

**Early Childhood Bilingualism:
A Study of the Development of the Noun Phrase in
Bosnian and English in Light of the ‘Single System’
and the ‘Separate System’ Hypotheses**

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Za mamu i tatu

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Abstract

This longitudinal study investigates the morphosyntactic development of the noun phrase in two young Bosnian/English bilingual children (both girls, aged 1;8 to 2;4), as well as their pragmatic development, in light of the 'single system' and the 'separate system' hypotheses. Although both of the children are acquiring the two languages simultaneously, the contexts of acquisition are different. Rina's parents speak different native languages – the mother speaks English and the father Bosnian – and claim that they employ the 'one person, one language' strategy when interacting with their daughter. The second child, Anya, is exposed to Bosnian at home, as both of her parents are native Bosnian speakers, and English only at the nursery.

The relationship between the children's degree of mixing in the two languages and the discourse strategies employed by the parents/caretakers is also examined. The parental strategies are categorised as either being monolingual or bilingual (Lanza, 1992;1997a). Both the Minimal Grasp and the Expressed Guess Strategies are requests for clarification and are classified as monolingual strategies. The Minimal Grasp Strategy enables the parent or carer to negotiate a monolingual context with his or her child, thus feigning the role of a monolingual. With the Expressed Guess Strategy, it is the parent who attempts to reformulate the child's mixed utterance; he/she does not request that from the child, as is the case when a Minimal Grasp Strategy is employed. The last three strategies identified by Lanza (1992; 1997a) – Repetition Strategy, Move on Strategy and Code-Switching Strategy – are defined as being bilingual strategies, as they reveal the parent's bilingual identity by clearly indicating the parent's comprehension of the child's mixed utterance.

The results show that both bilingual children are able to differentiate their two languages according to context (pragmatic differentiation), as well as structurally, from the earliest stages. There is appropriate inflectional marking within the noun phrase in Bosnian from the beginning, whereas marking is appropriately absent in English. The fact that the children are not recorded using either Bosnian inflections within an English noun phrase in the English context, or English inflections within a Bosnian noun phrase in the Bosnian context, thus serves as evidence for the 'separate system' hypothesis. Further

evidence is provided by the low percentage of mixed utterances in the data for both children. The presence of a slightly higher number of English, as well as mixed, utterances in Anya's data in the Bosnian context can be explained by the fact that the parents are found to be negotiating a bilingual context of interaction in the home, by using certain discourse strategies which signal to Anya that the use of English items in the Bosnian context is acceptable. On the other hand, a much lower number of mixed utterances is recorded in Rina's data. Rina's parents generally adhere to the 'one person, one language' strategy, although the mother employs more bilingual than monolingual strategies in response to the child's context-inappropriate language use than the father, resulting in a higher percentage of Bosnian utterances being recorded in the English context. These findings suggest that the parents' pragmatic choices may also have an influence on the language development of bilingual children.

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Chapter 1. Introduction

1.1 The Aim and Purpose of the Study

This study examines the language development of two young Bosnian/English bilingual children, aged 1;8 to 2;4 (year; month), by assessing whether the children are able to use their two languages in a context-appropriate way from an early age, as well as investigating their morphosyntactic development in the two languages within the noun phrase. One of the bilingual children, Rina, is acquiring her two languages through the ‘one person, one language’ strategy of interaction, as her mother is a native English speaker and her father is a native Bosnian speaker. The other child, Anya, is exposed to only Bosnian in the home, as her parents are both native speakers of Bosnian. The majority of her English input comes from outside the home, such as the nursery that she attends.

It is important to point out that this study does not address the potential relevance of gender in language acquisition, as this issue is beyond the immediate scope of the thesis; nevertheless, this issue should not be overlooked and could be investigated as part of further research.

Most of the studies (De Houwer, 1990; Lanza, 1997a; Sinka, 1999; Meisel, 1986; Deuchar and Quay, 2000; Goodz, 1989; Juan-Garau and Perez-Vidal, 2001; Döpke, 1998) have investigated bilingual children’s language development in terms of the degree of language separation within the ‘one person/one language’ linguistic context, which implies that the bilingual child is exposed to both languages in the

home, with the mother only using one language with the child and the father only using the other language. In addition, one of the parent's languages is the majority language of the community (also see Ronjat, 1913). However, there has been hardly any research (see Vihman, 1995) investigating bilingual first language acquisition, where the separation of the two languages in the input is affected and determined by 'domains', i.e. where a child is exposed to one language at home and the other outside the home.

“Although the separation of the two languages by person has received the most attention so far, the separation of the two languages in the input may also be effected by situation-bound factors (for instance, Finnish spoken by all family members inside the home, but Swedish once they are outside). To my knowledge there has again been no research investigating the effect of this type of input situation v. others on young bilingual children's language development.”

(De Houwer, 1995, p.226)

This study offers the possibility of investigating whether bilingual children acquire their two languages differently in the two types of contexts mentioned above, as one of the children in the study is exposed to the two languages through different domains, while the other child receives input in the two languages within the home.

The study is unique, as it focuses on a combination of languages previously unresearched and this bilingual language acquisition context will provide data that will enable one to research whether the children are able to differentiate their two linguistic systems (Meisel, 1989, 2000), both structurally and pragmatically.

The investigation is focused on the 'single system' and 'the separate system' hypotheses, and aims to test the latter, which claims that bilingual children are able to develop separate morpho-syntactic systems from the beginning of their language development. The children will be said to have achieved pragmatic differentiation of the two languages if the data show context-appropriate language use, i.e. more Bosnian utterances produced in the Bosnian context and more English utterances recorded in the English context. This would serve as evidence for the 'separate system' hypothesis.

The children in the study are acquiring two morphosyntactically very different languages (Sinka and Schelletter, 1998): Bosnian, a highly inflected language and English, a language not as morphologically complex. It will, therefore, also be possible to examine whether the rules of each language develop separately or as a single system. The research questions investigated in this study are expressed in full in section 4.1 (p.87).

This particular study focuses on the noun phrase, whose structure is very different in the two languages. Bosnian has three genders, seven cases and in a Bosnian noun phrase both determiners and adjectives have to agree in case, gender and number with the noun. English, on the other hand, has no gender system beyond the personal pronoun system and a restricted use of case. Within an English noun phrase the noun is marked only for the genitive and plural on common nouns, and agreement in number is only required between quantifiers and nouns (i.e. the quantifiers have to be marked for the plural if they occur with plural nouns).

The data collected will provide evidence for either the 'single system' hypothesis or the 'separate system' hypothesis. In line with other research (Sinka and Schelletter, 1998), the children's use of Bosnian inflections within an English noun phrase in an English context or English inflections or lack of inflection within a Bosnian noun phrase in a Bosnian context will be interpreted as support for the 'single system' hypothesis, while the children's language specific and language appropriate use of inflections will be interpreted as evidence for the 'separate system' hypothesis.

In addition, this study seeks to demonstrate that parental/caretaker discourse strategies directly impact the levels of mixing (see section 4.1.2) present in the bilingual children's utterances in the two contexts. It is important to point out at this stage that a detailed discussion of sociolinguistic factors (e.g. the influence of the host language and community on the maintenance of a minority language) is beyond of the scope of this thesis (for a brief outline of such factors see section 3.1.3).

1.2 Overview of the Thesis

The thesis presents the context and results of a longitudinal study of the simultaneous acquisition of Bosnian and English by two first-born children aged from 1;8 to 2;4 living in England.

A review of the relevant literature is provided in Chapter 2. The first part of this chapter addresses the two hypotheses, while the second part is dedicated to factors influencing bilingual language development, such as parental discourse strategies and sociolinguistic factors. In the third part of Chapter 2, the main concepts of

Universal Grammar are discussed, as they represent the theory of language that forms the basis of this study.

In Chapter 3, the structural features of the languages investigated in the study are described. A background of the Bosnian community is also given.

Chapter 4 presents the children's language environment, together with the case study methodology. This includes details of the data collection, as well as the transcription and coding methods.

In Chapter 5, the results of the children's general language development, which include MLU scores and language use according to context, are discussed. In addition, parental and carer discourse strategies, employed in response to the bilingual children's language mixing in both contexts, are analysed.

Chapters 6 and 7 consist of the findings referring to Rina's development of the noun phrase in English and Bosnian respectively. Similarly, Chapters 8 and 9 deal with the results from the analyses which focus on Anya's acquisition of the noun phrase in English, as well as Bosnian.

Finally, the summary and the discussion of the findings in reference to other studies of bilingual first language acquisition are given in Chapter 10. The implications and directions for further research are also presented in the concluding chapter.

Chapter 2. Literature Review

One of the most debated issues in bilingual first language acquisition has been whether bilingual children acquire their two languages as a single system or as two separate systems. In the following section, the two hypotheses will be discussed, as well as the different aspects of bilingual children's language mixing. The last section focuses on factors influencing bilingual children's language development, in particular the influence of parental discourse strategies on their bilingual children's language development and sociolinguistic factors.

2.1 The Two Hypotheses

2.1.1 The 'Single System' Hypothesis

It was Volterra and Taeschner (1978), who, through their research, started the debate on how bilingual children acquire their languages. In their paper, Volterra and Taeschner argue that three stages can be distinguished in the language development of a bilingual child (p.311). According to them, during the first stage the child has one lexical system, which consists of words from both languages. This changes in the second stage, which is characterised by the child having two different lexicons but now applying the same syntactic rules to both languages. In the final stage, the child, according to Volterra and Taeschner, has two different codes, with separate lexicons and syntax, but he or she associates each language exclusively with the person using that language.

“Only at the end of this stage, when the tendency to categorise people in terms of their language decreases, can one say that a child is truly bilingual.”

(Volterra and Taeschner, 1978, p.311)

It is important to stress that the above definition of a true bilingual is not adopted in this study, as it is now widely accepted that ‘bilingual’ describes someone who has competence in two languages and uses these languages for different purposes. In addition, a bilingual speaker does not necessarily need to possess the same level of proficiency in each language (Li Wei, 2000b).

Volterra and Taeschner’s study involves two Italian/German bilingual children, who are acquiring the two languages simultaneously from birth. The children’s language development is recorded from the age of 1;5 to 3;6, and 1;2 to 2;6 respectively.

The results show that, in what Volterra and Taeschner define as Stage 1, a word the children produce in one language almost always does not have a corresponding word in the other language. The authors also stress that words from both languages frequently occur together in two- to three-word constructions. They interpret the bilingual children’s language mixing to show that the children have one lexical system, which includes words from both languages. However, Volterra and Taeschner seem not to have taken into consideration the fact that the children might not have yet learnt some words in a particular language, or that the concepts lack a lexical label in that language, and are borrowing from the other.

A criticism of Volterra and Taeschner’s interpretation of their results is given by Genesee (2000). In his paper, Genesee discusses some reasons for bilingual mixing.

He mentions the work of Imedadze (1978), who found that bilingual children identify a referent with a term in the language that was first or most frequently used and might insist on using that word all the time regardless of the linguistic context. Another reason that Genesee proposes is that bilingual children might mix certain function words from one language into the other because they are simpler in form and more relevant than the equivalent in the other language. He believes that the examples of mixing due to lexical borrowing could be interpreted as overextensions of the type observed in monolingual children. The difference, Genesee (2000) stresses, is that bilingual children overextend inter-lingually as well as intra-lingually, while monolingual children overextend intra-lingually only (p. 333).

“...monolingual children make use of whatever vocabulary they have acquired; as their vocabulary grows, they use increasingly appropriate, less overextended words. This also seems a reasonable interpretation of bilingual overextensions...and, in fact, accords with the tendency for bilingual children to mix less as their proficiency increases...” (Genesee, 2000, p.333)

At this point in the discussion of Volterra and Taeschner's study, it is important to stress that, in their analysis of the children's utterances, they neither considered input nor context. This additional information might have shed more light on the children's language development and strengthened the validity of the results.

Another important study that contributes to the discussion of bilingual children's differentiation of their two languages is Vihman's study (1985), whose results support Volterra and Taeschner's findings. In her paper, Vihman (1985) discusses the

language development of an Estonian/English bilingual child (1;1 to 2;10), whose parents use exclusively Estonian at home, while English is the language of the community. Vihman points out that the child is aware that both parents are fluent in both languages and that English is his mother's native language. This situation could have produced a possible bilingual context, where both languages are present in the child's input within the home, which is an important fact to bear in mind when analysing the results of the study, as it might have influenced the child's language use. Although Vihman's data support Volterra and Taeschner's assumption that in Stage 1 the child has only one lexical system, she does not concur with the claim that when the child differentiates the two lexicons she/he still operates with one syntax (Volterra and Taeschner's Stage 2). Vihman states the following:

“...by the time he separates his lexical systems and no longer mixes languages to a great extent in single utterances, he has begun to separate his syntactic system as well.” (Vihman, 1985, p.312)

Vihman (1985) concludes that, when the child is adding words from both languages to his lexicon, he is not concerned with the difference between language sources, contexts or interlocutors (p. 316). As evidence she cites the fact that he uses words from both languages in both Estonian and English contexts. Vihman points out that between the ages of 1;8 to 2;0 his linguistic abilities increase in both languages, and it is then that he becomes aware of his language choices, the different contexts and interlocutors, which leads to a differentiation of the two language systems. It is during this period that his rates of language mixing drop. After that his mixing is interpreted by Vihman as code-switching. Genesee (2000) argues that declining rates of overall

mixing, which are cited by Vihman as the beginning of language differentiation, should not be interpreted as evidence that the child initially has only one language system:

“Mixing may decline with development, not because separation of the languages is taking place but rather because the children are acquiring more complete linguistic repertoires and, therefore, do not need to borrow from or overextend between languages.” (Genesee, 2000, p.332)

After reviewing Vihman’s data, Pye (1986) offers another interpretation of the results. He concludes that the child does, in fact, distinguish between the English and Estonian lexicon from the beginning. He attempts to recalculate the data on English/Estonian synonyms, this time excluding the English words with no known Estonian equivalent, which Vihman (1985) originally included in her analysis. According to Pye, his finding that the child’s English multi-word utterances account for less than 10% of all multi-word utterances in Estonian contexts shows that the child is well aware of his interlocutors and the context (p. 593). He believes that “it is premature to conclude that R had only a single lexicon in the early stages of language acquisition.” (Pye, 1986, p.593)

Lanza (1992) also discusses Vihman’s work, pointing out that Vihman’s results show that the majority of her son’s mixed utterances involve the use of English function words with Estonian nouns, although Vihman’s subject is claimed to be dominant in Estonian. If Vihman’s son were truly dominant in Estonian, the data should have shown the presence of mixed utterances consisting of a combination of Estonian

function words and English nouns in the Estonian context, rather than English function words with Estonian nouns. Lanza points out, however, that no criteria for this assessment of dominance are provided other than that Estonian is the home language. As mentioned earlier in the discussion, there is a possibility that the home context is not strictly monolingual Estonian, as the child is aware that the mother is a native speaker of English, who learnt Estonian as an additional language. Another reason why it is not easy to establish a clearer picture of the child's bilingual language development is the absence of recordings and data from an English context. A more detailed investigation of the home context, as well as an inclusion of data from an English context would have provided the researcher with more conclusive and comprehensive results.

Another study that is said to support the 'single system' hypothesis is research conducted by Redlinger and Park (1980), involving four two-year-old children living in Germany. The fathers of the children are native speakers of German and the mothers are all non-German. The authors state that two of the children (Danny and Marc) are addressed according to the 'one person-one language' strategy. However, according to Table 1. (p.339), it seems that both of Danny's parents address him only in the mother's native tongue, English. On the other hand, Henrik's parents use either language with him, and Marc is addressed in either language by his mother. Redlinger and Park emphasise that 'the children were reportedly not exposed to language mixing within sentence boundaries' (p.338). The authors proceed to make a systematic analysis of mixing with respect to language development in terms of age or MLU. In their study, they also analyse the parts of speech that have been mixed.

“An analysis of their language mixing revealed an initially higher rate of mixing which diminished with a growth in language development as measured in MLU. The data suggest that the children were at various stages in a gradual process of language differentiation thus providing support for the one-system theory of bilingual acquisition.” (Redlinger and Park, 1980, p.337)

Although they claim that their findings support the ‘single system’ hypothesis, Redlinger and Park point out that the language development of a bilingual child is affected by both linguistic and sociolinguistic factors. The data show that two of the four bilingual children are addressed by their parents in both languages, although the parents report using the ‘one parent-one language’ strategy with their children. Redlinger and Park believe that this has an impact on the bilingual children’s language development and they stress that the degree of separation of language by person in the child’s environment might affect the speed and ease with which the child learns to differentiate the languages (p.351). Redlinger and Park believe that

“Future studies of developmental bilingualism should address these questions in an attempt to gain increased insight into the sociolinguistic parameters of bilingual acquisition.”

(Redlinger and Park, 1980, p.351)

Although the above study does not address how the parents address each other, as well as third parties, in the presence of the children, such factors might be equally significant when discussing bilingual children’s language development.

It is precisely the insight into the bilingual child's linguistic environment that can affect the interpretation of the data, which up to then would have been considered as evidence for the 'single system' hypothesis and indicated the inability of bilingual children up to a given stage of development to differentiate their two languages. This aspect of bilingual language development will be discussed later in the chapter.

2.1.2 The 'Separate System' Hypothesis

The shortcomings of the data, that were identified in the studies which claimed to provide evidence to support the 'single system' argument, have led researchers to develop the 'separate system' hypothesis, which has in recent years been viewed as a more acceptable explanation of how bilingual children acquire their two languages.

Goodz (1994) criticises the proponents of the single system hypothesis by pointing out that they do not take into account the possibility that the bilingual child might be aware that he/she is being presented with two languages from the beginning. This premise is the main argument of the 'separate system' hypothesis, as well as the fact that the two languages need to be presented in a separate manner.

“The Separate Development Hypothesis claims that ‘the morphosyntactic development of a pre-school child regularly exposed to two languages from birth which are presented in a separate manner proceeds in a separate fashion for both languages.’” (De Houwer, 1990, p.339)

More current research provides evidence for a 'separate system' approach (Meisel, 1989; De Houwer, 1990; Genesee, 2000; Genesee et al, 1995; Köppe, 1996; Paradis and Genesee, 1996; Deuchar and Quay, 1998; Nicoladis, 1998; Bauer et al, 2002). One of the early studies by Lindholm and Padilla (1978) investigated the bilingual language development of five Spanish/English bilingual children aged between 2;0 and 6;2. The main emphasis of the research was language mixes in the language samples. They found that only 2% of the total number of utterances that were analysed contained mixes. The majority of the mixes involved the insertion of English nouns from the majority language into Spanish utterances. Lindholm and Padilla (1978) concluded that the analyses of the results

“reveal that bilingual children employ language mixes either when they lack the lexical entry in the appropriate language or when the mixed entry is more salient to the child ...Further, when these mixes occur the structural consistency of the utterances is maintained. These findings strengthen our earlier conclusion ...that bilingual children are able, from an early age, to differentiate their two linguistic systems.” (p.334)

De Houwer (1994) believes that in order to test the 'separate system' hypothesis one needs to look at cross-linguistically comparable areas that are clearly different in the bilingual child's two languages (see also Meisel, 1989). She states that in order for the child data to be considered as evidence for the separate development hypothesis it needs to show a difference in those areas in the two languages and that there should not be an influence from one language on the other. In her book, De Houwer (1990) presents the results of a case study of a Dutch-English bilingual child in the light of

the 'separate system' hypothesis. The subject of De Houwer's study, Kate, was recorded between the ages of 2;7 and 3;4, while interacting with her mother, who is a native English speaker and spoke only English to the child, and the investigator, who addressed the child in Dutch. De Houwer (1994) points out that Kate was equally exposed to both languages, which were separated in the child's input.

"Kate's two languages were clearly separated in the input, i.e., the people around Kate usually addressed her in one of two languages only. Thus, Kate grew up in a one person/one language environment." (De Houwer, 1994, p. 39)

De Houwer's main findings indicate that Kate's language production for each language is very similar to that of her monolingual peers. In addition, De Houwer describes Kate as a competent code-switcher. This refers to the fact that when Kate uses lexical mixes they are well-formed according to the rules of either Dutch or English. De Houwer also points out that the analysis of Kate's morphosyntactic aspects of language production shows that each of Kate's two languages develops separately from the other, as there is no evidence of structures, patterns or rules of the one language being applied to the other. De Houwer (1994) also notes that Kate's language choice is mostly determined by the interlocutor, and most of the time she addresses the interlocutor in the language in which he/she addressed her. However, when she does not address the particular interlocutor in the appropriate language, it is with persons that she knows are fluent bilinguals, such as the investigator and her father. On the other hand, if she knows that the interlocutor is monolingual, she will try not to use the inappropriate language.

“In both her willingness to lean on two linguistic systems alternatingly in interactions with known bilinguals and her reluctance to do so in conversations with monolinguals, Kate strongly resembles older bilinguals.” (De Houwer, 1994, p.42)

In their paper, Sinka and Schelletter (1998) also offer evidence to support the view that the bilingual child separates the two languages from the beginning. The study records the morphosyntactic development of two bilingual children, German/English (2;0 to 2;6) and Latvian/English (1;3 to 1;11) respectively. The research focuses on the development of word order and the emergence of inflections in the children’s respective languages. The fact that the word order and morphological marking follow very different patterns in Latvian and English, as well as in German and English, makes the data from this study highly suitable for testing the Separate Development Hypothesis. The authors state that the analysis of the German/English data show early language-specific word order patterns and in the Latvian/English data nouns and verbs are correctly inflected in Latvian, while such marking is appropriately lacking in English. These findings provide firm support for the Separate Development Hypothesis.

In search of further evidence of the children’s separate development of their two languages, Sinka and Schelletter (1998) also investigate the emergence of functional categories in the children’s two languages. Their research is set within the framework of generative grammar, which makes a distinction between lexical and functional categories (p.302). Functional categories include - besides the traditional ‘closed’ class items, such as conjunctions, prepositions and pronouns - tense and agreement marking on the verb, as well as case marking within the noun phrase.

Radford (1990, 1995) conducted extensive research on the acquisition of functional categories by monolingual English children, claiming that functional categories are absent from children's early language and emerge later in their language development (Maturational Hypothesis).

“...whereas adult sentences are projections of both lexical and functional heads alike, child sentence structures are projections of the four primary lexical heads (noun, verb, adjective and preposition), and lack functional heads (auxiliaries, complementizers, determiners, case particles) and their projections altogether.” (Radford, 1995, p.483)

According to the Maturational Hypothesis, children enter the lexical stage earlier and progress later to the functional stage (Radford, 1990, p.275). Radford also claims that this model of grammatical language development is applicable not just to English, but to other languages as well (p.290). Sinka and Schelletter (1998) state that the study of bilingual children enables a test of Radford's claim that functional categories need to 'mature' (Maturational Hypothesis), as it allows a necessary control of the children's stage of development (p.303). Their findings show that functional categories emerge first in the more inflected language (German and Latvian) and later in English, thus indicating a developmental lead-lag pattern (see also Garman, Schelletter and Sinka, 2000).

“We conclude that the bilingual children in the study are capable of discriminating between the two linguistic codes from an early age and that the lead-lag pattern which emerges in the morphosyntactic development of each pair of languages, together with the lack of mixed morphology across the languages, supports the Separate Development Hypothesis and provides evidence against Radford’s Maturational hypothesis.” (Sinka and Schelletter, 1998, p.303)

In their study, Deuchar and Quay (1998) investigate whether there is a single initial system in the syntax of developing bilinguals (p.231). They challenge the claim that the existence of mixed utterances, which appear in young bilinguals’ speech, are evidence of a single (undifferentiated) syntax. Drawing on their data, Deuchar and Quay (1998) argue against the above claim, as they conclude that the mixed utterances are often produced because the children lack lexical resources in both languages. They believe that one can only establish if bilingual children develop a differentiated or undifferentiated syntax when the bilingual child starts producing language-specific utterances in the two languages and shows evidence of morphological marking. Deuchar and Quay’s study investigates the speech of an English/Spanish bilingual child living with her Spanish-speaking father and English-speaking mother in southern England. Spanish is the language exclusively used in the home, among the parents, as well as with the child. English, on the other hand, is used when English-speaking visitors are present and is the language to which the child is exposed outside the home (e.g. crèche). It seems that the child’s language use is differentiated according to location. The authors estimate that half of the child’s total input is in English and the other half in Spanish.

Deuchar and Quay (1998) first present the results from their analysis of the bilingual child's mixed utterances recorded between the ages of 1;7 and 1;9. They conclude that the child seems to be choosing the contextually appropriate word where she can, but when she lacks a term in a particular language, she uses the lexical resources that she has available in the other language. Because of this, according to Deuchar and Quay, this data cannot be claimed to show evidence for a single initial syntactic system.

The second part of the analysis focuses on the emergence of language-specific morphological marking on nouns, verb and adjectives in multi-word utterances from ages 1;8 to 2;3. Deuchar and Quay (1998) conclude that the children's utterances can be classified as either English or Spanish by the age of about age 1;11, as by that age language-specific morphology has emerged. The findings show that the children are operating with language-specific syntax and indicate that they are differentiating between their two language systems.

Apart from the evidence found to support the 'separate system' hypothesis, which shows that young bilingual children develop language-specific syntax, some studies have found that bilingual children are also able to differentiate their two languages according to context from a very early age, i.e. they show pragmatic differentiation of their languages.

One such study, conducted by Nicoladis (1998), examines bilingual children's pragmatic (context-appropriate language use) and lexical (use of translation equivalents) differentiation in order to shed more light on how bilingual children come to understand that there are two languages in their input (p.105). Nicoladis

points out that the aim of pragmatic differentiation is not monolingual behaviour in the two languages, but it is the ability of the bilingual child to use his/her languages as required by the pragmatic context.

The main aim of Nicoladis's study is to determine whether lexical differentiation does indeed precede pragmatic differentiation in bilingual children's language development, as was found in Vihman's study (1985). The subject of the study includes a Portuguese/English bilingual child, aged 1;0 to 1;6. Interestingly, the results reveal that the bilingual child shows evidence of pragmatic differentiation before lexical differentiation. Nicoladis stresses that the results suggest

“that the child first understands that there are two pragmatic contexts and then learns equivalent words to be used differentially in the two contexts.”

(Nicoladis, 1998, p.105)

Another study that found evidence for pragmatic differentiation in bilingual children's language development was that conducted by Bauer et al (2002), who investigated the ways in which an English/German bilingual child, aged 2;0 to 3;0, used her two languages when interacting with her adult caregivers during play. They found that the child tended to use mostly the language of the interlocutor for the duration of the play activity. Bauer et al (2002) point out that their findings support earlier research, which showed that young bilingual children differentiate their language according to the language of the interlocutor.

“Here, even a child as young as two displayed interactional sensitivity to the code used by her play partner.” (Bauer et al, 2002, p.68)

The authors state that there is one exception to this behaviour. The data shows that, when the bilingual child is leading German play events, while interacting with her German interlocutor, she very often switches to English. However, Bauer et al stress that this does not constitute evidence of the child’s lack of competence in German, but that

“...she is developing the ability to use her two languages as a powerful tool for controlling the dynamics of her own and her participant’s involvement in those play activities in which she has an agenda for how the adult partner should act.”

(Bauer et al, 2002, p.69)

These results not only support the separate development hypothesis, but also show that bilingual children as young as two are able to code-switch between their two languages for pragmatic reasons, which is similar to the usage employed by bilingual adults (for an overview of research into adult bilingual behaviour see Romaine, 1995; Wei, 2000a).

2.1.3 Conclusion

In conclusion to her discussion of the ‘single system’ and the ‘separate system’ hypotheses and in support of the latter, Goodz (1994) points out that

“monolingual and bilingual children approach the task of language acquisition in the same way and that their early utterances can be understood as the expression of cognitive, affective, and social notions that are important to them, using the linguistic resources available to them at any particular point in their development.” (p.62)

As seen from the studies discussed in the previous section, current research provides firm evidence for the ‘separate system’ hypothesis.

“...Although currently the hypothesis that young bilingual children develop their two languages independently from one another as far as morphosyntax goes remains unchallenged, many more investigations are needed to further substantiate it.”

(De Houwer, 1995, p. 249)

2.2 Language Mixing

It is widely accepted that bilingual children at some point during their language development mix their two languages. The instances of mixing have been found to be generally very low (Lindholm and Padilla, 1978; De Houwer, 1990; Sinka, 1999), although some studies have reported a higher percentage of mixed utterances in bilingual children’s language (Vihman, 1985; Gawlitzek-Maiwald and Tracy, 1996; Lanza, 1997a). However, language mixing by bilingual children is not considered to be an indication of confusion or undifferentiated language development any more, as different factors have been found to influence the emergence and rate of bilingual children’s language mixing, such as borrowing, dominance and parental input (see Lanza, 1997a; Gawlitzek-Maiwald and Tracy, 1996). Furthermore, studies have

shown that bilingual children's language mixing is not indiscriminate and is governed by 'rules'.

In their discussion, Köppe and Meisel (1995) also point out that young bilingual children's mixing has often been interpreted as inability of the children to separate their two languages (for a definition of language mixing adopted in this study see section 4.1.2). They explain that bilingual code-switching can be characterised as being governed by grammatical as well as pragmatic constraints and they define the violation of these constraints as 'code-mixing'. In their discussion, they assume that the early code-mixing is a result of the lack of knowledge of these constraints.

Similarly, Sinka (2000) argues that a detailed investigation into language mixing patterns has established that mixing in bilingual children's language is governed by pragmatic and grammatical constraints. In her paper, Sinka (2000) discusses the language mixing in the language of two Latvian/English bilingual children (Māra -1;6 to 2;5 and Maija - 1;3 to 2;2) living in England. In the study, both of the children are addressed by their parents according to the 'one person-one language' principle and the input for both languages is fairly equal for both children. In her discussion, Sinka concentrates on the mixed utterances that the children produce and defines a mixed utterance as an utterance containing elements from both languages (p.151). Her findings show that the children produce a very low percentage of mixed utterances. Sinka goes on to analyse these mixed utterances and divides the mixing into three types: lexical, morphological and syntactic mixing.

“...the term *lexical* is used for categories such as nouns, verbs, adjectives, adverbs and prepositions, whose members are content words and have descriptive content (Radford 1997) and *morphological* is used for categories whose members have a grammatical function and carry information about grammatical properties such as tense, agreement and case. The third division, that of *syntactic* mixing, is introduced to highlight influences in syntactic structure from one language to another.”

(Sinka, 2000, p.158)

Sinka's findings show that the two children primarily mix lexical categories, mostly nouns. Contrary to these findings, both Vihman (1985) and Deuchar (1999) have found that their bilingual subjects mix mostly function words and not nouns. As an explanation of this finding, Deuchar suggests that early bilinguals may not be treating function words as language-specific, whereas they do so with content words (p.23).

In her paper, Sinka (2000) further states that, although the percentage of mixed utterances in Mara and Maija's data is in general very small, there is evidence of some lexical mixing throughout. In the following example (taken from Sinka, 2000, p.159), Māra (1;7) inserts a Lavian noun in an otherwise English utterance in the English context, which can be interpreted as an instance of borrowing due to a gap in the bilingual child's English vocabulary:

Ex.1

M (mother): what's that?
C (child): it's a *suns*
 'it's a dog'
M (mother): it's a dog.

Sinka points out that morphological and syntactic mixing is very rare, with four examples in Mara's data out of 5,342 utterances and 15 such utterances out of a total of 5,650 for Maija. Sinka (2000) concludes that the bilingual children are found to be able to separate their two linguistic systems on the grammatical level using appropriate markings for tense, person, gender, case and number from the first recordings. She also stresses that there is little evidence of bound morphemes (morphemes which are unable to function as free standing words) of one language being attached to elements from the other language.

Even though the most frequent type of mixing in bilingual children's language is found to be lexical in nature (see Lindholm and Padilla, 1978; Redlinger and Park, 1980; Goodz, 1989), some studies have recorded a considerable amount of syntactic, as well as morphological mixing (as defined by Sinka, 2000).

One of the studies that found evidence of syntactic, as well as lexical mixing in the bilingual child's language, was conducted by Gawlitzek-Maiwald and Tracy (1996), who investigated the language development of Hannah, a German/English bilingual child living in Germany from the age of 2;1 (see also Swain and Wesche, 1975, for instances of syntactic mixing). Hannah's syntactic mixing at 2;7 involved applying English word order to an otherwise German utterance, as exemplified below (taken from Gawlitzek-Maiwald and Tracey, 1996, p. 911):

Ex.2

ich habe gegeben meine löffel zu dir
'I have given my spoon(s) to you'

If the German word order had been followed, the utterance would have been: 'ich habe meine löffel zu dir gegeben' ('I have my spoon (s) to you given').

Gawlitzeck-Maiwald and Tracy believe such mixed utterances reflect the bilingual child's competence in both languages, and not linguistic confusion.

"Hannah pools her resources, taking and combining what is available to her in both languages, in a lexical as well as structural sense."

(Gawlitzeck-Maiwald and Tracy, 1996, p.920)

As far as morphological mixing is concerned, it features significantly in the data of Lanza's study (1992; 1997a) which deals with the language development of a Norwegian/English bilingual child, Siri, aged 2;0 to 2;7, living in Norway. Lanza (1992) points out that the data indicate that Siri applies Norwegian grammatical bound morphemes to English lexical morphemes in the English context, as, for example, in the use of the verb 'looker' ('looks'), which can be defined as morphological mixing. Siri is found to mix Norwegian grammatical items in her speech to her English-speaking mother while no such mixing of English items occurs in her speech to her Norwegian-speaking father. Lanza argues that Siri's grammatical mixing can be interpreted as a sign of her dominance in Norwegian and not as being indiscriminate (c.f. section 2.3.3 for further discussion of Siri's language dominance).

Language dominance seems to be a plausible cause of language mixing in bilingual children, as they are often less competent in one of their languages mostly due to differences in input and the 'power' of one language over the other. This is usually the

case when one of the children's languages is the language of the host community. The concept of dominance is discussed in more detail in Section 2.3.3 of this chapter.

In her study of French-English bilingual children, Goodz (1994) also researched language mixing of bilingual children and found that there was, generally, a very small degree of mixing in the children's language and that, contrary to the findings of most studies (see Vihman, 1985; Redlinger and Park, 1980), the frequency of mixing increased with the children's age. Goodz's results indicate that language mixing is almost nonexistent at the very youngest ages, but increases in the 19 to 24 month old age group, continues in the 25 to 30 month group and peaks at ages 31 to 36 months (p.66). She gives a convincing explanation for this unusual finding and argues that

“Unless the child makes equal progress in each language, duplicates every experience with both parents, and unless each parent ensures that conversations about similar events, objects and experiences take place, the child is unlikely to acquire corresponding or equivalent lexical items in each language. Thus, as the child seeks to express more and more ideas, he or she may need to borrow more and more lexical items from the parent's non-native language or even switch entirely to the parent's non-native language if the child has not had equivalent experiences in both languages.” (Goodz, 1994, p.67)

Goodz (1994) also provides evidence that shows that bilingual children are aware of the existence of two different language systems, even when using items from both languages in an utterance. One of the examples includes the children's differential use of a lexical item depending on the particular language context. She gives an example

of a child in her study, who, while interacting with his anglophone mother about the observer said, 'Mommy, he has such a long *cheveux*,' with strong emphasis on the English plural morpheme (p.68). Importantly, this shows English morphological marking being applied to a French noun in an English context appropriately. Goodz points out that, later in the same session, when the child addresses his francophone father and uses *les cheveux* ('hair') in a French sentence, he does not mark the plural by adding an English morpheme. Goodz argues that this evidence suggests that the bilingual children's mixing should not be interpreted as a result of a lack of language differentiation or confusion between the two linguistic systems.

"Rather, it appears that children are borrowing either an equivalent item because a term in the host language is unknown or even because it is the term that is most commonly used by both parents." (Goodz, 1994, p.68)

In their study, Köppe and Meisel (1995) discuss two types of switching (the authors use the term 'switching' instead of 'mixing') in bilingual first language acquisition: language choice (selection of language according to interlocutor, topic or context) and 'conversational switching'. They emphasise that the language spoken by the interlocutor seems to be the most important factor for language choice of bilingual children and young bilingual children are found to successfully switch languages according to interlocutor.

As far as 'conversational switching' is concerned, Köppe and Meisel (1995) stress that bilingual children have been found to repeat their own utterances in both languages in order to ensure that they are understood. This behaviour, they point out,

can be explained by the fact that, the parents understand utterances of both languages and respond to their children's utterances in a variety of ways even when addressed in the 'wrong' language (see also section 2.3.1 for Lanza's (1992) typology of parental responses). The authors emphasise that switching according to interlocutor that occurs as early as 2;0 does not necessarily involve intra-sentential switching. This type of switching usually appears later on, because, they claim, it requires syntactic knowledge that might not be available that early on in language development. Köppe and Meisel investigated the bilingual language development of two French/German bilingual children living in Germany (ages at the beginning of the study were 1;3- Ivar and 1;4 – Annika). The mothers of both children were native French speakers and the fathers were German speakers. The authors found that the children selected the appropriate language according to interlocutor from the age of 1;4 to 1;5 onwards. They point out that their data support Vihman's (1985) findings, which show that early mixing consists mostly of 'function words' and is later replaced by lexical categories, most often nouns.

“We believe we have shown that changes in the formal properties of the mixed speech of bilingual children are closely related to grammatical development. Specifically, the appearance of the functional category Inflection (INFL) seems to account for major qualitative changes like the transition from mixing of 'function words' to mixing of lexical categories (especially nouns). It also appears to be a prerequisite for the ability to respect grammatical constraints on intra-sentential code-switching.”

(Köppe and Meisel, 1995, p.293).

Lanvers (2001) also contributes to the research into bilingual children's language mixing by conducting a study in which she analyses language mixing of two English/German bilingual children, aged 1;6 to 2;11, in terms of pragmatic choices and constraints. Her findings indicate that the children's early switches are due to emphasis and appeal, as well as gaps in their vocabulary. Lanvers points out that examples of the simultaneous use of translation equivalents for emphatic purposes are observed at an early age in both children. She gives an example of such usage by child Ls, who, during one recording at the age of 1;6, finds a picture of a car in a book, which he excitedly shows to his father, shouting "GROSS.big" (p.445). In the discussion of the results of her study, Lanvers also states that the children's data show an awareness of the interlocutor's language preferences from the start of the observation period, which also includes self-corrections. In the following example (taken from Lanvers, 2001, p.450), Ls (1;11) shows his ability to switch appropriately in the form of a simultaneous translation within a bilingual setting. It is important to stress that M (mother) is a native German speaker and F (father) is a native English speaker.

Ex.3

Ls to M: EINE KUH. 'a cow.'
(turning to F)
Ls: *see.*
Ls: *a cow.*

Lanvers concludes that the data in her study show

“...that infants are sensitive from an early age to the precise nature and degree of language separation demanded from them, and make appropriate switches within their limited repertoire.” (Lanvers, 2001, p.462)

In her paper, Lanza (1992) reiterates that language mixing by bilingual two-year-olds has generally been interpreted as a sign of the child's lack of language differentiation and provides evidence and explanations to the contrary. She analyses the data from her study of a two-year-old Norwegian-English bilingual child, Siri, in order to investigate the child's language mixing from a sociolinguistic perspective. Similarly to Lanvers (2001), Lanza points out that her findings reveal that the bilingual child does indeed differentiate her language use in contextually sensitive ways, which indicates that she can code-switch consciously and purposefully.

“My claim, however, is not that the very young bilingual child can code-switch with the same pragmatic sophistication as an older bilingual...As the child matures, he or she will be able to resort to more sophisticated code-switching strategies in a display of bilingual identity.” (Lanza, 1992, p.655)

2.3 Factors Influencing Bilingual Language Development:

The Language Environment

2.3.1 Parental Input

Earlier in this chapter it was suggested that the linguistic contexts in which the bilingual children acquire their languages could influence the children's language production and the instances of language mixing. In her discussion, Lanvers (2001) stresses the importance of investigating bilingual children's language mixing in view of the socio- and psycholinguistic factors that influence their language development.

“...a formal analysis alone of instances of language contact in infants would disregard important socio- and psycholinguistic factors known to influence language choices at this age. An analysis has to take account of the child's competence in either language as well as the kind of language setting (mono- or bilingual interlocutors etc.) and the circumstances of the bilingual upbringing.”

(Lanvers, 2001, p.442)

Goodz (1994) also emphasises that researchers in bilingual language acquisition very rarely provide detailed information about the manner in which young children are exposed to 'bilingualism as a first language'. She points out that researchers interpret the data without taking into account the bilingual children's language learning environment, which in turn results in the observations containing contradictions and inconsistencies. Because of this, one of the goals of Goodz's longitudinal study on French-English bilingual families (children were from 13 to 15 months old at the

beginning of the study) focuses in part on the way the parents of the bilingual children use their languages and looks at how this affects the young children's bilingual acquisition. All parents in the study stated that they were strictly committed to using only their native language when addressing the children. The thirteen children were audio taped with either the mother or the father during play.

Goodz (1994) discusses some discrepancies in the children's rate of language development in the two languages and believes that they can be explained by the differences in the characteristics of the child-directed speech of each parent. Among the characteristics that encourage language acquisition she lists a slower rate of speech, which enhances the child's ability to process parental utterances and the emphasis and repetition of important words. Other variables that Goodz describes as important are the parent's ability to understand the child's level of semantic and syntactic development and their ability to elicit and maintain communicative interactions with their child.

“Such variations may change parental input in ways that lead to differences in the child's ability to extract words and meaning from the speech directed to them, differences in the amount of attention elicited from the child, and other variables... Further research is needed to pinpoint the reasons for the different rates of acquisition in each language. It is evident, however, that there is no simple relationship between a child's proficiency in each language and the language of daycare, maternal language, or the language of the neighbourhood.” (Goodz, 1994, p.69)

Goodz's (1994) findings also show that, even though the parents say that they are strictly adhering to the one parent-one language strategy, all of the parents involved in the study use, at times, both French and English with their children. She points out that as the children begin to say their first words and use multiword utterances, their parents start to use more non-native language in the speech directed to the child. Goodz believes that there are several reasons for this change in parental behaviour.

“...in order to encourage conversation, bilingual family parents may tend to choose words and linguistic structures that they are fairly sure the child will understand, even if these words are drawn from the vocabulary of the other parent's language.”

(Goodz, 1994, p.71)

Goodz (1994) explains that the reason why parents may repeat a word from their non-native language that the child has just used and then continue in his/her own language is that parents are anxious to encourage their children's language behaviour irrespective of its form. Another reason for this kind of parental language use is to indicate to the child that he or she has been understood and that their attempt at communication has been successful.

“Since...children tend to pay special attention to parental repetitions and expansions, and even to demand them when they are not immediately forthcoming, such parental mixing, together with parents' tendencies to switch languages for emphasis or to gain children's attention, combine to produce a situation in which parents model language mixing at a time when their children are particularly attentive to what they are saying.” (Goodz, 1994, p. 72)

To sum up, Goodz argues that the results suggest that, since parents may provide a model for language mixing in speech addressed to their children, it is unconvincing to interpret instances of language mixing in the bilingual child's language as a reflection of linguistic confusion.

“The evidence on parental language mixing provides another line of argument against interpreting children's mixing as an indication of linguistic confusion. If parents actually model mixed utterances, the children have no way of knowing that a strict separation of languages should be a goal. Thus, at the very least, the interpretation of early mixing as a result of linguistic confusion is perhaps unwarranted and definitely premature at this point.” (Goodz, 1989, p.43)

Genesee (2000) agrees with Goodz (1989) in emphasising the importance of input in bilingual first language acquisition. He concludes that the published evidence shows that more mixing is found in the speech of children who are exposed to both languages freely and interchangeably by the same interlocutors than in children who hear the languages strictly separated by interlocutor and/or context.

“Evidence that mixing by bilingual children can be traced in part to mixed input would weaken arguments that mixing during early bilingual development **NECESSARILY** reflects an underlying undifferentiated language system. Bilingual children with differentiated language systems may still mix because the input conditions permit it or the verbal interaction calls for it.” (Genesee, 2000, p.337)

In her study, Döpke (1988) investigates the language development of six English-German children living in Australia, whose parents speak their native languages to the children. Similarly to Goodz (1994), the purpose of her study is to find a link between the extent of the parents' teaching techniques and the children's active acquisition of the minority language. Döpke states that the data indicate that bilingual families who employ the 'one person-one language' strategy and do not have much linguistic support from outside the family are more likely to succeed in maintaining the minority language (German) "first if the educational quality of the linguistic input in German is at a certain yet-to-be-determined level, and, second, if the balance between the two languages is somewhat tipped toward German in terms of quality of input" (Döpke, 1988, p.110).

