak croak.”

B: 你是青蛙哈哈。
Ni3 shi4 qing1 wa1 ha1 ha1 ha1.
“You are a frog ha ha ha.” [uptake-laughter]

Child A mimicked frogs' croaks, which was onomatopoeic sound play. Child B responded to Child A with “ha ha ha”, which was coded as laughter.

(c) Recycling (repetition or adaption of laughable)

Child A and Child B are playing with blocks.

A: 他是不是要跟著耶誕老公公的臭麋鹿？
ta1 shi4 bu4 shi4 yao4 gen1 zhe ye2 dan4 lao3 gong1 gong de chou4
mi2 lu4?

“Will he follow Santa Claus's stinky reindeer?”

B: <你要> [/] 你要不要 <聖> [/] 誕老公公的臭爸爸？
ni3 yao4 ni3 yao4 bu4 yao4 sheng4 dan4 lao3 gong1
gong de chou4 ba4 ba? [uptake-recycling]

“Do you want Santa Claus's stinky dad?”

Child A uttered humorous words by mentioning “Santa Claus’s stinky reindeer”, which was verbal humour. Child B replied to the verbal humour by recycling Child A’s phrase structure and changing “stinky reindeer” to “stinky dad”, which was coded as recycling.

(d) Playful Comment

Child A is mimicking an old man who is coughing.

A: kou@o kou@o kou@o.

B: 好好笑喔。

[uptake-playful comment]

hao3 hao3 xiao4 o1.

“Very funny.”

Child A produced onomatopoeic sound play by imitating the coughing sounds of an old man. Child B responded to Child A’s language play with “very funny”, which was coded as playful comment.

(e) Second Improvisation/Second Joke

Child A and Child B are talking about the situations of the block car toys.

A: 我爸爸現在有一個黑色的車斷了 +...

wo3 ba4 ba xian4 zai4 you3 yi1 ge heil se4 de che1 duan4 le +...

“My dad’s black car now breaks...”

A: 斷了一塊了 [% laughing]。

duan4 le yi1 kuai4 le.

“One piece has broken.”

B: ei@u 我爸爸 xxx。

ei4 wo3 ba4 ba xxx.

“Hey, my dad.”

B: 他開一開就撞到他。

ta1 kai1 yi1 kai1 jiu4 zhuang4 dao4 ta1.

“When he is driving, he bumps into him.”

B: 還沒有翻還是繼續開。

hai2 mei2 you3 fan1 hai2 shi4 ji4 xu4 kai1.

“The car doesn’t turn over, so he keeps driving.”

[uptake-second
joke]

Child A gave a humorous descriptive account, which was verbal humour. Child B then replied with another new humorous descriptive account, which was coded as second joke.

Moreover, uptakes were regarded as both an uptake and an LP as long as the uptakes were followed by another uptake in the next turn. In this case, the uptakes were coded twice—once according to the coding scheme of the uptake, and then again according to the categorization of the LP. Example 10 below demonstrates the case where an uptake was both an uptake and an LP. CKC_y's LP was responded to by GJL_y's uptake. GJL_y's uptake was then followed by CKC_y's uptake, so it was also considered an LP.

Example 10

GJL_y and CKC_y are talking about the number of spinning tops they have.

- | | | | |
|---------------------|---|---|------------------|
| *CKC _y : | ei@u 我有'一百顆耶。 | } | [LP] |
| | ei4 wo3 you3 yi1 bai3 ke1 ye2. | | |
| | "I have one hundred spinning tops." | | |
| *GJL _y : | ei@u 我有'三千顆耶。 | } | [uptake]
[LP] |
| | ei4 wo3 you3 san1 qian1 ke1 ye2. | | |
| | "I have three thousand spinning tops." | | |
| *CKC _y : | ei@u 我有十兆千顆十兆千顆。 | } | [uptake] |
| | ei4 wo3 you3 shi2 zhao4 qian1 ke1 | | |
| | shi2 zhao4 qian1 ke1. | | |
| | "I have ten trillion and one thousand
ten trillion and one thousand spinning
tops." | | |

The categorization of the uptakes mentioned above is shown in Figure 3 below:

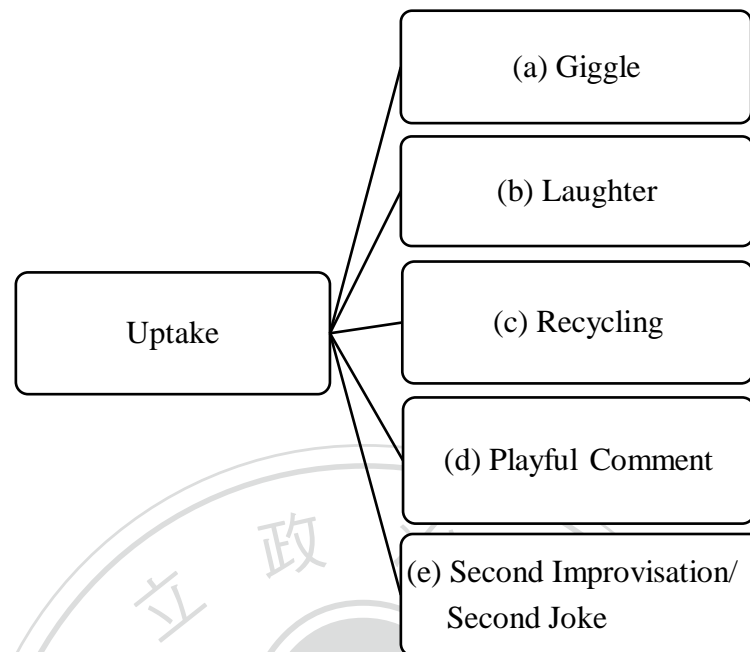


Figure 3. Categorization of uptakes

3.3.3 Analytical Approach

First, all LP was identified by its uptakes, along with their total tokens. Second, LP and its uptakes were further coded according to their respective coding schemes. When more than one subcategory was found in an LP, each subcategory was counted once. Likewise, when more than one type of uptake was found, each type was counted once. Third, uptakes were considered both uptake and LP when another uptake followed the original one. The original uptakes were counted once as an LP and once as an uptake and were then coded according to the respective coding schemes for LP and uptakes. As for coding reliability, another trained coder independently coded approximate one-fifth of the data. Cohen's Kappa was then used to compute the inter-rater reliability, and the value of K was 0.85.

Chapter 4

Results

4.1 Children's Language Play Production

To find out how often the same-age dyads and the mixed-age dyads produced language play, the utterances with LP, turns with LP, and tokens of LP were analysed. The frequencies of the utterances with LP are shown in Table 5 below. Among the 6,392 utterances produced by the same-age dyads, about one-tenth of them were utterances with LP (699, 10.94%), and mixed-age dyads also generated one-tenth of the utterances with LP (669, 10.15%) in a total of 6,592 utterances. The results indicated that the proportion of utterances with LP produced by the same-age and mixed-age dyads were very similar.

Table 5. Frequency of Utterances with LP in Same-age Dyads and Mixed-age Dyads

	same-age dyad	SD	mixed-age dyad	SD
Utterances with LP	699	21.34	669	22.54
% of utterances with LP	10.94%		10.15%	
Total utterances	6392	118.17	6592	185.81

Similar to the results of utterances with LP, the numbers of turns with LP in the same-age and mixed-age dyads were similar. The frequencies of turns with LP are displayed in Table 6 below. The same-age dyads had 425 turns with LP (14.15%) in a total of 3,003 turns, while the mixed-age dyads produced 408 turns with LP (13.93%) in a total of 2,929 turns.

Table 6. Frequency of Turns with LP in Same-age Dyads and Mixed-age Dyads

	same-age dyad	SD	mixed-age dyad	SD
Turns with LP	425	16.88	408	13.29
% of turns with LP	14.15%		13.93%	
Total turns	3003	63.33	2929	103.42

As for the tokens of LP, the same-age and mixed-age dyads also produced similar patterns. Table 7 below shows that in eight hours of data, the same-age dyads generated 369 tokens of LP compared with the mixed-age dyads' 360 LP tokens, which were very similar. In sum, the occurrences of language play in the same-age and mixed-age dyads were similar as shown in the respective frequencies of utterances with LP, turns with LP, and tokens of LP.

Table 7. Frequency of Tokens of LP in Same-age Dyads and Mixed-age Dyads

	same-age dyad	SD	mixed-age dyad	SD
Tokens of LP	369	15.18	360	13.76

The present study then examined the frequencies of the six subcategories of language play, as demonstrated in Table 8 below. Overall, word play was produced about four times more frequently than sound play (80.93% vs. 19.07%), which indicated that the children tended to produce more word play than sound play when interacting with their peers. Among the six subcategories, verbal humour (42.25%) accounted for the most frequent word play, followed by original word play (28.39%) and onomatopoetic sound play (12.35%). Role play was produced the least frequently, accounting for only 4.25%. This indicated that in peer conversations, the children tended to engage in pragmatic play (verbal humour), explore and manipulate the linguistic elements of words (original word play), and make sound effects (onomatopoetic sound play). However, they seldom played with real or imagined voices (role play). These results agreed with the findings of previous studies which

found that children after age five can play at all levels of language and generate rich word play.

Table 8. Frequency of Six Subcategories of Language Play

	Tokens	Percentage (%)
Sound Play		
Intrinsic Sound Play	49	6.72
Onomatopoetic Sound Play	90	12.35
Total	139	19.07
Word Play		
Original Word Play	207	28.39
Traditional Word Play	44	6.04
Role Play	31	4.25
Verbal Humour	308	42.25
Total	590	80.93

As previous studies have pointed out, children's language play production is guided by their interactions with co-participants. Therefore, it was necessary to examine the children's LP production in different social contexts to see how they interacted with different peers. Table 9 below shows the frequency of the six subcategories of language play in the same-age and mixed-age dyads. As Table 9 demonstrates, verbal humour was the most popular with both types of dyads (37.4% vs. 47.22%), original word play had the second highest number of occurrence (32.79% vs. 23.89%), onomatopoetic sound play was ranked the third most frequently occurring LP (11.92% vs. 12.78%), and the same-age and mixed-age dyads rarely produced role play (4.07% vs. 4.44%). These results indicated that the patterns of the LP's subcategory frequency in the same-age and mixed-age dyads were similar. The finding that role play was rarely observed was different from the finding of Ely and McCabe (1994), who found that children in peer interactions produced various kinds of role play (e.g., animals). It is possible that Ely and McCabe (1994) inspected

children's role play produced in both private and interactive situations, while the present study targeted role play only in interactive situations; hence, the results of role play were different from those in Ely and McCabe (1994).

Table 9. Frequency of Six Subcategories of Language Play in Same-age Dyads and Mixed-age Dyads

	same-age dyad			mixed-age dyad		
	tokens	Percentage (%)	SD	tokens	Percentage (%)	SD
Intrinsic Sound Play	33	8.94		16	4.44	
Onomatopoeic Sound Play	44	11.92		46	12.78	
Original Word Play	121	32.79		86	23.89	
Traditional Word Play	18	4.88		26	7.23	
Role Play	15	4.07		16	4.44	
Verbal Humour	138	37.4		170	47.22	
Total	369	100	15.18	360	100	13.76

Since both the same-age and mixed-age dyads produced mostly verbal humour (37.4% vs. 47.22%), that subcategory deserved to be closely inspected. Regarding verbal humour, it was found that the children enjoyed telling bathroom jokes, which included dirty words like 內褲 (*nei4 ku4*, “underwear”), 臭屁 (*chou4 pi4*, “stinky fart”), 大便 (*da4 bian4*, “poo”), etc. The targets of their bathroom jokes involved themselves, other classmates, toys, and cartoon characters. Among these targets, other classmates were the most frequent resources for bathroom jokes. Furthermore, the children liked to tease each other by using teasing words such as 你有病啊 (*Ni3 you3 bing4 a*, “Are you crazy?”), 你笨蛋 (*Ni3 ben4 dan4*, “You are stupid.”), etc. When the children were teased, they usually used language play as a retort, such as 騙人 (*Pian4 ren2*, “Liar!”), 亂講 (*Luan4 jiang3*, “Nonsense!”), and 沒禮貌 (*Mei2 li3 mao4*, “You are rude.”).

Besides verbal humour, original word play was another frequently occurring LP in both the same-age and mixed-age dyads (32.79% vs. 23.89%). From the original word play data, it was observed that the children in both the same-age and mixed-age dyads usually produced imitations, and the turn-taking was frequent and fast. The

uptakes easily became LP because the other peer responded with another uptake in the next turn, which echoed Keenan's (1974) and Rees's (1975) findings, that children like to use imitations to sustain language play. Example 11 below is an excerpt featuring imitations in a same-age dyad. Besides imitations, hyperboles were observed simultaneously in Example 11. CKC_y first produced hyperboles by highlighting the number of spinning tops he had, and GJL_y, in the next turn, imitated CKC_y and increased the number. The children took turns imitating each other and exaggerating the number of spinning tops they had; the number grew more and more throughout their language play exchanges, and the imitations and hyperboles went on and on.

Example 11

GJL_y and CKC_y are talking about the number of spinning tops they have.

- | | | | |
|---------------------|--|---|----------------------------------|
| *CKC _y : | ei@u 我有'一百顆耶。 | } | [LP-hyperbole] |
| | ei4 wo3 you3 yi1 bai3 ke1 ye2. | | |
| | "I have one hundred spinning tops" | | |
| *GJL _y : | +^ ei@u 我有'三千顆耶。 | } | [LP-imitation]
[LP-hyperbole] |
| | ei4 wo3 you3 san1 qian1 ke1 ye2. | | |
| | "I have three thousand spinning tops" | | |
| *CKC _y : | +^ ei@u 我有十兆千顆十兆千顆。 | } | [LP-imitation]
[LP-hyperbole] |
| | ei4 wo3 you3 shi2 zhao4 qian1 ke1 | | |
| | shi2 zhao4 qian1 ke1. | | |
| | "I have ten trillion and one thousand
ten trillion and one thousand spinning tops." | | |

Note that though both the same-age dyads and the mixed-age dyads produced imitations and engaged in some turn-taking and language play exchanges, the length of the language play exchanges were different in the same-age and mixed-age dyads. The same-age dyads generally produced longer language play exchanges compared with the mixed-age dyads. In addition, whether interacting with a same-age peer or a different-age peer, the children sometimes played with rhyming and homophones. The

source of their rhymes and homophones was usually animals. For example, 酷 (*ku4*, “cool”) was transformed to 褲子 (*ku4 zi*, “pants”) and ended up as 兔子 (*tu4 zi*, “rabbit”). In another example, 陀螺 (*tuo2 luo2*, “spinning top”) was altered to 駱駝 (*luo4 tuo2*, “camel”). Even more, in one example, the particle 吼 (*hou3*, “oh”) was changed to 猴子 (*hou2 zi*, “monkey”).

While both types of dyads generated imitations, rhyming, and homophones in original word play, they were also found to have different features in that subcategory. In the same-age dyads, it was found that the children were inclined to produce neologisms and hyperboles (e.g., 我有一億顆, *wo3 you3 yi1 yi1 ke1*, “I have one hundred million spinning tops.”) in original word play. When interacting with a same-age peer, the children often improvised with neologisms by using the names of other classmates and teachers. This finding was similar to Ely and McCabe’s (1994) finding, which discovered that children had a preference for using others’ names as sources for neologisms. Example 12 below is an extract featuring the children’s use of another’s name for neologisms:

Example 12

GJL_y and CKC_y see their classmate standing at the door.

*GJL_y: XWJ [= the classmate’s name] ◦

*CKC_y: 許文文。 [LP-neologism]
xu3 wen2 wen2.

*GJL _y :	許聞臭屁 [=! laughing] ◦] [LP-neologism] [LP-bathroom joke]
	xu3 wen2 chou4 pi4.	
	“Xu smells the stinky farts.”	

In this example, when GJL_y and CKC_y saw their classmate at the door, GJL_y yelled out the name. Then, CKC_y turned the name into a neologism by repeating the second word 文 (*wen2*) of it. In the next turn, GJL_y recycled CKC_y’s LP by using the homophone 聞 (*wen2*, “smell”) and combining it with 臭屁 (*chou4 pi4*, “stinky

farts”) to create a humorous bathroom joke. This example demonstrates the children’s ability to improvise neologisms and bathroom jokes, as well as their preference for using others’ names as sources. Besides names, the appearances of others were also sources for neologisms (e.g., 光腳丫丫飛船, *guang1 jiao2 ya1 ya1 fei1 chuan2*, “barefooted spaceship”).

On the other hand, in the mixed-age dyads, the children tended to generate prosodic alternations of words in original word play. They usually stressed their words with a loud and lengthening voice, such as in sharing their progress in making spinning tops. Example 13 below displays how the children played with word prosody. Respectively, LHY_o and GJL_y said 第一顆 (*di4 yi1 ke1*, “first spinning top”) and 第二顆 (*di4 er4 ke1*, “second spinning top”) loudly and lengthily, which showed their intention to stress their own progress.

Example 13

- *LHY_o: 我現在在做 <第: 一: 顆: > [!]。 [LP-prosody]
 wo3 xian4 zai4 zai4 zuo4 <di4 yi1 ke1> [!].
 “I am making my first spinning top.”
- *GJL_y: 我現在在做 <第: 二: 顆: > [!]。 [LP-prosody]
 wo3 xian4 zai4 zai4 zuo4 <di4 er4 ke1> [!].
 “I am making my second spinning top.”