De Houwer (1995) agrees and stresses that, even though the relationship between the type of input and language acquisition patterns is still unclear, studies of the language development of bilingual children should include a discussion of the degree of language separation in input (p. 226). She stresses that the nature of input is reflected in the Separate Development Hypothesis (SDH) and claims that a bilingual child exposed to two languages from birth in a separate manner goes on to differentiate the two languages from the beginning.

"It appears to me that for a better understanding of morphosyntactic development in both monolingual and bilingual children we would do well to find out more about the specific characteristics of that input." (De Houwer, 1994, p.48)

Lanza (1992) also emphasises that the bilingual children’s differentiation of the two languages must be studied in relation to the patterns of language use in the community as part of the child’s process of socialisation (p. 635). She points out that it is very difficult to analyse a bilingual 2-year-old’s mixing in his/her language output without the investigation of the child’s input, which, she feels, has been neglected. Lanza (1992) believes that ‘there is a need to focus on parental strategies toward child language mixing in order to address the issue of language socialisation and code-switching (p. 635).’ Her Parental Discourse Hypothesis (PDH) states that bilingual children’s rates of code-mixing are influenced by the particular discourse strategies the parents use in conversation with their children.

“In the Siri data, five basic discourse strategies were isolated as contributing to a negotiation of either a monolingual or bilingual context.

These parental strategies towards mixing can be placed on a continuum as in Fig.2.”

(Lanza, 1992, p.649, including the figure below)

Monolingual						Bilingual
Context						Context
	Minimal grasp	Expressed guess	Adult repetition	Move on strategy	Code-switching	

Parents are said to facilitate a bilingual context by employing the Expressed Guess Strategy (the parent requests clarification from the child by attempting to reformulate the child’s mixed utterance in a yes-no question form, thus indicating comprehension of the child’s use of the other language), Adult Repetition (the parent repeats the

child's utterance, using the other language), the Move on Strategy (the parent merely continues the conversation after the child has used a mixed utterance), as well as Code-switching (the parent code switches) in response to their child's language mixing.

On the other hand, parents are able to negotiate a monolingual context in conversations with their bilingual child by using the Minimal Grasp Strategy, during which the parent requests clarification of the mixed utterance from the child by relying on the child to reformulate the repairable utterance, by using, for example, 'I don't understand', 'Say that again' and Wh-interrogatives (Lanza, 1992, p.650). The PDH hypothesis predicts that the children would codemix more in response to bilingual strategies and less to the monolingual strategies.

Lanza (1992) points out that both of Siri's parents claim to use the 'one person-one language' strategy. However, the data show that this is not the case. The mother actively negotiates a monolingual context with her daughter by requesting clarification of Siri's lexical mixing, as well as refraining from language mixing, while Siri's father employs strategies that create a more of a bilingual context, such as the Repetition Strategy. Lanza emphasises that the father also employs the Move-on Strategy and even Code-switching in the later periods.

"It is through their responses to language mixing in conversation that the parents provided metalinguistic input as to the appropriacy of such mixing."

(Lanza, 1992, p.652)

In addition to Lanza's Parental Discourse Hypothesis, it may also be that parental discourse strategies with others in the bilingual child's environment are an important consideration.

Lanza's (1992, 1997a) study of parental strategies forms the basis of Juan-Garau and Perez-Vidal's (2001) paper, which focuses on the relationship between a child's degree of bilingualism and the role of parental input. The paper claims that parental discourse strategies are directly related to the levels of the child's mixing in his/her weaker language. The parents' reaction to their child's mixing is investigated.

The research is based on a longitudinal study of a Catalan/English bilingual child, Andreu (1;3 to 4;2) living in Barcelona, Catalonia with his English-speaking father and his Catalan-speaking mother. The parents communicate with each other in Catalan, the majority language and Andreu also attends a Catalan nursery. They state that Andreu is exposed to Catalan for approximately two thirds of the time, and English the remaining third. The data was collected via audio-recordings in naturalistic situations, which involved activities with parents, mostly free play and storytelling.

The findings show that Andreu's active command of English lags behind his command of Catalan. The authors point out that Andreu's mother employs strategies, which encourage a bilingual context and create opportunities for the use of both languages. This, they say, might account for Andreu's lexical mixing patterns with his mother. Similarly, Andreu's father also encourages a bilingual context when interacting with his son, but only until the age of three. After that the father tries to

engage him in a monolingual discourse by using different strategies. The data show that the child responded to this with an increased use of English and a decrease in his rates of mixing (p. 81). Juan-Garau and Perez-Vidal (2001) conclude that

“...the parent who speaks the minority language is the one who strives harder to negotiate a monolingual context with his or her child through the use of requests for clarification, whereas the parent who speaks the majority language is satisfied with more of a bilingual context and even code-switches on occasion.” (p. 82)

They also point out that a bilingual child might be discouraged from using the minority language when he or she is aware that the parent understands and speaks the majority language, especially if the one person – one language policy is not strictly followed through.

“...it appears from our study that parents have a significant contribution to make to their children’s degree of bilingualism. It needs to be acknowledged, however, that the establishment of productive bilingualism in the home demands great conviction and effort especially from the parents who are the conveyors of the minority language.” (Juan-Garau and Perez-Vidal, 2001, p.84)

In their paper, Nicoladis and Genesee (1998) also investigate whether young bilingual children’s code-mixing is influenced by discourse strategies used by parents in conversations with their children. Their study includes five French-English bilingual families in Montreal (children aged 2;0 – 2;6), who follow the one parent –one language rule. However, the results of the study show no correlation between the rates

of the children's code-mixing and the parents' discourse strategies, with the children continuing to code-mix regardless of the parents' strategy.

However, the majority of studies on the effect of parental input and teaching strategies on their bilingual children's language development conclude that the nature of parental language use considerably affects their children's language, and more specifically, the nature of their language mixing. It is, thus, essential to take into consideration these factors when investigating bilingual first language acquisition.

2.3.2 Other Carer Input

In the above discussion it has been firmly established that parental input has a very important role to play in bilingual children's language development. However, the effect of other types of input, such as that of other carers, cannot be ignored. Bilingual children who attend nursery are exposed to a different type of input and if the children spend the majority of their day at the nursery, the relevance of such input to their language development should not be disregarded.

The same applies to the role of childminders, as well as other relatives that might take care of the bilingual child, in the child's development of his/her two languages (c.f. Goodz, 1994). It is important to investigate how the language used by other carers might affect bilingual children's level of language mixing, as well as possible dominance in one of the languages.

2.3.3 Language dominance

In order to explain the occurrence of mixing in the speech of bilingual children researchers have not only emphasised the role of input (Meisel, 1989), but also of language dominance (Lanza, 1997a). Lanza (1997b) argues that the mixing of function words in young bilinguals' speech, which some researchers have interpreted as evidence for the 'single system' hypothesis, is not due to the children's lack of bilingual awareness, but

“can be an indicator of a language contact phenomenon that is also evident in more mature bilingualism, namely language dominance (p.136).”

In her study, Lanza (1997b) discusses the language development of Siri, a bilingual Norwegian-English two-year-old living in Norway. Lanza focuses on the child's language choice with each parent, her lexical and grammatical mixing and personal pronouns in language mixing. In order to explain Siri's mixing of function words, even when it is obvious that she is operating with a language specific syntax, Lanza introduces the issue of language dominance. According to Lanza, a dominant language is the one to which the child is exposed most and the language which the child needs in order to communicate with more people (p. 641).

Lanza's (1992) findings show that Siri mixed more functors (e.g. adverbs, determiners, pronouns, prepositions, conjunctions, modal auxiliaries) than content words (e.g. nouns, verbs, adjectives) in her multi-word mixed utterances. The results also show that the Norwegian grammatical morphemes (bound morphemes, as well as

functors) in Siri's speech appear with both Norwegian and English lexical morphemes, while English grammatical morphemes only occur with English lexical morphemes (p.640). Lanza (1992) interprets "this 'directionality of mixing' as an indication of Siri's dominance in Norwegian, the majority language of her environment." (p.640)

Goodz (1994) also points out that the data from her study of thirteen French-English bilingual children show that most mixing occurs when the language of the conversation is the language in which the child is least proficient. Lanza (1992, p.641) goes on to state that "in many cases, Siri had acquired the equivalent English grammatical morphemes; however, she tended to use the Norwegian ones." The author mentions the work of Berman (1979:169), who suggested that

"dominance is affected by three inter-related aspects: 'quantity of situational exposure and variety of contexts of use; linguistic knowledge and proficiency; and cognitive processing and the nature of bilingual strategies.'" (Lanza, 1992, p.641)

Lanza points out that Siri displays dominance in Norwegian in all of the above aspects. She interprets the fact that Siri always relies on Norwegian grammatical structure when interacting in English but never on English grammatical structure when communicating in Norwegian, as evidence for Siri's dominance in Norwegian (p.641). The data in Lanza's study show that Siri mixes Norwegian function words into her English while she interacts with her English-speaking mother, which Lanza describes in terms grammatical morphemes from her dominant language entering into her non-dominant language in language production. However, while interacting with

her father in the dominant language (Norwegian). Siri's mixes are all lexical and predominantly nouns, which, Lanza stresses, is found in the code-switching of bilingual adults. In a previous discussion of language dominance (Lanza, 1992) she stresses that

“...dominance is not static and may change if there are any changes in the linguistic environment... Hence, mixing as a result of dominance cannot be invoked as evidence for the child's lack of language separation, that is, as a developmental stage to be overcome (p. 641).”

In their study, Genesee et al (1995) examine language differentiation in five bilingual children aged from 1;10 to 2;2, which, they state, is prior to the emergence of functional categories. Although they show that the bilingual children code mix, the findings indicate that the children are able to differentiate their two languages by using the appropriate language with a particular parent, even when both parents are present.

The authors also investigate the causes of mixing in the children's language. Genesee et al focus on the children's language dominance, as well as the parents' rate of mixing as possible reasons for the children's mixing. They point out that there is a general tendency for bilingual children to use items from their dominant language when they are using the non-dominant one, because many linguistic structures are missing in the non-dominant language. This explanation assumes that mixing is unidirectional (dominant into non-dominant language). However, this prediction cannot account for the mixing of elements from the non-dominant language into the

dominant one. The data from the study show no evidence that the mixing in the children's language is due to parental input, but they emphasise that there is some evidence that language dominance plays a role. Genesee et al's findings reveal that the children mix more when using their non-dominant language than when using their dominant language.

“...the dominance effects we noted suggest that, like monolingual children, bilingual children make do with whatever linguistic resources they have available to express themselves...the only difference being that, unlike monolingual children who are limited to the resources of one language, bilingual children can draw on two.”

(Genesee et al, 1995, p.629)

When discussing language dominance it is important to stress that there is no measure of dominance that is employed by all researchers. In Lanza's study (1992), the directionality of language mixing was determined by identifying the 'base' language of the bilingual child's mixed utterance. On the other hand, De Houwer (1990) measured the bilingual child's proficiency and dominance by counting the number of pauses in each of the languages, while Döpke (1992) determined the dominant language of her bilingual subjects by using MLU scores and the amount of each language used with each parent. Similarly, Genesee et al (1995) included MLU as one of the measures of dominance in their study. Establishing a bilingual child's dominant language is still idiosyncratic to each study and that in turn makes the results of studies on language dominance difficult to compare.

2.3.4 Sociolinguistic Factors Influencing Bilingual Language Acquisition

In the following section, sociolinguistic factors such as language use according to domains, the influence of the host community on the minority language, attitudes of minority language speakers towards their language, the effect of social networks and demographic factors will be discussed. These are viewed as having a considerable impact on the success of family bilingualism in terms of the maintenance of a minority language.

Changes in language use patterns within a bilingual community are usually identified in the usage of the two languages in different domains. Appel and Muysken (1987) point out that in many minority communities the mother tongue has a strong place in informal domains, particularly in that of the family. They stress that the majority language can, however, start replacing the mother tongue in these domains, which results in variable language use and later language shift.

“When the minority language is spoken in fewer domains, its value decreases. This in turn will lessen the motivation of younger people to learn and use it.”

(Appel and Muysken, 1987, p.41)

The effect of the host community and language on the maintenance of minority languages has been widely investigated. Romaine (1995) focuses on the ‘power’ relationship between a minority and a dominant language. She points out that the more powerful groups in a society usually impose their language on the minority group. Romaine stresses that 25 out of 36 of the European countries are officially

monolingual. However, in most of those countries there are linguistic minorities, whose languages are not regarded as having the same rights as the dominant language.

“The marginalization of the languages and cultures of minority peoples in the European states can be seen as a form of ‘internal colonialism’...”

(Romaine, 1995, p.23)

Appel and Muysken (1987) stress the importance of institutional support, which refers to the extent to which a minority group and its language are represented in various institutions of a state, region or community. Maintenance of the minority language is encouraged when the language is used in government institutions, cultural organisations, mass media, education etc.. The fact that the minority language is not represented in the wider society affects the bilingual children’s language development in that they are limited in the amount of input they are able to receive in the minority language, which, in turn, makes the maintenance of bilingualism within the family harder. The limited number of domains in which the minority language is used, due to the absence of organised institutional support for the minority language, such as associations and mother tongue schools, also negatively influences the bilingual children’s exposure to the minority language.

Another socio-linguistic factor that is claimed to influence the maintenance of a minority language in an immigrant context is the attitudes of its speakers towards the minority language and culture (c.f. Karanović, 1997). It has been found that if bilingual speakers have a positive attitude towards the minority language and culture, they are able to more successfully acquire and maintain the minority language (c.f. Harding and Riley, 1999). However, if they display negative attitudes towards the

minority language, they are more likely to shift to the majority language and lose their competence in the minority language. This factor also becomes important when discussing family bilingualism and bilingual first language acquisition, as the parents' attitudes towards the two languages in their language environment influence the maintenance of bilingualism and their bilingual children's eventual competence in the two languages.

As far as the effect of social networks on the maintenance of bilingualism is concerned, a link between a close-knit network and the use of a minority language has been established. Li et al (1992) distinguish between 'strong' and 'weak' networks, as well as 'exchange' and 'interactive' networks. The exchange networks include persons such as kin and close friends with whom an individual "not only interacts routinely, but also exchanges direct aid, advice, criticism, and support." (Li et al, 1992, p.65)

Interactive networks include persons with whom an individual "interacts frequently and perhaps over prolonged periods of time, but on whom ego does not rely for personal favours and other material or symbolic resources", for example a shop owner and a customer (p.65). Li et al (1992) also discuss a 'passive' network tie, which refers to persons with whom an individual does not have regular contact, but he or she relies on them for moral support or advice. Examples of such networks are relatives and friends who live far away and Li et al emphasise that these ties are especially important for migrant families. In their study, Li et al investigated the link between network structure and patterns of language use in the Chinese community in Newcastle. Their findings indicate that

“...while network interacts with a number of other variables, it is capable of accounting more generally for patterns of language choice than the variables such as generation, sex of speaker, duration of stay and occupation with which it interacts.”

(Li et al, 1992, p.83)

Similarly, in her discussion of social networks in a bilingual community, Gal (1979) points out that

“social networks do not influence language use directly, but rather by shaping people’s goals and their means of action. ...Social networks influence people’s communicative strategies when such identification is expressed through speech.”

(Gal, 1979, p.15)

She emphasises that by investigating people’s networks one can analyse the way in which the interlocutors control their language choices. In her study, Gal (1979) investigated the language shift from Hungarian to German in the town of Oberwart in eastern Austria. She found that the language use of the speakers was determined by the kind of social networks they had. Those people who had mostly peasant networks used more Hungarian, while those who did not used more German and showed a greater tendency of language shift.

Another important group of sociolinguistic factors are demographic factors (see Giles et al, 1977), which refer to the number of members in a linguistic minority group and their demographic distribution. When the number of minority group members starts to decrease the usefulness of the minority language lessens and this causes language

shift towards the majority language. Appel and Muysken emphasise that geographical distribution considerably affects the maintenance of a minority language. They stress that as long as the minority group members live concentrated in a certain area they will have better chances of maintaining their mother tongue (p.36).

In order to illustrate some of the factors responsible for language maintenance and shift, Janik (1996) discusses the efforts of the Polish community in Australia in maintaining their language. According to him, migration, industrialisation, urbanisation, lack of prestige and absence of the language at school are the most common causes of language shift. However, Janik also mentions other factors, such as the education level of the immigrants, numerical strength, linguistic and cultural similarity to the dominant group and the attitude to the majority that, he believes, could influence both language maintenance and shift (p.4), although he acknowledges that it is not possible for one single factor to cause language maintenance and shift.

As far as the Polish community in Australia is concerned, he emphasises that the Polish language is very important for the maintenance of Polish culture and tradition. After the Polish immigrants arrived in Australia (in the 80s), they established many Polish organisations and churches in order to maintain their culture. Janik stresses that the media (radio and television-programmes broadcast from Warsaw) and the Polish press play an important part in the maintenance of Polish in Australia. He believes that the successful maintenance of the Polish language and culture in Australia is due to that fact that

“they still value Polish close-knit family structure. Polish cuisine, national dances etc., and they observe Polish religious feasts...The newly regained independence of Poland, and the country’s openness to the world have already increased the number of trips people are taking there, and the establishment of some Australian-Polish joint ventures. All this, and the Australian Government’s multicultural policy, have resulted in boosting Polish culture and traditions in Australia.” (Janik, 1996, p.7)

Verma (1996), on the other hand, gives the example of the Hindi speech community in order to illustrate language shift. The migration of the Hindi community from India was ‘individual’ rather than ‘community’ and this led to a decrease in the concentration of Hindi-speaking Indians in the United Kingdom as well as their isolation from the majority group.

“This entirely urban, highly professional group’s migration and patterns of settlement has led to their transformation from a large speech community in India into a small, isolated and relatively marginalised community in Britain.” (Verma, 1996, p.173)

He emphasises that because of this the children have started abandoning their mother tongue. Verma points out that they have easy access to the English-speaking majority. Although there are ethnic radio stations and satellite television in the native language as well as Hindi classes, this does not seem to increase the children’s competence in the mother tongue.

The value of considering factors mentioned above when analysing bilingual first language acquisition is emphasised by Ochs and Schieffelin (1995, p.89):

“What is missing from the majority of psycholinguistic studies of simultaneous bilingual acquisition is in-depth ethnolinguistic studies of the complex language ideologies, i.e. the values attached to the different codes that are characteristic of multilingual communities and their relation to language practices in those communities...”

Although a detailed analysis of the sociolinguistic factors mentioned above is beyond the scope of this thesis, it is important to bear them in mind when discussing the language environment and language use of the two bilingual children involved in this study.

2.4 The Noun Phrase

In this section the central concepts of Universal Grammar (UG) (see Chomsky, 1965; 1976) are presented, as they form the theory of language that is followed and on which this study is based. The discussion also focuses on the X-bar theory of phrase structure within UG (Chomsky, 1986a), as the basis for description of the noun phrase in the study. In the final part of this section, the acquisition of the noun phrase by monolingual English and Polish as well as Bosnian children is analysed. An overview of the acquisition the Polish noun phrase is included in the section for both its similarity in structure to the Bosnian noun phrase, as well as for the purposes of cross-linguistic comparison.

2.4.1 The Nature of Universal Grammar

2.4.1.1 The Main Concepts of Universal Grammar

UG was developed by Chomsky (1976) as a theory of language, which describes language as being an integral part of the human mind and the way in which it is acquired. Chomsky (1976) defines UG as ‘the system of principles, conditions, and rules that are elements or properties of all human languages’ (p.29), and stresses that the theory of Universal Grammar expresses the essence of human language, which all human beings possess regardless of which language they speak.

The principles and parameters theory is central to UG (Chomsky, 1981;1986a;1986b) and claims that language knowledge consists of principles that apply to all languages and parameters that vary from one language to another (Cook and Newson, 1996).

“Real progress in linguistics consists in the discovery that certain features of given languages can be reduced to universal properties of language, and explained in terms of these deeper aspects of linguistic form.” (Chomsky, 1965, p.35)

Cook and Newson (1996) explain that the acquisition of language in terms of UG involves learning how these principles apply to a particular language and which value is appropriate for each parameter (p.2). One of the principles that is central to UG is the structure-dependency principle, which states that all languages are based on the structural relationships in the sentence, and not merely on the sequence of words.

“Structure-dependency can therefore be put forward as a universal principle of language: whenever elements of the sentence are moved to form passives, questions, or whatever, such movement takes account of the structural relationships of the sentence rather than the linear order of words...”

(Cook and Newson, 1996, p. 11)

Apart from the unchanging principles that all languages possess, Universal Grammar describes the variation between languages in terms of ‘parameters’ which a particular language sets according to the limited choice that is available.

“...complexes of properties differentiating otherwise similar languages are reducible to a single parameter, fixed in one way or another way.” (Chomsky, 1981, p.6)

One of these parameters is the Head Parameter, which stipulates that the essential element of each phrase in a language is its head and that languages can vary according to where the head occurs in relation to other elements of the phrase, which, in human languages, can either be head-first (head occurs first in the phrase) or head-last (the head occurs last in the phrase). English is a head-first language, as the head of the phrase comes before the complements within it, as exemplified below.

Ex. 4

on the table: Preposition ‘on’ head-first before the complement Noun Phrase

‘the table’ in a Prepositional Phrase

Japanese, on the other hand, is a head-last language, as it requires the head of the phrase to follow its complements (see Example 5).

Ex.5 (in Cook and Newson, 1996, p.16)

Nihon ni (Japan in): Preposition 'ni' ('in') head last in the Prepositional Phrase

Another parameter of UG, which accounts for variation across languages, is the Pro-drop (Null Subject) Parameter. Cook and Newson (1996) define pro-drop as 'a generalisation about human language, a parameter of UG on which they vary' (p.57). This parameter indicates whether a language allows declarative sentences without an apparent subject or not. Languages can either permit both subjectless sentences and a verb-subject word order (pro-drop languages), or not allow declarative sentences without subjects, as well as inverted declaratives (non-pro-drop languages). English belongs to the latter group of languages, while Italian and Bosnian belong to the former.

2.4.1.2 The Universal Grammar Theory of Language Acquisition: Principles and Parameters

It is Chomsky's belief (1976) that all children are born with an innate capacity for language development, as well as a 'device' that enables it to operate, which he defines as the 'Language Acquisition Device' (LAD). This 'device' contains the general principles, which enable children to discover and structure language. The children then use the LAD to make sense of and process the utterances they hear around them ('primary linguistic data'), in turn acquiring linguistic competence in a particular language.

Chomsky (1959) emphasises the fact that a child is able to acquire grammars of great complexity with remarkable speed, which, he believes, indicates that human beings are specially designed to do this. He refutes the theory of language acquisition put forward by Skinner (1957), which states that language is determined by stimuli, by responses to the stimuli and by reinforcing stimuli, claiming that this theory does not account for what he calls the notion of creativity. The fact that people regularly understand and produce sentences that they have not heard before cannot be explained by stating that they are acting under the control of stimuli (Cook and Newson, 1996). As far as children's language acquisition is concerned, Chomsky (1959) argues that children are not able to learn a language only by relying on the adults' careful reinforcement.

Chomskyan theory of language acquisition, thus, asserts that UG is innate and that the human mind, i.e. the Language Acquisition Device, contains UG principles and parameters (Cook and Newson, 1996).

"...what we 'know innately' are the principles of the various sub-systems of S_0 [the initial state] and the manner of their interaction, and the parameters associated with these principles. What we learn are the values of the parameters and the elements of the periphery..." (Chomsky, 1986a, p.150)

At the start of language development, a child's mind is said to be open to any human language, as it contains Universal Grammar in the form of a system of principles and parameters. As a response to the evidence it encounters from the environment, the child creates a core grammar that sets or fixes all the parameters, resulting in the child

acquiring a particular language (Cook and Newson, 1996). In order to acquire a particular language, the child must set the values of all the parameters of UG appropriately for that language, such as the values for the head and pro-drop parameter (see Meisel, 1995). To acquire English rather than Bosnian, the child must set the values for pro-drop to reflect that English is a non-pro-drop language.

“The child does not acquire rules but settings for parameters, which interacting with a network of principles, create a core grammar.” (Cook and Newson, 1996, p.87)

However, the way in which the principles and parameters theory applies to bilingual language development has yet not been fully resolved. Foster-Cohen (1999) emphasises that, because bilingual children are able to develop multiple systems and to learn how to use them, there is a need to modify the basic idea of UG with a set of parameters set to particular language values on the basis of experience with language input in order to account for bilingual language acquisition. She suggests that

“...we should think in terms of a single set of parameters which get fixed in multiple ways, each setting being tagged with the language that that setting belongs to. So, if a child is learning a language with pro-drop and a language without, there will be two settings for that parameter: one that says (+Italian) and the other that says (+English), or whatever the two languages happen to be.”

(Foster-Cohen, 1999, p.161)

Whether a child is acquiring one or more languages, apart from the core grammar, the child has to acquire a large number of vocabulary items, their pronunciation, as well

as other parts of language that depart from the core, such as the irregular past tense forms in English (Cook and Newson, 1996). In order for the child to be able to set appropriate values for the parameters, as well as to acquire the peripheral aspects not covered by UG, it is necessary that the child hears appropriate input or 'positive evidence' (i.e. actual sentences of a language) (Chomsky, 1981).

“Language acquisition is thus a cooperative effort between UG and learning from the input, both in the sense of input triggering the parameter settings and in the sense of the input providing language forms from which rules can be deduced by general learning mechanisms not special to language.”

(Foster-Cohen, 1999, p.110)

2.4.2 The X-bar Theory of Phrase Structure

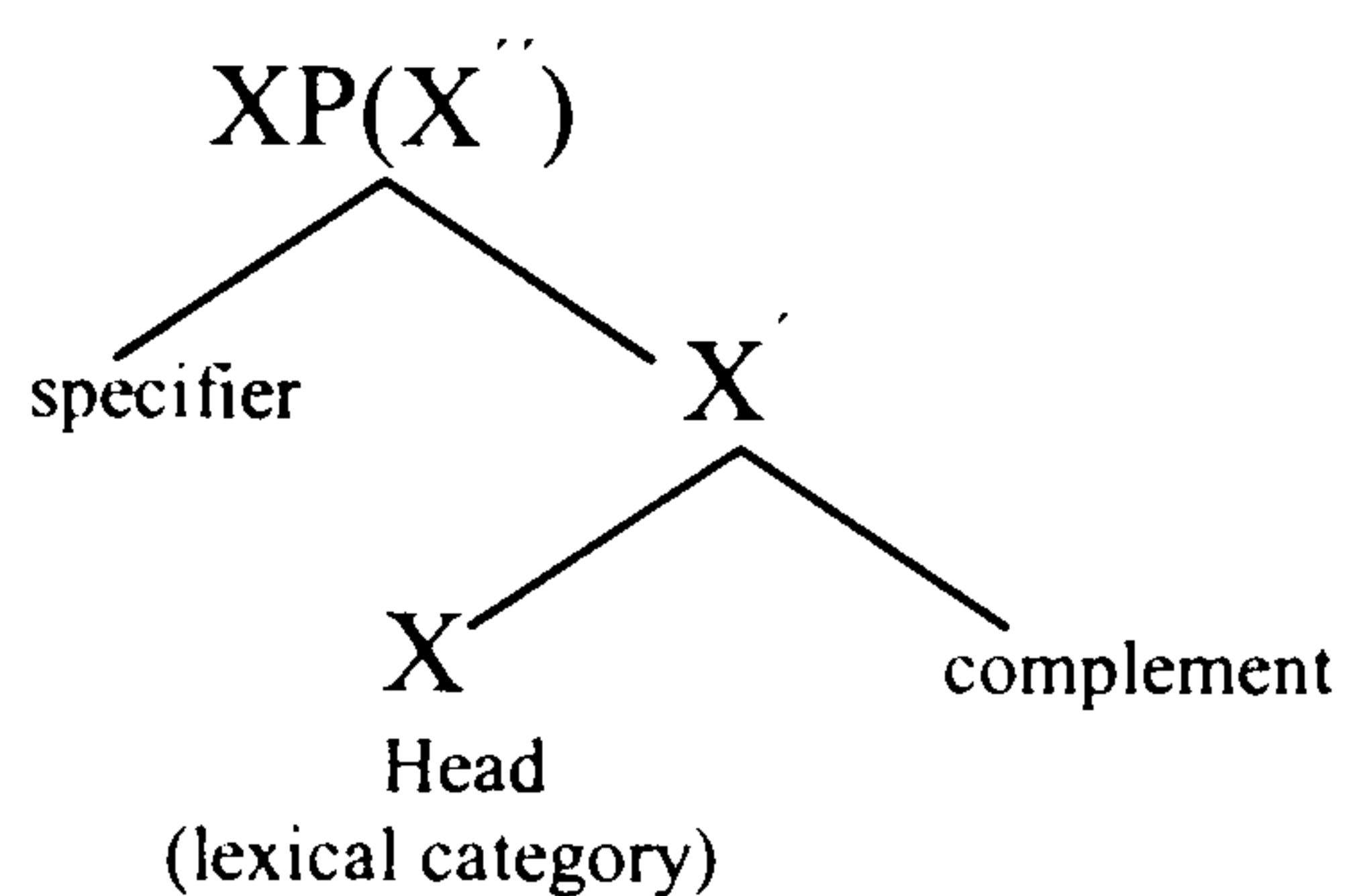
The aim of X-bar syntax is to express and explain the general principles of UG rather than the features of a particular language or a particular rule (Cook and Newson, 1996), by capturing properties of all phrases, not just those of a certain type. X-bar syntax states that a phrase contains at least a head, as well as other possible constituents. It also claims that all phrases have heads of the same category as the phrase itself (Chomsky, 1986a). Lexical phrases, such as the NP (Noun Phrase), are built around lexical heads, while functional phrases, such as the IP (Inflectional Phrase) are built around functional heads. The four lexical phrases used in X-bar syntax are the Verb Phrase (VP), Noun Phrase (NP), Adjective Phrase (AP) and Prepositional Phrase (PP).

“...phrases typically consist of a head (noun, verb, adjective, preposition, and possibly others) and an array of complements determined by lexical properties of the head. The category consisting of the head and its complements is a projection of the head (NP if the head is an N, VP if the is a V, etc.)”

(Chomsky, 1986a, p.81)

Cook and Newson (1996) summarize X-bar theory and point out that the theory claims that all types of phrases need two internal levels of structure. It proposes that all phrases in all languages have a simple structure with two levels to each phrase, as illustrated by the tree diagram:

Ex.6



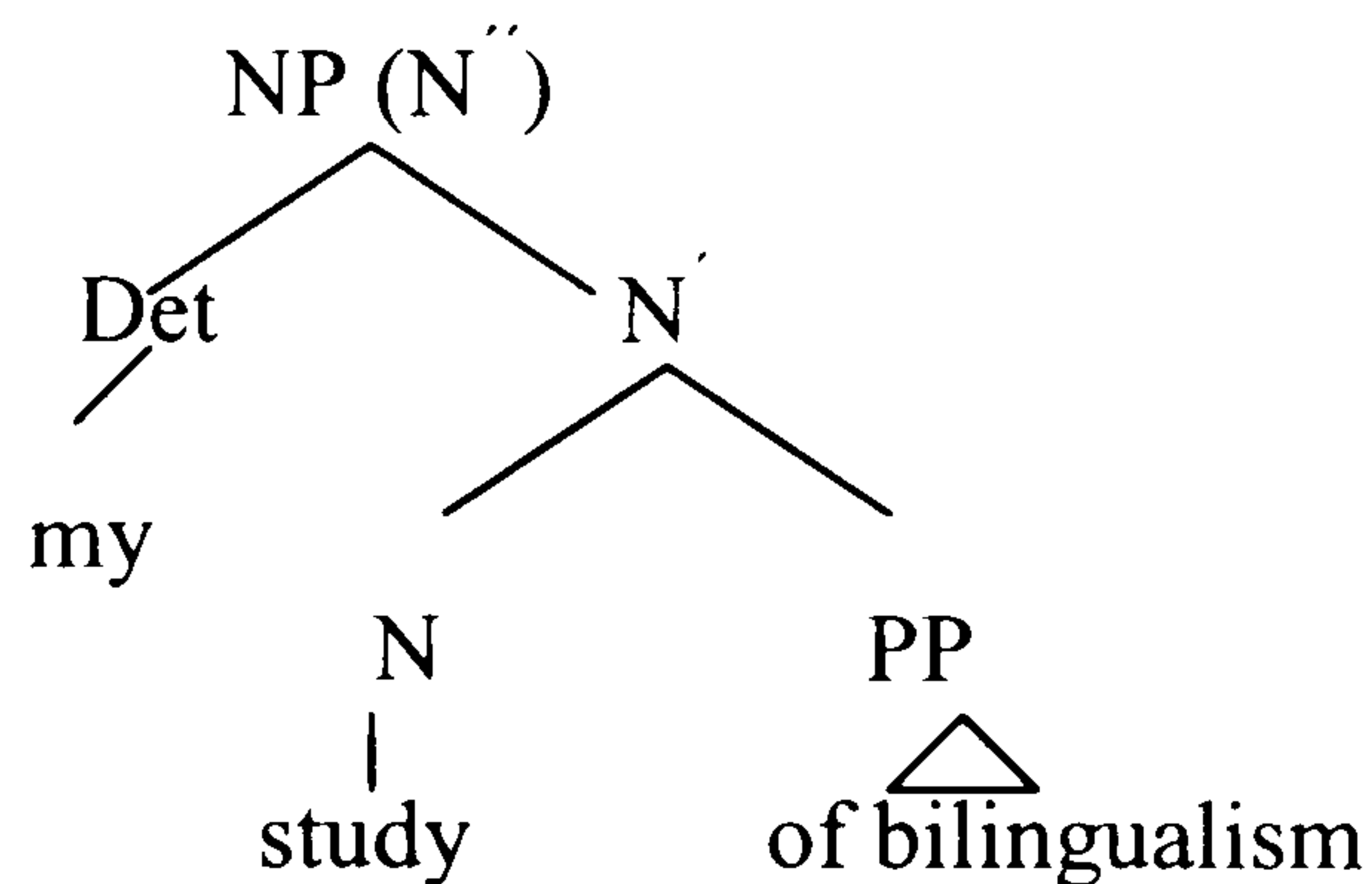
(taken from Cook and Newson, 1996, p.144)

One level (X'') consists of a head and possible specifiers, while the other level (X') consists of the head (X) and possible complements. Cook and Newson (1996) point out that the specifier and complement are not syntactic categories but functional labels for positions in the structure that could be filled with actual syntactic categories, such as an NP and VP (p.144). The structure of phrases within X-bar theory can be illustrated by analysing the following noun phrase:

Ex.7 my study of bilingualism

This noun phrase has a specifier consisting of the determiner ‘my’ and an N (‘study of bilingualism’). In turn, the N’ consists of the head noun (N) ‘study’ and a complement, which in this case is a prepositional phrase ‘of bilingualism’:

Ex.8



It is important to emphasise that ‘the order of these elements is parameterized and hence may vary from one language to another’ (Cook and Newson, 1996, p.157). In addition, they point out that a new type of functional phrase has been established, the DP (Determiner Phrase), within which the functional items acting as determiners, such as ‘the’, ‘a’, and ‘that’, get their own phrase. Some studies have also described certain inflectional features of the noun phrase, such as gender and number (c.f. Müller, 1994) in terms of the DP.

2.4.3 The Acquisition of the Noun Phrase by Monolingual Children

In the following section, the acquisition of the noun phrase by monolingual English, Polish and Bosnian children is presented. The data from the monolingual children’s language development will enable a comparison between the rate and sequence of the

acquisition of the different aspects of the noun phrase by the two bilingual children in this study and by their monolingual counterparts in the two respective languages.

2.4.3.1 The Acquisition of the English Noun Phrase

The acquisition of English by monolingual English children has been extensively investigated (e.g. Berko, 1958; Brown, 1973; De Villiers and De Villiers, 1985; Fletcher, 1985; Wells, 1985; Radford, 1990; Barrett, 1995) and the majority of child language acquisition literature focuses on the acquisition of English as a first language.

The first systematic study of the acquisition of English inflectional morphemes, conducted by Brown (1973), investigated the grammatical development of three American children. He defined their language development in terms of stages, which were determined according to the children's Mean Length of Utterance in morphemes scores. For example, Stage I was when the child's MLU fell between 1.0 and 2.0. At Stage II (MLU 2.00-2.49) the child started to acquire grammatical morphemes and inflections which included noun inflections, such as the plural and the possessive. Brown (1973) found that the plural and possessive inflections appeared quite early - in Eve's speech at about the age of 2;0 - although they were not produced consistently until many months later.

Wells (1985) also reported that plural forms of English nouns occurred quite regularly from the age of 1;6 onwards, but were not as frequent as singular nouns. By the age of 21 months, 50% of the subjects in Wells' study were producing plural nouns, as

opposed to all 125 children in the sample, who were producing singular nouns by the age of 2;0. When discussing monolingual English children's acquisition of plurals, it is important to point out that they go through a developmental stage, in which they overgeneralise the regular plural '-s' inflection on nouns and apply it to irregular plurals as well (e.g. sheep-sheeps; foot-feets). This emphasises the constructive role of error in learning English as a first language (see Ingram, 1989).

As far as the acquisition of pronouns by monolingual English children is concerned, Wells (1985) found that by the age of 36 months, all personal and demonstrative pronouns were in use by at least some of the children (p.260).

The demonstrative pronoun 'that' emerged very early and by the age of 15 months more than 25% of the sample was using it. The same percentage of usage of the demonstrative pronouns 'this' was recorded by 18 months, as it appeared later than the pronoun 'that'.

Personal pronouns also emerged early, and by the age of 19 months, 50% of the sample was producing both the first person singular personal pronoun 'I', and the third person singular pronoun 'it'. All of the pronouns, except 'her' and 'us' and the two plural demonstratives, were being produced by 90% of the children by 60 months. In addition, Wells stressed that plural pronouns were much less frequent than their corresponding singular forms.

Out of the eight possessive pronouns, only 'mine' and 'yours' were used by more than 50% of the sample by 60 months. Wells points out that 'mine' appeared first at around 21 months, while 'yours' emerged much later. The interrogative pronoun 'what' was

first to emerge, followed closely by 'where'. The nominal pronoun 'one' also appeared early. At the age of around 19 months more than 10% of the children in Wells' study were recorded using the pronoun, while by the age of 25 months around 50% of the sample was producing the nominal pronoun.

Apart from investigating the emergence of the constituents of noun phrases separately, Wells (1985) analysed the way in which they were combined in more complex structures. The first combination that was recorded in the children's speech included an indefinite article and a singular noun (c.f. Figure 6.29 in Wells, 1985, p.263). By the age of around 20 months, 50% of children produced this noun phrase structure. The combination of a definite article and a singular noun emerged later and was produced by 50 % of the children at the age of 25 months.

In his analysis of grammatical morphemes, Brown (1973) found that the establishment of the two bound morphemes - the plural and the possessive - was followed by the emergence of the indefinite and definite articles in the speech of his three subjects. Eve produced articles at the age of 2;3 (Stage V), while both Sarah and Adam were recorded using articles later, at the age of 3;1 (Stage III and IV respectively). These findings correspond to those discussed by Radford et al (1999), who describe the acquisition of English structures that contain a noun within the framework of Universal Grammar. They state that children start to produce adult-like DP structures of the form determiner + noun, using both definite determiners 'the/this/that' and indefinite ones such as 'a/another/some' from around two years of age (p.389). However, Radford et al stress that children who produce such structures

are also recorded using bare nouns with no determiner, in contexts where adults would have supplied one.

It was Radford (1990;1995) who extensively investigated the acquisition of phrase structure in English, by drawing on data from a corpus of more than 100,000 spontaneous children's utterances and describing the children's acquisition of English in terms of Chomsky's Universal Grammar. He points out that children first start to produce syntactic structures from around 20-24 months of age, to which Radford (1995) refers as Early Child English (p.483). He suggests that the syntactic structures found in Early Child English differ from those found in adult English in that child sentence structures are projections of lexical heads only (noun, verb, adjective, and preposition), and, according to Radford, contain no functional heads (auxiliaries, complementizers, determiners, case particles) and their projections, whereas both types of heads are present in adult sentences.

The absence of a determiner system is considered by Radford (1990;1995) to be one of the main features of early child structures that contain nouns. In his discussion, Radford adopts the DP-analysis, under which determiners (=D) are analysed as the head constituents of the structures containing nouns (Radford, 1995, p.491). He states that, when adult structures are compared to those produced by children, it is clear that the children use NPs in contexts where adults require DPs. He gives an example of Hayley (20 months), who produces the following utterances: 'Turn page' and 'Want duck'. Radford points out that the child's structures in these examples are headed by a singular count noun, and would require a pre-modifying determiner, such as 'a' or

'the', in adult language. This suggests that "the children in question have not yet developed a determiner system." (Radford, 1995, p.493)

As additional evidence in support of the above claim, Radford (1995) states the fact that early child English is characterised by a lack of 'personal pronouns', which, Radford argues, are determiners, and hence occupy the head D position of the DP (p.494). He points out that it has been found that children tend to avoid using pronouns such as 'I/you/he/she/it/we/they, as the following example illustrates:

Ex.9

Anya falling (Anya – 2;2.27)

Radford (1995) believes that such utterances show that children at this stage make no productive use of personal pronouns and use simple NPs in contexts where adults would require DPs, which he feels lends support to the claim that such children have not yet acquired a D-system (p.495).

2.4.3.2 The Acquisition of the Polish Noun Phrase

Polish is an Indo-European language, belonging to the West Slavic group of languages (Smoczyńska, 1985) and, like other Slavic languages, it is an inflecting type of language, in which single grammatical morphemes combine several functions, such as case, gender and number in noun forms (c.f. Kordić, 1997). As is the case with other highly inflected languages, such as Bosnian and Latvian (c.f. Jahić et al, 2000; Sinka, 1999), Polish relies on morphology for expressing syntactic distinctions.

Word order has limited grammatical functions, and mainly performs pragmatic functions.

Nouns in Polish are marked for three genders: feminine, masculine and neuter, and are inflected for seven cases (nominative, accusative, genitive, dative, locative, instrumental and vocative), as well as number (singular and plural). As in Bosnian, Polish adjectives, as well as other determiners, have to agree in case, number and gender with the noun they modify.

In her article, Smoczyńska (1985) presents an overview of the language development of Polish monolingual children from the ages of around 1;6 to 6;0. For the purposes of this discussion, only the acquisition of certain aspects of the noun phrase of children no older than 3;0 will be presented.

As far as the monolingual children's acquisition of the Polish noun phrase is concerned, Smoczyńska (1985) states that at the one-word stage there is no evidence of the productive use of any inflectional forms, with no significant changes being observed in the earliest two-word combinations (p.617). Apart from specific baby talk items and onomatopoeia, some adult forms of words are used and such nouns are produced in the nominative singular.

Smoczyńska points out that morphological development of Polish monolingual children is usually recorded in the third year of the two-word stage. As far as nouns are concerned, the initial contrast is accusative and genitive singular as opposed to nominative, with vocative appearing at the same time or slightly earlier (p.618). The

next step in the average morphological development of a 2-year-old within the noun phrase is found to be the emergence of the nominative and accusative plural, followed by the instrumental singular, the locative singular and the dative. Smoczyńska (1985) stresses that specific case endings are mostly used correctly from the moment of emergence of a given category. She argues that this is due to the early mastery of grammatical gender in the singular, which determines assigning a given noun to an appropriate declensional pattern (p.618).

2.4.3.3 The Acquisition of the Bosnian Noun Phrase

Due to the lack of literature investigating the language development of monolingual Bosnian children, the task of comparing the acquisition of Bosnian of the two bilingual English/Bosnian children in this study to that of Bosnian monolingual children was impossible to undertake. This highlights a serious gap in the literature on child language acquisition, which would have enabled the comparison of the bilingual children's development of Bosnian with their monolingual counterparts in the present study. However, the current analysis of the bilingual children's language development in Bosnian will provide other researchers with an indication of the acquisition and development of the Bosnian noun phrase by Bosnian monolingual children, as well as other Bosnian bilinguals. In addition, further research is required to focus on the similarity in acquisition between monolingual and bilingual children.

Chapter 3. The Languages

The following chapter focuses on the Bosnian community and language in the United Kingdom (Section 3.1), as well as the structural features of the Bosnian language. The inclusion of the information in Section 3.1 is relevant for two reasons: firstly, it presents the background of the bilingual families involved in this study, and secondly, it sets the Bosnian language on the language map. In Section 3.2, the Bosnian noun phrase is discussed and certain aspects of its structure are presented in detail. The final part of the chapter is dedicated to the structure of the noun phrase in English.