The above examples show comparisons between same-age and mixed-age dyads. To attain more thorough results, younger dyads, older dyads, and mixed-age dyads were then compared. Table 10 below presents the frequency of the six subcategories of LP that occurred in the three kinds of dyads. In the total number of LP tokens, it was surprising that the younger dyads (235) had more LP tokens than the older dyads (134), but this was mainly a result of the younger dyads producing longer language play exchanges (see Example 11 above). In the younger dyads, original word play resulted in 39.57% of the LP, followed by verbal humour at 28.94%. Role play

(3.83%) was rarely found in the younger dyads. In the older dyads, verbal humour (52.24%) accounted for about half of the LP, followed by original word play at 20.89%. Traditional word play (2.99%) was seldom produced in the older dyads. That verbal humour was popular among the older children confirms Crystal's (1998) finding, that children at age six like to tell original jokes, especially anecdotes and elaborative narratives. In the mixed-age dyads, verbal humour accounted for 47.22%, followed by original word play at 23.89%, or about one-fourth of the LP.

Table 10. Frequency of Six Subcategories of Language Play in Different Dyads

	same-age dyad						mixed-age dyad		
	younger dyad			older dyad					
	tokens	Percentage (%)	SD	tokens	Percentage (%)	SD	tokens	Percentage (%)	SD
Intrinsic Sound Play	17	7.23		16	11.94		16	4.44	
Onomatopoeic Sound Play	34	14.47		10	7.46		46	12.78	
Original Word Play	93	39.57		28	20.89		86	23.89	
Traditional Word Play	14	5.96		4	2.99		26	7.23	
Role Play	9	3.83		6	4.48		16	4.44	
Verbal Humour	68	28.94		70	52.24		170	47.22	
Total	235	100	7.14	134	100	6.68	360	100	13.76

As mentioned in previous research, children's social interaction and participation differ when they are conversing with different co-participants. To understand children's LP production in interactions with different co-participants, individual children's interactions with a same-age peer and a mixed-age peer were explored, respectively. Table 11 below shows the children's tokens of LP when interacting with different-age peers. As shown in Table 11, most of the older children generated more LP with a younger peer than with a same-age peer (LHY_o: 53 vs. 32; PYC_o: 51 vs. 26; LHU_o: 47 vs. 33), except for ZJR_o (30 vs. 47). As for the subcategory distribution of LP, all the older children used more original word play with a younger peer than with a same-age peer (LHY_o: 22 vs. 9; PYC_o: 11 vs. 4; LHU_o: 9 vs. 8; ZJR_o: 9 vs. 7). Moreover, most of the older children produced more verbal humour with a younger

peer than with a same-age peer (LHY_o: 23 vs. 18; PYC_o: 20 vs. 13; LHU_o: 37 vs. 20), except for ZJR_o (13 vs. 23). On the other hand, most of the younger children produced more LP with a same-age peer than with an older peer (XBX_y: 57 vs. 45; GJL_y: 56 vs. 32; CKC_y: 70 vs. 43), except for CPA_y (60 vs. 72). As for the subcategory distribution of LP, all the younger children produced more original word play with a same-age peer than with an older peer (XBX_y: 14 vs. 9; CPA_y: 16 vs. 14; GJL_y: 29 vs. 18; CKC_y: 39 vs. 8). Nevertheless, most of the younger children created more verbal humour with an older peer than with a same-age peer (XBX_y: 27 vs. 14; CPA_y: 31 vs. 22; CKC_y: 17 vs. 13), except for GJL_y (8 vs. 19).

Table 11. Tokens of Six Subcategories of Language play in Children with Different Peers

Code		ISP	OSP	OWP	TWP	RLP	VBH	Total
LHY _o	with same-age peer	2	2	9	0	1	18	32
	with younger peer	3	3	22	0	2	23	53
PYC _o	with same-age peer	4	1	4	0	4	13	26
	with younger peer	2	10	11	1	7	20	51
LHU _o	with same-age peer	0	1	8	1	3	20	33
	with younger peer	1	0	9	0	0	37	47
ZJR _o	with same-age peer	11	5	7	1	0	23	47
	with younger peer	2	0	9	6	0	13	30
XBX _y	with same-age peer	11	12	14	4	2	14	57
	with older peer	2	3	9	4	0	27	45
CPA _y	with same-age peer	4	7	16	4	7	22	60
	with older peer	1	14	14	6	6	31	72
GJL _y	with same-age peer	1	5	29	2	0	19	56
	with older peer	2	3	18	0	1	8	32
CKC _y	with same-age peer	0	10	39	8	0	13	70
	with older peer	1	13	8	2	2	17	43

ISP = Intrinsic Sound Play; OSP = Onomatopoeic Sound Play; OWP = Original Word Play; TWP = Traditional Word Play; RLP = Role Play; VBH = Verbal Humour.

In general, it was found that the older children tended to produce LP more

frequently with a younger peer than with a same-age peer; on the contrary, the younger children were inclined to generate LP more frequently with a same-age peer than with an older peer.

The above results show the differences in the LP production of children with same-age peers and mixed-age peers. It is noteworthy that in most mixed-age interactions, the older children produced more LP compared with the younger ones. When the younger and older children's LP production in the mixed-age dyads was analysed, it was found that the older children and younger children behaved differently. The older children usually produced an LP and the younger ones replied with laughter or giggle, and they even recycled and second improvised the older children's LP. Example 14 below shows a collaborative LP in a mixed-age dyad in which the older child produced an LP first and the younger one generated an uptake by recycling what the older one just said. PYC_o spoke in a contemptuous voice to describe that the classmates were being scolded, and CKC_y imitated PYC_o with a shriek, which was both an uptake (recycling) and an LP (original word play) that prompted PYC_o's laughter. It is worth noting that PYC_o was the first producer of the LP, with CKC_y as a follower who produced an uptake to PYC_o's language play.

Example 14

PYC_o and CKC_y hear the teacher scolding their classmates.

- *PYC_o: 又被罵了 [% speaking in a contemptuous voice] ◦ [LP-original word play]
 you4 bei4 ma4 le.
 “They’re scolded again.”
- *CKC_y: 又被罵了 [% speaking in a shriek] ◦ [uptake-recycling]
 you4 bei4 ma4 le. [LP-original word play]
 “They’re scolded again.”
- *PYC_o: 哈哈哈哈哈 ◦
 ha1 ha1 ha1 ha1.
 “Ha ha ha ha.”

In brief, the results showed that the children produced various kinds of language play in their interactions. They preferred word play to sound play, which met the developmental trajectory of language play. When LP production in the same-age and mixed-age dyads was compared, it was discovered that the same-age and mixed-age dyads produced approximately the same amount of LP. Moreover, both kinds of dyads preferred verbal humour and original word play. As for the differences between the younger dyads and the older dyads, the younger dyads generated more LP tokens compared with the older ones. The younger dyads' favorite language play was original word play, while for the older dyads it was verbal humour. Lastly, in the exploration of individual children's LP production, it was found that the older children tended to produce more LP with younger ones, while the younger children produced more LP with same-age ones.

4.2 Children's Uptake Production

There were 802 uptake tokens found in the data. As shown in Table 12 below, recycling (37.91%) occurred most frequently, followed by laughter (24.06%). This indicates that when there appeared to be language play, the children preferred repeating or adapting it, or replying to it with laughter. On the contrary, playful comments only accounted for 1.75% of the uptakes, indicating that the children seldom responded to others' language play with playful comments.

Table 12. Frequency of Five Types of Uptakes

	Tokens	Percentage (%)
Giggle	129	16.08
Laughter	193	24.06
Recycling	304	37.91
Playful Comment	14	1.75
Second Improvisation/Second Joke	162	20.2
Total	802	100

Regarding the uptake frequencies in the same-age and mixed-age dyads, two very similar patterns were observed. As Table 13 below displays, both the same-age and mixed-age dyads used recycling (39.55% vs. 36.3%) the most often, followed by laughter (20.4% vs. 27.65%) and second improvisation/second joke (20.15% vs. 20.25%). Playful comments were rarely used by the same-age and mixed-age dyads. The result that recycling accounted for the most uptake occurrences echoes the findings of previous research which found that in both same-age and mixed-age settings, children enjoy imitation.

Table 13. Frequency of Five Types of Uptakes in Same-age Dyads and Mixed-age Dyads

	same-age dyad			mixed-age dyad		
	tokens	Percentage (%)	SD	tokens	Percentage (%)	SD
Giggle	71	17.88		58	14.32	
Laughter	81	20.4		112	27.65	
Recycling	157	39.55		147	36.3	
Playful Comment	8	2.02		6	1.48	
Second Improvisation/Second Joke	80	20.15		82	20.25	
Total	397	100	13.97	405	100	16.72

Taking a closer look, the uptake frequencies of the younger and older dyads were compared. Table 14 below shows that for the younger dyads, recycling (46.96%) accounted for nearly half of the uptakes, while for the older dyads, recycling occurred 27.33% of the time. This finding means that compared with the older children, the younger children tended to recycle their peers' language play, which confirms the

active role of younger children in sustaining language play in same-age peer interaction. The older dyads, on the other hand, produced laughter (32%) the most, which suggests that the older children tended to acknowledge the humour of their peers' language play by laughing.

Table 14. Frequency of Five Types of Uptakes in Different Dyads

	same-age dyad					
	younger dyad			older dyad		
	tokens	Percentage (%)	SD	tokens	Percentage (%)	SD
Giggle	42	17.01		29	19.33	
Laughter	33	13.36		48	32	
Recycling	116	46.96		41	27.33	
Playful Comment	4	1.62		4	2.67	
Second Improvisation/Second Joke	52	21.05		28	18.67	
Total	247	100	5.19	150	100	5.32

Example 15 below displays how a younger child recycled a peer's language play. CKC_y and GJL_y decided that they would compete in spinning tops after they finished making them. They provoked each other—CKC_y teased GJL_y by depicting him as a pot, which was verbal humour. Next, GJL_y recycled CKC_y's language play—he reused CKC_y's sentence structure and described him as a head of stinky cattle. This example indicates that the younger children were able to adapt and manipulate the prior speakers' language play and sustain it. Furthermore, this kind of adaptation was more common than the complete repetition in the data observed.

Example 15

CKC_y and GJL_y have decided that they will have a competition in spinning tops.

- *CKC_y: 你這個鍋子。
ni3 zhe4 ge guo1 zi.
“You are a pot.”
- *GJL_y: 你這個臭 +...
ni3 zhe4 ge chou4...
“You are a stinky...”
- *GJL_y: 臭牛 [=! laughing]。
chou4 niu2.
“A head of stinky cattle.”
- [verbal humour]
- [recycling]

Example 16 below shows that the older children were inclined to reply to a peer's language play with laughter. LHU_o role-played an alert, announcing that there was a fire. LHY_o then responded with laughter, which was a positive evaluation of LHU_o's role play. Laughter as positive feedback for the other's language play was regularly seen in the older children's interactions.

Example 16

LHU_o is mimicking the alert for a fire.

- *LHU_o: 工作人員請注意。
gong1 zuo4 ren2 yuan2 qing3 zhu4 yi4.
“Attention, staff.”
- *LHU_o: 現在發生火災。
xian4 zai4 fa1 sheng1 huo3 zai1.
“There is a fire going on.”
- *LHY_o: 哈哈。
ha1 ha1.
“Haha.”
- [role play]
- [laughter]

Previous studies have reported that children behave differently towards peers at the same age and peers at different ages, so the present study inspected the uptake tokens of all the participants in the same-age and mixed-age peer interactions. As

Table 15 below reveals, all the older children produced more uptake tokens with younger peers than with same-age peers (LHY_o: 72 vs. 50; PYC_o: 49 vs. 38; LHU_o: 57 vs. 33; ZJR_o: 32 vs. 28). In contrast, most of the younger children generated more uptake tokens with same-age peers than with older peers (XBX_y: 75 vs. 46; CPA_y: 49 vs. 46; GJL_y: 67 vs. 42), except for CKC_y (56 vs. 61). The pattern of uptakes was similar to that of LP, so it could be inferred from the two similar patterns that in mixed-age interactions, the older children played not only a dominant role in producing LP but also an active role in replying to the younger children's LP.

Table 15 below exhibits the tokens of different types of uptakes for children with different peers. Most of the older children recycled LP more often when interacting with a younger peer than with a same-age peer (LHY_o: 26 vs. 20; PYC_o: 8 vs. 5; LHU_o: 20 vs. 3), while most of the younger children recycled LP more often in interactions with a same-age peer (CPA_y: 21 vs. 17; GJL_y: 35 vs. 18; CKC_y: 37 vs. 23).

Table 15. Tokens of Five Types of Uptakes in Children with Different Peers

Code		GIG	LAU	REC	PLC	SEI	Total
LHY _o							
	with same-age peer	3	21	20	2	4	50
	with younger peer	15	17	26	1	13	72
PYC _o							
	with same-age peer	12	11	5	0	10	38
	with younger peer	3	25	8	3	10	49
LHU _o							
	with same-age peer	7	13	3	2	8	33
	with younger peer	10	21	20	1	5	57
ZJR _o							
	with same-age peer	7	2	13	0	6	28
	with younger peer	2	7	11	1	11	32
XBX _y							
	with same-age peer	18	19	23	2	13	75
	with older peer	4	11	24	0	7	46
CPA _y							
	with same-age peer	5	7	21	0	16	49
	with older peer	2	15	17	0	12	46
GJL _y							
	with same-age peer	10	6	35	1	15	67
	with older peer	9	3	18	0	12	42
CKC _y							
	with same-age peer	9	1	37	1	8	56
	with older peer	13	13	23	0	12	61

GIG = Giggle; LAU = Laughter; REC = Recycling; PLC = Playful Comment; SEI = Second Improvisation/Second Joke.

The older children tended to produce more LP and uptakes with younger peers, while the younger children produced more LP and uptakes with same-age peers. There are two possible explanations for this result. First, the mixed-age environment is an imbalanced setting with hierarchies, where older children have a higher ranking than younger children, according to previous research (Griswold, 2007; Reynolds, 2007). Therefore, the older children were more dominant in their conversations with younger peers. Conversely, the younger children had fewer chances to show their linguistic competence in the imbalanced mixed-age setting, but they had more opportunities to do so in the same-age setting as they were interacting with peers with equal status. Second, the result may be attributed to the older children's intention to

sound stronger in front of younger children, which was shown in their more active uptakes in the mixed-age environment. As shown in Example 17 below, CKC_y showed off the strength of his big brother, and PYC_o, in order to sound greater, recycled CKC_y's language play by reusing the structure, and instead of showing off the strength of a sibling, she compared her own strength to that of her father's—a stronger and more patriarchal role.

Example 17

CKC_y and PYC_o are discussing their desire to beat their classmates.

*CKC_y: 我力氣跟我: 哥哥的力氣比你還要大。

wo3 li4 qi4 gen1 wo3 ge1 ge de li4 qi4 bi3 ni3 hai2 yao4 da4.

“My strength is as great as...my big brother's strength is greater than you.”

*CKC_y: '超級大的。

chao1 ji2 da4 de.

“Super great.”

*CKC_y: xxx。

*PYC_o: 我力氣跟我 +...

wo3 li4 qi4 gen1 wo3...

“My strength is as great as...”

*PYC_o: 我爸一樣大。

wo3 ba4 yi1 yang4 da4.

“My dad.”

[recycling]

Furthermore, it was found that the younger children not only used recycling more often but also adapted LP more often with same-age peers. On the other hand, the younger children recycled the older peers' LP less often, and when they did, they regularly repeated them without adding new elements. Example 18 below shows a younger child's recycling of a same-age peer's language play, while Example 19 demonstrates the recycling of an older peer's language play:

Example 18

XBX_y is ready to do a backflip and CKC_y is playing with blocks.

- *XBX_y: 我可以後空翻。
wo3 ke3 yi3 hou4 kong1 fan1.
“I can backflip.”
- *CKC_y: 後空 bu@u bu@u 啦。 [recycling]
hou4 kong1 bu1 bu1 la.
“Backflip *bu bu*.”
- *XBX_y: 後空大便啦。 [recycling]
hou4 kong1 da4 bian4 la.
“Backflip pooping.”
- *CKC_y: 後空尿尿啦。 [recycling]
hou4 kong1 niao4 niao4 la.
“Backflip peeing.”

Example 19

LHY_o and CPA_y hear the teacher speaking in the next classroom.

- *LHY_o: 剛玲玲 +...
gang1 ling2 ling2...
“Ling Ling just...”
- *LHY_o: 李李老師說八點半對不對？
li3 li3 lao3 shi1 shuo1 ba1 dian3 ban4 dui4 bu4 dui4?
“Teacher Li Li just said eight thirty, right?”
- *CPA_y: 李李老師: [% shaking LHY_o's head] [=! laughing] ! [recycling]
li3 li3 lao3 shi1!
“Teacher Li Li!”

Through the comparison of Example 18 and Example 19, it was discovered that the younger children enjoyed transforming their same-age peer's language play and repeating their older peer's language play. In Example 18, the structure 後空 (x) 啦 (“Backflip (x)”) was used again and again. CKC_y and XBX_y took turns filling the (x) slot with different words. However, in Example 19, the younger child, CPA_y, did not use the structure of LHY_o's language play but repeated his language play with 李李老師 (“Teacher Li Li!”).

In summary, the results indicated that the children were able to recognize their

peer's language play and respond with uptakes like recycling and laughter as encouragement or feedback. Recycling and laughter were the most common uptakes by both the same-age and mixed-age dyads. As for the younger and older dyads' preferences, the younger dyads liked recycling, while the older dyads preferred laughter. When interacting with different peers, the younger children tended to produce more uptakes with same-age peers, while the older children produced more uptakes with younger peers.