3.1 The Bosnian Community and Language in the United Kingdom

The Republic of Bosnia and Herzegovina is situated in south-eastern Europe, in the Balkan Peninsula, and it borders with Croatia in the north and west and with Serbia and Montenegro in the south and east. It has a territory of about 51,129 sq. km (30, 677 sq. mi). Sarajevo is the capital of Bosnia and Herzegovina and the country's largest city (see Figure 3.1 below).



Figure 3.1 Map of Bosnia and Herzegovina

3.1.1 Historical background

The territory now considered to be Bosnia and Herzegovina has always been a target of various powers and has been conquered many times. First the Romans (nearly three millennia ago), then the Goths, the Slavs, the Hungarians, the Turks (the Ottoman Empire) and finally the Austro-Hungarians conquered and settled on this territory, leaving their mark in many ways from architecture to language (see Malcolm, 1996). All of this ensured the existence of a multiethnic and multicultural state in which all nationalities learned to live together.

After World War II, the Socialist Federal Republic of Yugoslavia was created and consisted of six republics (Croatia, Serbia, Montenegro, Macedonia, Slovenia and Bosnia and Herzegovina) and two provinces (Vojvodina and Kosovo), but Bosnia was always considered to be the most typically 'Yugoslav' of all the republics, because of its mixed population. It was a place where Muslims, Serbs and Croats lived and worked together and married one another, more than in any other part of Yugoslavia, with no group being dominant. This was why, after the collapse of the Yugoslav federation in 1992, Bosnia and Herzegovina was the republic most devastated by the war that erupted in April 1992. As there no longer existed a multiethnic Yugoslavia, it was not possible for Bosnia to remain multiethnic either.

This bloody division of a country that was once so mixed and lived in peace caused many people to leave. Out of the total population of 4,124,000 that lived in Bosnia before the war, 1,329,333 people left the country during the war. These people are now refugees in other countries of the Former Yugoslavia as well as outside of the Former Yugoslavia (UNHCR, June 1996). Many more people have been driven from their homes and are now displaced within Bosnia.

On the 21 November 1995 the division of Bosnia and Herzegovina was officially recognised and accepted by the world. The agreement in Dayton, Ohio (USA) formally divided Bosnia into two parts: a Muslim-Croat federation and a Bosnian Serb republic. This division of the country involved more exchange of territory between the warring factions and this meant further displacement of people and more misery. The people that were left in Bosnia now had to take sides and move to different parts of the country if they wanted to live in peace, and many people that

were refugees outside Bosnia could not return home, either because their towns and villages were now controlled by people who did not want them there and their lives would be in danger if they did return or because everything they had in Bosnia was now gone.

3.1.2 The Bosnian Community in the United Kingdom

The situation in Bosnia made the refugees come to terms with a new life they had to create for themselves outside Bosnia and in a country that was unknown to them. Out of the 686,533 refugees that have settled in Europe, the biggest number settled in Germany (330,000) and Sweden (122,119), while Great Britain is a home to 13,000 Bosnian refugees (UNHCR, June 1996).

The refugees arrived in the United Kingdom in various ways, with many arriving with humanitarian convoy groups, while others came on their own initiative and through work or student visas. The refugees, who came to England through humanitarian programmes, settled all around the country and established various Bosnian associations, some of which included Bosnian-language schools and religion classes. However, many refugees did not become members of these associations, as the membership of these organisations was determined by religious or nationalistic orientation, reflecting the divisions that existed in Bosnia at that time, and many of the immigrants felt that that they did not represent them or their views. Most of these associations, which were established back in 1994, have ceased to exist and most of the language schools are no longer operational, mostly due to the lack of funding.

The language spoken by the Bosnian immigrants in the United Kingdom is viewed by many refugees in the United Kingdom to be the Bosnian language, although those refugees would have surely said that they spoke Serbo-Croat when they first arrived in Britain at the beginning of the war in Bosnia. The term Bosnian language emerged during the first two years of war and it was first associated with the Muslim population living in Bosnia, but today it is the official language of Bosnia (government controlled areas) and the mother tongue of all the people living there, regardless of nationality or religion. However, some immigrants in the United Kingdom still maintain that they speak Serbo-Croat, and not Bosnian.

The Bosnians in England use the Bosnian language almost only in the home domain, when interacting with the family and friends. It is not used in the wider host community and is not needed or used at work or school (for a more detailed discussion of sociolinguistic factors see section 2.3.4).

3.2 The Structure of the Bosnian Language

3.2.1 General Features

The Bosnian language belongs to the Southern branch of the Slavic group of the Indo-European language family (Kordić, 1997) and is spoken by around three million people in Bosnia and Herzegovina, as well as expatriates in Western Europe, North America and Australia. The language is very highly inflected, as opposed to English, which is not as morphologically diverse. As far as phonology is concerned, Bosnian has five vowels and 25 consonants, which are usually pronounced as they are written.

The graphic system, thus, follows the phonetic one. Two alphabets are used in Bosnia and Herzegovina: Latin (mostly used in Croatia) and Cyrillic (mostly used in Serbia), and they both have official status.

Until about seven years ago, the Bosnian language investigated in this study had been known in the linguistic literature as Serbo-Croat. The variety of Serbo-Croat spoken in Bosnia and Herzegovina had a distinct accent and some dialectal features, mostly lexical. Malcolm (1996) points out that in the eighteenth-century the language in Bosnia was referred to by the writers of that time as Bosnian, but what they meant by that was simply the language spoken in Bosnia at that time and they were not suggesting that it was different from Serbo-Croat that was spoken in the eighteenth century Bosnia. However, after the collapse of former Yugoslavia, whose official language was Serbo-Croat, three sovereign countries were established and three different languages, based on the ethnic identity of the respective countries, emerged: Croatian, Serbian and Bosnian (Kordić, 1997).

“Confusion between the Croatian and Serbian languages began in our century, when unitaristic forces within the Yugoslav government attempted to create *lingua communis* for all of Yugoslavia. The first such attempt involved the amalgamation of Slovenian, Croatian and Serbian (“Serbocroatoslovene”), while later attempts focused on the merging of only Croatian and Serbian. Despite all pressures from the centralist Yugoslav government, Croats continued to cultivate and today still cultivate their language in accordance with its natural development.” (Grubisić, 1995, p.7)

The Bosnian language, thus, became the official language of Bosnia and Herzegovina (see Jahić, Halilović and Palić, 2000), and as the families involved in this study originally came from Bosnia, one of the bilingual children's two languages will be referred to as Bosnian in this study. From the informal discussions with the families, it is clear that they still believe that Bosnian is still essentially Serbo-Croat in structure, but differs in accent and some lexical features from Croatian and Serbian.

As far as the structure of Bosnian is concerned, nouns, pronouns, adjectives and numerals are all inflected and are marked for seven cases in the singular and seven cases in the plural. A more detailed discussion of the noun phrase will be presented in the next section.

The verbs are conjugated in the 1st, 2nd and 3rd persons in the singular and plural within the three conjugation classes of verbs. They can be used in various tenses and moods. The simple tenses are present, aorist (a seldom used past tense indicating an action which must have been terminated before it is mentioned) and imperfect, while the compound tenses are perfect, pluperfect, future I (formed using the present of the auxiliary verb 'htjeti' – 'will, want' and the infinitive of the main verb) and future II (express some potential future action which is expected to be completed before or simultaneously with some other future action) (Kordić, 1997). Kordić states that the finite verb expresses the grammatical categories of person, number, mood (indicative, imperative, conditional I and conditional II), aspect, tense, voice (active and passive) and transitivity (transitive and intransitive) and it has to agree with the subject in person and number. Kordić lists the non-finite verb forms as the infinitive, active participle, passive participle, present participle and the past participle. She points out

that the active participle component of a compound tense also expresses the gender of the subject.

As far as the word order is concerned, it is relatively free, due to the presence of inflections, which determine the meaning within the sentence. It is usually determined more by pragmatic factors, rather than syntactic ones. Bosnian is also a pro-drop language, which means that a personal pronoun does not have to be used when it functions as a subject. It is the verb that is marked to show agreement with the subject by indicating person, number, and, within participles, the gender of the subject. Adverbs, prepositions, conjunctions, exclamations and particles do not change their form.

3.2.2 The Noun Phrase in Bosnian

In Bosnian, nouns, pronouns and nominal adjectives can be heads of a noun phrase, and they either stand on their own or are pre-modified or post-modified by adjectives, pronouns and numerals. Definite and indefinite articles, which are very often an essential component in the structure of a noun phrase in English, do not exist in Bosnian.

3.2.2.1 Nouns

Bosnian nouns can be masculine, feminine and neuter. Unlike English, which only has morphologically unmarked gender for persons, personified animals or things,

Bosnian also attributes gender to objects and abstract notions. In addition, gender in Bosnian is grammatical and not natural.

As far as cases are concerned, Bosnian has seven cases in the singular and seven cases in the plural: nominative, genitive, dative, accusative, vocative, locative and instrumental. Nominative and vocative are the independent cases (Kordić, 1997; Jahić, Halilović, Palić, 2000), as they can stand on their own. The nominative is often called the 'subject case' (Grubisić, 1995) and is used for naming animate beings, inanimate objects and abstract notions. The vocative is used for calling and is also called 'the addressing case' (Grubisić, 1995). Genitive denotes possession or the origin of a person or an object. It is used both with and without a preposition. The dative denotes direction towards a person or an object and is usually used without a preposition. The main function of the accusative is that of a direct object. The locative denotes the location where an action is taking place and is always used with prepositions. The dative and the vocative always have the same ending, but a distinction is made between them, as their roles in sentences are different. The instrumental most often denotes by which means (without preposition) or in whose company an action is performed (with preposition).

There are three basic noun declension types, named after the genitive singular ending: the A-type, the E-type and the I-type. The A-type includes nouns with masculine and neuter grammatical gender. The E-type include nouns with feminine grammatical gender that end in '-a' or '-o' in the nominative singular and the I-type includes nouns with feminine grammatical gender that end in the zero ending or in '-o' (Kordić, 1997). In each of the declension types the dative and the locative have the

same endings, while it is only in the plural that the dative, locative and instrumental have the same endings, as well as the nominative and vocative, which, also, have the same endings.

The majority of masculine nouns in the nominative singular end in a consonant or the zero ('-0') ending (e.g. sin 'son'). Some masculine nouns end in '-o' (e.g. posao 'work') and some nouns, which are foreign in origin and end in '-i', '-e', '-o' and '-u', are masculine as well (e.g. intervju 'interview'). All nouns with masculine grammatical gender are declined according to the A-type declension (see Table 3.1).

	Singular	Plural
NOM	sin- 0	sinov- i
GEN	sin- a	sinov- a
DAT	sin- u	sinov- ima
ACC	sin- a	sinov- e
VOC	sin- e	sinov- i
LOC	sin- u	sinov- ima
INST	sin- om	sinov- ima

Table 3.1 A-type declension (masculine noun – 'sin' son)

The majority of feminine nouns end in '-a' (e.g. curica 'girl'). All these feminine nouns belong to the E-type declension (see Table 3.2).

	Singular	Plural
NOM	curic- a	curic- e
GEN	curic- e	curic- a
DAT	curic- i	curic- ama
ACC	curic- u	curic- e
VOC	curic- o	curic- e
LOC	curic- i	curic- ama
INST	curic- om	curic- ama

Table 3.2 E-type declension (feminine noun – ‘curica’ girl)

However, there are some two hundred feminine nouns that end in a consonant (e.g. ljubav ‘love’). This group also includes all abstract nouns with the ending ‘ost’ (e.g. radost ‘happiness’). These feminine nouns belong to the I-declension (see Table 3.3).

	Singular	Plural
NOM	ljubav- o	ljubav- i
GEN	ljubav- i	ljubav- i
DAT	ljubav- i	ljubav- ima
ACC	ljubav- o	ljubav- i
VOC	ljubav- i	ljubav- i
LOC	ljubav- i	ljubav- ima
INST	ljubav- i	ljubav- ima

Table 3.3 I-type declension (feminine noun – ‘ljubav’ love)

Neuter nouns in Bosnian end in ‘-o’ or ‘-e’ (e.g. selo ‘village’; ulje ‘oil’) and these nouns belong to the A-type declension (see Table 3.4).

	Singular	Plural
NOM	sel-o	sel-a
GEN	sel-a	sel-a
DAT	sel-u	sel-ima
ACC	sel-o	sel-a
VOC	sel-o	sel-a
LOC	sel-u	sel-ima
INST	sel-om	sel-ima

Table 3.4 A-type declension (neuter noun – ‘selo’ village)

There are exceptions to these rules, but a discussion of those is not within the scope of this study.

3.2.2.2 Pronouns

In Bosnian, there are six main kinds of pronouns: personal pronouns, reflexive pronouns, possessive pronouns, demonstrative pronouns, interrogative pronouns and compound pronouns, which include indefinite, universal and negative pronouns (Grubisić, 1995, Kordić, 1997).

The personal pronouns distinguish between three persons in the singular and three persons in the plural and are declined in all seven cases. Only in the third person singular and the third person plural is a distinction made between the three genders.

The second person plural is also used with a singular meaning to denote respect when addressing a person (‘Vi’ – you).

The reflexive pronoun 'sebe/se' (oneself) is used for all persons, in both the singular and the plural and all three genders, unlike English which distinguishes between 'myself', 'yourself' etc. and it denotes that the object refers to the subject of the clause.

Possessive pronouns are derived from the personal pronouns and the reflexive pronoun, and, therefore, have three persons in singular and three persons in plural.

Possessive pronouns agree in gender, number and case with the noun they modify.

Demonstrative pronouns indicate the degree of distance from the speaker ('ovaj' - this, 'taj' - that and 'onaj' - that) and they are declined through all three genders, singular and plural, as well as all seven cases. The pronouns 'taj' and 'onaj' are declined as 'ovaj'. These pronouns, like the possessive pronouns, agree in gender, number and case with the noun they modify.

Kordić (1997) divides interrogative pronouns into substantival ('tko/ko' - who; 'što/šta' - what) and adjectival pronouns ('koji' - which; 'čiji' - whose; 'kakav' - what kind; 'koliki' - how large). 'Ko' is used for human and 'šta' for non-human. Both pronouns appear only in the singular and 'ko' behaves as masculine and 'šta' as neuter. The 'adjectival' interrogative pronouns have both singular and plural forms and all three genders.

The compound pronouns consist of indefinite, universal and negative pronouns, and are formed by adding usually prefixes to interrogative pronouns (Kordić, 1997). The prefix 'ne-' means indefiniteness (e.g. ne-ko 'someone'). The prefix 'ni-' means negation (e.g. ni-ko 'no-one'). The prefix 'sva-' denotes totality, universality

(e.g. *sva-ko* ‘everybody’). Indefinite, universal and negative pronouns have the same declension as interrogative pronouns from which they are formed.

3.2.2.3 Adjectives

In Bosnian, adjectives can be descriptive (‘*brz*’-fast), material (‘*drven*’-wooden) or possessive (*mamina*-‘mother’s’) (Grubisić, 1995). A Bosnian adjective is declined through singular and plural, all three numbers and all seven cases, and it agrees with the noun it modifies. However, adjectives can sometimes stand on their own, acting as nouns (nominal adjectives). Adjectives have the definite and the indefinite form. The indefinite forms are used when the adjective modifies a noun, which is mentioned for the first time. However, if an adjective accompanies a noun that has already been mentioned, then the definite form of the adjective should be used. Only some adjectives have both forms, and most adjectives have either the indefinite or definite forms. Adjectives in the masculine and neuter singular have different endings, which form the so-called long and short adjective forms (see Table 3.5 and Table 3.6).

	Singular			Plural		
	M	N	F	M	N	F
NOM	<i>crven-i</i>	<i>crven-o</i>	<i>crven-a</i>	<i>crven-i</i>	<i>crven-a</i>	<i>crven-e</i>
GEN	<i>crven-og</i>	<i>crven-og</i>	<i>crven-e</i>	<i>crvn-ih</i>	<i>crven-ih</i>	<i>crven-ih</i>
DAT	<i>crven-om</i>	<i>crven-om</i>	<i>crven-oj</i>	<i>crven-im</i>	<i>crven-im</i>	<i>crven-im</i>
ACC	<i>crven-i</i> <i>crven-og</i>	<i>crven-o</i>	<i>crven-u</i>	<i>crven-e</i>	<i>crven-a</i>	<i>crven-e</i>
VOC	<i>crven-i</i>	<i>crven-o</i>	<i>crven-a</i>	<i>crven-i</i>	<i>crven-a</i>	<i>crven-e</i>
LOC	<i>crven-om</i>	<i>crven-om</i>	<i>crven-oj</i>	<i>crven-im</i>	<i>crven-im</i>	<i>crven-im</i>
INST	<i>crven-im</i>	<i>crven-im</i>	<i>crven-om</i>	<i>crven-im</i>	<i>crven-im</i>	<i>crven-im</i>

Table 3.5 Definite adjective declension (‘*crven a o*’ – red)

	Singular			Plural		
	M	N	F	M	N	F
NOM	crven- o	crven- o	crven- a	crven- i	crven- a	crven- e
GEN	crven- a	crven- a	crven- e	crvn- ih	crven- ih	crven- ih
DAT	crven- u	crven- u	crven- oj	crven- im	crven- im	crven- im
ACC	crven- o crven- a	crven- o	crven- u	crven- e	crven- a	crven- e
VOC	-	-	-	-	-	-
LOC	crven- u	crven- u	crven- oj	crven- im	crven- im	crven- im
INST	crven- im	crven- im	crven- om	crven- im	crven- im	crven- im

Table 3.6 Indefinite adjective declension ('crven/a/o' – red)

Adjectives in Bosnian have three degrees of comparison: positive, comparative and superlative. However, only the descriptive adjectives can have comparative and superlative forms. The comparative is most often formed by adding the suffix '-ij-' to adjective stems (e.g. nov 'new' – noviji 'newer'). The superlative is formed by adding the prefix 'naj-' to the comparative (noviji - najnoviji 'newer - newest'). The comparative and the superlative are declined as definite forms of adjectives.

3.2.2.4 Numerals

On the basis of different semantic, morphological and syntactic properties, a distinction is drawn between cardinal, ordinal, and collective numerals.

Most cardinal numbers are not declined. The exceptions are numerals 1, 2, 3 and 4.

The numeral 1 is declined in all genders in singular and plural as definite-form adjectives and agrees with the noun it modifies. Ordinal numbers have the same stems as cardinals. All ordinal numbers are declined as definite-form adjectives in all three genders and also have to agree with the nouns they modify. In compound numerals

only the final element has the form of the ordinal, while the others have the form of a cardinal numeral. The final element is also the only one that is declined.

3.2.2.5 Word Order

Kordić (1997) explains that in Serbo-Croat “word order in a noun phrase is generally fixed. The noun is preceded by (sequentially from the farthest to the closest to the noun) universal pronouns, demonstratives, possessives, numerals, and adjectives. In poetic or expressive style each of the above-mentioned elements can follow the noun.” (p.44) This could also be applied to Bosnian. However, in spoken Bosnian the word order in the noun phrase is much freer than indicated by Kordić, although it is true that a stricter word order is required in written Bosnian. The freer word order is also evident in the data collected for this study, both in the children’s as well as the parents’ spoken language (see Example 9).

Ex.9

Moja mala beba je tamo. (My little baby is there.)

Mala moja beba je tamo. (*Little my baby is there.)

3.3 The Structure of the English Language

3.3.1 General Features

The English language belongs to the Western branch of the Germanic group of the Indo-European language family (Crystal, 1997). It is estimated that English is spoken

by around 400 million people as a mother tongue and an additional 500 million people use it as their second language, as well as an estimated 700 million people who learn English as a foreign language (Crystal, 2002).

The English language is a second language, and arguably a joint first language, to around 13,000 Bosnian immigrants living in the United Kingdom (UNHCR, June 1996) and it plays a very important part in the lives of Bosnians living in Britain. It is also a language that is learnt as a foreign language in Bosnia and is regarded very highly.

The English language is morphosyntactically very different from Bosnian. It uses very few inflections and relies on the word order in a sentence to convey meaning.

Apart from the plural ‘-s’ (e.g. cat - cats) and the possessive ’s (boy-boy’s) ending on nouns within the nouns phrase, English verbs are also marked for the 3rd person singular, with the ‘-s’ inflection appearing on regular verbs (play-he/she/it plays). The verbs are, thus, only marked for person and number, and not for gender. The same is true for the past tense ending ‘-ed’ (play - played) on regular verbs, which does not distinguish between person, number or gender.

3.3.2 The Noun Phrase in English

In the English language, a noun phrase has as its head a noun, a pronoun, a nominal adjective, or a numeral (Greenbaum, 1996). Some of the noun phrases consist only of one word, mostly pronouns, but noun phrases in English usually have more than one constituent. Noun phrases that have a noun as their head are introduced by a

determiner, most often the definite (the) or the indefinite article (a an/some). The noun heads are also pre-modified by adjectives, other nouns, genitive noun phrases and numerals, and are typically post-modified by prepositional phrases and relative pronouns/clauses. The order of constituents within the noun phrase is very strict and rarely varies. The usual word order in a complex English noun phrase is determiner-pre-modifier (e.g. adjective) - head noun - relative clause/prepositional phrase.

3.3.2.1 Nouns

Nouns in English do not denote gender differences through inflections and neither determiners nor adjectives change their form according to the gender of the noun they pre-modify. English has no grammatical gender, only natural gender and certain pronouns expressing natural contrasts in gender (e.g. he, she, it) are selected to refer to nouns of a particular natural gender (e.g. 'her' is used to refer to a girl; 'he' is used to refer to boy). An exception is the personal pronoun 'she', that can sometimes be used to refer to countries and inanimate objects such as ships, cars and planes.

English nouns are marked for the plural with the '-s' ending in regular plurals. As far as marking for case is concerned, English nouns are only marked for the genitive case (or possessive 's), which indicates possession (but c.f. 3.3.2.2 below), while all other forms have no inflection (defined as the 'common case', Greenbaum, 1996, p. 618).

3.3.2.2 Pronouns

In English, pronouns act as heads of a noun phrase and they are not typically introduced by determiners or are not modified. There are three main types of

pronouns: personal, possessive and reflexive. They express contrast in person (first, second, third), number (singular and plural), gender (masculine, feminine and non-personal), and case (subjective and objective) (see Greenbaum, 1996). The case markings on personal pronouns include different forms for the nominative ('he'), the accusative and the dative ('him').

3.3.2.3 Adjectives

English adjectives can pre-modify nouns in a noun phrase, but are not marked to agree with the noun they modify (e.g. blue book – blue books). However, adjectives can also act as the head of a noun phrase. These nominal adjectives are usually introduced by a definite article and they do not take the plural inflection (e.g. the blind).

3.3.2.4 Determiners

The main difference between a Bosnian and an English noun phrase is the fact that a head noun in the English noun phrase has to be preceded at least by a definite or indefinite article, whereas definite and indefinite articles do not exist in Bosnian and it is not necessary for a Bosnian head noun to be preceded by a determiner.

Chapter 4. The Study

In this chapter, the subjects of the study and their patterns of language use will be discussed, as well as data collection, transcription, coding and analysis procedures.

4.1 Research Design

This study sets out to examine the hypothesis that young bilingual children, who are learning two languages simultaneously from birth, are able to differentiate their languages according to context, as well as structurally, from the onset of speech production ('Separate System Hypothesis'; c.f. section 2.1.2). Evidence for the above will be provided by the analysis of the child data and the investigation of the following research questions:

1. Are bilingual children able to differentiate their two languages pragmatically, i.e. use them in a context-appropriate way, from an early age?

This is addressed by analysing the type of utterances produced by the children in the Bosnian and English contexts.

2. Do bilingual children acquire and develop two structurally separate systems from the beginning of their language development?

This is investigated by focusing on the children's data in the two language contexts: if there is a separation of the two systems, then appropriate inflectional marking will be found within the noun phrase for each language. If, however, inflectional marking is

applied to the inappropriate language, this would provide evidence for a single rather than a separate system.

4.1.1 Bilingual First Language Acquisition

Extensive discussion has been generated in the literature (see McLaughlin, 1984; De Houwer, 1990; Lanza, 1997; Deuchar and Quay, 2000) as to when a child can be regarded as acquiring his/her two languages simultaneously. McLaughlin (1984) states that the child who is introduced to a second language before 3 years will be regarded as acquiring the two languages simultaneously, whereas the child introduced to a second language after three will be considered to have had one language established and to have acquired the second successively, as a second language (p.73).

De Houwer (1990) rejects McLaughlin's definition on the basis of its arbitrariness and, instead, proposes the use of the term Bilingual First Language Acquisition (BFLA) to refer to situations in which a child is first exposed to language B no later than a week after he or she was first exposed to language A, as well as to situations in which a child's exposure to languages A and B is fairly regular, i.e. the child is addressed in both languages almost every day (p.3). This definition can be applied to this study, as both of the children have been exposed to both languages from birth and are addressed in both languages almost every day.

Lanza (1992) elaborates on this issue further, by defining the source and type of the input that the bilingual child, who is in the process of acquiring his/her two languages simultaneously, can be exposed to.

“In an investigation of bilingual first-language acquisition, there is a need to focus on the child who has received some input in two languages from infancy. This input, however, may come from within the home or through contact with another language outside the home, in cases in which the home language is not the language of the speech community.” (Lanza, 1992, p. 634)

In the present study, one of the bilingual children is exposed to both languages within the home through the ‘one parent-one language’ strategy, while the other child receives input in one language within the home and is exposed to the other language outside the home, as the home language is not the language of the host community.

4.1.2 Definitions of Language Mixing

Within bilingual first language acquisition literature there have been many attempts to define ‘language mixing’ (e.g. Vihman, 1985, Meisel, 1989), with differing definitions at times causing confusion in the interpretation of bilingual child language data (see also section 2.2). In her study, Lanza (1997a) uses the term language mixing to refer to any type of linguistic interaction between two languages. She also emphasises that, in her study, code-switching (‘the alteration or mixing of languages within and across utterances in discourse’, p.3) is treated as a type of language mixing. Similarly, Köppe and Meisel (1995) define language mixing as

“...any utterance or conversation containing features of both languages...irrespective of the reasons which cause this to happen.”

(Köppe and Meisel, 1995, p.227)

The term ‘language mixing’ is used in this study to refer to the use of mixed utterances (c.f. 4.3.3) in the bilingual children’s speech, but it by no means assumes “indiscriminate combinations of elements from each language” (Redlinger and Park, 1980, p.337), as has been the case in earlier work on bilingual children’s language development (c.f. Vihman, 1985). In this study, ‘language mixing’ refers to both intra-utterance mixing of the elements of the two languages, as well as inter-utterance mixing, which refers to mixing at discourse level, i.e. across turns (see Lanza, 1997a). Further distinction is made between lexical, morphological and syntactic mixing, where the instances of lexical mixing are viewed as borrowings from one language incorporated into the other language due to a gap in the children’s vocabulary in that language (appropriate language mixing), while morphological and syntactic mixing are considered to be inappropriate language mixing (see also section 2.2). It is essential to stress that language mixing, as referred to in this study, does not include the concept of code-switching, which is viewed as a bilingual speaker’s conscious choice of languages in different contexts and, in certain situations, a reflection of community norms.

4.1.3 The Subjects

The study investigates the language acquisition of two English/Bosnian bilingual children between the ages of 1;8 and 2;4. In the following sections, the children’s backgrounds, as well as their patterns of language use, will be discussed.

4.1.3.1 Rina

The first child (Rina), a girl, was born in September 1999 in London and is an only child of an English-Bosnian family living in London. Rina's mother is a native English speaker, while her father arrived in England as a refugee from Bosnia in 1994. Although the father's native language is Bosnian, he is proficient and fluent in English. However, the mother's knowledge of Bosnian is limited to a few hundred words and some basic phrases. In addition, the mother has little or no knowledge of Bosnian morpho-syntax.

The child has been exposed to both languages from birth and the parents expressed their intention to bring up their daughter by each speaking their own native language to her from the very beginning ('one person/one language principle', Ronjat, 1913; De Houwer, 1995). However, observations of the language use in the home have shown that the parents do not seem to adhere strictly to this principle. The mother reports that she uses only English with the child, although the data do not support this claim. The father states that he uses exclusively Bosnian when he is alone with the child, which is backed up by the data. When the mother is present, the father says that his usage of Bosnian drops to 80-90%, because he sometimes wants the mother to understand what he is saying. The same applies when English friends and relatives are present. The family's Bosnian friends and relatives are encouraged to use only Bosnian with Rina.

The child's weekly routine seems to suggest that she has more exposure to English during the day, as her father works and it is either her mother or an English childminder who look after her. During the weekend the father spends more time with

the child and the two of them visit Bosnian friends or relatives. On Sunday mornings the mother takes the child to church, where only English is spoken. The family goes on holiday to Croatia and Bosnia once a year for three weeks. During the data collection the child spent three weeks in Croatia and Bosnia (1;10.17 to 1;11). Another change in the child's routine came about when the paternal grandmother stayed at the family's home in London for almost two months (2;0.5 – 2;2.0). This meant that the child had more exposure to Bosnian than before, as it was now the grandmother who took care of the child most of the time and she became a constant source of Bosnian input for the child. The interactions among the parents are mostly conducted in English (90%), although sometimes they try to incorporate words and simple sentences in Bosnian for the mother's benefit.

4.1.3.2 Anya

The second child (Anya), also a girl, was born in February 2000 in York and is an only child of a Bosnian family living in York. Anya's parents are both native speakers of Bosnian and arrived in England as refugees in 1992. Although both children involved in this study are being brought up bilingually, the context of acquisition is different. In Anya's family, Bosnian is the home language and is used in conversations between the parents, as well as their interactions with the child. However, the parents are proficient in English and the child is aware of this. Both sets of grandparents also live in York and interact with Anya in Bosnian, as their knowledge of English is basic.

From the age of 0;8 to 1;1, Anya attended an English nursery three days a week (8.30am to 5pm). During the remaining two days she was cared for by her Bosnian grandparents, as both parents worked. From the age of about 1;1, the attendance at the nursery has increased to five days a week. Each day, after the nursery, Anya spends time with her parents or relatives at home. At weekends, the family spends time together and the child's exposure to Bosnian is increased considerably. The parents report that Bosnian is used 90% of the time at home, but when English people are present the parents use more English with the child in order not to exclude the native English interlocutors. On the other hand, when Bosnian people are present the interaction is exclusively in Bosnian.

4.2 Methodology

This study is longitudinal in nature and follows the language development of the two bilingual children from the age of 1;8 to about 2;4. The data for this study was collected through audio- and video recordings of naturally-occurring conversations in play situations with the children's parents/carers. The children were recorded every two weeks for 60 minutes, 30 minutes in a Bosnian context and 30 minutes in an English context. Before the data collection commenced, a consent form (see Appendix I) was signed by the parents, carers and the researcher involved in the study. The form was approved by the Faculty Ethics Committee, University of Hertfordshire in February 2001.

The first recording of Rina was a pilot recording made when the child was 1;7.23 (13/05/01). The child was recorded at home for 30 minutes with each parent, i.e. in an

English and Bosnian context, with a short break in between. It was decided that the recording should be done in the living room, where the child usually played. The recording equipment was operated by the researcher, who was present during both sessions, but did not actively participate in the English session, as she is a native Bosnian speaker. At the end of the session the parents concluded that they were happy with the time and duration of the recording.

The pilot of the second child (Anya) was recorded when she was 1;8.5 (22/10/01). The child was recorded in the English context first, which, in this case, was the nursery, as it provided the child's main English input. The equipment was positioned in a corner near a table where Anya and a teacher were seated. However, five minutes into the recording it was obvious that the children in the background made the child's, and even the teacher's, voice inaudible. Together with the teacher, it was decided that a table should be placed in the corridor outside the nursery door. The teacher was a bit apprehensive as to how the child would react when taken out of the nursery environment. Luckily, Anya was more than happy to play with the teacher one to one. A selection of toys was brought out so that the child was never short of things to do. The researcher operated the camera, but did not actively participate in the session. The rest of the recording went smoothly and the sound was satisfactory, so it was decided that future recordings should take place in the corridor. The recordings in the Bosnian context were made at the child's home after the parents came back from work and it was decided that the parents would alternate between recordings. The camera was set up in the living room, but for the next session the parents moved all Anya's toys into her bedroom and said that they thought it would be better to do the recordings there, and they were right. The child was more at ease because she was

used to playing in her own room and the parents, as well as the researcher, were satisfied with how it went. The researcher operated the recording equipment and sometimes participated in the interaction with the parent and child, as she is a native Bosnian speaker.

4.3 The Analysis

In the following section, the features of the CHILDES system, which is used for the transcription, coding and analysis of the child language data, are presented. In addition, the specific transcription, coding and analysis methods within this system, which were adopted for this study, are discussed. The terminology employed in the description of the data in this study is that of Universal Grammar – c.f. sections 2.4.1, 2.4.1.1 and 2.4.1.2 for a discussion of this theory of language, section 2.4.3.1 for an account of Radford’s research into the acquisition of phrase structure in English (described in UG terms) and Appendix IV for the codes used in the analysis.

4.3.1 CHILDES

MacWhinney (1995) describes the Child Language Data Exchange System (CHILDES) as

“one of the major methodological developments in the fields of child language research over the past decade has been the introduction of computerised systems for dealing with the transcription coding and of analysis of spontaneous production data.”

(p.152)

The three major components of the CHILDES system are the database, the CHAT transcription systems, and the CLAN programmes.

4.3.1.1 The Database

The first major tool in the CHILDES workbench is the database, which enables researchers all around the world to retrieve huge amounts of consistently coded child language transcript data and to directly test a vast range of empirical hypotheses. The database contains results of nearly a hundred major research projects in over a dozen languages across the last 25 years. These include a wide range of ages and situations, as well as different types of learners, such as bilingual children, children with language impairments, adults with aphasia and second language learners.

MacWhinney (1995) emphasises that almost all the data represent real spontaneous interactions in natural contexts, rather than simple lists of sentences or test results.

4.3.1.2 CHAT

CHAT (Codes for Human Analysis of Transcripts) is the standard transcription system for CHILDES, which provides options for basic discourse transcription as well as detailed phonological and morphological analysis. The CHAT system includes conventions for both transcription and coding, and it offers the transcriber a large array of coding options. Basic transcription is done on the 'main line', while additional coding is done principally on the secondary or 'dependent tier'.

The three major components of a CHAT transcript are the file headers, the main tier and the dependent tiers. A computerised transcript in CHAT format begins with a series of 'header' lines, which give information about the date of the recording, the names of the participants, the ages of the participants, the setting of the interaction and so forth. CHAT uses three types of headers: obligatory, constant and changeable. There are only four obligatory headers - @Begin, @Participants, @ID and @End – without which the CLAN commands will not run correctly. The second set of CHAT headers are the nonobligatory constant headers that contain useful information that is constant throughout the file. These headers are placed at the beginning of the file before any of the actual utterances. Constant headers indicate basic information that is unlikely to change during the course of the recording session, such as the speaker's age and date of birth. An example of obligatory and constant headers is given below.

Ex.10

@Begin

**@Participants: Anya Target_Child, AE Target_Child, AB Target_Child, TEA
Teacher**

@Date: 19-NOV-2001

@Age of Anya: 1;9.2

@Sex of Anya: Female

@Birth of Anya: 17-FEB-2000

@Language of TEA: English

***TEA: a yellow circle.**

***TEA: what colour is it?**

***AE: yellow.**

@End

The third type of headers, the changeable headers, can occur either at the beginning of the file along with constant headers or else in the body of the file, and they contain information that can change within the file. These headers appear at the point within the file where the information changes. For example, the @Situation header describes

the general setting of the interaction and applies to all the material that follows it until a new *@*Situation appears, as is shown in the example below.

Ex. 11

@Begin

@Participants: Rina Target_Child, RB Target_Child, RE Target_Child, RM Target_Child, FAT Father, OBS Observer, MOT Mother

@Date: 26-JAN-2002

@Age of Rina: 2;4.6

@Sex of Rina: Female

@Birth of Rina: 20-SEP-1999

@Language of FAT: Bosnian

@Situation: the child receives a package from her grandparents in Bosnia. The mother is present during the opening of the package.

In CHAT, words are transcribed on the main speaker tier, which shows what the speaker said. Each main tier line begins with an asterisk, after which there is a three-letter speaker ID, a colon and a tab. The remainder of the main tier line is composed primarily of a series of words.

Ex. 12

**TEA: What's that part of?*

The third major component of a CHAT transcript is the information given on the dependent tiers, which are lines typed below the main line that contain codes, comments, events and descriptions of interest to the researcher. All dependent tiers should begin with the percent symbol (%) and should be in lower case letters. As in the main tier, dependent tiers consist of a tier code and a tier line. The dependent tier code is the percent symbol, followed by a three-letter code ID and a colon. The dependent tier line is the text entered after the colon and that describes fully the

elements of interest in the main tier. An example of the morphosyntax tier (%mor) and the coding tier (%cod) is given below.

Ex.13 Anya (2;0.15 - English context)

**AE: Monkey go [*] in here.*

*%mor: En:prop|monkey Ev|go-*1P:PRES Eprep|in Eadv|here.*

%cod: (ENPs=En:prop)

The CHAT system is specifically designed to facilitate the subsequent automatic analysis of transcripts by CLAN.

4.3.1.3 CLAN

The third major tool in the CHILDES system is the CLAN (Computerised Language Analysis) package of analysis programs, which have been designed to specifically analyse data transcribed in the format of CHILDES. CLAN allows the researcher to perform a large number of automatic analyses on transcript data, which include frequency counts, word searches, mean length of utterance (MLU) and morphological analysis.

The analytical work of CLAN is performed by a series of commands that search for strings and compute a variety of indices, such as the MLU program, which computes the mean length of utterance. Many of the programs have quite a few possible options or switches that are shared across CLAN commands. For example, the +t option allows the researcher to include or exclude particular tiers from the analysis, while the +s option enables the researcher to search for a particular string.

CLAN commands include the program name, the set of options, and the names of the files being analysed. For example, the command

*freq +t*RE +s“cat” codemf12a-2.cha*

runs the *FREQ* program on the file specified (*codemf12a-2.cha*) and analyses only the main **RE* tier, while ignoring all the other tiers in the file (*+t* switch). Because of the inclusion of the *+s* option, the program searches only for the keyword specified within the command, in this case ‘*cat*’.

4.3.2 Transcription

All the recordings were transcribed and coded in the CHAT format (MacWhinney, 1991), using the CHAT manual. Both audio and video recordings were used while transcribing, and this was found to result in the most accurate transcription. All the interactions (both the children’s and parents’) were transcribed in full, including context information and phonemic transcription of some of the children’s utterances. Full transcriptions of two recordings (one from the Bosnian context and one from the English context) are given in Appendix II and Appendix III.

The unit of analysis in this study is the utterance. A one-word utterance is defined as having a single intonational contour. In the analysis, repetition which occurs within a conversational turn is dismissed. However, repetition across turns is considered to be relevant (Lanza, 1997a). Two-word utterances are those that share the same

intonational contour without a substantial pause between them (Deuchar and Quay, 1998).

When transcribing, an utterance was coded as [xxx] if it was still unintelligible after hearing the particular speech sample three times, both from the audio as well as the video recording.

All the children's utterances were transcribed in full, including unintelligible, nonsense and incomplete utterances. However, the analysis is only based on complete, meaningful and intelligible utterances. As far as ambiguous utterances, for which it is impossible to determine the source language, are concerned, such as some exclamations, interjections, onomatopoeias and words which sound similar in both languages, it has been decided that an ambiguous word would be considered to be language appropriate in a particular context, i.e. in an Bosnian context an ambiguous word is assumed to be a Bosnian word.

It is important to stress that within the thesis, both in the text, as well as in the examples, the children have been referred to using the pseudonyms Rina and Anya in order to preserve anonymity. In addition, their ages are referred to in shorthand throughout the thesis (year;month.day).

4.3.3 Coding

It was decided that not all of the children's data would be coded, as analysing and discussing all the data would have been beyond the scope of this thesis. Those

recordings that were chosen for coding represent ages at which changes in the children's language development were thought to have occurred. For Rina, 14 transcripts (seven in each context) were coded and a coding system was developed within the CHAT programme. As far as Anya was concerned, 12 transcripts (six in each context) were coded and they were directly comparable in age with Rina's transcripts. This was essential, as the analysis would involve the direct comparison of the children's bilingual language development. One extra transcript from Rina (the last one – 2;6.3) was coded, as her language development was thought to be slower than Anya's language development.

Apart from the main tier, all the children's utterances were also coded on the morphological tier, which included the morphological analysis of the child's utterance. This included coding errors in the utterance as well. A separate coding tier was introduced in order to code the components of the noun phrase in more detail for the purposes of later analysis. In order to analyse the child's errors within the noun phrase, the error tier was included in the coding. The different codes found on all four tiers and their explanations can be found in Appendix IV.

The complete and intelligible utterances are divided into three types in all transcriptions (based on Sinka, 2000):

- 1) Bosnian utterances (contain elements from only Bosnian)
- 2) English utterances (contain elements from only English)
- 3) Mixed utterances (contain elements from both languages, at morpheme level, word level, or at the level of a phrase, e.g. the noun phrase)

The following example illustrates the transcription and coding of a child's utterance:

Ex.14 Anya (2;1.16 – English context)

AE: Two bear-0

*%mor: Enum|two En:prop|bear-*0PL*

*%cod: (*ENPc=Enum-En:prop)*

%err: 0=s \$MOR \$NNUMSG (ERR)

The three-letter speaker ID (AE) indicates that the child is Anya and that the utterance she has produced is an English one. If the utterance were Bosnian or Mixed, the speaker ID would be AB or AM respectively. The main tier contains the elements of the utterance, as well as the symbol '0*' which indicates an ungrammatical omission, which in this case is the omission of the plural inflection '-s'.

The next tier is the dependent morphosyntax tier (%mor), which contains the morphosyntactic analysis of the child's utterance. This tier was supplied for all the children's utterances. In the above example, the English term for number 'two' is coded as Enum|two, while the English proper noun 'bear' is coded as En:prop|bear-*0PL. The '-*0PL' code indicates that there is an ungrammatical omission of the plural ending.

The second dependent tier used in the transcription is the coding tier (%cod), which was introduced in order to describe the noun phrase in the utterance. For the children's utterances, which do not contain a noun phrase, the coding tier was not used. In the example, the code '(*ENPc=Enum-En) shows that Anya has produced a complex English noun phrase with an error (*ENPc).

An English noun phrase contains only elements from English, while a Bosnian noun phrase contains only elements from Bosnian. A mixed noun phrase is defined as containing elements from both English and Bosnian, either at the word or morpheme level. English, Bosnian, as well as mixed noun phrases, are coded as being either single or complex noun phrases. A single noun phrase is a phrase which only contains a head, such as a noun, a personal pronoun, a demonstrative pronoun or a nominal adjective. A complex noun phrase, on the other hand, consists of a head and one or more specifiers or complements (c.f. 2.4.2), such as determiners.

In the above example, Anya has produced a complex English noun phrase, which consists of an English number as a specifier and an English noun as the head. The asterisk symbol indicates that the complex noun phrase contains an error, which can either be morphological (involving inflectional marking), syntactic (involving the word order within the noun phrase) and/or lexical (incorrect choice of the lexical item). It is important to emphasise that in this study an error is defined according to monolingual adult norms for the standard forms of the two languages (c.f. also page 105 for discussion of ‘correct’ noun phrases vs noun phrases with ‘errors’).

In order to provide more detailed information on the type of error within the noun phrase, the error tier (%err) is introduced as the third dependent. The error tier is not included when errors occur in any other part of the children’s utterances other than the noun phrase. However, other types of errors are coded both on the main tier, as well as the morphosyntax tier. The error code in the example being analysed consists of the code 0=s, which indicates a missing ‘-s’ inflection. The second set of codes ‘SMOR \$NNUMSG’ show that the error is morphological (SMOR) and that the singular noun

has been used incorrectly (SN-noun-NUM-number-SG-singular). For other error codes used in the study see Appendix IV.

In the analysis, the bilingual children's noun phrases are also referred to as being either 'correct' noun phrases or noun phrases with 'errors'. A correct English noun phrase is a noun phrase a child produces in either context, which contains only elements from English and whose form would resemble adult usage. Similarly, a correct Bosnian noun phrase includes only elements from Bosnian and reflects native Bosnian adult usage. Both English and Bosnian noun phrases would be defined as noun phrases with errors if they, in form, did not resemble the respective native adult usage. In addition to English and Bosnian noun phrases, there are a small number of mixed noun phrases in the data. These form part of the mixed utterances (c.f. page 97) and contain elements from both English and Bosnian.

As far as the coding of parental/carer utterances is concerned, for the purposes of investigating how parental/carer discourse strategies influence the bilingual children's extent of language mixing in the two contexts, Lanza's (1992;1997a) categorisation of parental strategies towards mixing have been adopted (see section 2.3.1). All the parents' and carers' utterances that occurred as a direct response to the children's use of the inappropriate language for the context, either in the form of a whole utterance (inter-sentential) or within a mixed utterance (intra-sentential), were coded following Lanza's (1992) five analytical categories: Minimal Grasp Strategy (MGS), Expressed Guess Strategy (EGS), Repetition Strategy (RS), Move on Strategy (MOS) and Code-switching (CS).

Parental/carer responses to the children's language mixing were coded as Minimal Grasp Strategies if the parent/carer requested clarification from the child by using phrases such as 'I don't understand' and Wh-interrogatives, which require the bilingual child to repeat the utterance in the appropriate language (see Example 15).

Ex.15 *Father (Rina 2;6.3 – Bosnian context)*

*RE: Eye.
*FAT: Šta je to?
%cod: (MGS).
 'What is that?'
*RB: Šta je to?
 'What is that?'
*RE: Eye.
*RB: Oči.
 'Eyes.'

With the Expressed Guess Strategy, the parent/carer is the one who attempts the reformulation of the child's utterance in a yes-no question form, as can be seen from the example below.

Ex.16 *Father (Rina 2;4.6 – Bosnian context)*

*RE: Off [/] off.
*FAT: Očeš ti da otvoriš?
%cod: (EGS).
 'Do you want to open?'
*RB: Da.
 'Yes.'

A parent's/carer's utterance was coded as being a Repetition Strategy if the parent/carer repeated the meaning of the child's mix, using the context appropriate language, but in a non-question form (see Example 17).

Ex.17 **Father (Anya 2;1.16 – Bosnian context)**

***AE:** *There ()*v hand [/] there hand [/] there hand.*

***FAT:** *Jeste, ruka mu je tu, jeste.*

%cod: *(RS).*

‘Yes, his hand is there, yes.’

Within the Repetition Strategy, Lanza (1997a) distinguishes between examples similar to the one above, and those parental responses which not only involve a repetition of the child’s mix in the appropriate language, but also a repetition of the child’s mix which is produced in the context inappropriate language. This differentiation is also adopted in this study, both in the coding and the analysis, as it is believed that there is a qualitative difference between these two types of Repetition Strategy. Parental/carer utterances which contained both a repetition of the child’s mix, as well as the repetition of the child’s meaning using the appropriate language, were defined and coded as Repetition Strategy + Code-switching (RS+CS), as is illustrated in the example below.

Ex.18 **Mother (Anya 2;2.26 – Bosnian context)**

***AM:** *Green buba.*

‘Green bug.’

***MOT:** *Zelena buba, jeste, green bug, zelena buba.*

%cod: *(RS+CS).*

‘Green bug, yes, green bug, green bug.’

The Move on Strategy was identified, and the parent’s/carer’s utterance was coded as such, when the parent merely continued the conversation after the child had produced a mix (see Example 19).

Ex.19 **Father (Anya 2;0.15 – Bosnian context)**

***AE:** *Vanja do it.*
***FAT:** *Nemože Vanja.*
%cod: (MOS).
 'Vanja can't.'

The final parental/carer discourse strategy, Code-switching, involves both inter-sentential and intra-sentential code-switching. An example of intra-sentential code-switching is one in which a parent/carer, in response to the child's mix, incorporates the child's use of the inappropriate language into his or her own utterance, as is illustrated in the example below.

Ex.20 **Father (Anya 1;9.2 – Bosnian context)**

***AE:** *Book.*
***FAT:** *Book, ajde, daj book.*
%cod: (CS).
 'Book, come on, give book.'

Inter-sentential code-switching involves the parent/carer switching immediately and completely to the context inappropriate language, in response to the child's mix (see Example 21).

Ex.21 **Mother (Anya 2;2.26 – Bosnian context)**

***AE:** *Sorry mama.*
 'Sorry mum.'
***MOT:** *It's ok, honey.*
%cod: (CS).

It is important to point out that the distinction between the above mentioned types of code-switching is not made in the coding or the analysis of the data.

4.3.4 Problems of Interpretation

Most of the problems encountered during transcription and coding of the selected samples involved the identifying and labelling of errors within the noun phrase, as shown in the example below.

Ex.22 *Anya (2;4.8 – English context)*

**TEA: Samuel.*
**AE: Get Samuel.*
%mor: Ev|get-IMP En:prop|samuel.
%cod: (ENPs=En:prop)
**TEA: I'll get it down.*
**AE: See it [*] Samuel.*
*%mor: Ev|see E*pro|it En:prop|samuel.*
*%cod: (*ENPs=Epro)*
%err: pro=0 \$SYN \$PRORED (ERR)

In this example, the difficulty was in deciding which noun phrase was reduplicated, the pronoun or the proper noun. It was decided that the personal pronoun was reduplicated and used incorrectly, as Anya produced the proper noun 'Samuel' correctly in previous turns.

The main problem that arose during the analysis of the data was the classification of the nouns produced by the children in the two contexts. The nouns which were used to name people or characters were defined as proper nouns, while the rest of the nouns produced were referred to as common nouns. However, a difficulty emerged when classifying names of animals and toys. It is well known that very young children tend to use terms for animals (e.g. lion) and toys (e.g. baby) as proper nouns and not common nouns, whereas in adult language such nouns would be defined as common

nouns. In this study, however, it was impossible to tell whether nouns that the children produced were proper or common nouns (except for the names of people), as the context did not provide enough information for a definite conclusion to be reached. It was decided that, for the purposes of the analysis within this study, all the terms for animals and toys used by the two children in both contexts throughout the period of data collection would be classified as proper nouns, as illustrated in the example below.

Ex.23 *Anya (2;1.16 – English context)*

**TEA: What?*
**AE: Teddybear.*
%mor: En:prop|teddybear.
%cod: (ENPs=En:prop)
**TEA: Teddybear, that's right.*
**TEA: Does he feel furry?*

In addition, the English common nouns produced by the two children in the English context without a determiner (definite or indefinite article) were not marked as errors in the samples in which an MLU score of 1.5 and below was calculated (see section 4.3.5 for a discussion of the MLU measurement), as the children were still thought to be at the one-word stage when their MLU score was within Brown's early Stage I (1.00-1.49). However, English common nouns produced without a determiner are marked as errors from the moment the children's MLU scores reach Brown's late Stage I (1.50-1.99), as they are then considered to be within the two-word stage (see sections 6.2.4 and 8.2.4). It is also at this stage that both children start producing complex noun phrases containing determiners. However, because these children have only just entered the two-word stage, there will clearly be examples of noun phrases without a determiner in the data.

It was not necessary to address the above issue in the Bosnian context, as Bosnian common nouns do not need to be preceded by determiners.

Another issue that caused some problems when interpreting the data was the children's use of proper nouns, particularly the terms used for addressing the parents. In the case of Rina, it was clear early on that she used the Bosnian term 'tata' for 'daddy' and the English proper noun 'mummy' in both contexts, which was fully accepted by both parents. These terms were, thus, treated as language appropriate in a particular context. In other words, if Rina was recorded using the proper noun 'tata' in the English context, it would be transcribed and coded as an English proper noun within an English or Mixed utterance (see Example 24). However, if 'tata' were used as part of an otherwise Bosnian utterance, it would be considered to be a Bosnian proper noun.

Ex.24 *Rina (2;6.3 – English context)*

***RE: Tata.**

%mor: En:prop|tata.

%cod: (ENPs=En:prop)

The same applies to the proper noun 'mummy', which is considered to be a Bosnian proper noun if used in a Bosnian or Mixed utterance in the Bosnian context, as illustrated in the following example.

Ex.25 *Rina (2;0.18 – Bosnian context)*

***RB: Mummy.**

%mor: Bn:prop|mummy-FEM:NOM:SG.

%cod: (BNPs=Bn:prop)

The decision concerning noun phrases was somewhat more complex in Anya's case. She was recorded using both the Bosnian terms ('tata' – 'daddy'; 'mama' – 'mummy') and the English terms ('mummy'; 'daddy') interchangeably when addressing or referring to her parents in both contexts. It was, thus, decided that these terms would be coded as language appropriate in a particular context. In other words, both 'mummy' and 'mama' were considered to be English noun phrases if used in the English context within an English or Mixed utterance. However, if they were recorded in the Bosnian context, they would be treated as Bosnian proper nouns if they appeared in a Bosnian or Mixed utterance, or English, if they were used within an otherwise English utterance (see Example 26).

Ex.26 *Anya (2;2.26 - Bosnian context)*

**AE: No mummy.*
%mor: Eyn|no En:prop|mummy.
%cod: (ENPs=En:prop)

As far as the parental discourse strategies are concerned, the main problem that arose during the coding of the parental/carer responses to the children's mixes was connected with whether a parental response which involved a Wh-interrogative, as well as a repetition of the child's mix in the appropriate language, should be coded as a Minimal Guess Strategy or a Repetition Strategy. It was decided that such parental utterances should be coded as examples of the Repetition Strategy (see Example 27).

Ex.27 *Father (Anya 2;4.7 – Bosnian context)*

*AE: Making 0*d [/] making.*
**FAT: Šta ćemo pravit?*
%cod: (RS).
 'What are we going to make?'

In the above example, the child uses the English verb 'making' and in response to that the father asks 'What are we going to make?' The father's utterance involves a continuation of the topic, which also contains a repetition. Because of this, such a response is defined as a Repetition Strategy and not a Minimal Guess Strategy.

It is important to emphasise that both the transcription and the coding of the data were discussed with the supervisor and problems that arose within the coding were resolved through discussion.

4.3.5 The Analysis of the Data

The analysis of the data was conducted using the CLAN commands and options (c.f. section 4.3.1.3) and it concentrated mostly on the noun phrase, although an analysis of the children's general language development in terms of MLU and the number of utterances in each context was completed first.

The Mean Length of Utterance (MLU) measurement was developed by Brown (1973), in order to determine and compare children's language development in terms of the average number of morphemes in an utterance. Brown defines five stages (Stages I, II, III, IV and V) on the MLU continuum, according to ranges of MLU scores. In Stage I, the child's MLU scores fall between 1.0 and 2.0, while Stage II is when a child's MLU falls between 2.00 and 2.49. In addition, Brown subdivides Stage I into two stages, early Stage I (1.00 – 1.49) and late Stage I (1.50 - 1.99). The ranges of the last three stages are defined by Brown as follows: Stage III (2.50 -- 2.99). Stage IV (3.00 – 3.99) and Stage V (4.00 and up).

De Houwer (1990) voices her concern about using this measurement in studies of bilingual first language acquisition, as it was created for the analysis of monolingual English child language data. The use of MLU as an indication of a bilingual child's language development in two languages becomes problematic when, for example, one of the languages in the child's repertoire is English, and is compared to a morphologically more complex language such as Bosnian. The higher proportion of morphemes in Bosnian would generate a higher MLU score, which would not necessarily indicate a more advanced language development in Bosnian.

Despite these limitations, the MLU measure is employed in this study in order to obtain a general overview of the bilingual children's rate of language development in the two languages.

For the purposes of this study an MLU count for morphemes, as well as words was calculated using the MLU program in CLAN (c.f. section 5.1), which computes the Mean Length of Utterance. The MLU in words was calculated using a command to include the main tiers only, while the morphosyntax tier (%mor) was used to generate the MLU in morphemes scores. The children's MLU values in both words and morphemes (see Example 28 and 29 below) were generated only for context appropriate utterances. In other words, MLU scores in morphemes and words were recorded for English utterances in the English context for all the samples in that context, as well as Bosnian utterances in the Bosnian context.

Ex.28 **MLU in words (Anya 2;0.15 – English context)**

*> mlu +t*AE +k codeanya10a-2.cha @*

No file matching .cha found.

Try using "accept all" command.

*mlu +t*AE +k .cha @*

Thu May 01 20:28:48 2003

mlu (22-Sep-2000) is conducting analyses on:

*ONLY speaker main tiers matching: *AM; *AE; *AB;*

From file <c:\childev\clan\lib\anya-coded\codeanya10a-2.cha>

*MLU for Speaker: *AE:*

MLU (xxx and yyy are EXCLUDED from the utterance and morpheme counts):

Number of: utterances = 346, morphemes = 471

Ratio of morphemes over utterances = 1.361

Standard deviation = 0.638

Ex.29 **MLU in morphemes (Rina 2;3.2 – Bosnian context)**

*> mlu +t%mor +t*RB +k coderina14a-2.cha @*

No file matching .cha found.

Try using "accept all" command.

*mlu +t%mor +t*RB +k .cha @*

Tue Jan 14 18:10:15 2003

mlu (22-Sep-2000) is conducting analyses on:

ONLY dependent tiers matching: %MOR;

From file <c:\childev\clan\lib\rina-coded\coderina14a-2.cha>

*MLU for Speaker: *RB:*

MLU (xxx and yyy are EXCLUDED from the utterance and morpheme counts):

Number of: utterances = 157, morphemes = 287

Ratio of morphemes over utterances = 1.828

Standard deviation = 0.972

The MLU values in words were included in the analysis in order to avoid the possible misleading patterns of language development in the two languages that an MLU in morphemes count might have generated. The MLU in words scores, together with the MLU in morphemes scores, enabled a more accurate and valid analysis of the two children's language development.

The number of utterances in all the samples in each of the contexts was calculated in order to provide detailed information about the children's language use according to

context (c.f. section 5.2). The MLU program was also used to generate the number of utterances counts.

The most frequently used program in this study was the **FREQ** program for the frequency analysis. The **FREQ** program was used to analyse the types of noun phrases in the both contexts using the coding tier. The output generated showed the number and type of noun phrases used by the child in the sample, and was used to calculate the number of English, Bosnian and Mixed noun phrases in the sample, as well as the type of noun phrases that the child produced. The **FREQ** program was also used to generate lists of English and Bosnian nouns, as well as other single noun phrases, as shown in the example below.

Ex.30 **Number and Type of English nouns (Rina 2;0.18 – English context)**

```
> freq +t%mor +s"*En|*" +k coderina10a-2.cha @
```

No file matching .cha found.

Try using "accept all" command.

```
freq +t%mor +s*En|* +k coderina10a-2.cha @
```

Tue Jan 14 17:49:44 2003

freq (22-Sep-2000) is conducting analyses on:

ALL speaker tiers

and those speakers' ONLY dependent tiers matching: %MOR;

```
From file <c:\chilides\clan\lib\rina-coded\coderina10a-2.cha>
```

```
1 En|ball
```

1 Total number of different word types used

1 Total number of words (tokens)

1 Type/Token ratio

In addition, the **FREQ** program was used in order to quantify the parental/carer discourse strategies used in response to the bilingual children's language mixing, as is illustrated in the example below.

Ex.31 **Number and Type of Parental Discourse Strategies**
(Father; Anya 2;4.7 – Bosnian context)

```
> freq +t*FAT +t%cod +s"(*)" codeanya17b-2.cha @  
  
No file matching .cha found.  
Try using "accept all" command.  
freq +t*FAT +t%cod +s(*) codeanya17b-2.cha @  
Thu Jul 17 12:11:58 2003  
freq (27-Jun-2003) is conducting analyses on:  
  ONLY speaker main tiers matching: *FAT;  
  and those speakers' ONLY dependent tiers matching: %COD;  
*****  
From file <c:\childe\clan\lib\anya-c~1\anya coding (6)\codeanya17b-2.cha>  
16 (cs)  
 4 (rs+cs)  
 2 (egs)  
 1 (mgs)  
45 (mos)  
26 (rs)  
-----  
 6 Total number of different word types used  
94 Total number of words (tokens)  
0.064 Type/Token ratio
```

The KWAL program was also very useful in the analysis of the bilingual children's data, as it outputs utterances that match certain user-specified search words. The program also allows the user to view the context in which any given keyword is used. One of its functions within this analysis was to generate the children's utterances that contained errors, as well as the context in which these were produced (see Example 32 below).

Ex.32 **Type of Error (Anya 2;0.15 – English context)**

> *kwal +t%err +s"(ERR)" +w2 -w2 +k codeanya10a-2.cha @*

No file matching .cha found.

Try using "accept all" command.

kwal +t%err +s(ERR) +w2 -w2 +k codeanya10a-2.cha @

Sun May 11 17:34:14 2003

kwal (22-Sep-2000) is conducting analyses on:

ALL speaker tiers

and those speakers' ONLY dependent tiers matching: %ERR;

From file <c:\chilides\clan\lib\anya-coded\codeanya10a-2.cha>

**** File "c:\chilides\clan\lib\anyacoded\codeanya10a-2.cha": line 1191. Keyword:
(ERR)*

**TEA: The baby.*

**TEA: Is that the baby?*

**AE: That 0*v 0*det:artdef baby here .*

%err: 0=artdef \$SYN \$ARTDEFLOS (ERR)

**TEA: Is that the baby?*

**AE: Ye .*

Chapter 5. Results: General Language Development (length of utterance and language use according to context) and Parental Discourse Strategies

In this chapter, the results of the Mean Length of Utterance (MLU) analyses are presented in words and morphemes for the two bilingual children and for both languages. The MLU scores indicate the rate of language development of each child in the two languages and also enable a comparison of the children's rate of language development (see section 4.3.5).

The English MLU in morphemes scores are discussed in terms of Brown's (1973) five stages of grammatical development, while the Bosnian MLU scores are not, as Brown's stages do not apply to Bosnian. The second part of this chapter describes the language use of both children according to context, which has been determined by the number of English, Bosnian and Mixed utterances produced in each context. The findings of these analyses show whether the bilingual children's language use is context appropriate (c.f. Sinka, 2000).

The final section of the chapter focuses on the discourse strategies employed by parents and carers in conversations with the bilingual children. It is believed (see Lanza, 1997a) that the type of strategy used by parents or carers influences the amount of mixing that occurs in the bilingual children's output.

5.1. Mean Length of Utterance (MLU)

5.1.1 Rina

5.1.1.1 English

In the English context, Rina's MLU counts, in both words and morphemes, steadily increase with age (see Table 5.1; Figure 5.1). The first sample (1;8.28) shows an MLU of 1 for both words and morphemes (Early Stage I), and this count does not increase for the next two samples. However, at the age of 2;1.16, there is an increase of MLU in words to 1.1 and from that age there is a more significant increase in MLU scores. In the sixth sample of the analysis (2;4.6), an MLU in words of 1.3 is recorded. However, there is a slight decrease in the MLU in words score in the final recording (2;6.3) (see also section 5.1.1.2).

A similar picture emerges for the MLU in morphemes scores in English. In the first sample (1;8.28), an MLU in morphemes of 1 (Early Stage I) is recorded, which increases to 1.2 at the age of 2;1.16. There is a significant increase in the MLU counts in morphemes at the age of 2;4.6 to 1.5 (Late Stage I), as morphological marking emerges in Rina's English. There is a slight decrease in the MLU in morphemes score at the age of 2;6.3. However, no obvious explanation could be found for the decrease in the MLU scores in the last sample (see also section 5.1.1.2).

Table 5.1 Rina - MLU scores (English context)

AGE	MLU in words (English utterances)	MLU in morphemes (English utterances)
1;8.28	1.03	1.02
1;11.8	1.03	1.02
2;0.18	1.02	1.12
2;1.16	1.06	1.2
2;3.2	1.14	1.19
2;4.6	1.32	1.55
2;6.3	1.17	1.38

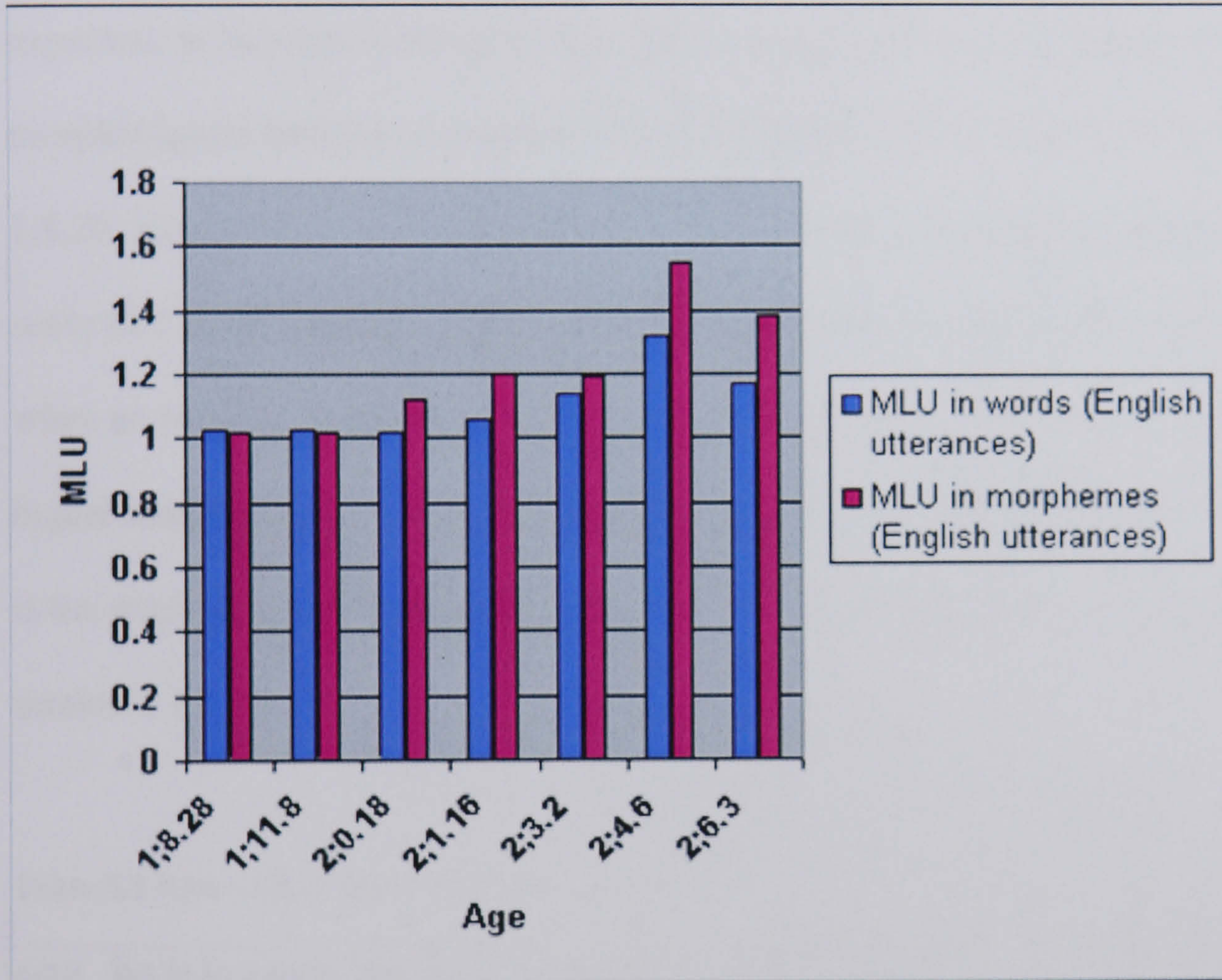


Figure 5.1 Rina - MLU scores (English context)

The child's Mean Length of Utterance (MLU) in morphemes scores in the English context can be classified as corresponding to Brown's (1973) Stage I between the ages of 1;8.28 and 2;6.3.

5.1.1.2 Bosnian

In the Bosnian context, a similar picture in the development of MLU in words emerges (see Table 5.2; Figure 5.2). In the last sample, Rina's MLU in words score is 1.35, which is slightly higher than in the English context. However, the MLU in morphemes scores are dramatically different across the two contexts. This is expected, as Bosnian is a highly inflected language and the wide range of morphological marking in Bosnian is reflected in the MLU scores. At the age of 1;8.28, Rina's MLU in morphemes score in the Bosnian is 1.9, as opposed to the score of 1 in the English context. This score remains the same until the age of 2;4.6, when an MLU in morphemes score in Bosnian of 2.4 is recorded. This is considerably higher than the MLU in morphemes score of 1.6 in the English context. The exception is the slight decrease in the MLU count in morphemes in the last sample (see also section 5.1.1.1).

Table 5.2 Rina - MLU scores (Bosnian context)

AGE	MLU in words (Bosnian utterances)	MLU in morphemes (Bosnian utterances)
1;8.28	1	1.9
1;11.4	1.01	1.4
2;0.18	1.08	1.88
2;1.16	1.07	1.93
2;3.2	1.13	1.82
2;4.6	1.44	2.37
2;6.3	1.35	2.08

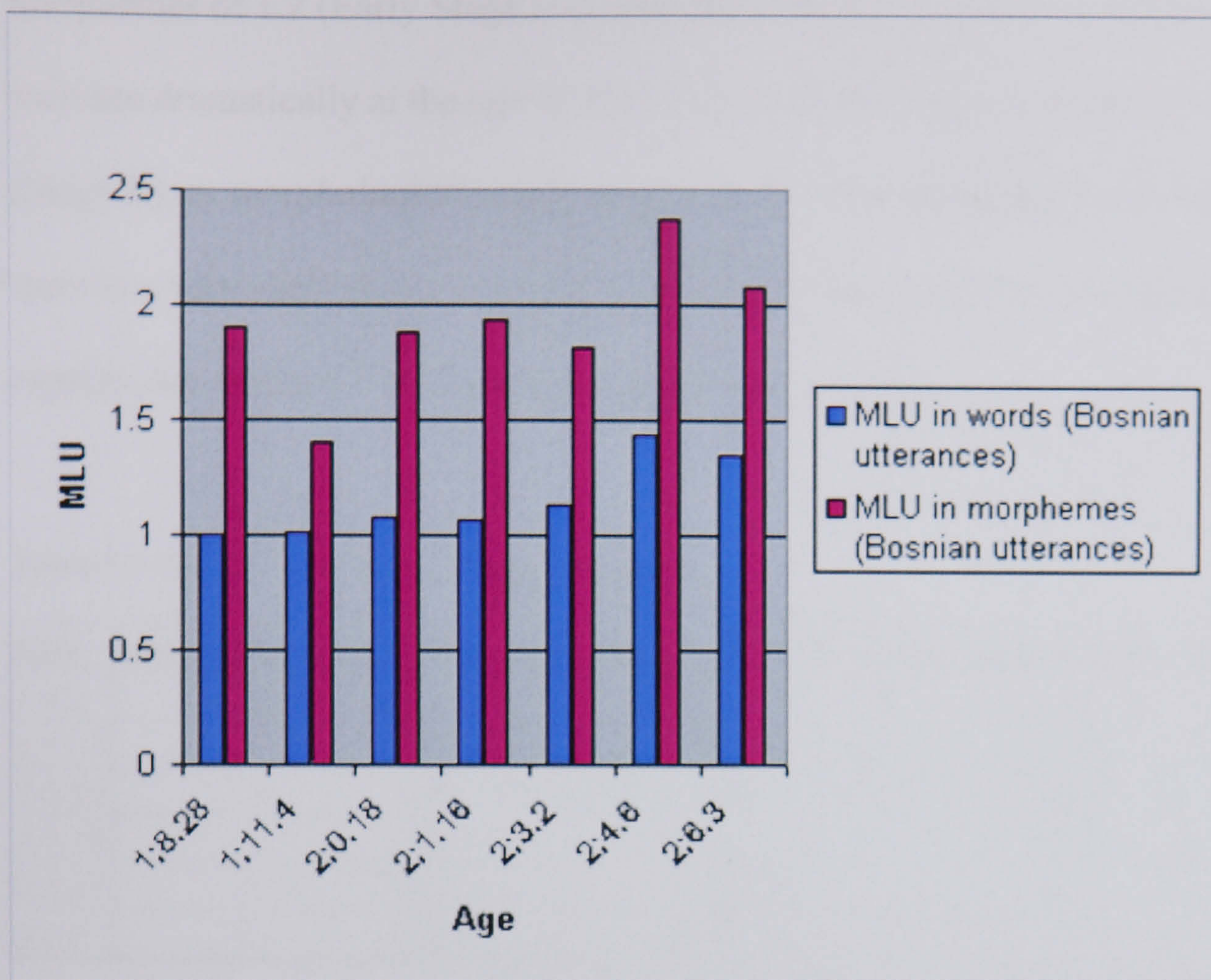


Figure 5.2 Rina - MLU scores (Bosnian context)

5.1.2 Anya

5.1.2.1 English

In the English context, Anya's MLU scores in both words and morphemes increase significantly across the samples (see Table 5.3; Figure 5.3). At the age of 1;9.2, a MLU score in words of 1.1 is recorded for Anya. The score increases to 1.7 at the age of 2;2.27. The only exception is a very slight decrease in the MLU in words score (1.6) in the last sample (2;4.7).

As far as the MLU in morphemes scores are concerned, the MLU increases in a similar fashion to the MLU in words scores. In the first sample (1;9.2), an MLU in

morphemes of 1.2 (Early Stage I) is recorded. The MLU counts in morphemes increase dramatically at the age of 2;0.15 to 1.7 (Late Stage I) and at 2;2.27 to 2.2 (Stage II), as morphological marking appears in Anya's English. In the last sample, there is a very slight decrease in MLU in morphemes scores to 2.0 in the English context, for which no obvious explanation could be found.

Table 5.3 Anya - MLU scores (English context)

AGE	MLU in words (English utterances)	MLU in morphemes (English utterances)
1;9.2	1.1	1.2
1;11.4	1.1	1.2
2;0.15	1.4	1.7
2;1.16	1.5	1.7
2;2.27	1.7	2.2
2;4.7	1.6	2

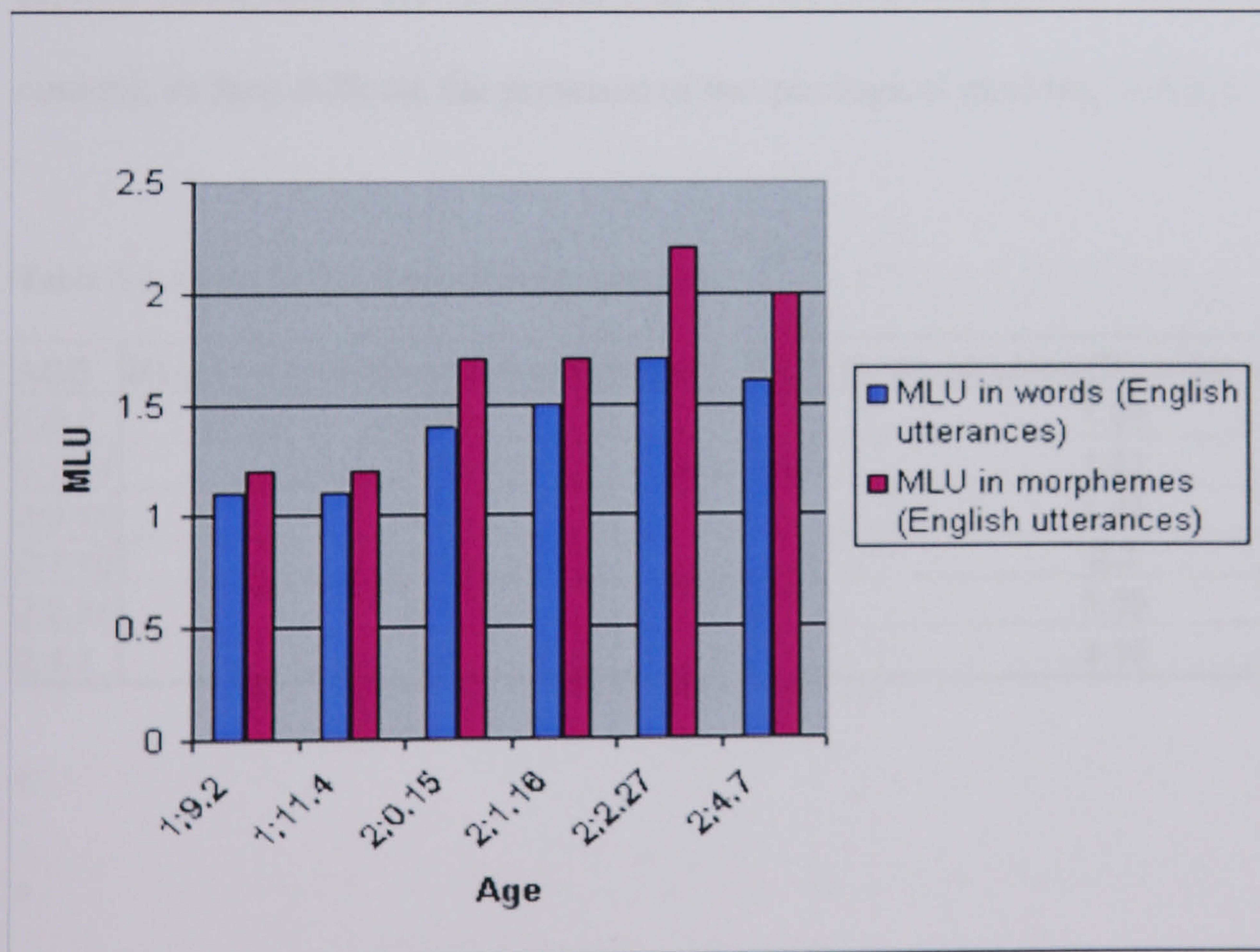


Figure 5.3 Anya - MLU scores (English context)

5.1.2.2 Bosnian

In the Bosnian context, a steady increase of MLU scores in both words and morphemes with age is recorded (see Table 5.4; Figure 5.4). In the first sample (1;9.2), an MLU in words score of 1 is recorded. This increases to an MLU score of 1.8 in the last recording (2;4.7), which represents a slightly higher score than in the English context (c.f. section 5.1.2.1).

As expected, the MLU in morphemes scores are considerably higher in the Bosnian context than in the English context. In the first sample (1;9.2), an MLU in morphemes of 1.7 is recorded. This increases to 2.4 at the age of 2;1.16 and 3.4 in the last sample (2;4.7). These scores are far higher than the MLU in morphemes scores in the English context, as they indicate the presence of morphological marking in Anya's Bosnian.

Table 5.4 Anya - MLU scores (Bosnian context)

AGE	MLU in words (Bosnian utterances)	MLU in morphemes (Bosnian utterances)
1;9.2	1.01	1.69
1;11.4	1.08	1.82
2;0.15	1.24	1.87
2;1.16	1.34	2.3
2;2.26	1.6	3.05
2;4.7	1.8	3.39

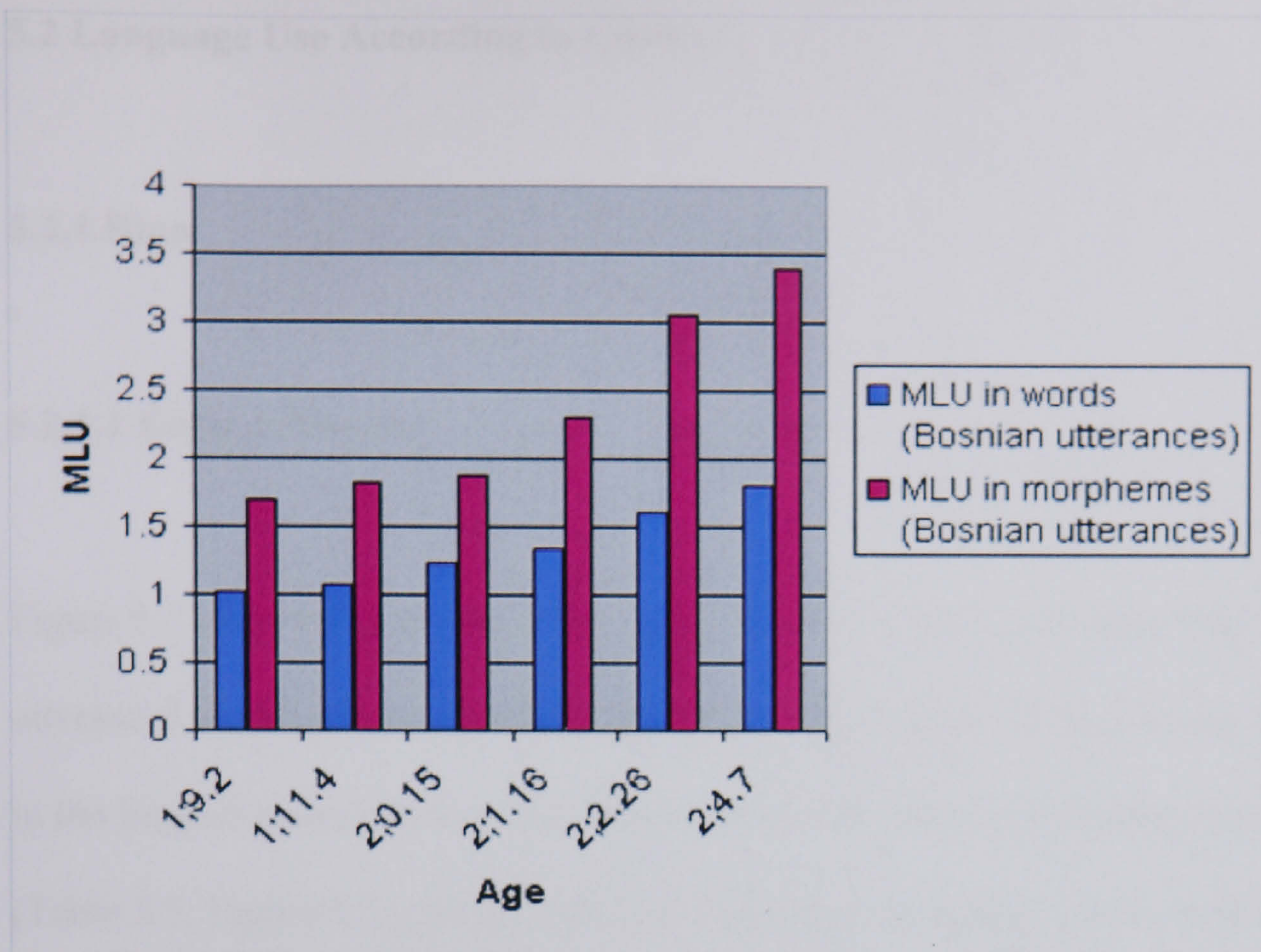


Figure 5.4 Anya - MLU scores (Bosnian context)

5.1.3 Conclusion

To sum up, the results of the MLU analyses for both children show that Anya's rate of language development is more accelerated than Rina's in both contexts. As far as the MLU in morphemes scores in the English context are concerned, Anya reaches Stage II by the age of 2;2.27, while Rina is still at Early Stage I at the same age. A similar pattern of development is found in the Bosnian context. Both children generate higher scores for the MLU in morphemes measure in Bosnian than in English due to the high levels of morphological marking in Bosnian. However, Rina reaches an MLU in morphemes score of 2.08 by the age of 2;4.6, while Anya displays a much more accelerated rate of language development in Bosnian, reaching an MLU in morphemes score of 3.39 by the same age.

5.2 Language Use According to Context

5.2.1 Rina

5.2.1.1 English Context

Figure 5.5 clearly shows that, in the English context, Rina uses more English utterances across all seven samples analysed. The number of Bosnian utterances used in the English context is low, and the use of mixed utterances is almost non-existent (Table 5.5; Figure 5.5), which indicates that Rina's language use is context appropriate from a very early age.

Table 5.5. Rina – Number of utterances (English context)

Age	English utterances	Bosnian utterances	Mixed utterances	Total utterances (100%)
1;8.28	58 (95%)	1 (2%)	2 (3%)	61
1;11.8	77 (70%)	32 (30%)	0 (0%)	109
2;0.18	43 (65%)	28 (35%)	0 (0%)	71
2;1.16	76 (74%)	25 (25%)	1 (1%)	102
2;3.2	176 (72%)	70 (28%)	0 (0%)	246
2;4.6	186 (76%)	58 (24%)	0 (0%)	244
2;6.3	282 (90%)	22 (7%)	10 (3%)	314

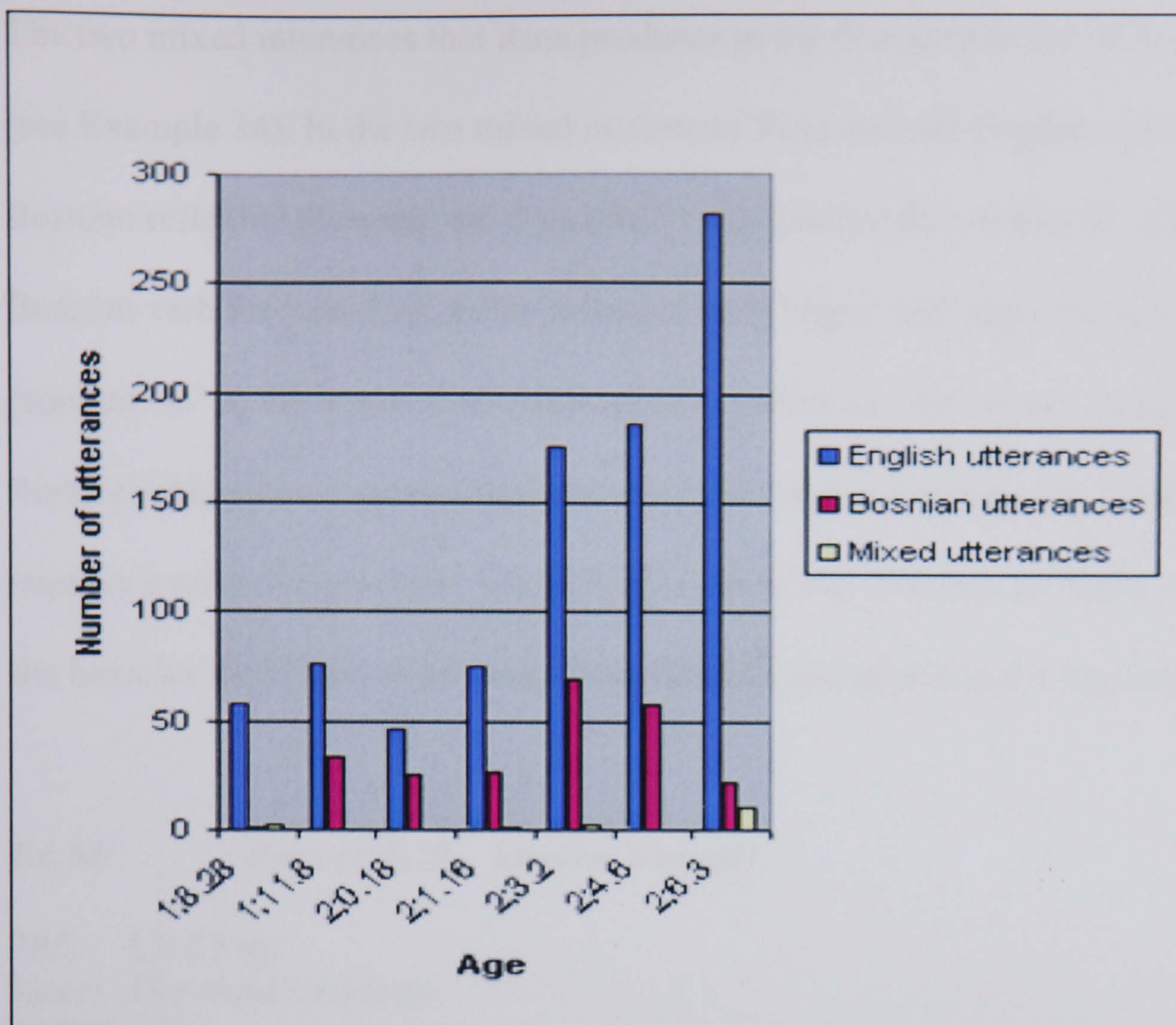


Figure 5.5 Rina – Number of utterances (English context)

At the age of 1;8.28, Rina uses only one Bosnian utterance, which is the Bosnian verb ‘nema’ (‘there’s nothing’). Rina produces this utterance not while interacting with her mother, but while interacting with the Bosnian speaking observer/researcher. It is also important to emphasise that Rina repeats the verb after the researcher has said it first, as shown in the example below.

Ex.33 *Rina (1;8.28 – English context)*

- *RE: Rina.
- *OBS: Nema.
‘There’s nothing.’
- *RB: Nema.
- %mor: Bv|to be-NEG-3S-PRES.
‘There’s nothing.’
- *OBS: Nema.
‘There’s nothing.’
- *RE: Rina.

The two mixed utterances that Rina produces in the first sample are of the same type (see Example 34). In the two mixed utterances Rina uses the English verb ‘up’ and the Bosnian reflexive pronoun ‘se’ (‘yourself’) when telling her mother to stand up. The Bosnian verb for ‘stand up’ is the reflexive verb ‘digni’ and requires the reflexive pronoun ‘se’ in the imperative. Although one cannot say for certain, it is possible that Rina could have over-generalised and assumed that the English verb ‘stand up’ also requires a reflexive pronoun, whose English form she does not yet know. Therefore, she borrows the reflexive pronoun from Bosnian and uses it in the English context.