4.3 The Combination of Children's Language Play and Uptakes

To get a more complete picture of how the children used different uptakes to respond to the different subcategories of LP, the combination of LP and uptakes was analysed. As Table 16 below illustrates, intrinsic sound play (ISP), original word play (OWP), traditional word play (TWP), and verbal humour (VBH) were among the most common combinations with recycling (REC) (ISP+REC: 21; OWP+REC: 134; TWP+REC: 15; VBH+REC: 116). Onomatopoetic sound play (OSP) occurred with second improvisation/second joke (SEI) the most often (31), and role play (RLP) occurred with laughter (LAU) the most frequently (15).

Table 16. Frequency of Combination of LP and Uptake

	ISP	OSP	OWP	TWP	RLP	VBH
GIG	6	9	32	6	5	88
LAU	13	23	48	3	15	98
REC	21	24	134	15	6	116
PLC	0	4	2	0	2	6
SEI	18	31	39	11	12	59
Total	58	91	255	35	40	367

ISP = Intrinsic Sound Play; OSP = Onomatopoetic Sound Play; OWP = Original Word Play; TWP = Traditional Word Play; RLP = Role Play; VBH = Verbal Humour; GIG = Giggle; LAU = Laughter; REC = Recycling; PLC = Playful Comment; SEI = Second Improvisation/Second Joke.

The results showed that the children produced uptakes to reply to their peers' language play. A qualitative examination of the combination of language play and uptakes will be presented in the following description to show how language play was given as feedback and was replied to differently with the use of different uptakes.

Intrinsic sound play was generally followed by recycling. The children usually produced intrinsic sound play in their solo private language play first, but their intrinsic sound play soon became an invitation for other peers to join in as a source for others to reuse. Example 20 below is an extract of intrinsic sound play in which CKC_y and XBX_y indulged in a shooting game. Holding their block guns, they ran and produced various kinds of sounds. CKC_y first generated a long episode of intrinsic sound play himself by using the element *mi@u*. Then, XBX_y recycled CKC_y's intrinsic sound play with a repetitive *mi@u*, which served as positive feedback to and encouragement for CKC_y's prior intrinsic sound play, prompting CKC_y to continue making the sound and turning the solo intrinsic sound play into a collaborative one. After using *mi@u* as elements, both children then contributed more sounds to this collaborative intrinsic sound play. CKC_y repeated the sound *mei@u* rhythmically and jumped with a corresponding tempo. XBX_y followed the tempo, jumping and repeating the sound *ba@u*. Finally, the intrinsic sound play ended with XBX_y's puffing and jumping. In Example 20, XBX_y's recycling of CKC_y's intrinsic sound play shows his attendant and involved attitude towards CKC_y's LP, which he identified as a successful performance that contributed to sustaining the intrinsic sound play. Moreover, XBX_y's recycling also created a convergence between them, as shown by CKC_y's following uptake.

Example 20

CKC_y and XB_{Xy} are running and humming.

*CKC _y : mi@u mi@u.	}	[intrinsic sound play]
*CKC _y : mi@u mi@u mi@u mi@u.		
*CKC _y : bon@u bon@u.		
*CKC _y : mi@u mi@u <mi@u mi@u> [>].		
*XB _{Xy} : <mi@u mi@u> [<].		[recycling]
*CKC _y : mi@u mi@u.		

Original word play was another language play that regularly occurred with recycling. Unlike intrinsic sound play, the children employed original word play to deliberately make fun of or attract their peers' attention. Their peers easily perceived this intention and usually responded with recycling. Example 21 below is an extract of original word play. At first, GJL_y and CKC_y made spinning tops with blocks and boasted about how good their spinning tops were. GJL_y then started a conversation ("Wanna fight? Come."), trying to challenge CKC_y to a game of spinning tops, which tentatively positioned himself as a challenger and CKC_y as the challenged. In the fourth turn, CKC_y leaned his head towards GJL_y and produced original word play by stressing the pronoun "you". It is likely that CKC_y's original word play reversed his own identity from the challenged to a challenger. The original word play drew GJL_y's attention and he soon understood CKC_y's intention. GJL_y leaned his head towards CKC_y and recycled the original word play, seemingly trying to grab back his position as challenger. Next, CKC_y and GJL_y jointly created long exchanges of original word play as they highlighted "you" with louder and louder voices and leaned their heads towards each other. Finally, their original word play ended when they growled and pressed their heads against each other. This example shows that the language play and uptakes not only attracted each other but also challenged them. Moreover, the social positioning function was implied in the pairs' LP as shown by the use of original word play to switch the positions of challenger and challenged between GJL_y and CKC_y.

Example 21

GJL_y and CKC_y are playing with spinning tops made of blocks.

- *GJL_y: 想跟我拼就來啊。
xiang3 gen1 wo3 pin1 jiu4 lai2 a.
“Wanna fight? Come.”
- *CKC_y: 你才來啊。
ni3 cai2 lai2 a.
“You fight with me.”
- *GJL_y: 你啊。
ni3 a.
“You.”
- *CKC_y: 你'啊！ [original word play]
ni3 a!
“You!”
- *GJL_y: 你'啊！ [recycling]
ni3 a!
“You!”

Besides original word play, traditional word play was often replied to with recycling. Traditional word play usually happened when the children were happily playing with toys, and most of the traditional word play seemed to welcome peers to join in. In Example 22 below, ZJR_o was amazed at the big ball of clay she found; she sang “Finger Family” and showed PYC_o her fingers with clay on them, which may have been an inviting gesture for PYC_o to join her in playing. PYC_o then accepted the invitation; she participated in ZJR_o’s traditional word play by recycling the lyrics “Daddy finger, daddy finger” and kept singing this song while ZJR_o compared the size of the clay to plums. ZJR_o’s traditional word play triggered PYC_o’s song singing, and PYC_o’s recycling identified ZJR_o’s LP as a successful LP.

Example 22

ZJR_o is playing with clay on her fingers.

*ZJR_o: Daddy finger daddy finger [% singing and moving her fingers].
[traditional word play]

*PYC_o: Hei hei hei.

*PYC_o: Daddy finger daddy finger [% singing]. [recycling]

Like original word play and traditional word play, verbal humour was produced by the children with the purpose of making fun of and appealing to their peers, which was easily achieved with recycling. In Example 23 below, XBX_y and LHU_o were building blocks and teasing each other. XBX_y produced verbal humour by teasing LHU_o with a bathroom joke, intending to sound funny and make fun of LHU_o. LHU_o then recycled and transformed XBX_y's verbal humour by changing the addressee to XBX_y and "loves farting" to "likes panties", trying to tease back. The verbal humour ended in XBX_y's further recycling of the bathroom joke ("LHU loves his poo") and hearty laughter from both of them. LHU_o's recycling acknowledged that XBX_y's verbal humour was a successful LP. In addition, XBX_y's verbal humour and LHU_o's recycling indicated that they intended to show their identities as individuals who had the linguistic and social competence to tell jokes and make fun.

Example 23

XB_{Xy} and LHU_o are teasing each other.

- | | | |
|---|---|--|
| <p>*XB_{Xy}: 啊 LHU。
a LHU.
“Ah LHU.”</p> <p>*XB_{Xy}: 啊愛放屁。
a ai4 fang4 pi4.
“Ah loves farting.”</p> <p>*LHU_o: 嘿嘿。
heil heil.
“Hei hei.”</p> <p>*LHU_o: 啊 XB_X。
a XB_X.
“Ah XB_X.”</p> <p>*LHU_o: 喜歡內褲 [=! laughing]。
xi4 huan1 nei4 ku4.
“Likes panties.”</p> | } | <p>[verbal humour]</p>

<p>[recycling]</p> |
|---|---|--|

On the other hand, onomatopoetic sound play was regularly found with the second improvisation/second joke uptake. The children usually generated onomatopoetic sound play in pretend play, and their peers' second improvised onomatopoetic sound play corresponded to the situation of pretend play created by the first child. Example 24 below displays that PYC_o started onomatopoetic sound play by imitating the sounds of shooting and pointing her block gun at CKC_y in pretend play. CKC_y then second improvised onomatopoetic sound play by producing *king@u king@u*—a fighting sound—and holding up a block as his shield, which corresponded to the pretend play and enriched its details. The onomatopoetic sound play ended with PYC_o pretending to shoot CKC_y and CKC_y pretending to be shot to the ground. PYC_o's LP set up the play frame and CKC_y's second improvisation strengthened and enriched the frame. Thus, Example 24 demonstrates that the children's LP and uptakes may also have had the function of building the play setting.

Example 24

PYC_o and CKC_y are playing a shooting game.

*PYC_o: bon@u bon@u bon@u bon@u bon@u [% pretending to shoot CKC_y].
[onomatopoetic sound play]

*CKC_y: en@u king@u king@u king@u [% pretending to fight with PYC_o].
[second improvisation/second joke]

Different from all the above combinations of language play and uptakes, role play occurred with laughter the most often. The children usually role-played the characters seen or voices heard in their daily lives (e.g., teachers, classmates, announcements, adults, TV show characters, etc.). From the data observed, role play was produced to amuse oneself and others. In Example 25 below, CPA_y and LHY_o are talking about a flag-raising game. When LHY_o explained that Teacher Rou Rou had taught him to play the game, CPA_y had the chance to role play Teacher Rou Rou by using gestures and speaking in a delicate and touching voice, which successfully aroused LHY_o's laughter, serving as a positive evaluation of CPA_y's LP and appreciation of her humour. That prompted CPA_y to role play another role—a monk—chanting the name of Buddha (阿彌陀佛, *amitabha*) with the same hand gestures until both of them burst out laughing.

Example 25

LHY_o is talking about Teacher Rou Rou.

*LHY_o: 這彩色柔柔老師教我玩顏色旗的。
zhe4 cai3 se4 rou2 rou2 lao3 shi1 jiao1 wo3 wan2 yan2 se4 qi2
de.

“This colorful...Teacher Rou Rou taught me how to play the
flag-raising game.”

*CPA_y: 柔柔老師 [% putting her palms together and speaking in a
touching voice] ° [role play]

rou2 rou2 lao3 shi1.

“Teacher Rou Rou.”

*LHY_o: 哈哈。 [laughter]

ha1 ha1 ha1.

“Ha ha ha.”

To conclude, different subcategories of language play were followed by different uptakes. Most subcategories of language play occurred with recycling, whose functions included positive feedback, social positioning, identity display, and acknowledgement of humour.



Chapter 5

Discussion

The results revealed that the children had the ability to produce different kinds of language play and use different uptakes to reply to their peers' language play. In this chapter, some possible explanations for the major findings will be discussed. The discussion will focus on the whole picture of the children's LP production and uptake use, as well as comparisons of LP production and uptake use between same-age dyads and mixed-age dyads, younger dyads and older dyads, and younger children towards different peers and older children towards different peers.

First, the high frequency of word play compared with sound play showed that the children were fonder of playing with words. This result corresponds to many previous studies (Apte, 1985; Ely & McCabe, 1994; Crystal, 1998) which discovered that after age three, children are able to manipulate more complex linguistic structures and that their word play becomes more frequent and skilful. As for the frequency of LP subcategories, it was found that verbal humour, original word play, and onomatopoetic sound play ranked as the top three subcategories, respectively. This further proves that children around age five to six love to play at the pragmatic level of language most, followed by the lexical level and then the phonological level. That the third most frequently produced subcategory was onomatopoetic sound play agrees with Cekaite (2018), who found that three- to six-year-olds exploit sound play for social interactional functions. The present study found that five- to six-year-olds were able to generate onomatopoetic sound play to maintain their play frames.

Second, the number of LP productions and LP subcategory distribution in the same-age and mixed-age dyads were similar. This shows that different dyad

compositions may have led to a similar number and subcategories of LP. The data further showed that the mixed-age dyads were not more playful than the same-age dyads as reported by Gray (2011) and Liu and LaFreniere (2014). Though the younger children did sometimes follow the older ones' language play, as previous studies have also observed, it was discovered that in some cases the younger children and the older children wanted to play different games. For example, when the older children invited the younger ones to join in, the younger children said 我不要玩這個遊戲 (*Wo3 bu4 yao4 wan2 zhe4 ge you2 xi4*, "I don't want to play this game."). On the other hand, when the younger children welcomed the older ones to play with them, the older children said 你幹嘛 (*Ni3 gan4 ma2*, "What are you doing?").

Though age difference did not always facilitate social participation, it was reflected in the children's linguistic competence. For subcategory preference, the younger dyads were fond of original word play, while the older dyads favored verbal humour. This finding adds to previous findings on the linguistic competence of children at different ages. Previous research has suggested that children's language play progresses from sound play to word play and it grows more and more sophisticated as the children age (Garvey, 1977; Crystal, 1998; Cook, 2000). Crystal (1996) further elaborated that two-year-olds play with word form and rhyme, while three-year-olds can adopt various tones and four-year-olds love to tell bathroom jokes, generate nonsense names, and break pragmatic rules. The results of the present study echo those of Crystal (1996). It was found that the children around five years old liked original word play, which involves manipulations of linguistic elements like form, rhyme, tone, and stress at the lexical level. Meanwhile, the children aged about six enjoyed verbal humour, which involves the pragmatic use of language. From this result, it was inferred that LP at the pragmatic level (e.g., verbal humour) represents a more complex level of language that may be more difficult to manipulate, and the

present study also showed that LP at this level was frequently created by the older children, who were more linguistically competent. On the other hand, phonological and prosodic manipulations at the lexical level (e.g., original word play) were more basic and easier to produce. Language play that manipulated these aspects at the lexical level occurred more commonly among the younger children, who were less linguistically competent. In brief, different LP productions required different linguistic abilities to manipulate different aspects. The younger children and older children had different mastery levels of linguistic competence, so the LP they usually generated was different. The younger and older children's linguistic competence also reflected their age differences.

Age difference was also reflected in the children's interactions with same-age and different-age peers. The exploration of individual children indicated that the younger children produced more LP with a same-age peer, while the older children produced more LP with younger ones. From the data, the younger children were more skilful in outdoing each other with language play in interactions with same-age peers, leading to more collaborative language play exchanges. When interacting with older peers, the younger children sometimes recycled or adapted their language play; however, long interactive language play exchanges were less frequent. Unlike the younger children, the older children were more active in interactions with younger peers, and they produced LP more frequently. These results imply that age affected the children's interactions, as age differences created hierarchies and established unequal status. For example, in the mixed-age setting, the older children tended to be more dominant in LP production, while the younger children were more submissive. However, in the same-age setting, where each peer had equal status, the younger children had more chances to produce more LP. These findings agree with many previous studies which claimed that there are age-graded hierarchies in children's

peer interactions (Goodwin, 2001; Kyratzis, Marx, & Wade, 2001; Evaldsson, 2004; Kyratzis, 2004; Griswold, 2007; Reynolds, 2007).

Third, contrary to expectations, the younger dyads generated more LP tokens compared with the older ones. It was expected that the older children would have better language competence, so they should have produced more language play; however, the results showed the opposite. One possible explanation may be that the younger children liked to maintain language play, as they often recycled and transformed each other's LP, giving rise to lengthy language play exchanges. On the other hand, the older children were not fond of maintaining language play; instead, they liked to tell humorous stories to earn a peer's laughter. In sum, the LP tokens of the older dyads were lower than those of the younger dyads. These findings agree with Kyratzis's (2004) study, which found that younger children are skilled at "building on and topping their partners," while older children are good at "humorous stories" (p. 630).

As for the uptakes, the present study found that the children tended to use recycling and laughter more often, both of which served as a direct response to and assessment of language play. Recycling and laughter delivered the message that the children, as listeners, were attending to their co-participants' language play and that they enjoyed it. Both the same-age dyads and the mixed-age dyads liked to use recycling and laughter. Playful comments were rarely produced, but when they were, they generally followed either recycling or laughter. It has been speculated that recycling or laughter alone is sufficient to show positive evaluations of language play, and playful comments are an additional mark of approval, which is why they were rarely seen in the data.

The younger and older dyads had different preferences for uptakes. The younger dyads loved recycling, while the older dyads preferred laughter. The data showed that

the younger children's recycling provided rich resources for language play, as Cekaite (2018) suggested that children use recycling "as resources for building creative improvisations that make use of structure" (p. 28). The younger children tended to reuse the structure of the prior speaker's LP and adapted some elements. The younger children's recycling continuously provided resources and resulted in long episodes of language play exchanges; in contrast, the older children's laughter seemed to encourage their peers' LP but did not provide resources for others to use. Thus, an older child's LP often ended with another older child's laughter, and many turns of language play exchanges appeared less often in the older dyads' interactions.

When individual children's interactions with different peers were observed, it was found that the younger children were inclined to produce more uptakes with same-age peers, and the older children produced more uptakes with younger peers, which was similar to the pattern of LP production. This is incompatible with the results of Cekaite (2018), who claimed that older children objected to younger ones' language play. The present study showed that the younger children played a submissive role in both LP and uptake production in mixed-age interactions, in which they replied to the older children's LP less frequently. The younger children, however, liked to maintain LP with same-age peers, so they kept replying to their peer's language play.

Last but not least, the combination of LP and uptakes showed that most of the subcategories of language play were followed by recycling, which is in line with several previous studies (Blum-Kulka et al., 2004; de León, 2007; Howard, 2009; Cekaite, 2018). Through qualitative analysis, it was found that the co-participants' uptakes were indeed important feedback for children's language play, and the uptakes served as encouragement for the children to produce more language play. This confirms previous research which found that language play is a social performance

(Garvey, 1977; Iwamura, 1980; Crystal, 1998; Maybin & Swann, 2007; Duranti & Black, 2012; Aronsson, 2012; Carter, 2016; Cekaite, 2018). Moreover, the data reflected that the children were able to exploit language play to accomplish various social interactional functions. Basically, language play was produced to attract another's attention and sound funny, which echoes Carter's (2016) findings. Further, the children used language play to invite others to play with them, which agrees with the findings from Cekaite (2018) and Cekaite and Aronsson (2014). Making fun of others was also carried out in language play, as Norrick (2017) also found. The children's social goals to negotiate social positions and display identities were likely achieved by language play as well, which conforms to many previous studies (Kyratzis, 2004; Goodwin & Kyratzis, 2007; Carter, 2016). Finally, the children also used language play to create and maintain the setting of play, as Cekaite and Aronsson (2014) discovered.