Ex.34 *Rina (1;8.28 – English context)*

***RE:** *Up [/] up.*
%act: *The child stands up.*
***MOT:** *Up.*
***RM:** *Up [*] se.*
%act: *The child wants her mother to stand up.*
%mor: *Ev|*up-IMP Bpro:refl|se.*
%cod: *(BNPs=Bpro:refl)*
 ‘Stand up.’
***MOT:** *Down.*
***RM:** *Up [*] se.*
%mor: *Ev|*up-IMP Bpro:refl|se.*
%cod: *(BNPs=Bpro:refl)*
 ‘Stand up.’
***MOT:** *Up.*

The above discussion shows that Rina uses a Bosnian utterance in the English context at the age of 1;8.28 as a response to the change of interlocutor, i.e. a switch from an English speaker to a Bosnian speaker (c.f. De Houwer, 1990) or, in the case of the mixed utterances, to a gap in her knowledge of English reflexive pronouns.

In the second sample, at the age of 1;11.8, there is an increase in Rina’s usage of Bosnian utterances in an English context. However, on closer analysis it appears that out of the 32 utterances, 22 tokens are Bosnian yes/no words (‘da’ – yes (15); ‘ne’ –

no (7)). This could represent Rina's preference for the Bosnian expressions, as both Rina's Bosnian speaking father (see Example 35) and English speaking mother (see Example 36) are also recorded using the Bosnian yes/no expressions frequently in both language contexts, as is illustrated in the two examples below.

Ex.35 ***Rina's father - FAT (1;10.18 - Bosnian context)***

***FAT:** *Šta hoćeš, očemo nešto drugo čitat?*
'What do you want, shall we read something else?'

***RB:** *Da.*
'Yes.'

***FAT:** *Da.*
'Yes.'

Ex.36 ***Rina's mother - MOT (1;9.10 – English context)***

***MOT:** *Ne, easy, careful.*

%eng: *No, easy, careful.*

***MOT:** *Ne, Rina.*

%eng: *No, Rina.*

The mother's usage of a Bosnian word in the English context would make it acceptable for Rina to use the same expression when interacting with her mother. The same applies to the Bosnian adverb 'opet' ('again'), which Rina uses in an English context (8 tokens). Rina's mother uses both the English adverb 'again' and its Bosnian equivalent 'opet' in the English context, as shown in Example 37 below.

Ex.37 **Rina (1;11.8 – English context)**

**MOT: Jump.*
**MOT: Bravo.*
%eng: Well done.
**RB: Opet [/] opet.*
%mor: Badv|opet.
 ‘again’
**MOT: Opet.*
%eng: Again.

Only two Rina’s Bosnian utterances in the English context are nouns. One of these is the Bosnian common noun ‘konj’ (‘horse’), which Rina borrows from Bosnian and uses in the English context, as there is no record of her having an English equivalent in any of the recording sessions. The second noun is the Bosnian proper noun ‘tati’ (‘to daddy’), which was defined as Bosnian, as it was inflected for the dative case.

At the age of 2;0.18, the types of Bosnian nouns used in an English context are almost identical to the usage at 1;11.8. Out of the 28 Bosnian utterances, 19 tokens are either Bosnian yes/no words (17) or the Bosnian adverb ‘opet’ (‘again’), which is used twice. The rest are Bosnian nouns (‘jaje’ – egg, ‘zeko’ – rabbit and ‘žaba’ – frog), demonstrative pronouns (‘druga’ – another one, ‘ta’ – that one and ‘to’- that one), the number ‘dva’ – two, and the Bosnian interjection ‘bravo’ (‘well done’), that Rina has borrowed and used in the English context due to a gap in her knowledge of the English vocabulary, as shown in Example 38. There is no evidence that the English equivalents of the Bosnian words mentioned above are part of Rina’s productive English vocabulary at this stage.

Ex.38 *Rina (2;0.18 – English context)*

**MOT: Triangle?*

**MOT: Good girl.*

**MOT: And the heart?*

**RB: Jaje.*

%mor: Bn|jaje-NEU:NOM:SG.

%cod: (BNPs=Bn)

‘Egg.’

**MOT: Ok, find the eyes, make the eyes right.*

Rina still uses the same types of Bosnian utterances at the age of 2;1.16. Out of the 25 Bosnian utterances, 19 tokens are Bosnian yes/no expressions and one is the Bosnian adverb ‘opet’ (‘again’). At this stage, Rina also starts using the English equivalent, which would explain the low number of the Bosnian form of the adverb. The rest of the Bosnian utterances are the noun ‘zeko’ – rabbit (1 token) and adjectives mala/male/mali – ‘small’ (3 tokens) and ‘veliki’ – big (1 token), which are not yet present in Rina’s English productive vocabulary. The only mixed utterance Rina produces in the English context at this age consists of the Bosnian verb ‘ajde’ in the imperative (‘come on’) and the English demonstrative pronoun ‘this’, as illustrated in the example below.

Ex.39 *Rina (2;1.16 – English context)*

**RE: Po.*

**MOT: Bravo.*

%eng: Well done.

**RM: Ajde this.*

%pho: /ade dis/.

%mor: Bv|ajde-IMP Epro:dem|this.

%cod: (ENPs=Epro:dem)

‘Come on this’

**MOT: Good girl.*

It is important to point out that Rina's English speaking mother also uses the verb 'ajde' while interacting with her daughter in the English context. This verb is very frequently used in Bosnian and the mother probably picked it up from Rina's Bosnian speaking father, who uses this expression very often. The mother's usage is exemplified below.

Ex.40 ***Rina's mother (2;1.16 – English context)***

**MOT: Bravo.*

%eng: Well done.

**MOT: Well, stand up then.*

**MOT: Ok, seven, eight.*

**MOT: Hajde, come on.*

%eng: Come on, come on.

At the age of 2;3.2, Rina uses 70 Bosnian utterances in the English context. Out of the 70, 23 tokens are Bosnian yes/no expressions ('da' – yes; 'ne' - no), while the rest are either Bosnian nouns (16 types/23 tokens), verbs (8 types/12 tokens), demonstrative pronouns (2 types/8 tokens) or adjectives (2 types/4 tokens). Rina has borrowed these from Bosnian, as she has not yet acquired the English equivalents. There is no evidence of Rina using the English equivalents of the above Bosnian words in any of the previous recordings in either context. Rina uses the Bosnian verb 'spava' ('he is sleeping') in the English context in order to describe a picture (see Example 41). Her mother replies by providing the English equivalent ('sleeping').

Ex.41 *Rina (2;3.2 – English context)*

**MOT: What about this?*

**RB: Spava. (line 532)*

%mor: Bv|spava-3S:PRES.

'She's sleeping.'

**MOT: Hm?*

**RB: Spava.*

%mor: Bv|spava-3S:PRES.

'She's sleeping.'

**MOT: Sleeping, shshsh.*

However, later in the conversation, when Rina wants to say that somebody is sleeping, she uses the English verb 'sleeping' instead of the Bosnian verb she used earlier, as shown in the example below.

Ex.42 *Rina (2;3.2 – English context)*

**MOT: What is she doing?*

**RE: Sleeping [/] sleeping. (line 624)*

%mor: Ev|sleep-PROG.

This indicates that Rina uses the Bosnian verb, because she is lacking the appropriate vocabulary in English. The moment she learns the English equivalent she uses it appropriately in the English context.

In the last two recordings, at the ages of 2;4.6 and 2;6.3, the number of Bosnian utterances produced in the English context decreases. However, there is a very slight increase in the number of mixed utterances that Rina uses in the English context in the last recording, as Rina borrows certain items from Bosnian, such as the adjective 'mala' ('small'), in order to fill a gap in her English vocabulary. There is no evidence in the previous recordings in either context of Rina having productive use of the

English adjective 'small'. Other mixed utterances involve the use of Bosnian numbers, which Rina seems to prefer to the English equivalents, an example of which is given below.

Ex.43 *Rina (2;6.3 – English context)*

*MOT: *Five.*

*RB: *Pet.*

'Five.'

*MOT: *Five.*

*RM: *No, pet.*

%mor: *Eyn|no Bnum|pet.*

'No, five.'

%com: The child and her mother are counting colouring pencils.

*MOT: *Pet, da, ok.*

'Five, yes, ok.'

5.2.1.2 Bosnian Context

Within the Bosnian context Rina uses significantly more Bosnian than English utterances. The percentage of English utterances used in the Bosnian context is lower than the percentage of Bosnian utterances used in the English context. The number of mixed utterances in the Bosnian context is very low, with only 14 mixed utterances recorded in the first six samples (see Table 5.6; Figure 5.6).

Table 5.6 Rina – Number of utterances (Bosnian context)

Age	English utterances	Bosnian utterances	Mixed utterances	Total utterances (100%)
1;8.28	15 (15%)	83 (85%)	0 (0%)	98
1;11.8	5 (6%)	81 (94%)	0 (0%)	86
2;0.18	11 (11%)	92 (89%)	0 (0%)	103
2;1.16	18 (11%)	139 (86%)	5 (3%)	162
2;3.2	50 (23%)	159 (74%)	5 (3%)	214
2;4.6	30 (12%)	213 (86%)	4 (3%)	247
2;6.3	78 (32%)	143 (58%)	24 (10%)	245

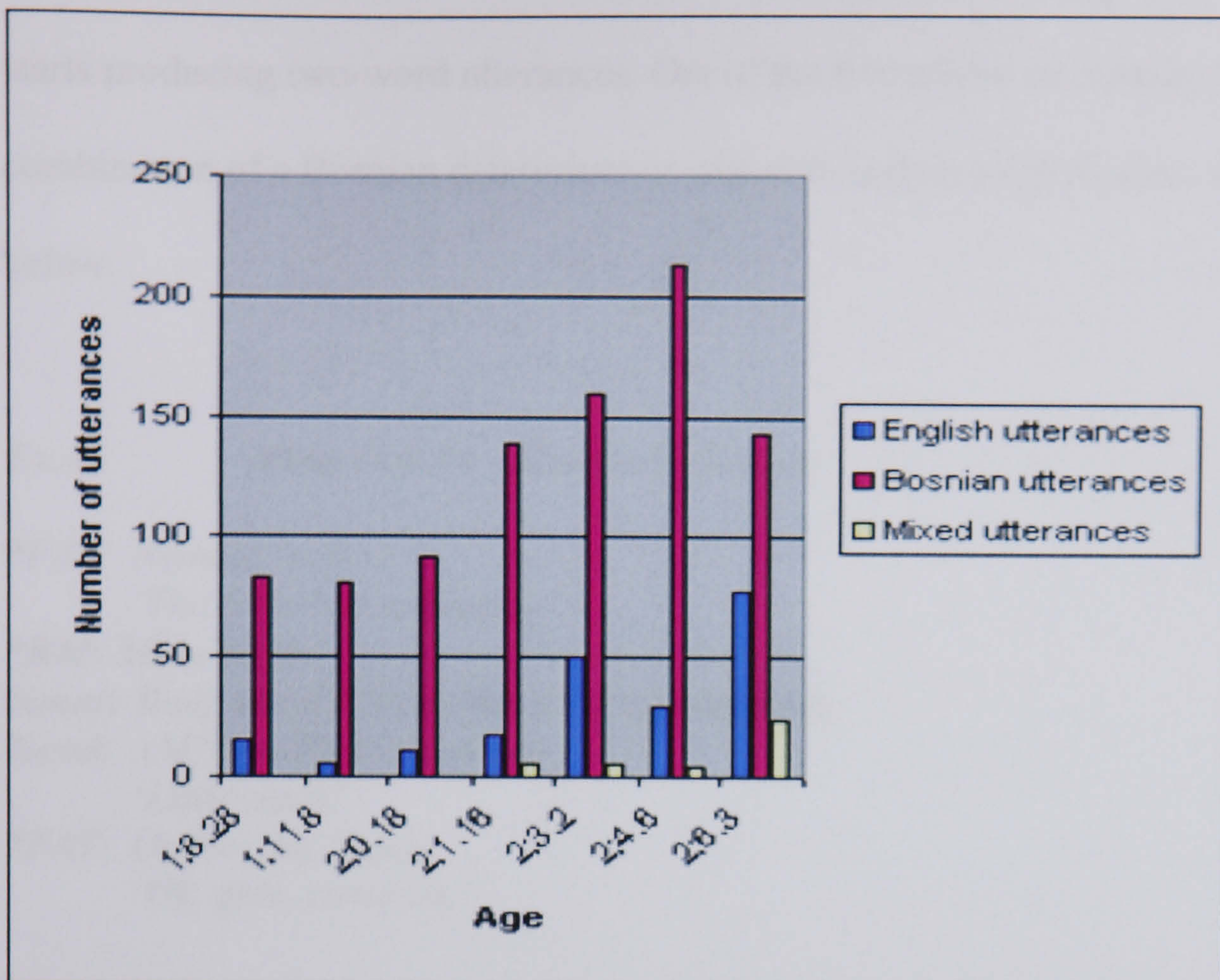


Figure 5.6 Rina – Number of utterances (Bosnian context)

At the age of 1;8.28, Rina uses 15 English utterances in the Bosnian context. Out of these, 9 tokens are the English noun ‘car’ (see Example 44) and 4 tokens are the English noun ‘teddy’, whose Bosnian equivalents Rina has not yet acquired.

Ex.44 *Rina (1;8.28 – Bosnian context)*

*FAT: Šta je to?
‘What is that?’

*RE: Car.

%pho: /ka/.

%mor: En|car.

%cod: (ENPs=En)

*FAT: Auto.

‘Car.’

In the second sample (1;11.8), Rina produces only 5 English utterances. These consist of only two types: 3 tokens of the number ‘one’ and 2 tokens of the noun ‘car’.

The first mixed utterances in the Bosnian context appear at the age of 2;1.16, as Rina starts producing two-word utterances. Out of the five mixed utterances, four are a combination of a Bosnian determiner or adjective and an English noun, as illustrated below.

Ex.45 *Rina (2;1.16 - Bosnian context)*

**FAT: Nemože mali.*

'The little one cannot go.'

**RM: Mala duck.*

%mor: Badj|mal-FEM:NOM:SG En:prop|duck.

%cod: (MNPc=Badj-En:prop)

'Little duck'

**FAT: Dobro, daj, hajde.*

'Ok, give, come on.'

Apart from the English noun 'duck' (1 token), which is exemplified above, Rina uses the English noun 'baby' (3 tokens) in her mixed utterances. She seems to prefer the English noun 'baby' to the Bosnian equivalent 'beba', which she also uses in the sample, but not as frequently as the English noun (see Example 46 below).

Ex.46 *Rina (2;1.16 – Bosnian context)*

**RM: Baby mala.*

%mor: En:prop|baby Badj|mal-FEM:NOM:SG.

%cod: (MNPc=En:prop-Badj)

'Little baby.'

**FAT: Mala beba.*

'Little baby.'

**RB: Mummy [/] mummy beba.*

%mor: Bn:prop|mummy-FEM:NOM:SG Bn:prop|beb-FEM:NOM:SG.

%cod: (BNPc=Bn:prop-Bn:prop)

'Mummy baby.'

**FAT: Šta mummy beba?*

'What mummy baby?'

The final mixed utterance that Rina uses at the age of 2;1.16 is the combination of the English adverb ‘back’ and the Bosnian proper noun ‘baka’ (‘grandma’), as is shown in Example 47. As there is no record of the Bosnian equivalent of the English adverb in Rina’s earlier recordings, it is most likely that she borrows the English equivalent in order to fill in a gap in her knowledge of Bosnian vocabulary.

Ex.47 *Rina (2;1.16 – Bosnian context)*

***RM:** *Back baka.*
%mor: *Eadv|back Bn:prop|bak-FEM:NOM:SG.*
%cod: *(BNPs=Bn:prop)*
 ‘Back grandma.’
***GRA:** *Molim?*
 ‘Sorry?’
***RE:** *Back [/] back.*
***GRA:** *Back, šta?*
 ‘Back, what?’
***RE:** *Back [/] back.*

As Figure 5.6 shows, there is a significant increase in Rina’s production of English utterances in the Bosnian context at the age of 2;3.2. However, out of the 50 utterances, 28 tokens are of the English expression ‘hello’, an example of which is shown below.

Ex.48 *Rina (2;3.2 – Bosnian context)*

***FAT:** *Zdravo Megablocks♦, kako si, kako si?*
 ‘Hello Megablocks, how are you, how are you?’
***RE:** *Hello.*
%mor: *Econv|hello.*
***FAT:** *Oh, zdravo teto.*
 ‘Oh, hello aunty.’
***FAT:** *Megablocks i teta.*
 ‘Megablocks and aunt.’
***RE:** *Hello.*
%mor: *Econv|hello.*

♦a Lego toy character

It is important to emphasise that, even though ‘hello’ is classified as an English expression, it is often used interchangeably with the Bosnian equivalent ‘zdravo’ by Rina’s father in the Bosnian context (see Example 49 below). The father’s usage of this expression gives Rina the option to use it in the Bosnian context as well.

However, one should also bear in mind the fact that the variations of ‘hello’ are present in many world languages and are used very often.

Ex.49 *Rina’s Father (2;3.2 – Bosnian context)*

**FAT: Zdravo.
 ‘Hello.’*
**RE: Hello tata.*
%mor: Econv|hello En:prop|tata.
%cod: (ENPs=En:prop)
**FAT: Hello.*
%com: Zdravo.

The mixed utterances produced at this age in the Bosnian context mostly consist of the combination of the English expression ‘hello’ and a Bosnian noun. However, the number of mixed utterances increases significantly at the age of 2:6.3, when Rina produces 24 mixed utterances in the Bosnian context. Twelve of these utterances involve the usage of the English verbs ‘look’ (8 tokens), ‘find’ (1 token), and ‘put’ (3 tokens). The example below illustrates Rina’s usage of the verb ‘look’ as part of a mixed utterance.

Ex.50 *Rina’s Father (2;6.3 – Bosnian context)*

**RM: Look labuda.*
°com: The child is showing a swan toy to her father.
%mor: Ev|look-IMP Bn:prop|labud-M.ASC:ACC:SG.
%cod: (BNPs=Bn)
‘Look swan.’

There is no evidence of the Bosnian equivalents of these verbs being used in any of the earlier recordings in either context.

At this age (2;6.3), Rina uses the English expression 'no' in five, otherwise Bosnian, utterances. She is recorded using 'no' more frequently than the Bosnian equivalent 'ne', especially in the last two samples. It is possible that Rina uses the two expressions interchangeably, as they are very close in form.

In addition, Rina produces English nouns in four of the 24 mixed utterances. One of these nouns is the noun 'foot' (2 tokens), whose Bosnian equivalent Rina is not recorded using in earlier samples. This indicates that Rina is borrowing English items to fill a gap in her Bosnian vocabulary.

5.2.1.3 Conclusion

To sum up, these findings indicate that Rina is able to differentiate her two languages according to context from the very first recording. The presence of English utterances in the Bosnian context and vice versa indicates that Rina is borrowing items from the context inappropriate language in order to fill a gap in her knowledge of the other language (see Genesee, 2000). However, there is evidence that Rina has a preference for certain words in a particular language, which she uses across contexts. These words are found to be used frequently by both parents also across contexts, thus signalling to Rina that it is acceptable for her to use them regardless of context. There is no evidence in Rina's data of any other type of mixing except lexical.

5.2.2 Anya

5.2.2.1 English Context

As Table 5.7 and Figure 5.7 show, Anya almost only produces English utterances in the seven samples analysed in the English context. Out of the total 1,593 utterances that Anya produces in the six recordings, only five are Bosnian utterances and two are mixed utterances. This clearly indicates that she is able to differentiate her two languages according to context.

Table 5.7 Anya – Number of utterances (English context)

Age	English utterances	Bosnian utterances	Mixed utterances	Total utterances (100%)
1;9.2	179 (100%)	0 (0%)	0 (0%)	179
1;11.4	202 (100%)	0 (0%)	0 (0%)	202
2;0.15	346 (99%)	1 (0.5%)	1 (0.5%)	348
2;1.16	375 (99%)	4 (1%)	0 (0%)	379
2;2.27	253 (99%)	0 (0%)	1 (1%)	254
2;4.7	230 (100%)	0 (0%)	0 (0%)	230

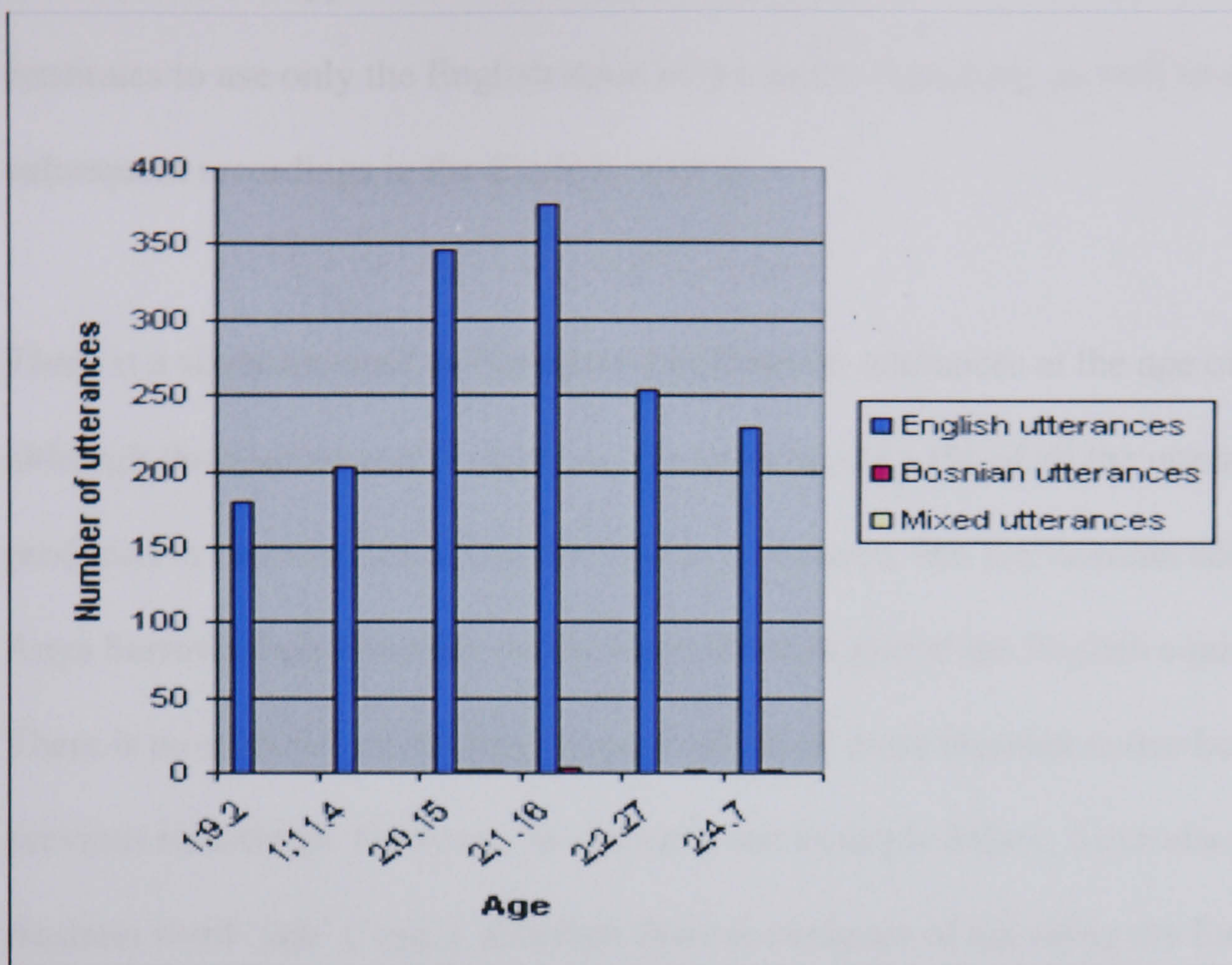


Figure 5.7 Anya – Number of utterances (English context)

The first Bosnian utterance in the English context, which is illustrated in the example below, is produced by Anya at the age of 2;0.15.

Ex.51 *Anya (2;0.15 – English context)*

***AB:** *Jaje [ʃ] jaje.*

%mor: *Bn|jaje-NEU:NOM:SG.*

%cod: *(BNPs=Bn)*

‘Egg.’

***TEA:** *No, it's an egg.*

***AE:** *Egg.*

As there is no evidence of Anya using the English equivalent of the Bosnian noun ‘jaje’ (‘egg’) in any of earlier recordings in either context, the example quoted above is clearly an instance of borrowing. Anya borrows a Bosnian noun and uses it in the English context, as she has not yet acquired the English equivalent. However, as soon

as she has been supplied with the equivalent English noun by the teacher. Anya continues to use only the English noun in the above recording, as well as all the subsequent recordings in the English context.

There is a slight increase in the number of Bosnian utterances at the age of 2;1.16, although the number is still very low, constituting only 1% of all the utterances produced in that recording. Out of the four utterances, two are Bosnian nouns that Anya borrows from Bosnian, as she has still not acquired the English equivalent.

There is no evidence of the English equivalents of these Bosnian nouns being used in previous recordings. However, as shown in the example below, Anya also uses the Bosnian word 'jaje' ('egg'), although there is evidence of her using the English noun in earlier recordings. It could be claimed that she more frequently uses the Bosnian word and so prefers it to the English equivalent. However, it is very evident from the example that Anya corrects herself and produces the English noun 'egg' when she realises that the teacher had not understood her and that her usage of the noun was inappropriate, showing an awareness of the two languages in her linguistic repertoire and their different uses.

Ex.52 *Anya (2;1.16 – English context)*

**TEA: What's that one?*

**AB: Jaje.*

%act: The teacher is silent.

%mor: Bn|jaj-NEU:NOM:SG.

%cod: (BNPs=Bn)

'Egg.'

**AE: Egg.*

**TEA: Egg, that's right, an egg.*

At the age of 2;2.27, Anya produces the only example of syntactic mixing (see Example 53) recorded in the twelve samples across both contexts. This utterance is the only one of its kind among the 3,018 utterances coded.

Ex.53 *Anya (2;2.27 – English context)*

**AM: Ima wheels blue [*].*

%mor: Bv|imati&3S&PRES En|wheel-PL Eadj|blue.

*%cod: (*ENPc=En-Eadj)*

%err: wheels blue=blue wheels \$SYN \$NPPOS (ERR)

‘It has blue wheels.’

**TEA: Ye, blue wheels, well done, they are.*

In the above example, Anya produces an English noun phrase, but applies to it the rules of Bosnian word order. In English, the determiner in the noun phrase has to precede the head noun, while in Bosnian the word order within the noun phrase is less fixed and allows the head noun to precede its determiner. In this instance, Anya forms the noun phrase by placing the head noun ‘wheels’ before the determiner ‘blue’, which is acceptable in Bosnian, but not in English. In addition, Anya’s mixed utterance illustrated above contains an example of lexical mixing, as she borrows the Bosnian verb ‘ima’ (‘it has’) in the English context. It is important to point out that the English phrase ‘it has’ is not produced by Anya in any of the previous samples in both contexts.

5.2.2.2 Bosnian Context

In the Bosnian context, the picture is somewhat different (see Table 5.8; Figure 5.8). Anya produces a sizeable number of English utterances in the Bosnian context. This

could be explained by the fact that Anya's parents accept their daughter's usage of English when she addresses them (see section 5.3.2.2).

Table 5.8 Anya – Number of utterances (Bosnian context)

Age	English utterances	Bosnian utterances	Mixed utterances	Total utterances (100%)
1;9.2	74 (47%)	82 (53 %)	0 (0%)	156
1;11.4	90 (49%)	85 (46%)	8 (5%)	183
2;0.15	119 (54%)	85 (39%)	13 (7%)	217
2;1.16	105 (35%)	164 (54%)	33 (11%)	302
2;2.26	87 (34%)	138 (55%)	28 (11%)	253
2;4.7	117 (37%)	143 (45%)	55 (18%)	315

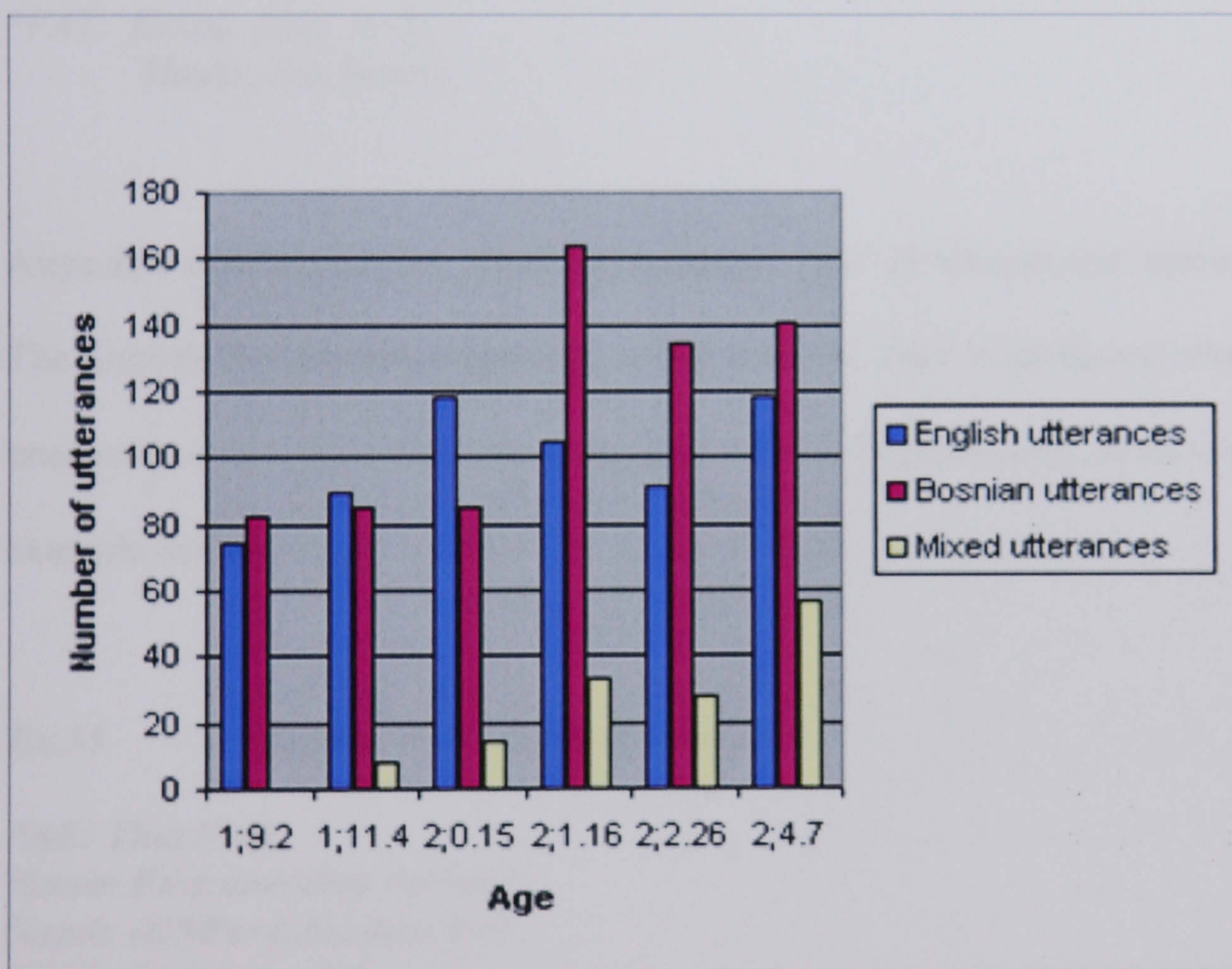


Figure 5.8 Anya – Number of utterances (Bosnian context)

At the age of 1;9.2, Anya uses more Bosnian utterances in the Bosnian context.

However, a considerable number of utterances (47%) in the Bosnian context at this age are English utterances. Anya is not recorded producing mixed utterances at this stage.

The majority of the English utterances produced at age 1;9.2 are English nouns, such as ‘house’ (see Example 54 below), for which Anya does not have a Bosnian equivalent, as she is not recorded using these Bosnian nouns in the Bosnian context at 1;9.2. Anya uses 10 types of English nouns and produces 25 tokens of these.

Ex.54 *Anya (1;9.2 - Bosnian context)*

**FAT: Šta je to?*

‘What is that?’

**AE: House.*

%mor: En|house.

%cod: (ENPs=En)

**FAT: House, jeste, kuća.*

‘House, yes, house.’

Anya also uses the English terms for numbers: ‘two’ (9 tokens) and ‘three’ (8 tokens).

The English demonstrative pronoun and determiner ‘that’ is produced often, either in one-word or two word utterances, together with an English noun, as shown in the example below.

Ex.55 *Anya (1;9.2 – Bosnian context)*

**AE: That book.*

%mor: Edet:dem|that En|book.

%cod: (ENPc=Edet:dem-En)

**FAT: Tu knjigu, dobro.*

‘That book, ok.’

The English phrase ‘Yeah, please’ (7 tokens) is used frequently by Anya in the Bosnian context, as she has not acquired its Bosnian equivalent. She is recorded using this English phrase often in the English context (nursery), as the teachers at the nursery regularly reinforce its use. Anya also uses the adverbial phrase ‘in there’ or

‘there’ (5 tokens). She is not recorded using the Bosnian equivalent at this age. After analysing the English utterances that Anya produces at 1;9.2 in the Bosnian context, it is clear that she is borrowing the English items mentioned above, as she seems to have not yet acquired the Bosnian equivalents.

There is a slight increase of English utterances in the Bosnian context at the age of 1;11.4 (see Table 5.8). This is also the age at which Anya produces her first mixed utterances in the Bosnian context, although the percentage of these is very low. Two of these are a combination of a Bosnian determiner ‘druga/drugi/drugo’ (‘another’) and an English noun, as illustrated in the example below.

Ex.56 *Anya (1;11.4 – Bosnian context)*

***AM:** *Druge [*] book.*
 %mor: *Bdet|drug-FEM:NOM:*PL En|book.*
 %cod: *(*MNPc=Bdet-En)*
 %err: *druge=druga \$MOR \$DETNUMPL (ERR)*
 ‘Another book.’

In four of the eight mixed utterances, Anya produces a mix within a word, i.e. she uses the stem of the English verb ‘go’ and the appropriate Bosnian inflection for the third person singular ‘-i’, an example of which is given below.

Ex.57 *Anya (1;11.4 – Bosnian context)*

***AM:** *Goi car [/] goi car [/] goi car.*
 %mor: *Mv|go-3S&PRES En|car.*
 %cod: *(ENPs=En)*
 ‘Car drives.’
***FAT:** *Vozi.*
 ‘Drives.’

This shows that Anya is borrowing the English lexical item and supplying the Bosnian inflection appropriately in the Bosnian context, which indicates that she is able to apply the rules of Bosnian appropriately in the Bosnian context.

At the age of 2;0.15, Anya uses slightly more English utterances (54%) than Bosnian utterances (39%). The majority of the English utterances consist of English common nouns which Anya has not yet acquired in Bosnian (26 tokens), or items which she prefers to the Bosnian equivalents. For example, the English expression 'no' is used much more frequently in the Bosnian context (23 tokens) than the Bosnian equivalent 'ne', which occurs only once in the sample. It seems as if Anya prefers to use the English expression in both contexts. Certain types of English constructions, such as the question 'Where are you?', the imperative sentences 'Go away', 'Put it away', and 'Do it', as well as the adverbs 'here' and 'there' form the majority of English utterances in the Bosnian context. No Bosnian equivalents of these constructions were recorded in the earlier samples in the Bosnian context.

From the age of 2;1.6 onwards, context appropriate language use is recorded in the Bosnian context, as Anya uses considerably more Bosnian utterances in the Bosnian context.

Anya continues to produce mixed utterances at 2;0.15, although the percentage of these is still very small, with only 13 mixed utterances recorded at this age. Eleven of these utterances contain either the English adverbs 'here' and 'there' (8 tokens), the English complex noun phrase 'that one' (2 tokens), used as the subject of the sentence, or the English demonstrative pronoun 'that' (1 token). All these English

items are used in otherwise Bosnian utterances (see Examples 58 and 59). It is clear that, at the age of 2;0.15, Anya borrows particular English items and uses them in the Bosnian context in order to fill a gap in her Bosnian vocabulary, as she probably has not yet acquired the Bosnian equivalents.

Ex.58 *Anya (2;0.15 – Bosnian context)*

**AM: Here 0*v nona.*
*%mor: Eadv|here *0v Bn|non-FEM:NOM:SG.*
%cod: (BNPs=Bn)
‘Here leggy.’

Ex.59 *Anya (2;0.15 – Bosnian context)*

**AM: That one 0*v bubamara.*
*%mor: Edet:dem|that Epro:noml|one *0v Bn:prop|bubamar-FEM:NOM:SG.*
%cod: (ENPc=Edet:dem-Epro:noml/BNPs=Bn:prop)
‘That one ladybird.’

It is also at this age that the only two examples of morphological mixing in Anya’s data are recorded (see Section 2.2). It is important to point out that these are the only instances of morphological mixing in both contexts and the only two such utterances out of the 3,018 utterances coded, which is a negligible percentage. Both of the mixed utterances involve the usage of the English plural inflection ‘-s’ on a Bosnian noun in the Bosnian context, as shown in the two examples below.

Ex.60 *Anya (2;0.15 – Bosnian context)*

**AM: That [*] 0*v rukas.*
*%mor: *Epro:dem|that *0v Mn|ruka-PL.*
*%cod: (*ENPs=Epro:dem/MNPs=Mn)*
%err: that=those SMOR SPRODEMNUMSG (ERR)
‘That hands.’

Ex.61 *Anya (2;0.15 – Bosnian context)*

***AM:** *Two vuks.*

%mor: *Enum|two Mn|vuk-PL.*

%cod: *(MNPc=Enum-Mn)*

'Two wolves.'

Even though Anya uses an English inflection on a Bosnian noun in the Bosnian context, it could be argued that she considers the above utterances to be English in nature, as all the items she uses, both the bound and free morphemes, except the common nouns, are English, and, thus, Anya applies the correct English inflection within the English context of the utterance. It is important to stress that the inclusions of the English free morphemes in the examples above (e.g. 'that' and 'two') within the Bosnian context are being treated as instances of lexical mixing.

In the later recordings, at the ages of 2;1.16, 2;2.26 and 2;4.7, the majority of Anya's mixed utterances contain either English items mentioned above, such as adverbs and demonstrative pronouns and determiners, or English common nouns that Anya borrows from English due to a gap in her Bosnian vocabulary, as illustrated in the example below.

Ex.62 *Anya (2;4.7 – Bosnian context)*

***AM:** *Napravi [*] cake.*

%mor: *Bv|naprav-*3S:PRES En|cake.*

%cod: *(ENPs=En)*

'Make cake.'

It is important to stress that the Bosnian equivalent of the English common noun 'cake' is not produced by Anya in this sample, or any of the earlier samples in the two contexts.

5.2.2.3 Conclusion

To sum up, Anya's patterns of language use in the Bosnian context cannot be interpreted as her lack of language differentiation in the Bosnian context, as she hardly uses any Bosnian or mixed utterances in the English context. If she were not able to differentiate her two languages, one would expect her to produce a considerable amount of Bosnian and mixed utterances in the English context, which she does not do.

In the Bosnian context, Anya uses a significant number of English and mixed utterances. However, upon closer analysis of such utterances, a pattern emerges, which shows that Anya tends to borrow specific English items, such as adverbs, some common nouns and certain phrases to fill a gap in her Bosnian vocabulary. She also prefers to use certain English words to their Bosnian equivalents, as they are more present in her input and frequently used by Anya in the English context.

The one example (out of 3,018 utterances) of syntactic mixing and a very low percentage (two out of 3,018 utterances) of morphological mixing in Anya's data, indicate that Anya's mixing in both contexts is mostly lexical in nature.

It is clear from the evidence found in Anya's data that it is not possible to claim that the lack of language separation accounts for the presence of English, as well as mixed utterances in the Bosnian context. Therefore, one has to consider parental discourse strategies and the concept of dominance in order to explain the presence of mixing in Anya's Bosnian (see Lanza, 1997a).

5.3 Parental Discourse Strategies

In the following section, an overview of the types of discourse strategies employed by parents and carers of both bilingual children in the two contexts, produced in response to the children's language mixing, will be presented. The findings will then be discussed in the light of the degrees of mixing found in the children's output in both contexts.

Within the discussion, the parental strategies are categorised as either being monolingual or bilingual, as presented on Lanza's (1992;1997a) continuum (see also section 2.3.1). According to Lanza (1997a), only the Minimal Grasp Strategy can be defined as a monolingual strategy, as it enables the parent or carer to negotiate a monolingual context with his or her child, thus feigning the role of a monolingual. By using the Minimal Grasp Strategy, the parent attempts to create a monolingual context for his or her child by providing negative sanctioning to the child's language mixing (Lanza, 1997a, p.260).

Similarly, the Expressed Guess Strategy also involves an adult request for clarification. However, with the Expressed Guess Strategy, it is the parent who

attempts to reformulate the child's mixed utterance, and does not request that from the child, as is the case when a Minimal Grasp Strategy is employed. It is thought (see Lanza, 1997a) that a parent is not able to negotiate a monolingual context with his or her child as successfully as when the Minimal Grasp Strategy is used. This is due to the fact that, through the usage of the Expressed Guess Strategy, the parent is indicating comprehension of the child's use of the other language (Lanza, 1997a, p.264), thus, to some extent, exhibiting his or her bilingual identity. However, in this study, both the Minimal Grasp Strategy and the Expressed Guess Strategy are classified as being monolingual strategies. Such reasoning is adopted, as both strategies involve the questioning of the bilingual child's mixed utterance, thus indicating that such usage is not appropriate.

“The role of the monolingual is highlighted more with the Minimal Grasp strategy and the Expressed Guess strategy than with the Repetition strategy. That is, given that Requests for Clarification call for a response by the child, and that the Repetition strategy does not call for a response by the child, we will consider this latter strategy less directed toward negotiating a monolingual context.” (Lanza, 1997a, p.265)

The last three strategies (Repetition Strategy, Move on Strategy and Code-Switching Strategy) are defined as being bilingual strategies, as they reveal the parent's bilingual identity, by clearly indicating the parent's comprehension of the child's mix. As far as the Code-switching Strategy is concerned, it is placed at the bilingual end of the continuum, as such a strategy shows a parent, in response to the child's mix, using the context inappropriate language, thus creating a completely bilingual context of discourse.

“A bilingual context can also be negotiated, most obviously when an interlocutor code-switches to another language shared by his partner in conversation. The parent who initiates a code-switch with his or her child signals the appropriateness of language mixing and hence socialises the child into code-switching.”

(Lanza, 1997a, p.256)

5.3.1 Rina

5.3.1.1 Mother (English Context)

As is evident from Table 5.9, Rina’s mother employs mostly those discourse strategies, through which, according to Lanza (1997a), a bilingual context is negotiated with the child, such as the Move on Strategy (67.5%) and the Code-switching Strategy (21%).

Table 5.9 Rina - mother’s strategies towards mixing (English context)

Age	MGS	EGS	RS		MOS	CS	Total
			RS	RS+CS			
1;8.28	-	-	-	-	2	-	2
1;11.8	-	-	-	-	18	15	33
2;0.18	-	-	1	-	16	4	21
2;1.16	-	-	-	-	15	5	20
2;3.2	-	1	8	1	35	9	54
2;4.6	-	-	3	1	32	5	41
2;6.3	-	-	7	-	9	1	17
Total	0 (0%)	1(0.5%)	19(10%)	2 (1%)	127(67.5%)	39(21%)	188(100%)

MGS - Minimal Grasp Strategy; EGS – Expressed Guess Strategy; RS – Repetition Strategy; RS+CS – Repetition Strategy + Code-switching; MOS – Move on Strategy; CS – Code-switching

In response to her daughter’s inter-sentential, as well as intra-sentential mixing,

Rina’s mother mostly uses the Move on Strategy. This involves the mother simply

continuing the conversation in English, signalling comprehension of the child's use of Bosnian, which in turn reveals the bilingual identity of the parent. The mother's use of the Move on Strategy is illustrated in the following example.

Ex.63 **Rina (2;1.16 – English context)**

*RB: *Zeko.*
 'Rabbit'
*MOT: **Good girl.**
%cod: **(MOS).**

Another strategy, that Rina's mother employs, is the Code-switching Strategy which involves the parent either incorporating the child's use of Bosnian into her own, otherwise English, utterance (intra-sentential code-switching), or immediately switching to Bosnian herself (inter-sentential code-switching).