Chapter 6

Conclusion

The present study targeted the ways younger children and older children exploited language play and responded to peers' language play in same-age and mixed-age settings. The results showed that the children were able to manipulate different levels of language to build on LP and use different uptakes to reply to peers' language play. The younger children's and older children's most favorite subcategories of LP involved manipulations at different levels of language, indicating that the younger children and older children possessed different mastery levels of linguistic competence. Additionally, it was found that the performances of the younger children and older children were different. The younger children tended to be more active in LP and uptake production with same-age peers, while the older children tended to be more active in LP and uptake production with younger peers. These results reflect previous studies, which found that hierarchies are established by age difference. In the mixed-age setting, the younger children tended to be submissive, while the older children were more dominant. In the same-age setting, the younger children were equal to each other, so they had more chances to play with language compared with being in an unequal setting. Finally, the qualitative investigation of the combination of LP and uptakes demonstrated that children aged around five or six are able to use language play to communicate with others through various social interactional functions implemented by LP, such as invitation, social positioning, identity display, play frame creating, etc.

Most previous research observed children's play in mixed-age settings in which the younger children and the older children were two or three years apart in age.

Previous studies found that children's play in mixed-age settings is more social and creative than that in same-age settings. The present study targeted language play in an environment where the children had a one-year age disparity. The results showed that the one-year age difference did not always facilitate social participation. However, it influenced the interactions between the younger and older children—the older children were dominant, while the younger children were more submissive in LP and uptake production in the mixed-age setting. Previous research found age-graded hierarchies in environments where children were at least two years apart (Griswold, 2007; Reynolds, 2007), while the present study discovered that a one-year age difference also caused hierarchies.

This study also contributes to establishing children's linguistic competence at age five and six. Previous studies have shown that word play is more complex than sound play, so when children grow older, they are more skilled at word play. The present study found that the children aged around five and six liked to play with words and they were indeed good at word play. When further details were examined, it was found that phonological and prosodic aspects of words were easier to manipulate compared with pragmatic aspects of words. The easier aspects were more frequently played with by the younger children, while the more difficult aspects were employed by the older children. This implies that there was a difference in linguistic competence as revealed by the aspect manipulation of words between children aged around five and children aged around six.

Various social interactional functions of LP were also illustrated in the present study. What is different from previous research is that the children practiced language play not only to invite others to join in their LP (see Example 22) but also to challenge each other (see Example 21). Additionally, their social positions switched through exchanges in collaborative language play, for example, between challenger and

challenged (see Example 21), and the one who made fun and the one who was teased (see Example 23).

Despite all the findings mentioned above, there are still some suggestions for further research. First, the present study recruited eight participants for cross-sectional observation. It would be better for future studies to include more participants and form more kinds of groups to gain findings that are more representative. It is also recommended that further research observe children's language play production in triads with different compositions since different co-participants and social contexts can influence children's language play. Second, the present study emphasized the influence of co-participants' age differences on children's language play. More factors of co-participants that may affect children's language play should be explored (e.g., social roles). Third, children's language play has been reported to have various communicative functions by previous research. Though the present study analysed a few communicative functions of language play, the analysis was limited, and this area still needs further investigation. More qualitative analysis of language play's communicative functions awaits future research, for example, how children use language play to negotiate positions, display identities, and maintain relationships.

Appendix A

Transcription symbols

(Adopted from MacWhinney, B. (2000). The CHILDES Project: Tools for Analyzing Talk. 3rd Edition. Mahwah, NJ: Lawrence Erlbaum Associates)

xxx	unintelligible speech
.	period
?	question mark
!	exclamation point
'	primary stress
:	lengthened syllable
+...	trailing off
<◇	portion of utterances
@o	onomatopoeia
&	phonological fragment
[=! text]	paralinguistic material
[= text]	explanation
[% text]	comment on main line
0 [=! action]	action without speech
[>]	overlap follows
[<]	overlap precedes
[/]	retracing without correction
[//]	retracing with correction
[!]	stressing
+^	quick uptake

References

- Ahn, S. Y. (2016). Bridging notions of language play and language awareness. *Humor*, 29(4), 539-554. doi:10.1515/humor-2016-0004
- Apte, M. L. (1985). *Humor and Laughter: An Anthropological Approach*. London: Cornell University Press.
- Aronsson, K. (2012). Language Socialization and Verbal Play. In A. Duranti, E. Ochs, & B. B. Schieffelin (Eds.), *The Handbook of Language Socialization* (pp. 464-483). New Jersey: Wiley-Blackwell.
- Bainum, C. K., Lounsbury, K. R., & Pollio, H. R. (1984). The Development of Laughing and Smiling in Nursery School Children. *Child Development*, 55(5), 1946-1957.
- Biber, B. (1972). Introductory Essay. In H. M. Johnson (Ed.), *Children in "The Nursery School"* (pp. vii-xxvii). New York: Agathon Press.
- Blum-Kulka, S., Huck-Taglicht, D., & Avni, H. (2004). The social and discursive spectrum of peer talk. *Discourse Studies*, 6(3), 307-328.
- Blum-Kulka, S., & Snow, C. E. (2004). Introduction: the potential of peer talk. *Discourse Studies*, 6(3), 291-306.
- Brito, E. E. (2017). *Language and communication in the dyadic play of preschoolers with isolate and social toys*. Master thesis, Our Lady of the Lake University, Texas.
- Broner, M. A., & Tarone, E. E. (2001). Is It Fun? Language Play in a Fifth-Grade Spanish Immersion Classroom. *Modern Language Journal*, 85(3), 363-379. doi:10.1111/0026-7902.00114
- Carter, R. (2004). *Language and Creativity: The Art of Common Talk*. London: Routledge.
- Carter, R. (2016). *Language and Creativity: The Art of Common Talk* (2nd ed.). London: Routledge.
- Cekaite, A. (2018). Microgenesis of language creativity: Innovation, conformity and incongruence in children's language play. *Language Sciences*, 65, 26-36. doi:10.1016/j.langsci.2017.01.007
- Cekaite, A., & Aronsson, K. (2004). Repetition and Joking in Children's Second Language Conversations: Playful Recyclings in an Immersion Classroom. *Discourse Studies*, 6(3), 373-392. doi:10.1177/1461445604044295
- Cekaite, A., & Aronsson, K. (2005). Language Play, a Collaborative Resource in Children's L2 learning. *Applied Linguistics*, 26(2), 169-191. doi:10.1093/applin/amh042

- Cekaite, A., & Aronsson, K. (2014). Language play, peer group improvisations, and L2 learning. In A. Cekaite, E. Teubal, S. Blum-Kulka, & V. Grøver (Eds.), *Children's Peer Talk: Learning from Each Other* (pp. 194-213). Cambridge: Cambridge University Press.
- Cekaite, A., Blum-Kulka, S., Grøver, V., & Teubal, E. (2014). Children's peer talk and learning: uniting discursive, social, and cultural facets of peer interactions: editors' introduction. In A. Cekaite, S. Blum-Kulka, V. Grøver, & E. Teubal (Eds.), *Children's Peer Talk: Learning from Each Other* (pp. 3-20). Cambridge: Cambridge University Press.
- Chukovsky, K. (1963). *From Two to Five*. Berkeley, CA: University of California Press.
- Cook, G. (2000). *Language Play, Language Learning*. Oxford, UK: Oxford University Press.
- Cook-Gumperz, J., & Kyratzis, A. (2001). Child discourse. In D. Schiffrin, D. Tannen, & H. Hamilton (Eds.), *A Handbook of Discourse Analysis* (pp. 590-611). Oxford: Blackwell.
- Corsaro, W. A. (2012). Peer cultures. *Childhood Studies, Oxford Bibliographies*. www.oxfordbibliographies.com/page/childhood-studies
- Crystal, D. (1996). Language play and linguistic intervention. *Child Language Teaching and Therapy*, 12(3), 328-344.
- Crystal, D. (1998). *Language Play*. London: Penguin Books.
- de León, L. (2007). Parallelism, Metalinguistic Play, and the Interactive Emergence of Zinacantec Mayan Siblings' Culture. *Research on Language & Social Interaction*, 40(4), 405-436. doi:10.1080/08351810701471401
- Dickie, J. R. (1973). Private speech: The effect of presence of others, task and intrapersonal variables. *Dissertation Abstracts International*, 34(3-B), 1292.
- Duranti, A., & Black, S. P. (2012). *Language Socialization and Verbal Improvisation*. In A. Duranti, E. Ochs, & B. B. Schieffelin (Eds.), *The Handbook of Language Socialization* (pp. 443-463). New Jersey: Wiley-Blackwell.
- Ely, R., & McCabe, A. (1994). The language play of kindergarten children. *First Language*, 14, 019-035.
- Evaldsson, A. C. (2004). Shifting moral stances: morality and gender in same-sex and cross-sex game interaction. *Research on Language and Social Interaction*, 37, 331-363.
- Fabes, R. A., Martin, C. L., & Hanish, L. D. (2009). Children's behaviors and interactions with peers. In K. H. Rubin, W. M. Bukowski, & B. Laursen, (Eds.), *Handbook of peer interactions, relationships, and groups* (pp. 45-62). New York: Guilford Press.