Ex.64 **Rina (1;11.8 – English context)**

*MOT: *Shall we count some numbers?*
*RB: *Da.*
 'Yes.'
*MOT: **Da.**
 'Yes.'
%cod: **(CS).**
*MOT: **Sjedi, sjedi.**
 'Sit, sit.'
%cod: **(CS).**

The above example illustrates the mother using the Code-switching Strategy in response to the child using Bosnian, by first repeating the child's Bosnian utterance, and then continuing the conversation in Bosnian herself. Lanza (1997a) points out that the parent who initiates a code-switch with his or her child signals the appropriateness of language mixing (p.256).

It is important to point out that the mother's knowledge of Bosnian is very basic during data collection and she only seems to code-switch when she knows the Bosnian being used by the child. A decrease in the instances of code-switching by the mother in response to Rina's mixing is recorded in the later recordings (see Table 5.9), as the child's Bosnian becomes more complex. If the child uses something in Bosnian with which the mother is not familiar, she corrects the child, by providing the English equivalent of the child's Bosnian utterance (Repetition Strategy), as is illustrated in the example below.

Ex.65 **Rina (2;3.2 – English context)**

**MOT: What's this?*

**RB: Plače [/] plače.*

'He's crying, he's crying.'

**MOT: Crying, sad.*

%cod: (RS).

The mother reports that she is aware that she mostly employs the 'bilingual' strategies, as she wants the child to be exposed to as much Bosnian as possible, due to the fact that the child's input in Bosnian mostly comes from her father.

As Table 5.5 illustrates, Rina produces a substantial number of Bosnian utterances in the English context. In light of the data on the types of strategies employed by the mother, this finding could be explained by the fact that Rina's mother mostly negotiates a bilingual context with her child, by using 'bilingual' discourse strategies (99.5%) in response to Rina's mixing.

5.3.1.2 Father (Bosnian Context)

As far as the father's discourse strategies in the Bosnian context are concerned, Table 5.10 indicates that Rina's father uses more 'monolingual' strategies than the mother in the English context (10%), thus negotiating more of a monolingual context with Rina.

Table 5.10 Rina - father's strategies towards mixing (Bosnian context)

Age	MGS	EGS	RS		MOS	CS	Total
			RS	RS+CS			
1;8.28	1	-	8	-	4	1	14
1;11.8	1	-	-	-	3	1	5
2;0.18	-	-	1	-	3	1	5
2;1.16	-	-	4	-	4	0	8
2;3.2	3	5	15	3	10	5	41
2;4.6	2	1	11	1	7	4	26
2;6.3	2	1	20	1	35	4	63
Total	9(6%)	7(4%)	59(36%)	5 (3%)	66(41%)	16(10%)	162(100%)

MGS – Minimal Grasp Strategy; EGS – Expressed Guess Strategy; RS – Repetition Strategy; RS+CS - Repetition Strategy + Code-switching; MOS – Move on Strategy; CS – Code-switching

In the following example, the father employs the Minimal Grasp Strategy by requesting the child to repeat her English utterance in Bosnian, signalling that he did not understand the child's use of the context inappropriate language and negotiating a monolingual context with his daughter.

Ex.66 *Father (Rina 2;4.6 – Bosnian context)*

**RE: Bite-0* you.*

**FAT: Šta, šta radi zmija?*

%cod: (MGS).

'What, what is the snake doing?'

Another monolingual strategy that the father uses is the Expressed Guess Strategy, as is illustrated in Example 67.

Ex.67 *Father (Rina 2;3.2 – Bosnian context)*

**RE: Stand up [/] stand up.*

**FAT: Da ustanem?*

%cod: (EGS).

‘Me stand up?’

In response to the child’s English utterance, the father questions her usage of the context inappropriate language by attempting to reformulate the child’s utterance himself. The father’s request for clarification requires the child to answer ‘yes’ or ‘no’, and not to repeat the English utterance using Bosnian herself, as was the case in Example 66.

Even though the father employs more monolingual strategies than the mother, he still mostly uses strategies which propose a bilingual context of discourse with Rina and highlight the father’s bilingual identity. The bilingual strategies that the father most often employs in response to Rina’s mixing, is the Move on Strategy (see Example 68).

Ex.68 *Father (Rina 2;1.16 – Bosnian context)*

**RE: Bus [/] bus.*

**FAT: Odi sjedi ovde samnom.*

%cod: (MOS).

‘Come sit here with me.’

In the above example, even though the father continues the conversation in Bosnian, he reveals his bilingual identity by indicating that he understood and accepted Rina's use of English.

Another bilingual strategy that the father uses is the Repetition Strategy. In Example 69 below, the father provides the Bosnian equivalent of Rina's mix in Bosnian in a non-question form.

Ex.69 **Father (Rina 2;6.3 – Bosnian context)**

**RM: Dole, put it dole.*

**FAT: Stavi dole.*

%cod: (RS).

'Put it down.'

It is interesting to note that the father uses considerably less of the Code-switching Strategy (10%) than the mother in the English context (21%). An example of such usage is provided below.

Ex.70 **Father (Rina 2;0.18 – Bosnian context)**

**FAT: Šta je to?*

'What is that?'

**RE: Monkey.*

**FAT: Nije to monkey.*

%cod: (CS).

'That's not monkey.'

**FAT: To je cuko.*

'That is doggie.'

The above example illustrates the father's use of intra-sentential code-switching in response to his child's use of the English noun 'monkey'. The father incorporates the

English noun in his, otherwise Bosnian, utterance, thus indicating to the child that language mixing is appropriate in the Bosnian context.

The father's usage of more monolingual strategies and his avoidance of code-switching in response to Rina's mixing could explain why Rina produces more Bosnian items with her mother in the English context, than English items with her father in the Bosnian context (see section 5.2.1). It could be argued that the father negotiates more of a monolingual context with Rina, by employing strategies such as the Minimal Grasp and Express Guess Strategies, and even the Repetition Strategy, than the mother. However, the fact he also uses a high percentage of bilingual strategies, signals to Rina that it is appropriate to use English in the Bosnian context, which results in Rina producing a considerable number of English utterances in conversations with her father (see section 5.2.1.2).

5.3.2 Anya

5.3.2.1 Teacher (English Context)

As expected, due to the fact that they had no knowledge of Bosnian, the nursery teachers employed monolingual discourse strategies in response to Anya's use of Bosnian in the English context, such as the Minimal Grasp and the Expressed Guess Strategy (see Table 5.11).

Table 5.11 Anya - teachers' strategies towards mixing (English context)

Age	MGS	EGS	RS		MOS	CS	Total
			RS	RS +CS			
1;9.2	-	-	-	-	-	-	-
1;11.4	-	-	-	-	-	-	-
2;0.15	1	-	1	-	-	-	2
2;1.16	1	-	2	-	1	-	4
2;2.27	-	-	-	-	1	-	1
2;4.7	-	1	-	-	-	-	1
Total	2(25%)	1 (12.5%)	3(37.5%)	0 (0%)	2 (25%)	0(0%)	8 (100%)

MGS – Minimal Grasp Strategy; EGS – Expressed Guess Strategy; RS – Repetition Strategy; CS+RS – Code-switching + Repetition Strategy; MOS – Move on Strategy; CS – Code-switching

The examples below illustrate the teacher's use of the Minimal Grasp Strategy in response to Anya's use of Bosnian. In the first example, the teacher disregards Anya's utterance as wrong and then provides the English equivalent, indicating that Bosnian is not the language that the child is supposed to use, which in turn results in Anya repairing her utterance and using the appropriate English noun. In the second example (Example 72), by staying silent after Anya's mix, the teacher signals non-comprehension of the child's utterance, which forces Anya to provide the English equivalent in order to achieve communication with her teacher.

Ex. 71 *Anya (2;0.15 – English context)*

**AB: Jaje [j] jaje.
 'Egg.'*

**TEA: No, it's an egg.*

%cod: (MGS).

**AE: Egg.*

**TEA: Egg.*

Ex.72 *Anya (2;1.16 – English context)*

**TEA: What's that one?*

**AB: Jaje.*

'Egg.'

**TEA: [=silent].*

%act: The teacher is silent.

%cod: (MGS).

**TEA: Egg, that's right, an egg.*

Interestingly, the teacher also uses a bilingual strategy, the Move on Strategy, whose usage is shown in the example below.

Ex.73 *Anya (2;1.16 – English context)*

**AB: To 0*v Charlotte.*

'That Charlotte.'

**TEA: Charlotte, ye.*

%cod: (MOS).

In this example, the teacher seems to accept Anya's mixed utterance and indicates comprehension of what Anya has said. It is possible that, even though the teacher does not fully comprehend the child's utterance, she does not believe that understanding is seriously impeded and decides that it is appropriate to continue with the conversation.

The finding that Anya uses a very low number of Bosnian and mixed utterances in the English context (see Table 5.7), is due to the fact that she is aware that the teachers do not understand Bosnian, which is signalled by the discourse strategies employed by the teachers, and that, if Anya were to use Bosnian, communication would be unsuccessful.

5.3.2.2 Parents (Bosnian context)

As Table 5.12 below illustrates, Anya's parents employ a very high percentage of bilingual strategies (96%) in response to her mixing, thus indicating to Anya that it is acceptable to use English in the Bosnian context.

Table 5.12 Anya - parents' strategies towards mixing (Bosnian context)

Age	MGS	EGS	RS		MOS	CS	Total
			RS	RS+CS			
1;9.2	-	1	6	14	20	18	59
1;11.4	1	1	14	11	27	13	67
2;0.15	-	2	25	3	55	15	100
2;1.16	2	8	20	6	61	18	115
2;2.26	1	4	30	4	35	18	92
2;4.7	1	2	26	4	45	16	94
Total	5(1%)	18(3%)	121(23%)	42 (8%)	243(46%)	98(19%)	527 (100%)

MGS – Minimal Grasp Strategy; EGS – Expressed Guess Strategy; RS – Repetition Strategy; CS+RS – Code-switching + Repetition Strategy; MOS – Move on Strategy; CS – Code-switching

The parents use a high percentage of the Code-switching Strategy, thus highlighting their roles as bilinguals, as is illustrated in the example below.

Ex. 74 *Mother (Anya 2;2.16 – Bosnian context)*

**AE: Mummy 0*v horse.*

**MOT: Neće mama da bude horse.*

%cod: (CS).

'Mummy doesn't want to be a horse.'

In this example, the mother incorporates the child's mix into her own, otherwise Bosnian, utterance, thus resulting in an intra-sentential code-switch.

The bilingual strategy that the parents employ the most is the Move on Strategy. In Example 75, the father merely continues the conversation after Anya produces a mixed utterance, thus signalling comprehension and acceptance of the child's mix.

Ex.75 **Father (Anya 2;1.16 – Bosnian context)**

**AM: That one 0*v čiko.*

'That one man.'

**FAT: Nemože tu.*

%cod: (MOS).

'Can't there.'

The Repetition Strategy is also frequently used by the parents. Even though the parents tend to mostly repeat the child's mix by providing the Bosnian equivalent only (see Example 76), a considerable number of parental utterances produced in response to Anya's mix involve the parents initially employing the Repetition Strategy, and then going on to repeat the English mix, as is illustrated in Example 77.

Ex.76 **Mother (Anya 2;2.26 – Bosnian context)**

**AE: House.*

**MOT: Jeste, kućica.*

%cod: (RS).

'Yes, house.'

Ex.77 **Father (Anya 1;11.4 – Bosnian context)**

**AE: Gone Anya.*

**FAT: Otišla Anya, gone Anya.*

%cod: (RS+CS).

'Gone Anya, gone Anya.'

It can be argued that the type of repetition used by the father in Example 77 is more bilingually oriented than the Repetition Strategy used in Example 76. The repetition of Anya's mix, together with supplying the Bosnian equivalent, encourages the child's verbal production, while still providing the equivalent in the other language (Lanza, 1997a).

The fact that 65% of all the parental utterances which occur after Anya has produced a mix, could either be classified as a Move on Strategy or a Code-switching Strategy, indicate that the child is socialised into code-mixing and that the parents negotiate a bilingual context with Anya most of the time. By mostly employing bilingual strategies, the parents reveal to Anya their bilingual identity and signal to her that it is appropriate to use English and that communication will not be impeded as a result of such usage. It is not surprising then to find that Anya produces a high percentage of English and mixed utterances in the Bosnian context (see section 5.2.2.2). It is clear that Anya's degree of language mixing is not a result of confusion or her inability to differentiate the two language systems, but can be

“evaluated in relation to the extent to which the parent creates a monolingual or bilingual context with the child, that is to the extent to which the parent highlights his or her role of a monolingual or bilingual.”

(Lanza, 1997a, p.261)

Chapter 6. Rina's Acquisition of the Noun Phrase in English

In the following chapter, Rina's development of the English noun phrase in English is discussed. In the first part of the chapter, an overview of the noun phrases produced by Rina in the English context is presented. The second part of the chapter focuses on Rina's acquisition of the English noun phrase in the English context, discussing in detail the emergence and development of the different aspects of the English noun phrase in Rina's English.

6.1. Total Number of Noun Phrases (all utterances)

As can be seen from Table 6.1 and Figure 6.1, Rina's production of noun phrases, both correct NPs and NPs with errors, in the English context increases with age (for a definition of an error in this study see pages 104 and 105).

Table 6.1 Rina – Total number of NPs incl. correct NPs and NPs with errors (English context)

Age	English NPs	Bosnian NPs	Mixed NPs	Total NPs (100%)	Proportion of NPs/Total utterances (%)
1;8.28	23 (92%)	2 (8%)	0 (0%)	25	41
1;11.8	28 (93%)	2 (7%)	0 (0%)	30	28
2;0.18	10 (71%)	4 (29%)	0 (0%)	14	20
2;1.16	40 (89%)	5 (11%)	0 (0%)	45	44
2;3.2	92 (69%)	42 (31%)	0 (0%)	134	54
2;4.6	139 (67%)	67 (33%)	0 (0%)	206	84
2;6.3	84 (92%)	5 (6%)	2 (2%)	91	29

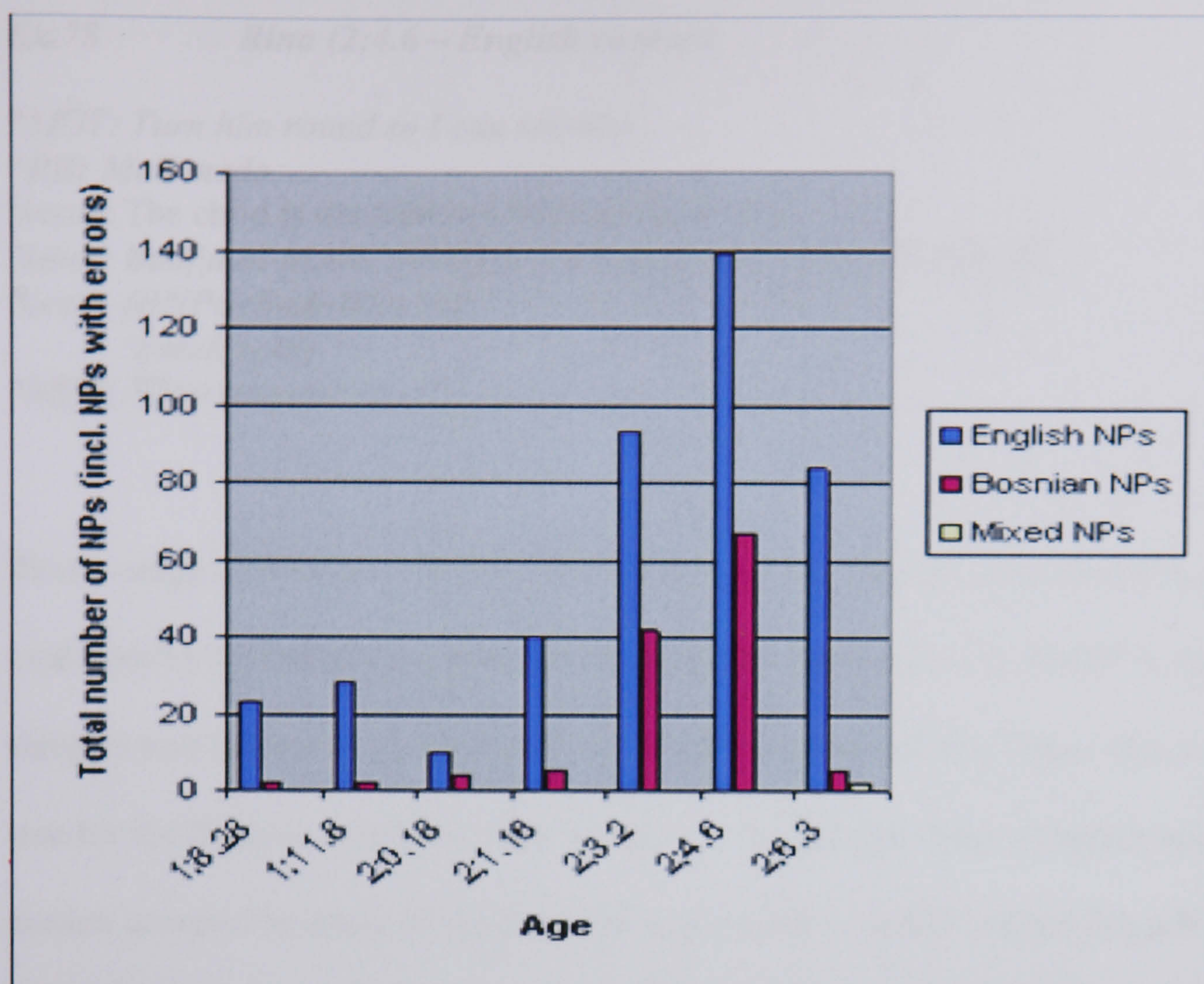


Figure 6.1 Rina – Total number of NPs incl. correct NPs and NPs with errors (English context)

Across the first four samples, the number of English noun phrases in the English context does not increase considerably with age. However, at the ages of 2;3.2 and 2;4.6 there is a significant increase in the number of English noun phrases (92 and 139 respectively). In the last sample (2;6.3), there is a slight decrease in the number of English nouns phrases produced.

In the English context, Rina produces more English noun phrases than Bosnian noun phrases. The following example illustrates Rina's usage of Bosnian noun phrases in the English context:

Ex. 78 *Rina (2;4.6 – English context)*

**MOT: Turn him round so I can see him.*

**RB: Mali medo.*

%com: The child is describing what she has drawn.

%mor: *Badj|mal-MASC:NOM:SG Bn:prop|med-MASC:NOM:SG.*

%cod: *(BNPc=Badj-Bn:prop)*

'Small teddy.'

**MOT: What does he need?*

Rina's usage of the above Bosnian noun phrase in the English context can be explained by the fact that she prefers to use the Bosnian noun for 'teddy' in the later samples and has been recorded using the English equivalent less often. The same is true for the Bosnian adjective 'mali' ('small'). In addition, Rina's English speaking mother accepts the usage of the Bosnian noun 'medo' ('teddy') in the English context and even uses it herself, which signals to Rina that it is appropriate to use a Bosnian noun in the English context.

Mixed noun phrases are non-existent in the first six samples. In the last sample, at the age of 2;6.3, Rina produces two mixed noun phrases, one of which is illustrated below.

Ex. 79 *Rina (2;6.3 – English context)*

**MOT: What's this?*

**RM: One bubamara.*

%com: The child is pointing to a ladybird in a picture book.

%mor: *Enum|one Bn:prop|bubamar-FEM:NOM:SG.*

%cod: *(MNPc=Enum-Bn:prop)*

'One ladybird.'

**MOT: One ladybird.*

The above mixed noun phrase is a combination of the English number ‘one’ and a Bosnian noun ‘bubamara’ (‘ladybird’). As there is no record of the English equivalent of the Bosnian noun ‘bubamara’ (‘ladybird’) being used by Rina in earlier recordings, it is most likely that she borrows the Bosnian equivalent in order to fill a gap in her knowledge of English vocabulary.

The majority of Rina’s noun phrases are correct and the number of noun phrases with errors is low across the first five samples, but increases in the last two recordings (Table 6.2).

Table 6.2 Rina – Number of correct NPs and NPs with errors (English context)

Age	Correct NPs	NPs with errors	Mixed NPs
1;8.28	25	-	-
1;11.8	29	1	-
2;0.18	14	-	-
2;1.16	43	2	-
2;3.2	132	2	-
2;4.6	168	38	-
2;6.3	78	11	2

The correct noun phrases produced by Rina in the English context are mainly English, while Bosnian noun phrases are very infrequent in the first four samples (Table 6.3). However, there is an increase in the number of correct Bosnian noun phrases at the ages of 2;3.2 and 2;4.6.

Table 6.3 Rina – Correct NPs and NPs with errors (English context)

Age	Correct NPs		NPs with errors		Mixed NPs
	Engl.	Bos.	Engl.	Bos.	
1;8.28	23	2	-	-	-
1;11.8	28	1	-	1	-
2;0.18	10	4	-	-	-
2;1.16	38	5	2	-	-
2;3.2	91	41	1	1	-
2;4.6	102	66	37	1	-
2;6.3	73	5	11	-	2

Even though the number of Bosnian noun phrases is considerable during that period of the child's language development, English noun phrases still form the majority of the noun phrases produced. The Bosnian noun phrases produced at the age of 2;3.2 mostly consist of Bosnian common and proper nouns (e.g. majca 'vest', leptir 'butterfly') that Rina borrows from Bosnian in order to fill a gap in her English vocabulary. It is important to emphasise that the English equivalents of these nouns are not recorded in earlier samples in either context.

At 2;4.6, Rina produces 19 tokens of the Bosnian interrogative 'Šta je to?' ('What is that?'), which account for 38 Bosnian noun phrases produced in the English context at this age. Other types of Bosnian noun phrases used at this age include Bosnian common nouns, such as 'zubi' ('teeth'), as well as the Bosnian reflexive pronoun 'se' ('self') produced as part of the Bosnian verb phrase 'kupa se' ('having a bath'). Rina is not recorded using the English equivalents of any of the above mentioned Bosnian noun phrases in earlier samples in either context.

Mixed noun phrases are extremely rare, with only two such noun phrases recorded at the age of 2;6.3.

As far as the noun phrases with errors are concerned, the majority of the noun phrases with errors are English (51), while Rina produces only three Bosnian noun phrases with errors across the seven samples.

Table 6.4 Rina – Missing English NPs (English context)

Age	0=PRO	0=PRO:INTERROG
1;8.28	-	-
1;11.8	-	-
2;0.18	-	-
2;1.16	1	-
2;3.2	-	-
2;4.6	-	1
2;6.3	-	-

PRO-pronoun; PRO:INTERROG – interrogative pronoun

In addition, in the seven samples analysed, only two missing English noun phrases are recorded (Table 6.4). The fact that both of these noun phrases are pronouns suggests that Rina is still at the stage of acquiring certain pronouns, such as the demonstrative and the interrogative pronouns.

6.2 English Noun Phrases in the English Context (English and Mixed Utterances)

6.2.1 Correct English Noun Phrases

Most of the noun phrases that Rina produces are single noun phrases (see Table 6.5; Figure 6.2). Complex noun phrases emerge at the age of 2;4.6 and continue to increase in number in the last sample (for definitions of single and complex noun phrases c.f. section 4.3.3).

Table 6.5 Rina – Correct English NPs (English context)

Age	Single NPs	Complex NPs
1;8.28	23	-
1;11.8	28	-
2;0.18	10	-
2;1.16	38	-
2;3.2	91	-
2;4.6	94	8
2;6.3	61	12

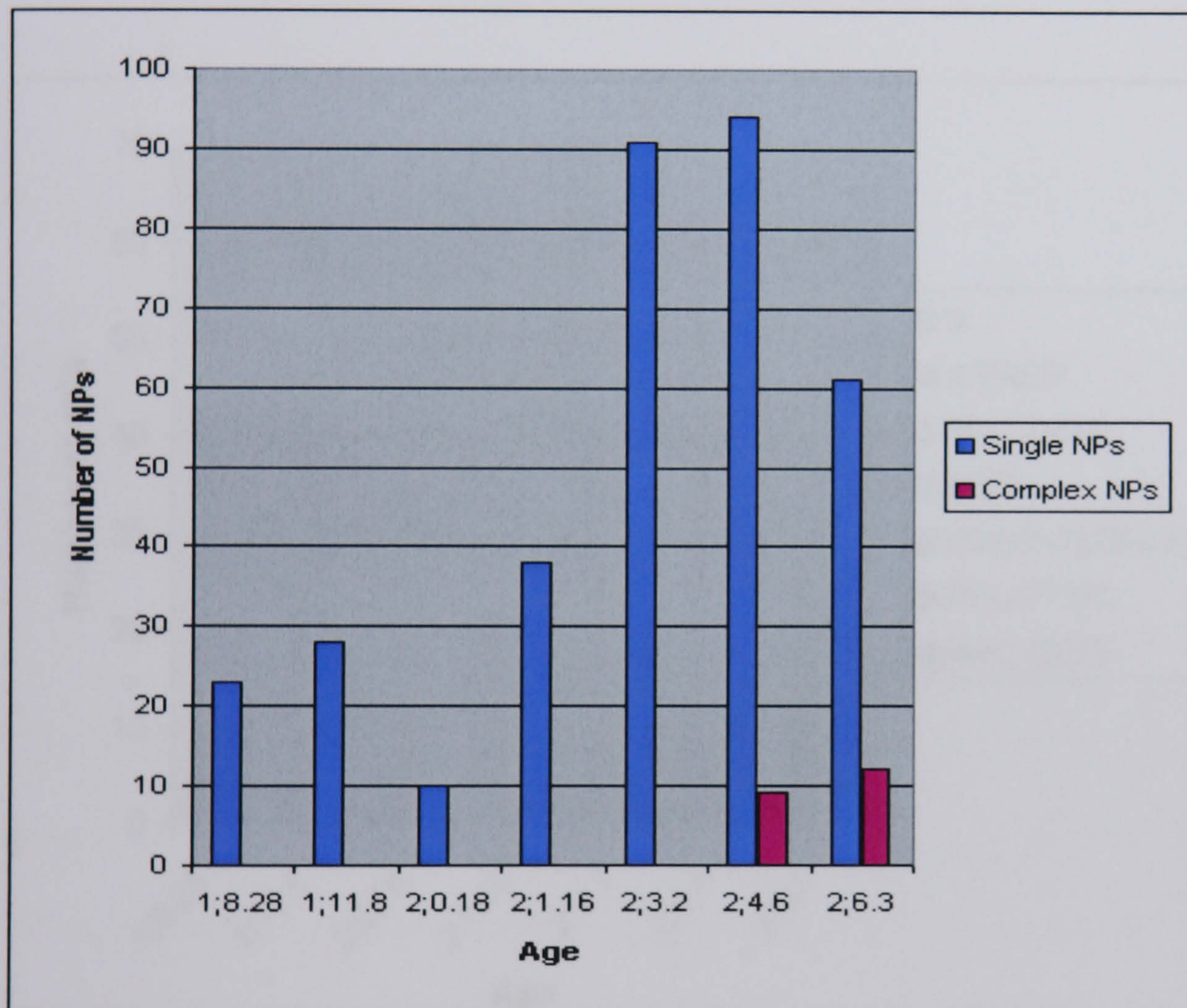


Figure 6.2 Rina – Correct English NPs (English context)

6.2.2 Single English Noun Phrases

As far as the single noun phrases are concerned, Rina produces more proper nouns than common nouns in six out of the seven samples analysed (Table 6.6; Figure 6.3).

Table 6.6 Rina – Single English NPs (English context)

Age	N	N:PROP	PRO:DEM	PRO	PRO:INTERROG	PRO:POSS	PRO:INDEF
1;8.28	3	20	-	-	-	-	-
1;11.8	6	22	-	-	-	-	-
2;0.18	1	8	-	-	-	1	-
2;1.16	12	23	2	1	-	-	-
2;3.2	44	40	2	3	-	1	1
2;4.6	25	60	6	2	1	-	-
2;6.3	19	26	7	5	4	-	-

N – noun; N:PROP – proper noun; PRO:DEM – demonstrative pronoun; PRO – pronoun; PRO:INTERROG – interrogative pronoun; PRO:POSS – possessive pronoun; PRO:INDEF – indefinite pronoun

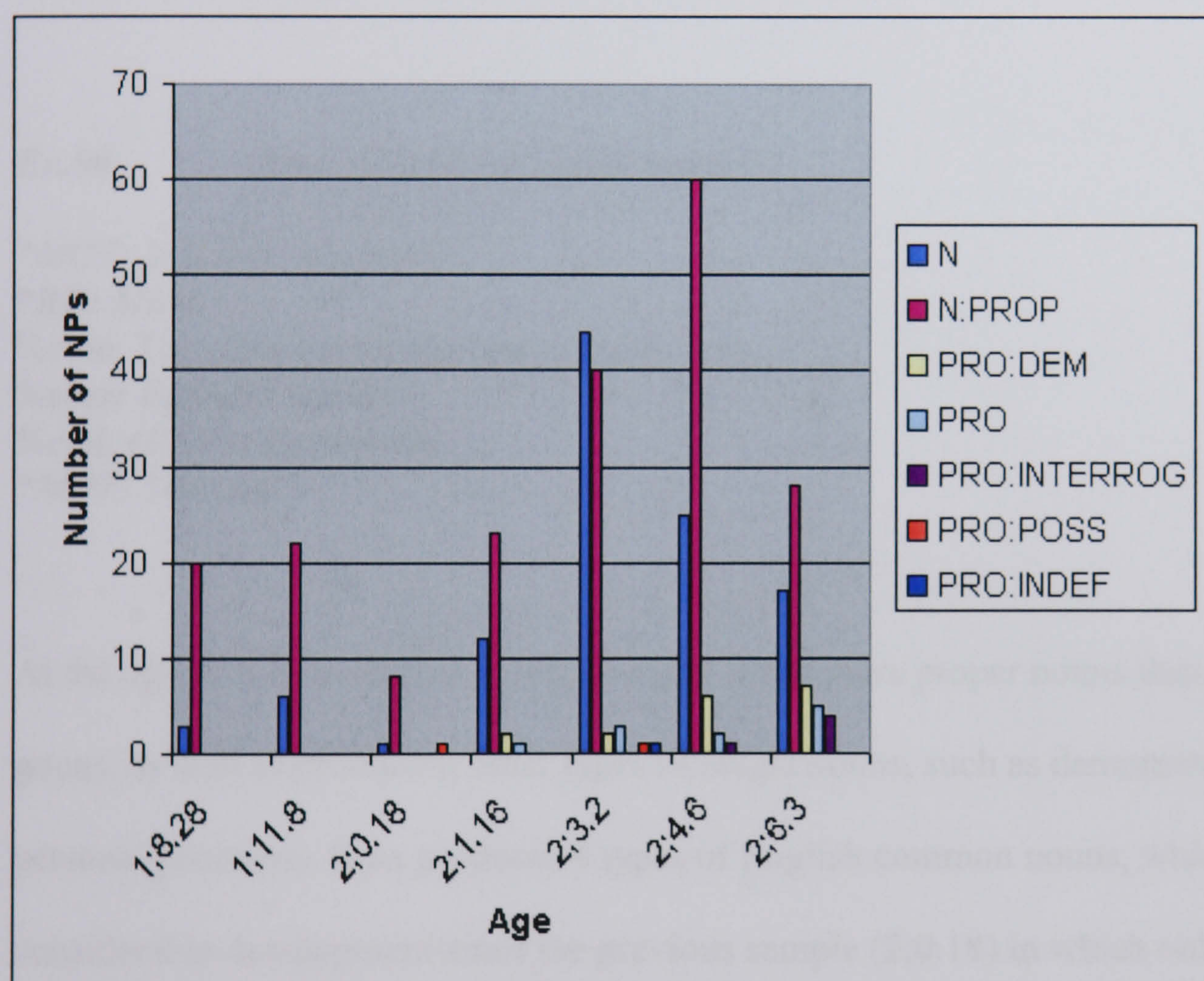


Figure 6.3 Rina – Single English NPs (English context)

At the age of 1;8.28, Rina produces 3 tokens of the common noun ‘chair’ and, although a higher number of proper-noun tokens is recorded at this age, Rina uses only three types of such nouns: 12 tokens of ‘Rina’, 5 tokens of ‘Daddy’ and 3 tokens of ‘Mummy’. A similar pattern in the production of English nouns is recorded at 1;11.8. There is an increase in the types of common nouns used in this sample to two,

with 5 tokens of 'car' and 1 token of 'bus' recorded. The number of proper nouns is still higher than that of common nouns. Rina produces seven types of proper nouns, which include the terms for herself ('Rina'), her parents and the names of her toys ('La', 'Nunu', 'Po').

The first single noun phrase produced that is not a noun is the English possessive pronoun 'mine' at the age of 2;0.18 (see section 2.4.3.1), as shown in the example below.

Ex.80 *Rina (2;0.18 – English context)*

**MOT: Is it this, this one?*

**RE: Mine.*

%com: The child is playing with a jigsaw toy.

%mor: *Epro:poss|mine.*

%cod: *(ENPs=Epro:poss)*

**MOT: This one?*

At the age of 2;1.16, Rina is again recorded using more proper nouns than common nouns, as well as producing other types of single nouns, such as demonstrative and personal pronouns. Rina produces 8 types of English common nouns, which indicates considerable development since the previous sample (2;0.18) in which only one type of common noun is recorded. Rina also uses two demonstrative pronouns of the same type: 'this' (see Example 81).

Ex.81 *Rina (2;1.16 – English context)*

**RE: This.*

%com: The child has just finished putting a jigsaw together.

%mor: *Epro:dem|this.*

%cod: *(ENPs=Epro:dem)*

**MOT: Finished, good girl.*

At this stage, Rina also produces her first personal pronoun 'it' when referring to her toy, as illustrated in the example below.

Ex.82 *Rina (2;1.16 – English context)*

**MOT: Ok, that there.*

**RE: Rina [/] Rina 0*v 0*to hold it.*

%com: The child is referring to one part of the jigsaw toy.

*%mor: En:prop|rina *0v *0to Ev|hold Epro|it.*

%cod: (ENPs=En:prop/ENPs=Epro)

**MOT: Rina hold it.*

In the fifth sample (2;3.2), 31 different types of common nouns are recorded and only 10 types of proper nouns, even though the number of proper-noun tokens is higher.

The proper nouns include Rina's own name (16 tokens), names of parents and relatives (15), toys (3), animals (5) and friends (1).

The range of single nouns also increases at the age of 2;3.2. The two demonstrative pronouns that Rina produces at this age are two tokens of the plural demonstrative pronoun 'these'. However, it is important to point out that the production of this form of the demonstrative pronoun could be due to the repetition of the mother's utterance that directly precedes the child's utterance containing the demonstrative pronoun (Example 83).

Ex.83 *Rina (2;3.2 – English context)*

**MOT: Oh, what are these?*

**RE: These.*

%com: The child and the mother are looking through a picture book.

%mor: *Epro:dem|these.*

%cod: *(ENPs=Epro:dem)*

**MOT: What are these?*

**RE: These.*

%mor: *Epro:dem|these.*

%cod: *(ENPs=Epro:dem)*

The three personal pronouns used by Rina at the age of 2;3.2 are of the same type - the third person singular pronoun 'it' (Example 84) – which is first recorded at 2;1.16.

Ex.84 *Rina (2;3.2 – English context)*

**MOT: Where is it, where's Masey Mouse?*

**RE: Watch it [/] watch it.*

%com: The child refers to the Masey Mouse video.

%mor: *Ev|watch-IMP Epro|it.*

%cod: *(ENPs=Epro)*

**MOT: Hm?*

At the age of 2;3.2, the use of the possessive pronoun 'mine' is recorded, as well as the indefinite pronoun 'nothing' (see Example 85).

Ex.85 *Rina (2;3.2 – English context)*

**MOT: Anymore?*

**RE: Nothing.*

%com: The child and the mother are naming different objects in a picture book.

%mor: *Epro:indef|nothing.*

%cod: *(ENPs=Epro:indef)*

**MOT: Nothing, ok.*

In the sixth sample, at the age of 2;4.6, there is a sharp decrease in the number of single noun phrases which are common nouns. The reason for such a change in usage is that, at this age, Rina's MLU score reaches 1.5 and the common nouns which are used as single noun phrases are marked as errors (c.f. section 4.3.4), as the normally developing child is now expected to provide a determiner in front of an English common noun. However, at this age certain common nouns (15 types) are still coded as single noun phrases. These nouns include mass nouns, such as 'milk' (1), 'tea' (5) and 'sugar' (2), which do not require a determiner to precede them, as well as plural nouns (clothes - 1) or count nouns which are used in the plural (eyes - 2, boots - 1, wheels - 4, arms - 1). In addition, common nouns, such as 'beach' (3), 'park' (1), 'sweater' (1), rain (1), kite (1), 'cat' (1) and 'stop', are also coded as single noun phrases and not as complex noun phrases containing an error, due to the fact that, while reading a picture book together with Rina, Rina's mother provides the prompt, i.e. the determiner for these nouns in her own utterance, and only expects Rina to provide the correct common noun, as illustrated in the following two examples:

Ex.86 ***Rina (2;4.6 – English context)***

****MOT: How's Masey dressed here?***

****MOT: Dress Masey for the?***

****RE: Beach.***

%mor: En|beach.

%cod: (ENPs=En)

****MOT: Beach.***

Ex.87 *Rina (2;4.6 – English context)*

***MOT:** *Can you find Masey's?*

***RE:** *Kite.*

%mor: *En|kite.*

%cod: *(ENPs=En)*

***MOT:** *And her?*

***RE:** *Sweater.*

%mor: *En|sweater.*

%cod: *(ENPs=En)*

The 13 types of proper nouns produced by Rina in this sample (2;4.6) still consist of names of book characters (36), animals (5), relatives (7) and her own name (12).

In addition to proper nouns, at the age of 2;4.6 Rina uses a higher number of demonstrative pronouns, as her English utterances become more complex (see section 2.4.3.1). Rina produces two types of demonstrative pronouns: 'that' (4 tokens) and 'this' (2 tokens). An example of Rina's usage of the demonstrative pronoun is shown below:

Ex.88 *Rina (2;4.6 – English context)*

***MOT:** *And what's this?*

***RE:** *No pull.*

***MOT:** *No pull, no pull.*

***RE:** *0*det:artindef light [/] light.*

***RE:** *That 0*v 0*det:artdef pull.*

%mor: *Epro:dem|that E*0v|be&3S&PRES E*0det:artdef|the En|pull.*

%com: The child is referring to a pull♦ at the back of a bus pictured in a story book.

%cod: *(ENPs=Epro:dem/*ENPc=E0det:artdef-En)*

%err: *0=det:artdef \$SYN \$ARTDEFLOS (ERR)*

***MOT:** *There's the pull.*

♦a pull – something used for pulling, such as a knob or a handle (Collins English Dictionary, 1998)

In this sample, Rina uses the personal pronoun 'it' twice. In addition, she produces the interrogative pronoun for the first time, although it is possible that this is a result of the repetition of the mother's utterance that precedes it (see Example 89).

Ex.89 *Rina (2;4.6 – English context)*

**MOT: Who's this?*

**RE: Who's this?*

%mor: Epro:interrog Ev|be&3S&PRES Epro:dem|this.

%cod: (ENPs=Epro:interrog/ENPs=Epro:dem)

**RE: Cyril [/] Cyril.*

%mor: En:prop|cyril.

%cod: (ENPs=En:prop)

In the last sample (2;6.3), Rina produces 11 types of common nouns, which have been defined as single noun phrases, as they are either produced with the plural inflection (e.g. cars, steps) or are non-count nouns (e.g. school, grass), as the example below illustrates:

Ex.90 *Rina (2;4.6 – English context)*

%com: Rina and her mother are reading a picture book.

**MOT: Little Hoot goes to, goes to?*

**MOT: School.*

**RE: School.*

%mor: En|school.

%cod: (ENPs=En)

**MOT: Little Hoot goes to school.*

6.2.2.1 English Nouns (Correct NPs and NPs with errors)

As far as marking for number on English nouns in the English context is concerned,

Rina uses only singular nouns in the first four samples (see Table 6.7).

Table 6.7 Rina – English nouns (English context)

Age	Type		Number		Case	
	Common	Proper	Singular	Plural	Nominative	Genitive
1;8.28	3	20	23	-	23	-
1;11.8	6	22	28	-	28	-
2;0.18	1	8	9	-	9	-
2;1.16	14	23	37	-	37 (*2)	-
2;3.2	45	40	79	6	85	-
2;4.6	70	63	125	8	129	4
2;6.3	34	32	46	20	66 (*1)	-

(*n) indicates the number of errors

Table 6.8 Rina – English common nouns (English context)

Age	Number		Case	
	Singular	Plural	Nominative	Genitive
1;8.28	3	-	3	-
1;11.8	6	-	6	-
2;0.18	1	-	1	-
2;1.16	14	-	14	-
2;3;2	40	5	45	-
2;4.6	62	8	70	-
2;6.3	14	20	34	-

(*n) indicates the number of errors

Table 6.9 Rina – English proper nouns (English context)

Age	Number		Case	
	Singular	Plural	Nominative	Genitive
1;8.28	20	-	20	-
1;11.8	22	-	22	-
2;0.18	9	-	9	-
2;1.16	23	-	23 (*2)	-
2;3;2	39	1	40	-
2;4.6	63	-	59	4
2;6.3	32	-	32 (*1)	-

(*n) indicates the number of errors

The first plural form of the noun is recorded at the age of 2;3.2 (5 tokens/3 types) and becomes more frequent in the last recording (20 tokens/10 types). An example of a plural noun used by Rina is given below:

Ex.91 *Rina (2;4.6 – English context)*

**MOT: What does he need?*

**RE: Eyes [/] eyes.*

%com: The child is drawing a teddy.

%mor: *En|eye-PL.*

%cod: *(ENPs=En)*

Contrastive use of the plural inflection is recorded in the last sample, as Rina produces the common noun ‘colour’ in both the singular and plural form (‘colours’).

Most of the English nouns used in the six recordings are in the nominative case. The first genitive form of the noun (i.e. possessive) appears at the age of 2;4.6 (4 tokens – see Table 6.9). The inflection ’s appears on two types of proper nouns: ‘Masey’ and ‘tata’ (see example below).

Ex.92 *Rina (2;4.6 – English context)*

**RE: Tata's.*

%com: The child is referring to the cup that she has assigned to her father.

%mor: *En:prop:gen|tata-POSS.*

%cod: *(ENPs=En:prop:gen)*

In the above example, Rina supplies the possessive inflection appropriately to the proper noun ‘tata’ in order to express possession.

Contrastive use of the genitive case on the proper noun ‘Masey’ is recorded at the age of 2;4.6, as Rina produces both the nominative and genitive form of the noun appropriately. However, at the age of 2;6.3, Rina fails to inflect a noun for the genitive case, which might indicate that she has not yet fully acquired the possessive marker.

6.2.2.2 English Pronouns (Correct NPs and NPs with Errors)

As far as personal pronouns in Rina's English are concerned, only two types of personal pronouns are recorded in the seven samples - 'it' and 'you'. These pronouns are both only used in the singular and the nominative. The third person singular personal pronoun emerges at the age of 2;1.16, and in the course of the last four recordings Rina produces 10 tokens of the pronoun 'it', while she uses 'you' only in the last sample (2;6.3), as illustrated in the example below.

Ex.93 *Rina (2;6.3 – English context)*

***RE:** *Mummy, you put it.*

%com: The child wants the mother to put the drawing board on the floor.

%mor: *En:prop|mummy Epro|you Ev|put-IMP Epro|it.*

%cod: *(ENPs=En:prop/ENPs=Epro/ENPs=Epro)*

***MOT:** *Come on, draw happy face for mummy, go ahead.*

The types of English pronouns that Rina uses most frequently in the English context are demonstrative pronouns, which appear in both the singular and plural in Rina's English. The first demonstrative pronoun to appear in Rina's English is the pronoun 'this' at the age of 2;1.16. 'That' emerges later, at the age of 2;4.6. Up to the age of 2;3.2, Rina produces two types of demonstrative pronouns – 'this' and 'that' - only in the singular. However, at the age of 2;3.2, Rina is recorded using the plural form 'these', as shown the following example.

Ex.94 *Rina (2;3.2 – English context)*

***RE:** *These.*

%com: The child is referring to some clothes in a picture book.

%mor: *Epro:dem|this-PL.*

%cod: *(ENPs=Epro:dem)*

*MOT: *What are these?*

The only possessive pronoun that is recorded in Rina’s English is the pronoun ‘mine’ at the age of 2;0.18 (see Example 80).

6.2.3 Complex English Noun Phrases

As far as complex English noun phrases are concerned, Rina starts producing such noun phrases at the age of 2;4.6 (Table 6.10; Figure 6.4).

Table 6.10 Rina – Complex English NPs (English context)

Age	Enum+ En	Edet:dem+ Epro:nom	Edet+ En:prop	Edet:dem+ En	Edet:artdef+ En	En:prop:gen+ En	Eqn+ En	En:prop:gen+ Eadj+En	Enum+ En:prop
1;8.28	-	-	-	-	-	-	-	-	-
1;11.8	-	-	-	-	-	-	-	-	-
2;0.18	-	-	-	-	-	-	-	-	-
2;1.16	-	-	-	-	-	-	-	-	-
2;3.2	-	-	-	-	-	-	-	-	-
2;4.6	-	1	-	-	2	2	2	1	-
2;6.3	5	3	2	1	-	-	-	-	1

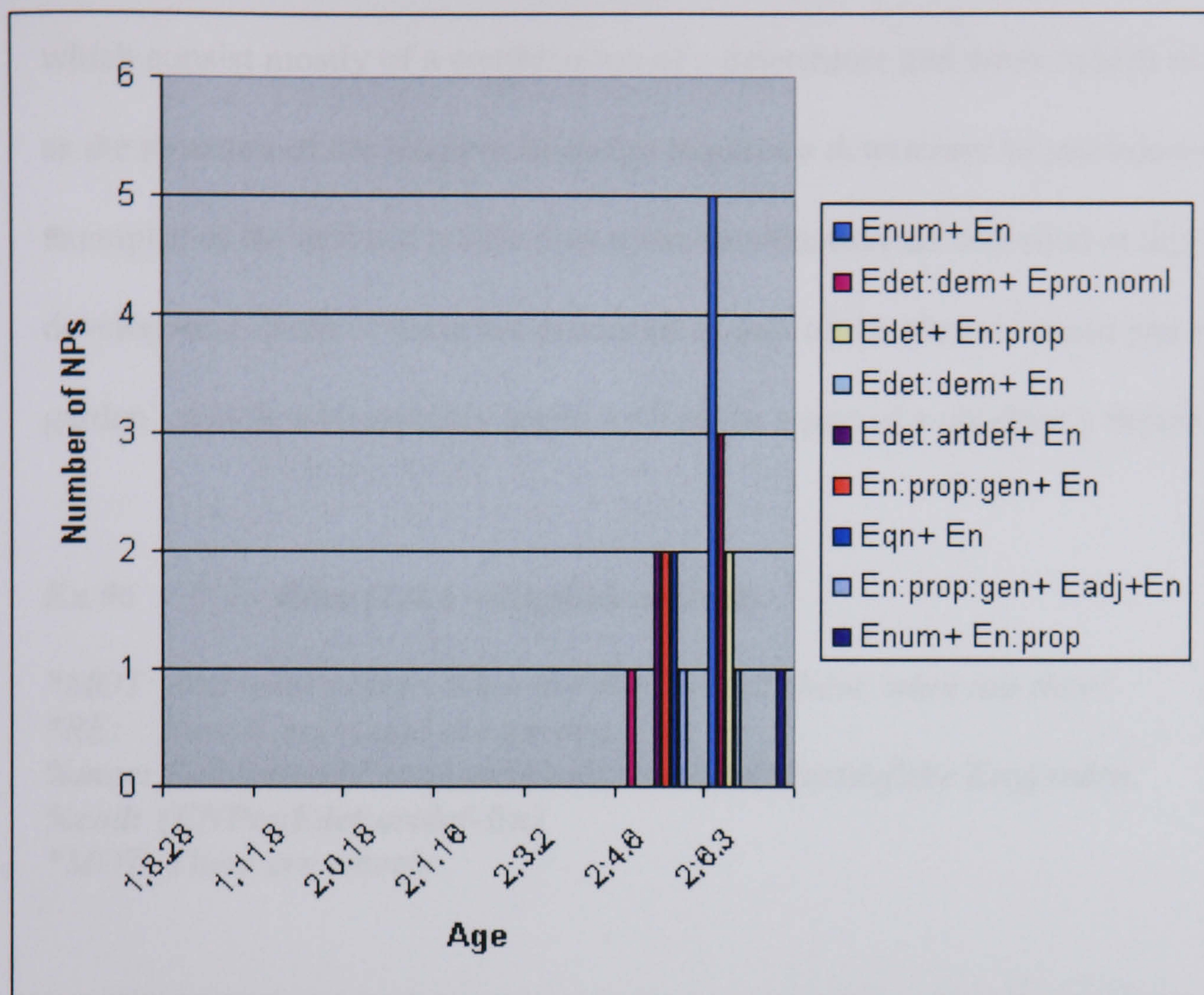


Figure 6.4 Rina – Complex English NPs (English context)

This first complex noun phrase that Rina produces is a combination of a demonstrative determiner and a nominal pronoun, used when referring to a toy. She continues to produce this type of complex noun phrase in the last recording (3 tokens), as illustrated below.

Ex. 95 Rina (2;4.6 – English context)

***RE:** *This one.*

%com: The child is pointing to a toy.

%mor: *Edet:dem|this Epro:noml|one.*

%cod: *(ENPc=Edet:dem-Epro:noml)*

At the age of 2;4,6, Rina produces a wide variety of complex English noun phrases, which consist mostly of a combination of a determiner and noun, which is expected, as the structure of the English language requires a determiner to precede a noun. Two examples of the definite article plus noun combination are recorded at this stage of development. Both of these are produced as part of the phrase ‘round and round the garden’, which was probably learnt by Rina as a part of a children’s rhyme.

Ex.96 *Rina (2;4.6 – English context)*

**MOT: And what's these, what are they, what's these, what are they?*

RE: Round and round **the garden.*

*%mor: Eadv|round Econj|and Eadv|round **Edet:artdef|the En|garden.***

*%cod: (**ENPc=Edet:artdef-En**)*

**MOT: These are wheels.*

The usage of a definite article with a noun in the two examples can be interpreted as a noun phrase which the child has learnt and now produces only as part of that particular phrase. One could argue that she has not yet acquired the knowledge of complex noun phrase structure which includes a definite article. Furthermore, evidence for this claim can be found in the data. In the recording at 2;4.6, Rina does not produce any other correct complex English noun phrases containing either a definite or an indefinite article and a noun. However, she produces 37 noun phrases missing the definite or indefinite article in front of the noun. In the example below, Rina fails to supply the definite article in front of the noun ‘crown’.

Ex.97 *Rina (2;4.6 – English context)*

**MOT: Come on then, find Queen Masey's crown.*

RE: **0*det:artdef crown.*

*%mor: **E*0det:artdef|the En|crown.***

*%cod: (***ENPc=0Edet:artdef-En**)*

At the age of 2;4.6, Rina also produces three complex English noun phrases containing a noun with the possessive 's inflection and another noun (see Example 98). This is expected, as it is at this stage that Rina starts marking nouns for the genitive case (c.f. 6.2.2.1).

Ex.98 **Rina (2;4.6 - English context)**

***MOT:** *Super.*

***MOT:** *Ok.*

***RE:** *Masey's bus.*

%mor: *En:prop:gen|masey-POSS En|bus.*

%cod: *(ENPc=En:prop:gen-En)*

%com: The child wants to read a picture book about Masey's bus – points to a picture of a bus and the main character, Masey.

***MOT:** *Masey's bus.*

Out of the eight complex English noun phrases, Rina produces two tokens of a complex noun phrase containing a quantifier and a noun (see Example 99).

Ex.99 **Rina (2;4.6 – English context)**

***MOT:** *And what's this?*

***RE:** *No pull.*

%mor: *Eqn|no En|pull.*

%cod: *(ENPc=Eqn-En)*

***MOT:** *No pull, no pull.*

In the above example, Rina is referring to a picture of a bus that does not have a pull at the back.

6.2.4 English Noun Phrases with Errors

From Table 6.11, it is possible to see that all the English noun phrases with errors are complex noun phrases (51).

Table 6.11 Rina – English NPs with errors (English context)

Age	Single NPs	Complex NPs
1;8.28	-	-
1;11.8	-	-
2;0.18	-	-
2;1.16	-	2
2;3.2	-	1
2;4.6	-	37
2;6.3	-	11

Forty seven of these complex noun phrases with errors include an omission of either a definite (23 tokens) or an indefinite article (24 tokens) (see Table 6.12). The majority of such errors are produced at the age of 2;4.6, as it is at this stage that Rina's MLU score reaches 1.5 and the common nouns that she uses without a determiner in the last two recordings are marked as complex noun phrases with errors (see section 4.3.4). In the last two samples, Rina produces 20 correct complex noun phrases and 48 complex noun phrases with errors. The 20 correct complex noun phrases include 18 which show an appropriate use of a determiner. Out of the 48 complex noun phrases with errors, 46 are missing determiners. The higher number of errors at the ages of 2;4.6 is evidence of the child experimenting with the English noun phrase structure and moving from a one-word to a two-word stage. This is also confirmed by the fact that the number of complex noun phrases with errors decreases in the final sample (11 tokens).

Table 6.12 Rina – Complex English NPs with errors (English context)

Age	\$SYN	\$SYN	\$SYN	\$MOR
	\$ARTDEFLOS	\$ARTINDEFLOS	\$DETINTERROGLOS	\$NPOSSLOS
1;8.28	-	-	-	-
1;11.8	-	-	-	-
2;0.18	-	-	-	-
2;1.16	-	-	-	2
2;3.2	-	1	-	-
2;4.6	18	19	-	-
2;6.3	5	4	1	1

The example below illustrates an error in the noun phrase which includes the omission of the indefinite article.

Ex.100 Rina (2;4.6 – English context)

**MOT: Plate.*

**RE: Rina 0*v 0*det:art indef plate [/] Rina plate.*

*%mor: En:prop|rina *0v E*0det:art indef|a En|plate.*

*%cod: (ENPs=En:prop/*ENPc=0Edet:ar indef-En)*

%err: 0=art:indef \$SYN \$ARTINDEFLOS (ERR)

%com: The child is trying to get her cup and saucer set out of the box.

**MOT: That's a way of getting them out, got a plate, little plate, saucer.*

In the above example, Rina fails to supply the determiner before the common noun 'plate', which is not acceptable in English.

A missing possessive marker on the noun accounts for three English noun phrases with errors. Two are recorded at the age of 2;1.6, by which stage Rina has not yet acquired the possessive marker. This error is also made later in her language development, at the age of 2;4.6 (see Example 101).

Ex.101 *Rina (2;4.6 – English context)*

**MOT: Is that Rina's bag?*

**RE: Rina-0*'s bag.*

*%mor: En:prop|rina-*0POSS En|bag.*

*%cod: (*ENPc=En:prop-En)*

%err: 0='s \$MOR \$NPOSSLOS (ERR)

It seems that the possessive nominal inflection is present in Rina's English, but is not yet produced consistently at the age of 2;4.6 (c.f. Brown, 1973).

6.3 Conclusion

In the English context, Rina produces more English noun phrases than Bosnian noun phrases. As far as mixed noun phrases are concerned, only two are recorded in the seven samples analysed. The majority of the English noun phrases are correct and the number of English noun phrases with errors is low in comparison, although their number increases in the last two samples.

The majority of the correct noun phrases that Rina produces are single nouns and these include mostly common and proper nouns, with pronouns beginning to emerge at the age of 2;0.18. The first plural marking on nouns is recorded at the age of 2;3.2, while the genitive form of the noun (i.e. possessive) appears at 2;4.6.

Rina starts using complex noun phrases at the age of 2;4.6. However, all the English noun phrases with errors are complex noun phrases. The majority of the noun phrases with errors include an omission of either a definite or an indefinite article, or involve a

missing possessive marker on the noun. It seems that, at the age of 2;6.3, Rina has not yet completely acquired either the correct usage of definite and indefinite articles, or the possessive marker on the nouns.

Chapter 7. Rina's Acquisition of the Noun Phrase in Bosnian

In the following chapter, Rina's development of the Bosnian noun phrase in Bosnian is discussed. An overview of the noun phrases produced by Rina in the Bosnian context is presented first. The second part of the chapter then focuses on Rina's acquisition of the Bosnian noun phrase in the Bosnian context, and includes a detailed discussion of the emergence and development of the different aspects of the Bosnian noun phrase.

7.1 Total Number of Noun Phrases (all utterances)

As far as the Bosnian context is concerned, Rina's production of noun phrases is considerably more accelerated than in the English context. By the time she is 2;1;16, Rina produces 104 Bosnian noun phrases, which increase to 177 at the age of 2;4.6 (see Table 7.1; Figure 7.1). Her language in the Bosnian context does include English noun phrases, but the percentage is low. Mixed noun phrases are very rare.

Table 7.1 Rina – Total number of NPs incl. correct NPs and NPs with errors (Bosnian context)

Age	English NPs	Bosnian NPs	Mixed NPs	Total NPs (100%)	Proportion of NPs/Total utterances (%)
1;8.28	13 (33%)	27 (67%)	0 (0%)	40	41
1;11.8	2 (7%)	28 (93%)	0 (0%)	30	35
2;0.18	2 (3%)	63 (94%)	0 (0%)	65	63
2;1.16	6 (5%)	104 (91%)	4 (4%)	114	70
2;3.2	18 (16%)	95 (83%)	1 (1%)	114	53
2;4.6	10 (5%)	177 (95%)	0 (0%)	187	76
2;6.3	35 (24%)	114 (75%)	3 (1%)	152	62

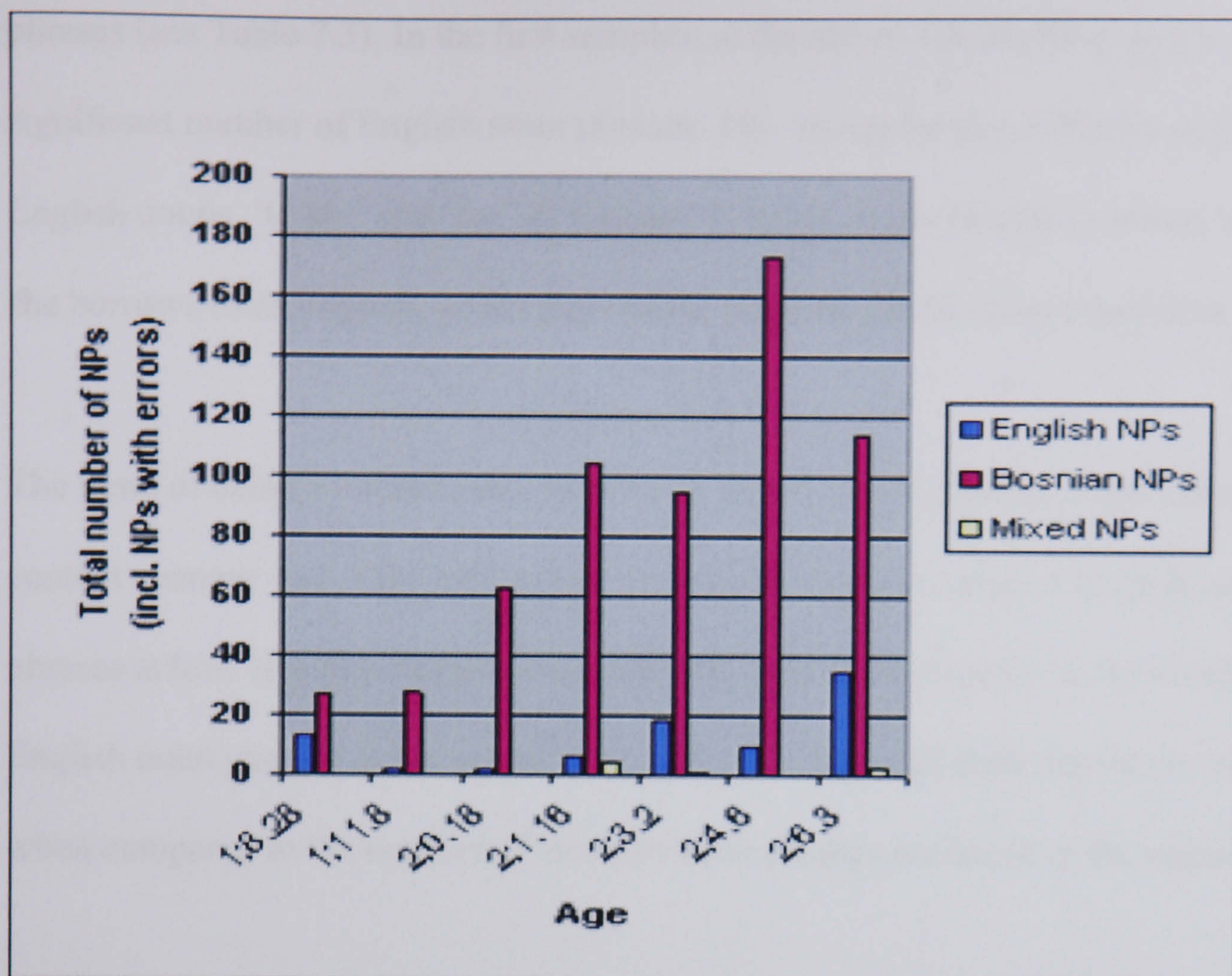


Figure 7.1 Rina – Total number of NPs incl. correct NPs and NPs with errors (Bosnian context)

The majority of the noun phrases that Rina produces in the Bosnian context are correct and the number of noun phrases with errors is low (see Table 7.2).

Table 7.2 Rina – Number of correct NPs and NPs with errors (Bosnian context)

Age	Correct NPs	NPs with errors	Mixed NPs
1;8.28	40	-	-
1;11.8	30	-	-
2;0.18	62	3	-
2;1.16	108	2	4
2;3.2	112	1	1
2;4.6	184	3	-
2;6.3	141	8	3

The correct noun phrases in the Bosnian context are mostly Bosnian, with English noun phrases making up a small percentage of the total number of correct noun

phrases (see Table 7.3). In the first samples, at the age of 1;8.28, Rina uses a significant number of English noun phrases. The reason for this is Rina's usage of two English nouns, 'teddy' and 'car' (2 tokens/13 types), in the Bosnian context, which she borrows from English, as she has not yet acquired the Bosnian equivalent.

The trend of using a considerable number of English noun phrases in the Bosnian context changes and in the subsequent recordings the percentage of English noun phrases is low. It is important to point out that there is an increase in the number of English noun phrases at the age of 2;3.2 and 2.6.3, although their number is still low when compared to the number of Bosnian noun phrases produced at the same ages.

Mixed noun phrases are rare, with only eight of these produced in total across the seven samples analysed.

Table 7.3 Rina - Correct NPs and NPs with errors (Bosnian context)

Age	Correct NPs		NPs with errors		Mixed NPs
	Engl.	Bos.	Engl.	Bos.	
1;8.28	13	27	-	-	-
1;11.8	2	28	-	-	-
2;0.18	2	60	-	3	-
2;1.16	6	102	-	2	4
2;3.2	18	94	-	1	1
2;4.6	10	174	-	3	-
2;6.3	35	106	-	8	3

The majority of the noun phrases with errors are Bosnian, while, in the seven samples, Rina produced no English noun phrases with errors (see Table 7.3).

Table 7.4 Rina – Missing Bosnian NPs (Bosnian context)

Age	Missing NPs
1;8.28	-
1;11.8	-
2;0.18	-
2;1.16	-
2;3.2	-
2;4.6	-
2;6.3	2

In the seven samples analysed, only two missing noun phrases are recorded at the age of 2;6.3 (see Table 7.4), which consist of a missing Bosnian reflexive pronoun ‘se’ (‘yourself’), an example of which is shown below.

Ex.102 Rina (2;6.3 – Bosnian context)

*FAT: *Ajde, idu svi ovde spavat.*
‘Come on, they are all going to sleep here.’

*RB: *Probudi 0*pro.*
%com: The child is telling the doll to wake up.
%mor: *Bv|probud-2S:IMP *0pro:refl|se.*
%cod: (NP0)
%err: *0=pro:refl \$MOR \$REFLPROLOS (ERR)*
‘Wake up.’

*FAT: *Spavala*
‘She was sleeping.’

Rina uses the reflexive verb ‘probuditi se’ (‘wake up’), which is always formed with the reflexive pronoun ‘se’ (‘yourself’). However, in the above example, Rina fails to supply the pronoun ‘se’, which she has not yet acquired as part of her productive Bosnian vocabulary at the age of 2;6.3.

7.2 Bosnian Noun Phrases in the Bosnian Context (Bosnian and Mixed Utterances)

7.2.1 Correct Bosnian Noun Phrases

The correct Bosnian noun phrases in the Bosnian context are mostly single noun phrases (see Table 7.5; Figure 7.2). Rina starts producing complex noun phrases at the age of 2;1.16, and 12 Bosnian complex noun phrases in total are recorded across the seven samples.

Table 7.5 Rina – Correct Bosnian NPs (Bosnian context)

Age	Single NPs	Complex NPs
1;8.28	27	-
1;11.8	28	-
2;0.18	60	-
2;1.16	95	7
2;3.2	94	-
2;4.6	172	2
2;6.3	103	3

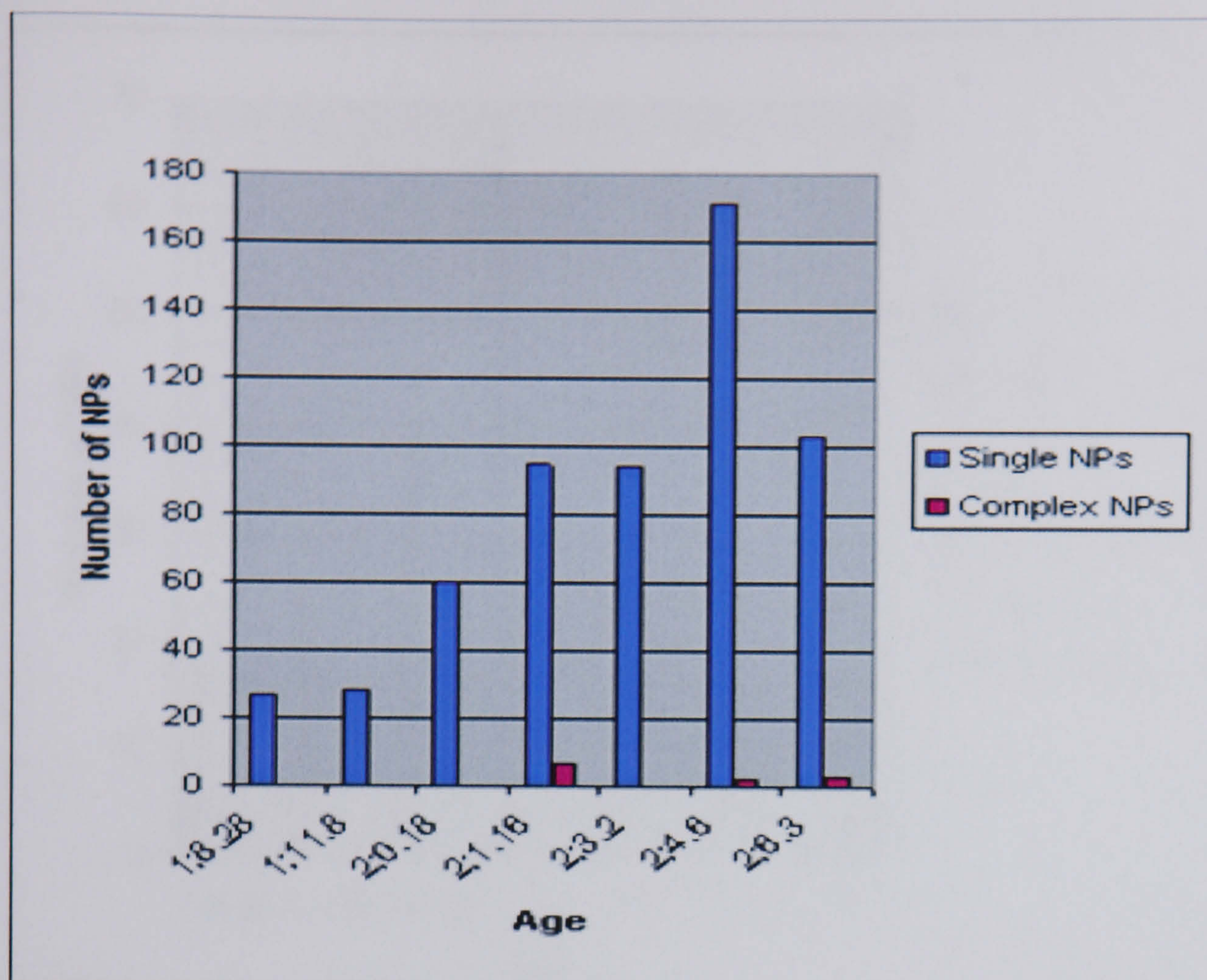


Figure 7.2 Rina – Correct Bosnian NPs (Bosnian context)

7.2.2 Single Bosnian Noun Phrases

As Table 7.6 (Figure 7.3) shows, Rina’s single Bosnian noun phrases mostly consist of common and proper nouns.

Table 7.6 Rina – Single Bosnian NPs (Bosnian context)

Age	N	N:PROP	PRO:DEM	PRO	PRO:INTERROG	PRO:REFL	PRO:POSS
1;8.28	8	18	1	-	-	-	-
1;11.8	5	23	-	-	-	-	-
2;0.18	22	38	-	-	-	-	-
2;1.16	66	26	2	1	-	-	-
2;3.2	38	49	4	-	-	2	1
2;4.6	46	59	32	5	28	1	-
2;6.3	39	30	16	2	14	2	-

N – noun; N:PROP – proper noun; PRO:DEM – demonstrative pronoun; PRO – pronoun; PRO:INTERROG – interrogative pronoun; PRO:REFL – reflexive pronoun; PRO:POSS – possessive pronoun

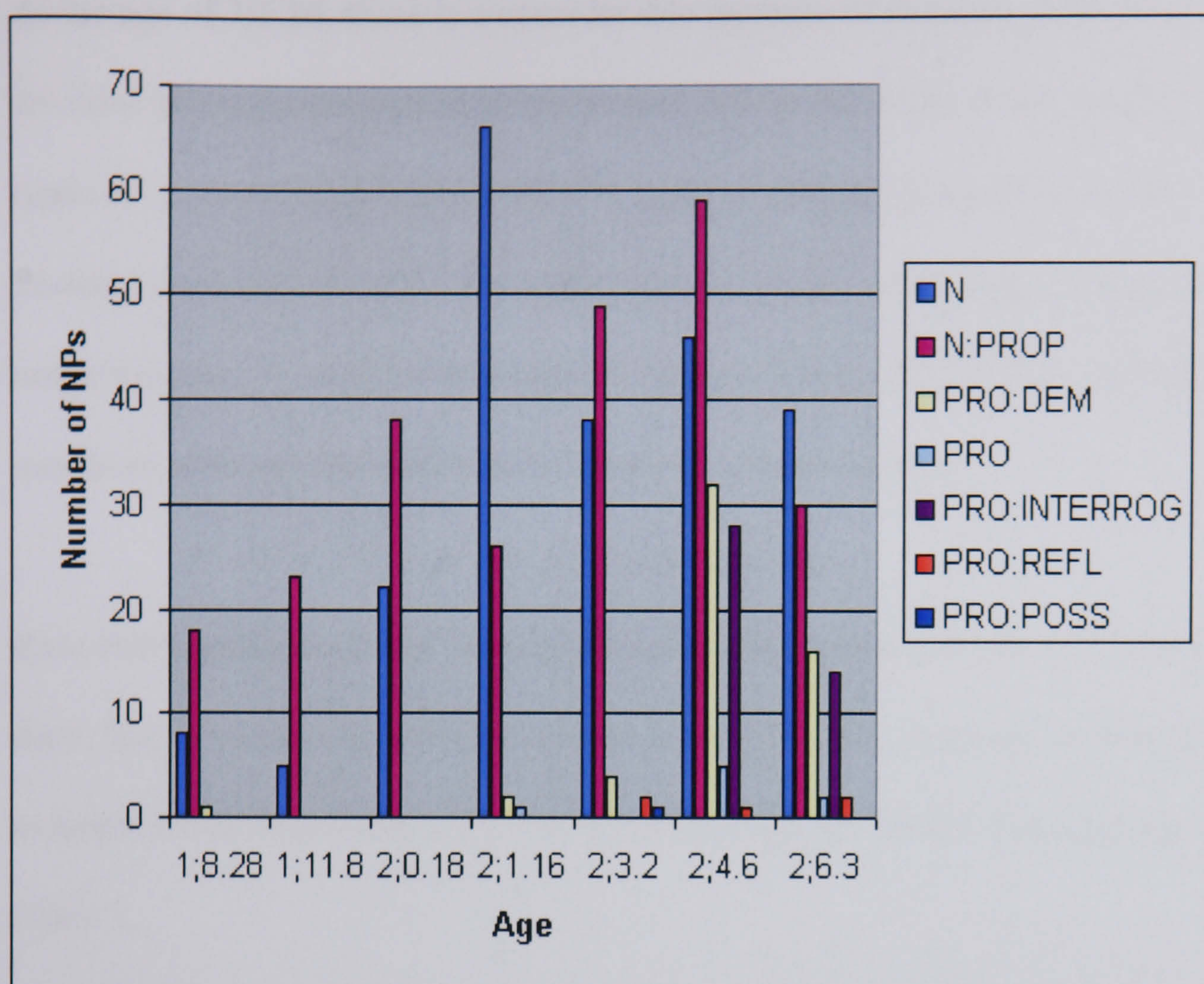


Figure 7.3 Rina – Single Bosnian NPs (Bosnian context)

In four out of the six samples, Rina produces more proper nouns than common nouns.

However, at the ages of 2;1.16 and 2;6.3 more common nouns are recorded.

After a more detailed analysis, it emerges that Rina uses a significantly higher number of proper-noun than common-noun types and tokens in the first three samples. At 1;11.8, Rina produces 7 types of proper nouns, which she uses often (for example, she uses the proper noun ‘Rina’ six times in the one recording). The number of common noun types is lower (4), with five tokens produced. This shows that the child has a tendency to use the same proper nouns, which mostly include the names of her family members, whereas she uses a wider range of common nouns. A similar pattern of usage of common and proper nouns is recorded at age 2;0.18.

At the age of 2;1.16, there is a considerable increase of Bosnian common nouns and a decrease in the production of proper nouns. It is at this stage that Rina produces 28 types of common nouns, while only 11 types of proper nouns are recorded. The findings show that the child has a tendency to use the same proper nouns (the proper noun 'mummy' is used 9 times), which mostly include the names of her family members, whereas she uses a wider range of common nouns.

Rina starts producing other types of Bosnian single noun phrases at 2;1.16 for the first time. She produces one personal and two demonstrative pronouns in this sample. The example below illustrates Rina's usage of the Bosnian demonstrative pronoun 'ovo' ('this').

Ex.103 *Rina (2;1.16 – Bosnian context)*

***RB: Ovo.**

%com: The child is pointing to a ladybird in a picture book.

%mor: *Bpro:dem|ovo-NEU:NOM:SG.*

%cod: (*BNPs=Bpro:dem*)

'This.'

*GRA: *To je bubamara, male bubamare.*

'That is a ladybird, little ladybirds.'

It is at the ages of 2;4.6 and 2;6.3 that an increase in the variety of single Bosnian noun phrases is recorded in Rina's speech. In the fifth sample (2;3.2), the first Bosnian reflexive pronouns are produced (2).

Ex.104 *Rina (2;3.2 – Bosnian context)*

*FAT: *Ovde?*
 'Here?'
*RB: *Kupa se.*
%mor: *Bv|kupa-3S:PRES Bpro:refl|se.*
%cod: *(BNPs=Bpro:refl)*
 'Having a bath.'
*FAT: *Kupa se.*
 'Having a bath.'

At the age of 2;4.6, Rina produces a very high number of interrogative and demonstrative pronouns. However, on closer analysis it can be concluded that Rina uses only one type of interrogative pronoun (28 tokens). She produces the interrogative pronoun 'šta' ('what') almost only (27 tokens) as part of the question 'Šta je to?' ('What is that?'). The same number of tokens (27) account for the demonstrative pronoun 'to' ('that'), also used as part of the above Bosnian question (see Example 105 below). Only one other type of Bosnian demonstrative pronoun is produced in this sample (2 tokens), which is the pronoun 'ovo' ('this').

Ex.105 *Rina (2;4.6 – Bosnian context)*

*RB: *Šta je to?*
%mor: *Bpro:interrog|šta-FEM:NOM:SG Bv|biti&3S&PRES*
 Bpro:dem|t-NEU:NOM:SG.
%cod: *(BNPs=Bpro:interrog/BNPs=Bpro:dem)*
 'What is that?'
*FAT: *Nosi tanjiriće, jel nosi tanjiriće curica?*
 'Carrying little plates, is the little girl carrying little plates?'
*RB: *Da.*
 'Yes.'

At this age, Rina starts using more personal pronouns (5 tokens), as is shown in the example below.

Ex.106 *Rina (2;4.6 – Bosnian context)*

**FAT: Naočale imaju.*

'They have glasses.'

**RB: Evo je!*

%com: The child has seen a picture of a kitten.

%mor: *Badv|evo Bpro|ona-FEM&GEN&SG.*

%cod: *(BNPs=Bpro)*

'Here she is!'

**FAT: Evo, maca ima naočale.*

'Here, the kitty is has glasses.'

It is important to point out that three out of the five personal pronouns used are of the same type as in the above example and all are produced as part of the exclamation phrase 'Evo je!' ('Here she is.').

7.2.2.1 Bosnian Nouns (Correct NPs and NPs with errors)

From Table 7.7, it is possible to conclude that Rina supplies case marking on Bosnian nouns in the Bosnian context from the very first recording at the age of 1;8.28.

Table 7.7 Rina – Bosnian nouns (Bosnian context)

Age	Type		Gender			Number		Case						
	Common	Proper	Fem.	Masc.	Neu.	Sing.	Pl.	Nom.	Gen.	Dat.	Acc.	Voc.	Inst.	Loc.
1;8.28	8	18	13	8	5	26	-	25	-	1	-	-	-	-
1;11.8	5	23	20	7	1	28	-	27	-	1	-	-	-	-
2;0.18	25	38	34 (*2)	28	1	63	-	61	-	2	-	-	-	-
2;1.16	68	34	58	31	13	95	7	98	2	-	2	-	-	-
2;3.2	39	50	44	37 (*1)	8	85	2	85	2	-	2	-	-	-
2;4.6	52	59	64	44	3	102	9	103 (*3)	2	1	2	3	-	-
2;6.3	41	40	43 (*1)	27	11 (*1)	72	9	70 (*3)	-	3(*3)	7	1(*1)	-	-

(*n) indicates the number of errors

Table 7.8 Rina – Bosnian common nouns (Bosnian context)

Age	Gender			Number		Case						
	Fem.	Masc.	Neu.	Sing.	Pl.	Nom.	Gen.	Dat.	Acc.	Voc.	Inst.	Loc.
1;8.28	1	2	5	8	-	8	-	-	-	-	-	-
1;11.8	3	1	1	5	-	5	-	-	-	-	-	-
2;0.18	9 (*2)	15	1	25	-	25	-	-	-	-	-	-
2;1.16	31	25	12	59	9	65	1	-	2	-	-	-
2;3.2	13	18 (*1)	8	35	4	37	-	-	2	-	-	-
2;4.6	30	19	3	44	8	50 (*3)	-	1	1	-	-	-
2;6.3	26(*1)	4	11 (*1)	33	8	38 (*3)	-	-	3	-	-	-

(*n) indicates the number of errors

Table 7.9 Rina – Bosnian proper nouns (Bosnian context)

Age	Gender			Number		Case						
	Fem.	Masc .	Neu.	Sing.	Pl.	Nom.	Gen.	Dat.	Acc.	Voc.	Inst.	Loc.
1;8.28	12	6	-	18	-	17	-	1	-	-	-	-
1;11.8	17	6	-	23	-	22	-	1	-	-	-	-
2;0.18	25	13	-	38	-	36	-	2	-	-	-	-
2;1.16	27	6	1	34	-	33	1	-	-	-	-	-
2;3.2	31	19	-	50	-	48	2	-	-	-	-	-
2;4.6	28	18	-	46	-	53	2	-	-	3	-	-
2;6.3	17	23	-	39	1	32 (*2)	-	3 (*3)	4	1 (*1)	-	-

(*n) indicates the number of errors

The first case marking on a Bosnian noun is produced by Rina at the age of 1;8.28 (Table 7.9), and it involves the use of the dative ending on the proper noun ‘tata’ (‘daddy’), as she is giving something to her father, which in Bosnian is expressed in the dative (Example 107).

Ex.107 Rina (1;8.28 – Bosnian context)

***RB: Tati.**

⁰omor: Bn:prop|tat-MASC:DAT:SG.

%cod: (BNPs=Bn:prop)

‘To daddy.’

At the age of 2;1.16, Rina produces the first plural forms of Bosnian common nouns (5 types/9 tokens – see Table 7.8), as can be seen in the example below.

Ex.108 *Rina (2;1.16 – Bosnian context)*

**FAT: Ovako, daj rukicu, ovako, jedan, dva, tri.*

%com: Like this, give me your hand, like this, one, two, three.

**RB: Godine [/] godine.*

%com: The child has counted two fingers on her hand.

%mor: Bn|godin-FEM:NOM:PL.

%cod: (BNPs=Bn)

'Years.'

**FAT: Godine, jeste, imaš dvije godine.*

'Years, yes, you are two years old.'

It is at this age that the contrastive use of the plural form of the noun is recorded in Rina's Bosnian. She appropriately uses the Bosnian common noun 'oko' in the singular, as well as the plural ('oči').

In the fourth sample (2;1.16), Rina produces Bosnian nouns both in the accusative (see Example 109 below) and the genitive for the first time.

Ex.109 *Rina (2;1.16 – Bosnian context)*

**RB: 0*v 0*prep šetnju.*

*%mor: *0v *0prep Bn|šetnj-FEM:ACC:SG.*

%cod: (BNPs=Bn)

'Walk.'

**GRA: Ideš u šetnju.*

'You are going for a walk.'

The above example illustrates Rina's usage of the feminine accusative singular ending on the noun 'šetnja' ('walk'). Even though the preposition that governs the case of the noun is missing, Rina is still able to mark the noun for the appropriate case.

At the age of 2;4.6, there is an increase of the production of plural Bosnian nouns (9 tokens). It is at this age that Rina uses a Bosnian noun marked for the vocative case for the first time (see Example 110).

Ex.110 *Rina (2;4.6 – Bosnian context)*

***RB:** *Halo curice.*
%mor: *Bconv|halo Bn|curic-FEM:VOC:SG.*
%cod: *(BNPs=Bn)*
 ‘Hello little girl.’

From the data presented in this section it is evident that Rina marks Bosnian nouns in the Bosnian context for case and number from the first recording. In addition, Rina shows contrastive use of case inflections on the same proper noun ‘tata’ (‘daddy’), which is used at different points in the third sample (2;0.18). In Example 111, Rina uses the proper noun ‘tata’ in the nominative singular, as she wants her father to help her take the toy out of its box.

Ex.111 *Rina (2;0.18 – Bosnian context)*

⁰_{com}: Rina and her father are trying to get a toy cup and saucer set out of the box.

***FAT:** *Oće tata izvadi, il ćeš ti sama?*
 ‘Shall daddy take it out, or will you do it yourself?’

***RB:** *Tata.*
%mor: *Bn:prop|tat-MASC:NOM:SG.*
%cod: *(BNPs=Bn:prop)*
 ‘Daddy.’

***FAT:** *Gdje mi je tanjirić?*
 ‘Where’s my little saucer?’

***RB:** *Tata [/] tata.*
%mor: *Bn:prop|tat-MASC:NOM:SG.*
%cod: *(BNPs=Bn:prop)*
 ‘Daddy.’

***FAT:** *Ja ću tebi to vako ovde sve izvadit.*
 ‘I’ll take it all out for you here like this.’

In the example below, on the other hand, Rina appropriately supplies the dative singular ending to the proper noun 'tata', as she is giving a toy to her father.

Ex.112 **Rina (2;0.18 – Bosnian context)**

***RB: Tati.**

%act: The child gives her father the toy.

%mor: *Bn:prop|tat-MASC:DAT:SG.*

%cod: (*BNPs=Bn:prop*)

'To daddy.'

The usage illustrated in the two examples above shows that Rina has not merely learnt the different forms of the same noun, but is applying the rules of the Bosnian case system when required by the context. This also indicates that Rina is able to differentiate her two languages, as she only marks the Bosnian nouns and is not recorded using Bosnian inflections on English nouns in the English context.

7.2.2.2 Bosnian Pronouns (Correct NPs and NPs with Errors)

As Table 7.10 shows, Rina uses Bosnian personal pronouns from the age of 2;1.16. It is clear that her usage of personal pronouns reflects appropriate contrasts in gender and case from the start.

Table 7.10 Rina – Bosnian personal pronouns (Bosnian context)

Age	Gender			Number						Case						
	Fem.	Masc.	Neu.	Sing.			Pl.			Nom.	Gen.	Dat.	Acc.	Voc.	Inst.	Loc.
				1 st	2 nd	3 rd	1 st	2 nd	3 rd							
1;8.28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1;11.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2;0.18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2;1.16	1	-	-	-	-	1	-	-	-	-	1	-	-	-	-	-
2;3.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2;4.6	3	-	-	2	-	3	-	-	-	-	3	-	2	-	-	-
2;6.3	1	-	-	1	-	1	-	-	-	-	2	-	-	-	-	-

In the fourth sample, Rina produces her first personal pronoun, which is marked for the third person genitive singular, as shown in the example below.

Ex.113 Rina (2;1.16 – Bosnian context)

*GRA: *Neka sada, naći ćemo je, Rina, drugi put.*

'It doesn't matter now, we'll find her, Rina, another time.'

*RB: *Evo je!*

%com: The child has found the ball.

%mor: *Badv|evo Bpro|ona-FEM&GEN&SG.*

%cod: *(BNPs=Bpro)*

'Here she is!'

*GRA: *Da vidi baka.*

'Let grandma see.'

*GRA: *Jesi našla?*

'Have you found it?'

*GRA: *Eto.*

'There.'

At the age of 2;4.6, Rina uses personal pronouns in both the genitive and the accusative case. In this sample, both personal pronouns in the first person, as well as the third person singular are recorded. The following example illustrates Rina's usage of the personal pronoun in the first person accusative singular.

Ex.114 *Rina (2;4.6 – Bosnian context)*

*RB: *Pusti me!*

%mor: *Bv|pusti-IMP Bpro|ja-1S&ACC.*

%cod: *(BNPs=Bpro)*
'Let me go!'

At the age of 2;6.3, Rina produces personal pronouns in the dative singular for the first time. In the example below, Rina is shown using the personal pronoun in the third person singular 'ona' ('she') in the dative case.

Ex.115 *Rina (2;6.3 – Bosnian context)*

*RB: *Pade joj lice [/] pade joj lice.*

%mor: *Bv|pad-3S:PRES Bpro|ona-3S&FEM&DAT Bn|lic-NEU:NOM:SG.*

%cod: *(BNPs=Bpro/BNPs=Bn)*

No Bosnian personal pronouns in the plural are recorded in Rina's Bosnian in the seven samples.

As far as Bosnian demonstrative pronouns are concerned, Rina also produces demonstrative pronouns only in the singular (see Table 7.11).

Table 7.11 Rina – Bosnian demonstrative pronouns (Bosnian context)

Age	Gender			Number		Case						
	Fem.	Masc.	Neu.	Sing.	Pl.	Nom.	Gen.	Dat.	Acc.	Voc.	Inst.	Loc.
1;8.28	1	-	-	1	-	-	-	-	1	-	-	-
1;11.8	-	-	-	-	-	-	-	-	-	-	-	-
2;0.18	-	-	-	-	-	-	-	-	-	-	-	-
2;1.16	1	-	1	2	-	2	-	-	-	-	-	-
2;3.2	-	-	6	6	-	6	-	-	-	-	-	-
2;4.6	-	1	31	32	-	32	-	-	-	-	-	-
2;6.3	2	-	14	16	-	16	-	-	-	-	-	-

However, she marks the pronouns for gender to correctly agree with the item to which she is referring. In the example below, Rina uses the Bosnian demonstrative pronoun ('ta' – 'that') in the feminine nominative singular. As she is referring to a ladybird, which is of the feminine gender in Bosnian, she supplies the appropriate feminine ending on the demonstrative pronoun in order for it to agree with the noun.

Ex.116 **Rina (2;1.16 – Bosnian context)**

***RB: Ta.**

%com: The child is pointing to a ladybird in a picture book.

%mor: **Bpro:dem|t-FEM:NOM:SG.**

%cod: (**BNPs=Bpro:dem**)

'That.'

The only demonstrative pronoun that is marked for a case, except the nominative, was produced as early as 1;8.28, as shown in Example 117.

Ex.117 **Rina (1;8.28 – Bosnian context)**

***RB: Tu.**

%com: Child points at a book.

%mor: **Bpro:dem|t-FEM:ACC:SG.**

%cod: (**BNPs=Bpro:dem**)

'This.'