- Fagan, T. J. (2009). *Younger and Older Together: Children's interactions in a mixed-age early childhood centre*. Master thesis, Victoria University of Wellington, Wellington.
- Freud, S. (1960). *Jokes and Their Relation to the Unconscious*. New York: W. W. Norton.
- Garvey, C. (1977). Play with Language and Speech. In S. Ervin-Tripp & C. Mitchell-Keraan (Eds.), *Child Discourse* (pp. 27-47). San Diego: Academic Press.
- Goldman, J. A. (1981). Social Participation of Preschool Children in Same- versus Mixed-Age Groups. *Child Development*, 52(2), 644-650.
- Goodwin, M. H. (2001). Organizing participation in cross-sex jump rope: Situating gender differences within longitudinal studies of activities. *Research on Language and Social Interaction*, 34, 75-106.
- Goodwin, M. H., & Kyratzis, A. (2007). Children Socializing Children: Practices for Negotiating the Social Order Among Peers. *Research on Language & Social Interaction*, 40(4), 279-289. doi:10.1080/08351810701471260
- Gray, P. (2011). The Special Value of Children's Age-Mixed Play. *American Journal of Play*, 3(4), 500-522.
- Griswold, O. (2007). Achieving Authority: Discursive Practices in Russian Girls' Pretend Play. *Research on Language and Social Interaction*, 40 (4), 291-319.
- Groch, A. S. (1974). Joking and Appreciation of Humor in Nursery School Children. *Child Development*, 45(4), 1098-1102.
- Han, Bo. (2015). 遊戲中兒童自言自語的功能 (you2 xi4 zhong1 er2 tong2 zi4 yan2 zi4 yu3 de gong1 neng2), *Journal of Educational Development*, 11, 23-26.
- Han, Bo, & Qin, Dong-fang. (2016). Study on Effect of Children's Soliloquy in Kindergarten Game. *Journal of Tonghua Normal University*, 37(3), 121-126. doi:10.13877/j.cnki.cn22-1284.2016.03.022
- Hiebert, E. H., & Cherry, L. J. (1978). Language Play in Young Children's Interactions with Three Co-Participants. In D. Farkas, W. M. Jacobsen, & K. B. Todrys (Eds.), *Papers from the 14th Regional Meeting* (pp. 156-166). Chicago, Illinois: Chicago Linguistic Society.
- Howard, K. M. (2009). Breaking in and spinning out: Repetition and decalibration in Thai children's play genres. *Language in Society*, 38(3), 339-363. doi:10.1017/S0047404509090526
- Howes, C., & Farver, J. (1987). Social pretend play in 2-year-olds: Effects of age of partner. *Early Childhood Research Quarterly*, 2(4), 305-314.
- Huth, T. (2017). Playing with turns, playing with action? A social-interactionist perspective. In N. Bell (Ed.), *Multiple Perspectives on Language Play* (Vol. 1,

- pp. 47-72). Boston/Berlin: Walter de Gruyter
- Iwamura, S. G. (1980). *The Verbal Games of Pre-school Children*. New York: St. Martin's Press.
- Keenan, E. O. (1974). Conversational competence in children. *Journal of Child Language*, 1, 163-183.
- Keenan, E. O., & Klein, E. (1975). Coherency in Children's Discourse. *Journal of Psycholinguistic Research*, 4(4), 365-380.
- Kirby, K. C. (1998). *Fantasy Play in Preschool Classrooms: Age Differences in Private Speech*. Paper presented at the Biennial Conference on Human Development, Mobile, Alabama.
- Kuczaj, S. A. (1982). Language Play and Language Acquisition. In H. W. Reese (Ed.), *Advances in Child Development and Behavior* (Vol. 17, pp. 197-232). New York: Academic Press.
- Kyratzis, A. (2004). Talk and Interaction Among Children and the Co-Construction of Peer Groups and Peer Culture. *Annual Review of Anthropology*, 33(1), 625-649. doi:10.1146/annurev.anthro.33.070203.144008
- Kyratzis, A., Marx, T., & Wade, E. R. (2001). Preschoolers' communicative competence: Register shift in the marking of power in different contexts of friendship group talk. *First Language*, 21, 387-431.
- Laing, C. E. (2014). A phonological analysis of onomatopoeia in early word production. *First Language*, 34(5), 387-405.
- Lantolf, J. (1997). The function of language play in the acquisition of L2 Spanish. In W. R. Glass & A. T. Perez-Leroux (Eds.), *Contemporary perspectives on the acquisition of Spanish* (pp. 3-24). Somerville, MA: Cascadilla Press.
- Liu, C., & LaFreniere, P. (2014). The Effects of Age-Mixing on Peer Cooperation and Competition. *Human Ethology Bulletin*, 29(1), 4-17.
- MacWhinney, B. (2000). *The CHILDES Project: Tools for Analyzing Talk* (3rd ed.). Mahwah, New Jersey: Lawrence Erlbaum Associates.
- Martlew, M., Connolly, K., & McCleod, C. (1978). Language use, role and context in a five-year-old. *Journal of Child Language*, 5(1), 81-99. doi:10.1017/S0305000900001951
- Maybin, J. (2016). Everyday language creativity. In R. H. Jones (Ed.), *The Routledge Handbook of Language and Creativity* (pp. 25-39). Oxon: Routledge.
- Maybin, J., & Swann, J. (2007). Everyday Creativity in Language: Textuality, Contextuality, and Critique. *Applied Linguistics*, 28(4), 497-517. doi:10.1093/applin/amm036
- Maynard, A. (2002). Cultural teaching: The development of teaching skills in Maya sibling interactions. *Child Development*, 73, 969-982.

- McGhee, P. E., & Kach, J. A. (1981). The development of humor in black, Mexican-American and white preschool children. *Journal of Research and Development in Education*, 14(3), 81-90.
- Moore, L. C. (2012). Language Socialization and Repetition. In A. Duranti, E. Ochs, & B. B. Schieffelin (Eds.), *The Handbook of Language Socialization* (pp. 209-226). New Jersey: Wiley-Blackwell.
- Nelson, K. (1989). *Narratives from the crib*. Cambridge, Massachusetts: Harvard University Press.
- Nelson, K. (2014). What, when, and how do children learn from talking with peers? In A. Cekaite, S. Blum-Kulka, V. Grover, & E. Teubal (Eds.), *Children's Peer Talk: Learning from Each Other* (pp. 237-250). New York: Cambridge University Press.
- Norrick, N. R. (2017). Language play in conversation. In N. Bell (Ed.), *Multiple Perspectives on Language Play* (Vol. 1, pp. 11-45). Boston/Berlin: Walter de Gruyter
- Rees, N. (1975). Imitation and language development: Issues and clinical implications. *Journal of Speech and Hearing Disabilities*, 40, 339-350.
- Reynolds, J. F. (2007). "Buenos Días/((Military Salute))": The Natural History of a Coined Insult. *Research on Language & Social Interaction*, 40(4), 437-465. doi:10.1080/08351810701471427
- Rubin, K. H., Hultsch, D., & Peters, D. (1971). Non-social speech in four-year-old children as a function of birth order and interpersonal situation. *Merrill-Palmer Quarterly*, 17, 41-50.
- Sherzer, J. (1993). On Puns, Comebacks, Verbal Dueling, and Play Languages: Speech Play in Balinese Verbal Life. *Language in Society*, 22(2), 217-233.
- Sherzer, J. (2002). *Speech Play and Verbal Art*. Austin: University of Texas Press.
- Stern, D. N. (1974). Mother and infant at play: The dyadic interaction involving facial, vocal, and gaze behaviors. In M. Lewis & L. Rosenblum (Eds.), *The effect of the infant on its caregiver*. New York: Wiley.
- Sullivan, P. N. (2000). Spoken artistry: Performance in second language classroom. In J. K. Hall & L. S. Verplaetse (Eds.), *Second and Foreign Language Learning Through Classroom Interaction* (pp. 73-90). Mahwah, NJ: Lawrence Erlbaum.
- Valentine, C. (1942). *The psychology of early childhood*. London: Methusen.
- Vygotsky, L. S. (1978). The role of play in development. In V. J.-S. M. Cole, S. Scribner, & E. Souberman (Eds.), *Mind in society: The development of higher psychological processes*. Cambridge MA: Harvard University Press.
- Weir, R. H. (1962). *Language in the Crib*: Mouton.