The above example again illustrates Anya's ability to supply appropriate marking on the demonstrative pronoun according to the noun with which it agrees. In this instance, Rina points to a book she wants and, as the Bosnian noun 'knjiga' ('book') is feminine in gender, she adds the correct feminine accusative ending on the pronoun.

It is important to stress at this point that no Bosnian possessive pronouns are recorded in Rina's data in the Bosnian context.

7.2.3 Complex Bosnian Noun Phrases

As far as complex Bosnian noun phrases in the Bosnian context are concerned, Rina starts producing complex noun phrases at the age of 2;1.16 and uses 12 complex noun phrases in total (see Table 7.12; Figure 7.4).

Table 7.12 Rina - Complex Bosnian NPs (Bosnian context)

Age	Bdet:poss+Bn	Badj+Bn	Bdet+Bn
1;8.28	-	-	-
1;11.8	-	-	-
2;0.18	-	-	-
2;1.16	3	4	-
2;3.2	-	-	-
2;4.6	-	1	1
2;6.3	-	3	-

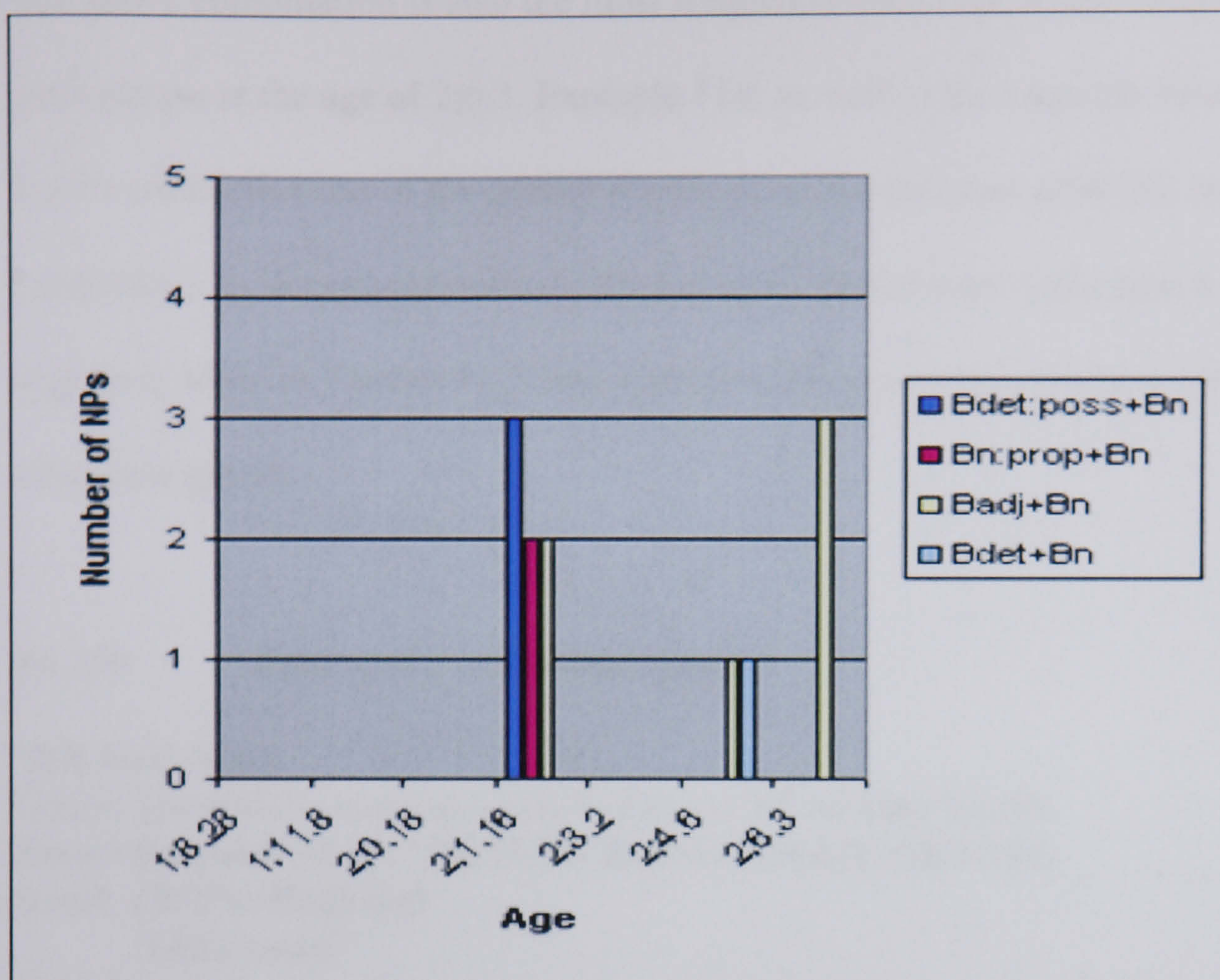


Figure 7.4 Rina - Complex Bosnian NPs (Bosnian context)

The first Bosnian complex noun phrases in Rina's speech are mostly a combination of a Bosnian possessive determiner and a Bosnian noun, as well as a Bosnian adjective and a Bosnian noun (see Example 118).

Ex.118 Rina (2;1.16 – Bosnian context)

*GRA: Šta je ovo?
'What's this?'

*RB: Mala riba.

%com: The child is looking a picture book.

%mor: Badj|mal-FEM:NOM:SG Bn:prop|rib-FEM:NOM:SG.

%cod: (BNPc=Badj-Bn:prop)
'Little fish.'

*GRA: Mala riba, da.
'Small fish, yes.'

The above combination is also the most frequently used type of the complex Bosnian noun phrase at the age of 2;6.3. Example 118, as well as the example below, shows Rina's contrastive use of the gender markings on the Bosnian adjective for 'small' ('mali/o/a'). In the example above, Rina applies the feminine inflection to the adjective, while in Example 119 she appropriately marks the adjective for the masculine gender.

Ex.119 Rina (2;6.3 – Bosnian context)

**RB Mali labud.*

%com: The child is making a small swan out of building blocks.

%mor: *Badj|mal-MASC:NOM:SG Bn|labud-MASC:NOM:SG.*

%cod: *(BNPc=Badj-Bn)*

'Little swan.'

Rina uses a higher number of English complex noun phrases (21 tokens) in the English context (see section 6.2.3) than she does Bosnian complex noun phrases in the Bosnian context (12 tokens). This is to be expected, as the structure of the Bosnian language requires neither articles nor determiners to precede nouns.

7.2.4 Bosnian Noun Phrases with Errors

In Rina's Bosnian, most of the Bosnian noun phrases with errors are single Bosnian noun phrases (see Table 7.13). Only five complex noun phrases with errors are recorded across the seven samples.

Table 7.13 Rina – Bosnian NPs with errors (Bosnian context)

Age	Single NPs	Complex NPs
1;8.28	-	-
1;11.8	-	-
2;0.18	2	1
2;1.16	1	1
2;3.2	1	-
2;4.6	3	-
2;6.3	5	3

Rina produces her first Bosnian noun phrases with an error at age 2;0.18, which involve both complex and single noun phrases.

The majority of the single Bosnian noun phrases with errors contain an error on the noun and its case inflection (see Table 7.14 below).

Table 7.14 Rina – Single Bosnian NPs with errors (Bosnian context)

Age	\$MOR	\$SYN	\$MOR	\$MOR	\$MOR	\$MOR
	\$NGFEM	\$DETPOSSLOSINFL	\$NGMASC	\$NCNOM	\$NCVOC	NCDAT
1;8.28	-	-	-	-	-	-
1;11.8	-	-	-	-	-	-
2;0.18	2	-	-	-	-	-
2;1.16	-	1	-	-	-	-
2;3.2	-	-	1	-	-	-
2;4.6	-	-	-	3	-	-
2;6.3	-	-	-	3	1	1

Out of the 12 single Bosnian noun phrases with an error on the noun, six are marked incorrectly for the nominative. In Example 120 below, Rina uses the noun ‘labud’ (‘swan’) in the nominative. As she is describing to her uncle what her father has made (the object), the Bosnian noun should be marked for the accusative, and not the nominative case.

Ex.120 **Rina (2;6.3 – Bosnian context)**

**UNC: Labud, jest, labud je.*

'Swan, yes, it's a swan.'

**RB: Napravio labud [*].*

%com: The child is telling her uncle that her father made a swan.

%mor: *Bv|napravi-3S:PAST Bn|labud-MASC:*NOM:SG.*

%cod: *(*BNPs=Bn)*

%err: *labud=labuda \$MOR \$NCNOM (ERR)*

'He made swan.'

As far as the complex Bosnian noun phrases with errors are concerned, they all contain morphological errors (see Table 7.15).

Table 7.15 Rina – Complex Bosnian NPs with errors (Bosnian context)

Age	\$MOR \$ADJGFEM	\$MOR \$DETGFEM;\$NCDAT	\$MOR \$DETGFEM
1;8.28	-	-	-
1;11.8	-	-	-
2;0.18	1	-	-
2;1.16	1	-	-
2;3.2	-	-	-
2;4.6	-	-	-
2;6.3	-	2	1

In all of the complex Bosnian noun phrases with errors, the error consists of the lack of agreement between the noun and its determiner, as illustrated in the example below.

Ex.121 *Rina (2;1.16 – Bosnian context)*

*FAT: Šta mala?

‘What small?’

*RB: *Mala [*/] oko.*

%com: The child is drawing a face.

%mor: *Badj|mal- *FEM:NOM:SG Bn|oko-NEU:NOM:SG.*

%cod: (**BNPc=Badj-Bn*)

%err: *mala=malo \$MOR \$ADJGFEM (ERR)*

‘Small eye.’

*FAT: *Malo oko.*

‘Small eye.’

In this instance, Rina uses the neuter noun ‘oko’ (‘eye’) in the nominative singular, which requires the determiner that precedes it to be inflected for the neuter nominative singular as well. However, Rina produces the adjective ‘mala’ (‘little’) in the feminine nominative singular, thus generating an error in agreement within the noun phrase.

It is possible to conclude that, even though Rina provides appropriate case and gender marking on nouns from the first recording, she is still not consistent in applying these rules at the age of 2;6.3.

7.3 Conclusion

In the Bosnian context, Rina produces more Bosnian noun phrases than English noun phrases, while mixed noun phrases are very rare. The majority of the Bosnian noun phrases are correct and the number of noun phrases with errors is low.

Most of the correct Bosnian noun phrases are single noun phrases, of which the majority are common and proper nouns. However, Rina produces a significant number of different types of pronouns from the age of 2;1.16.

Contrastive use of case marking on Bosnian nouns appears in the very first recording at 1;8.28, while plural inflections on nouns emerge at 2;1.16. In addition, Rina marks personal and demonstrative pronouns appropriately for case and gender from the beginning.

Rina starts producing complex Bosnian noun phrases at the age of 2;1.16. She uses a low number of complex noun phrases which is to be expected, as Bosnian does not require either articles or determiners to precede nouns.

The majority of Bosnian noun phrases with errors are single noun phrases, which mostly involve incorrect usage of a case inflection on the noun. As far as complex noun phrases with errors are concerned, they all feature a lack of agreement between the noun and its determiner.

Chapter 8. Anya's Acquisition of the Noun Phrase in English

Chapter 8 focuses on Anya's development of the English noun phrase in English. In the first part of the chapter, a general overview of all the noun phrases produced by Anya in the English context is presented. The second part looks in detail at Anya's acquisition of the English noun phrase in the English context.

8.1. Total Number of Noun Phrases (all utterances)

In the English context, Anya's language development shows an increase in the production of noun phrases with age for the first four samples (see Table 8.1; Figure 8.1).

Table 8.1 Anya – Total number of NPs incl. correct NPs and NPs with errors (English context)

Age	English NPs	Bosnian NPs	Mixed NPs	Total NPs (100%)	Proportion of NPs/Total utterances (%)
1;9.2	47 (100%)	0 (0%)	0 (0%)	47	26
1;11.4	72 (100%)	0 (0%)	0 (0%)	72	36
2;0.15	240 (99%)	1 (0.5%)	1 (0.5%)	242	69
2;1.16	259 (98%)	5 (2%)	0 (0%)	264	70
2;2.27	197(100%)	0 (0%)	0 (0%)	197	77
2;4.7	141(99%)	1 (0.5%)	0 (0%)	142	62

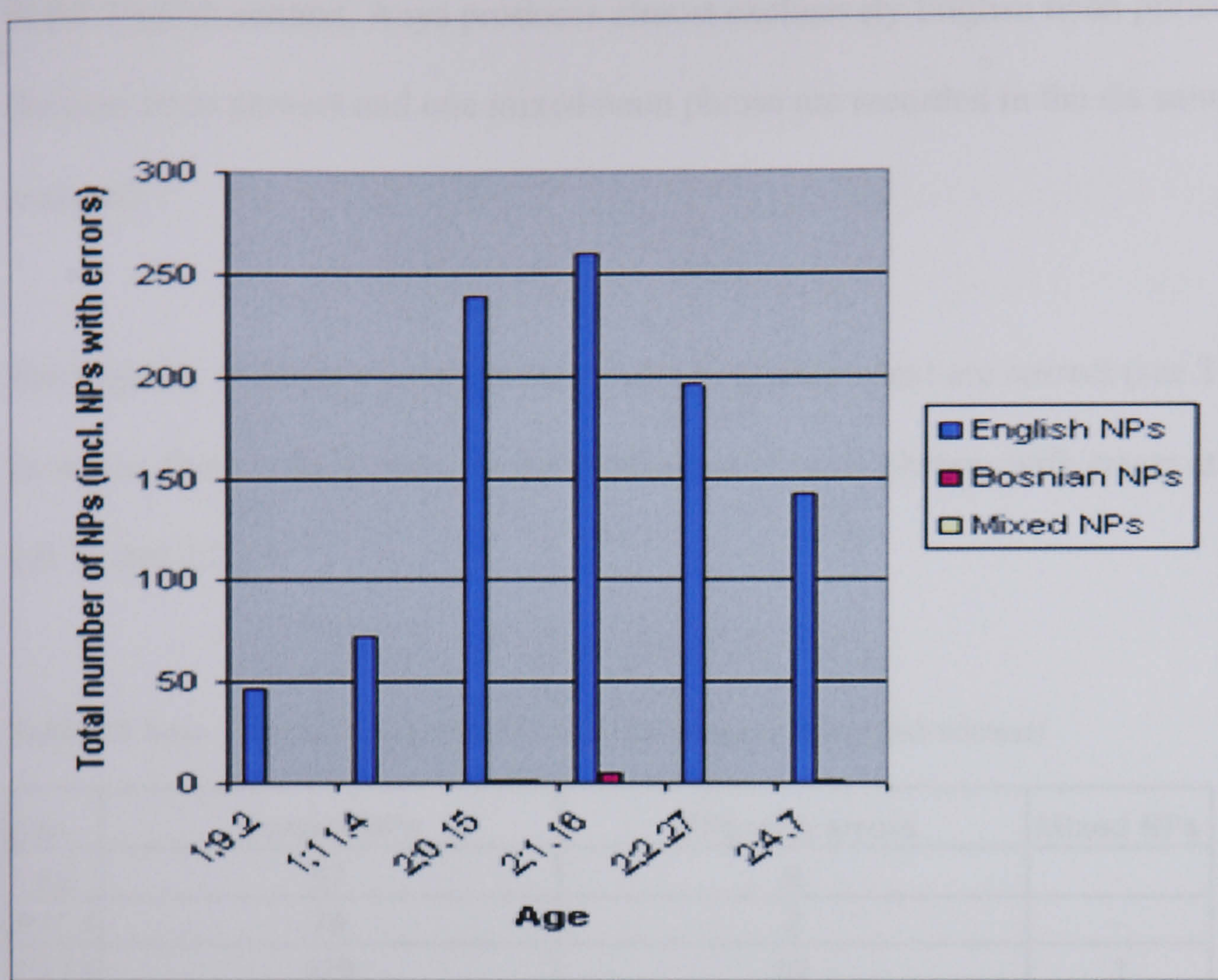


Figure 8.1 Anya – Total number of NPs incl. correct NPs and NPs with errors (English context)

At the age of 1;9.2, Anya produces 47 English noun phrases, which increases to 72 at the age of 1;11.4. There is a steep increase in the third sample (2;0.15), when Anya produces 240 English noun phrases. A decrease occurs at the age of 2;2.27, with 197 English noun phrases produced, and the token count is lower still at 2;4.7 (141). However, these figures should not be interpreted as a lack of production of noun phrases: at these ages, Anya generally produces fewer utterances due to the change of interlocutor (c.f. 5.2.2.1). This is due to the fact that for the last two recordings a different teacher from the one Anya was used to playing with during the previous recordings interacted with Anya in the nursery. This affected Anya's responsiveness, which is reflected in the decrease of the number of noun phrases produced.

In the English context, Anya produces almost exclusively English noun phrases. Only six Bosnian noun phrases and one mixed noun phrase are recorded in the six samples analysed.

The majority of Anya's noun phrases in the English context are correct (see Table 8.2).

However, there is an increase in the production of noun phrases with errors at the ages of 2;0.15 and 2;2.27.

Table 8.2 Anya – Number of correct NPs and NPs with errors (English context)

Age	Correct NPs	NPs with errors	Mixed NPs
1;9.2	47	0	-
1;11.4	70	2	-
2;0.15	179	62	1
2;1.16	188	76	-
2;2.27	151	46	-
2;4.7	110	32	-

The correct noun phrases produced by Anya in the English context are almost all English, with only six Bosnian correct noun phrases recorded in the six samples (see Table 8.3), an example of which can be found below (Example 122).

Ex. 122 *Anya (2;1.16 – English context)*

*TEA: *Oh, what's that?*

*AB: *Kišobran.*

%mor: *Bn|kisobran-MASC:NOM:SG.*

%cod: *(BNPs=Bn)*

'Umbrella.'

*TEA: *Umbrella.*

*AE: *Umbrella.*

In the example above, Anya uses a Bosnian single noun 'kišobran' ('umbrella'), as she has not yet acquired the English equivalent. It is important to point out that, out of the six Bosnian noun phrases that Anya produces in the English context, four are Bosnian single nouns. No evidence of English equivalents of these nouns is found in Anya's data up to then (2;1.16). As far as mixed noun phrases are concerned, Anya produces only one mixed noun phrase in the English context.

Table 8.3 Anya - Correct NPs and NPs with errors (English context)

Age	Correct NPs		NPs with errors		Mixed NPs
	Engl.	Bos.	Engl.	Bos.	
1;9.2	47	-	-	-	-
1;11.4	70	1	2	-	-
2;0.15	178	1	62	-	1
2;1.16	183	5	76	-	-
2;2.27	151	-	46	-	-
2;4.7	109	1	32	-	-

In the six samples analysed, Anya only produces English noun phrases with errors (see Table 8.3). The number of English noun phrases with errors increases dramatically at the age of 2;0.15, as it is at this stage that Anya's MLU scores reach 1.5 and above, resulting in all common nouns which she produces without determiners, being marked as errors. In addition, 20 missing noun phrases in total are recorded (see Table 8.4).

Table 8.4 Anya - Missing English NPs (English context)

Age	Missing NPs
1;9.2	5
1;11.4	-
2;0.15	5
2;1.16	5
2;2.27	-
2;4.7	5

At the age of 1;9.2, Anya fails to produce five noun phrases, of which four are pronouns (see Example 123 below). It is important to emphasise that all the four missing pronouns are of the same type as in the example below and appear within the same type of utterance at different times in the recording.

Ex.123 *Anya (1;9.2 – English context)*

**TEA: Don't you want red?*
**AE: 0*v 0*pro back [/] back.*
 %com: The child refers to the red pencil.
 %mor: *E*0v|put-IMP *0pro Eadv|back.*
 %cod: (NP0)
 %err: *0=pro \$SYN \$PROLOS (ERR)*
**TEA: Put it back.*

In the last sample (2;4.7), five missing noun phrases are recorded. Three of these involve a missing subject, as is illustrated in the following example.

Ex.124 *Anya (2;4.7 – English context)*

**TEA: What colour's that one?*
**AE: White.*
**AE: 0*subj dropped it.*
 %com: Anya is threading different coloured shapes onto a string.
 %mor: **0subj Ev|dropp-PAST Epro|it.*
 %cod: (ENPs=Epro/NP0).
 %err: *0=subj \$SYN \$SUBJLOS (ERR)*
**TEA: Dropped it, oh dear.*

The above example shows Anya failing to supply the subjective personal pronoun 'I' at the beginning of the utterance in the place of a subject. The tendency of children acquiring English as a first language to omit sentence subjects was discussed by Hyams (1986), who observed that children at around two years of age omit sentence subjects and produce sentences such as the one in the above example. The teacher's utterance in

Example 124 is treated as a repetition of the child's utterance, and not an example of ellipsis, because of the speed and copied intonation of the retort.

8.2 English Noun Phrases in the English Context (English and Mixed Utterances)

8.2.1 Correct English Noun Phrases

The majority of the English noun phrases that Anya produces are single noun phrases, although her usage of complex noun phrases is already recorded in the first sample at the age of 1;9.2 (see Table 8.5; Figure 8.2), and the number of complex English noun phrases continues to increase with age.

Table 8.5 Anya – Correct English NPs (English context)

Age	Single NPs	Complex NPs
1;9.2	44	3
1;11.4	67	3
2;0.15	156	22
2;1.16	162	21
2;2.27	120	31
2;4.7	85	24

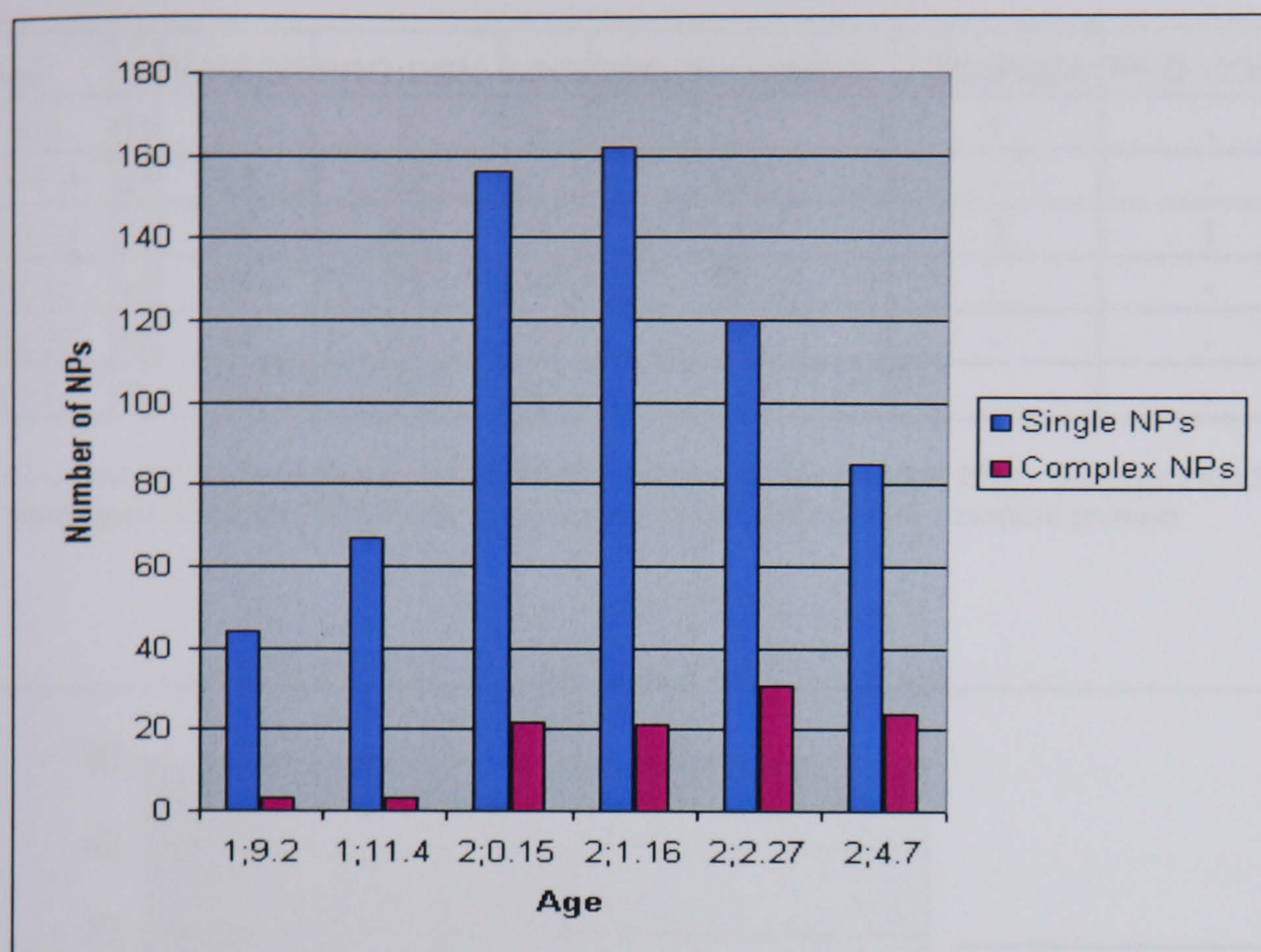


Figure 8.2 Anya – Correct English NPs (English context)

8.2.2 Single English Noun Phrases

From the outset, Anya uses mostly English nouns (common and proper) in the English context (see Table 8.6; Figure 8.3). However, from very early on (1;9.2) she uses other types of single noun phrases and these increase in number with age, although proper nouns are the most frequent type of single English noun phrases.

Table 8.6 Anya – Single English NPs (English context)

Age	N	N:PROP	PRO:DEM	PRO	PRO:INTERROG	PRO:POSS	PRO:NOML
1;9.2	14	27	2	-	-	1	-
1;11.4	31	23	12	-	1	-	-
2;0.15	24	78	41	8	1	3	1
2;1.16	33	80	23	17	9	-	-
2;2.27	12	44	41	16	7	-	-
2;4.7	5	56	7	17	-	-	-

N – noun; N:PROP – proper noun; PRO:DEM – demonstrative pronoun; PRO – pronoun; PRO:INTERROG – interrogative pronoun; PRO:POSS – possessive pronoun; PRO:NOML – nominal pronoun

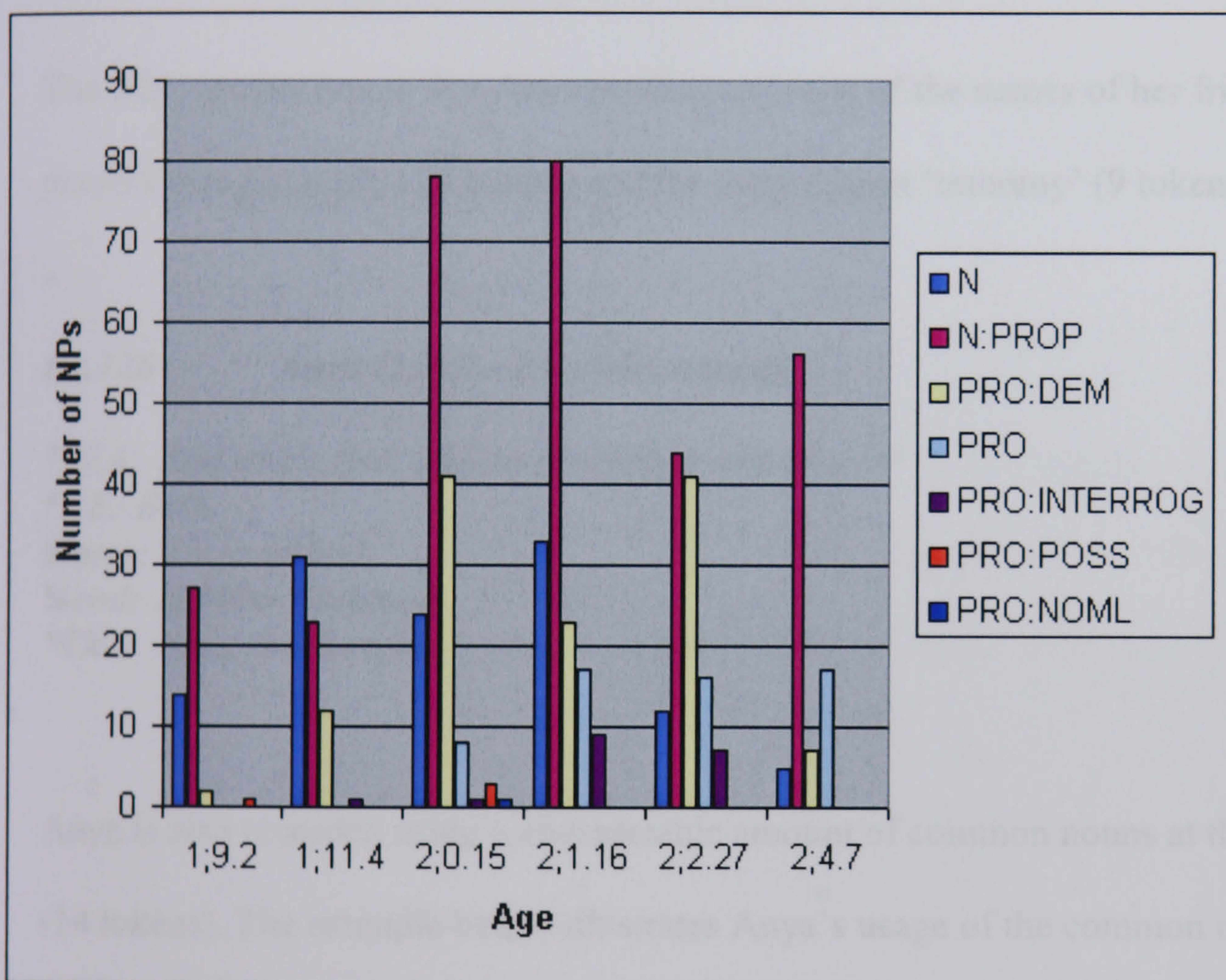


Figure 8.3 Anya – Single English NPs (English context)

At the age of 1;9.2, Anya uses more English proper nouns than common nouns. Closer analysis shows that Anya produces 11 types of English common nouns and 12 types of English proper nouns. An example of Anya's usage of an English proper noun is shown below. It is important to emphasise that the noun 'bear' is classified as a proper noun, as

Anya is thought to be using the noun 'bear' as a name of the animal to which she is referring.

Ex.125 *Anya (1;9.2 – English context)*

**TEA: Who's that there?*

**AE: Bear.*

%mor: En:prop|bear.

%cod: (ENPs=En:prop)

**TEA: Sooty the bear.*

The other proper nouns that Anya produces consist of the names of her friends from the nursery (see Example 126 below) and the proper noun 'mummy' (9 tokens).

Ex.126 *Anya (1;9.2 – English context)*

**TEA: And who's that, do you remember who that is?*

**AE: Beth.*

%mor: En:prop|beth.

%cod: (ENPs=En:prop)

**TEA: Beth, that's right.*

Anya is also recorded using a considerable amount of common nouns at that age of 1;9.2 (14 tokens). The example below illustrates Anya's usage of the common noun 'bike'.

Ex.127 *Anya (1;9.2 – English context)*

**TEA: What's that one called, you know what that is, how's that one go?*

**AE: Bike.*

%mor: En|bike.

%cod: (ENPs=En)

%com: The child is pointing to a picture of a motorbike on the jigsaw puzzle.

**TEA: Another bike, a motorbike, that's a motorbike.*

**AE: There.*

%mor: Eadv|there.

**TEA: That's a bike, that's right.*

It is important to point out that the above single noun phrase containing a common noun is not marked for an error, even though a determiner is not supplied before the noun. This is due to the fact that, at the age of 1;9.2, Anya has not yet reached an MLU score of 1.5 and is still considered to be in the one-word stage (c.f. section 4.3.4).

From the age of 2;0.15 onwards, Anya produces a much higher number of proper-noun tokens than common-noun tokens. The reason for this is that, at this age, Anya's MLU score reaches 1.7 and all common nouns that Anya produces without a determiner are marked as complex noun phrases with errors, with the exceptions of mass nouns (e.g. jam, milk, juice) and nouns used in the plural form (e.g. mushrooms, shoes, carrots) which do not require a determiner to precede them.

At the age of 1;9.2, Anya produces two other types of single English noun phrases. Two tokens of the demonstrative pronoun 'that' are recorded, as well as a token of the possessive pronoun 'mine', which is illustrated in Examples 128 below.

Ex. 128 *Anya (1;9.2 – English context)*

**TEA: Whose mum's that?*

**AE: Mine.*

%mor: Epro:poss|mine.

%cod: (ENPs=Epro:poss)

**TEA: Yours, Anya's, Anya's mummy, that's right.*

In the above example, Anya uses the first person possessive pronoun appropriately, as she is referring to herself (see section 2.4.3.1).

At the age of 1;11.4, there is an increase in the usage of demonstrative pronouns in Anya's English (12 tokens). She produces two types of demonstrative pronouns: 'that' (9 tokens) and 'this' (3 tokens), which she uses for the first time (Example 129).

Ex.129 *Anya (1;11.4 – English context)*

**TEA: Can you put the things in the holes, the pegs?*

**AE: Yes.*

**AE: This.*

%com: The child is playing with coloured pegs.

%mor: Epro:dem|this.

%cod: (ENPs=Epro:dem)

**TEA: Zero.*

**TEA: You don't put anything in there, do you?*

In the second sample (1;11.4), Anya is recorded using the interrogative pronoun 'what' for the first time, as is shown in the example below.

Ex.130 *Anya (1;11.4 – English context)*

**AE: What 0*v that?*

*%mor: Epro:interrog|what E*0v|be&3S&PRES Epro:dem|that.*

%cod: (ENPs=Epro:interrog/ENPs=Epro:dem)

**TEA: Iron, ironing clothes, does mummy have an iron to iron clothes?*

At the age 2;0.15, there is a significant increase in Anya's usage of English demonstrative pronouns (41 tokens), out of which 40 tokens are of the pronoun 'that'. In addition, one token of the demonstrative pronoun 'this' in the plural is recorded, as is shown in the example below.

Ex.131 *Anya (2;015 – English context)*

**TEA: What are these, do you know?*

**AE: What 0*v these?*

*%mor: Epro:interrog|what E*0v|be&3P&PRES Epro:dem|this-PL.*

%cod: (ENPs=Epro:interrog/ENPs=Epro:dem)

**TEA: What are these, what's this?*

It is important to emphasise that Anya's usage of the plural demonstrative pronoun 'these' could be the result of repetition of the adult utterance, as no other instances of the pronoun are recorded in the later samples.

There is also an increase in the number of possessive pronouns produced at 2;0.15, with two tokens of the pronoun 'mine' recorded and one token of the possessive pronoun 'yours', as illustrated in the example below.

Ex.132 *Anya (2;0.15 – English context)*

**AE: That 0*v yours, mine.*

*%mor: Epro:dem|that E*0v|be&3S&PRES Epro:poss|yours, Epro:poss|mine.*

%cod: (ENPs=Epro:dem/ENPs=Epro:poss/ENPs=Epro:poss)

**TEA: Yours, I'll have this one.*

In the example above, Anya shows contrastive use of the possessive pronouns in the first and second person singular, as she is referring to the teacher's cards, as well as her own.

At this age the first personal pronouns are recorded, as Anya produces 8 tokens of the personal pronoun 'it' (see Example 133). In the example below, Anya is referring to a cake and appropriately supplies the third person pronoun as the object of the transitive verb 'like'.

Ex.133 *Anya (2;0.15 – English context)*

***AE:** *Anya like-0*s it.*

%mor: *En:prop|anya Ev|like-*1S:PRES Epro|it.*

%cod: *(ENPs=En:prop/ENPs=Epro)*

***TEA:** *Cake, you like the cake, do you?*

In the third sample (2;0.15), Anya uses the nominal pronoun ‘one’ as a single noun phrase for the first time.

Ex.134 *Anya (2;0.15 – English context)*

***TEA:** *What are they?*

***AE:** *Anya 0*v one.*

%com: The child referring to a pair of shoes shown on the card.

%mor: *En:prop|anya *0v Epro:noml|one.*

%cod: *(ENPs=En:prop/ENPs=Epro:noml)*

***TEA:** *What is it?*

***AE:** *Anya.*

***TEA:** *Yours are white, aren't they?*

8.2.2.1 English Nouns (Correct NPs and NPs with Errors)

As far as Anya’s marking for the plural and the genitive case on English nouns in the English context is concerned, evidence of plural markings on common nouns can be found as early as the first sample at the age of 1;9.2 (see Table 8.7 and Table 8.8).

Table 8.7 Anya – English nouns (English context)

Age	Type		Number		Case	
	Common	Proper	Singular	Plural	Nominative	Genitive
1;9.2	14	29	42	1	43	-
1;11.4	34	23	54	3	57	-
2;0.15	86	86	165	7	168(*3)	4
2;1.16	106	89	172(*1)	23	193(*1)	2
2;2.27	62	52	108(*1)	6 (*1)	113	1
2;4.7	32	72	94	10(*2)	96(*3)	8(*2)

(*n) indicates the number of errors

Table 8.8 Anya – English common nouns (English context)

Age	Number		Case	
	Singular	Plural	Nominative	Genitive
1;9.2	13	1	14	-
1;11.4	31	3	34	-
2;0.15	79	7	86	-
2;1.16	85	21	106	-
2;2.27	54	8(*1)	62	-
2;4.7	29	3(*1)	31(*1)	1

(*n) indicates the number of errors

Table 8.9 Anya – English proper nouns (English context)

Age	Number		Case	
	Singular	Plural	Nominative	Genitive
1;9.2	29	-	29	-
1;11.4	23	-	23	-
2;0.15	86	-	82(*3)	4
2;1.16	87(*1)	2	87(*1)	2
2;2.27	51(*1)	-	50	1
2;4.7	65	7(*1)	65(*1)	7(*2)

(*n) indicates the number of errors

At the age of 1;9.2, Anya produces one English noun with the regular plural ‘-s’ ending in the English context, as illustrated below. It should be pointed out that the usage of the plural inflection could be the result of the repetition of the adult utterance.

Ex.135 *Anya (1;9.2 – English context)*

*TEA: *That's got pears on it.*

*AE: *Pears.*

^omor: *En|pear-PL.*

^ocod: *(ENPs=En)*

*TEA: *You've got a pear.*

However, Example 136 clearly illustrates that Anya has acquired the plural ending ‘-s’, as her usage of the inflection cannot be said to have been influenced by the adult’s utterance.

Ex.136 *Anya (1;11.4 – English context)*

**TEA: What are those?*

**AE: Shoes.*

%mor: En|shoe-PL.

%cod: (ENPs=En)

**TEA: Are there some shoes on you card?*

At the age of 2;1.16, contrastive use of the plural inflection is recorded, as Anya produces the common noun ‘flower’ both in the singular and the plural (illustrated in the examples below).

Ex.137 *Anya (2;1.16 – English context)*

**TEA: What have you got in your hand then?*

**AE: There Anya 0*v:aux got 0*det:art indef flower.*

*%mor: Eadv|there En:prop|maya E*0v:aux|have&3S&PRES Ev|got-PERF
E*0det:art indef|the En|flower.*

*%cod: (*ENPc=0Edet:art indef-En)*

%err: 0=det:art indef \$SYN \$ARTINDEFLOS (ERR)

**TEA: You've got a flower, haven't you?*

Ex.138 *Anya (2;1.16 – English context)*

**AE: Two flowers.*

%com: The child is pointing to a picture of some flowers.

%mor: Enum|two En|flower-PL.

%cod: (ENPc=Enum-En)

In the first two samples, there is no evidence of case marking in English. The first genitive marking on the noun is recorded at the age of 2;0.15 (see Table 8.9), with the English noun ‘baby’ being marked in all four instances (see Example 139).

Ex.139 *Anya (2;0.15 – English context)*

***AE:** *Baby's.*

%com: The child is pointing to a baby's towel in a picture book.

%mor: *En:gen:prop|baby-POSS.*

%cod: *(ENPs=En:gen:prop)*

***TEA:** *Is it a baby's towel?*

***AE:** *Ye.*

At this age (2;0.15), Anya also produces the proper noun 'baby' in the nominative, which shows that she has not merely learnt the different forms of the noun, but applies the rules of the English inflection system appropriately.

However, in the same sample three errors on English nouns are recorded, in which the possessive marker is omitted. This indicates that Anya has still not fully acquired the case marking on English nouns.

As opposed to the previous example, the example below illustrates Anya's omission of the possessive marker on the noun 'baby'.

Ex.140 *Anya (2;0.15 – English context)*

***AE:** *That 0*v baby-0*s.*

%mor: *Epro:dem|that E*0v|be&3S&PRES En|baby-*0POSS.*

%cod: *(ENPs=Epro:dem/*ENPs=En)*

%err: *0='s \$MOR \$NPOSSLOS (ERR)*

***TEA:** *A baby's bed, is it?*

8.2.2.2 English Pronouns (Correct NPs and NPs with Errors)

As far as personal pronouns in Anya's English are concerned, three types of personal pronouns are recorded in the six samples - 'it', 'you' and 'he'. At the age of 2;0.15, Anya

produces the pronoun 'it' (8 tokens) for the first time. This type of personal pronoun continues to feature in all the subsequent recordings, totalling 48 tokens in all, and proves to be the personal pronoun most frequently used by Anya. In the fourth sample (2;1.16), Anya is recorded using the personal pronoun 'you' for the first time, as shown in the example below.

Ex.141 *Anya (2;1.16 – English context)*

**AE: There you go.*
%mor: Eadv|there Epro|you Ev|go.
%cod: (ENPs=Epro)

It is important to emphasise that there is a possibility that the pronoun 'you' is produced by Anya as part of a phrase that she has been learnt as a single unit. i.e. a 'learnt item'.

The third type of personal pronoun that is recorded in Anya's English is the pronoun 'he', which she produces at the age of 2;2.27 for the first time (4 tokens). An example of this usage is provided below.

Ex.142 *Anya (2;2.27 – English context)*

**TEA: What's that?*
**AE: He's crying.*
°com: A little boy can be heard crying.
°mor: Epro|he Ev|be&3S&PRES Ev|cry-PROG.
°cod: (ENPs=Epro)
**TEA: He's crying, ye, Felix.*

In the above example, Anya appropriately uses the third person subjective personal pronoun 'he', as she is referring to a male person, i.e. her friend Felix.

There is no evidence in the six samples of Anya using either the plural forms of the personal pronouns, or marking them for any other case, i.e. the accusative or the dative, except the nominative.

Demonstrative pronouns are the most frequently produced type of pronouns by Anya, with 130 tokens of the pronouns ‘that’ and ‘this’ recorded in the six samples. Apart from using these pronouns in the singular, Anya produces plural forms of both types of demonstrative pronouns. At the age of 2;0.15, Anya is recorded using the plural demonstrative pronoun ‘these’ (see Example 131). In addition, Anya produces the plural form of ‘that’ as part of a question, as illustrated in the example below.

Ex.143 *Anya (2;1.16 – English context)*

*AE: *What 0*v that?*

*TEA: *What are those?*

*AE: *What are **those**?*

%mor: *Epro:interrog|what Ev|be&3P&PRES Epro:dem|those.*

%cod: *(ENPs=Epro:interrog/ENPs=Epro:dem)*

*TEA: *What are they then, do you know?*

*AE: *Keys.*

It should be pointed out that it is possible that Anya’s usage of the plural form of the demonstrative pronoun is the result of the repetition of the teacher’s utterances.

Another type of pronoun that Anya uses often in her English is the nominal pronoun ‘one’, for which 74 tokens are recorded in six samples. Anya mostly produces this pronoun in the singular, although one instance of the nominal pronoun ‘one’ in the plural is recorded at the age of 2;4.7, as shown in the example below.

Ex.144 *Anya (2;4.7 – English context)*

*AE: *Chickens.*

*AE: *Baby ones, chickens.*

%com: The child is looking through a picture book with animals.

%mor: *Eadj|baby Epro:noml|one-PL En|chicken-PL.*

%cod: *(ENPc=Eadj-Epro:noml/ENPs=En)*

*TEA: *What's that, what's this Anya?*

*AE: *Doggy.*

This example illustrates Anya's appropriate usage of the plural form of the nominal pronoun 'one', as she is referring to the plural noun 'chickens'.

8.2.3 Complex English Noun Phrases

Anya's usage of complex English nouns in an English context is varied, as she begins to use such noun phrases from the first recording (1;9.2). The frequency of complex noun phrases increases dramatically at the age of 2;0.15 and Anya continues to use a variety of complex noun phrases during all the subsequent recordings (see Table 8.10).

Table 8.10 Anya – Complex English NPs (English context)

Age	Edet:dem +	Edet:dem +	En:prop:gen +	Eadj +	Eqn +	Edet:dem +	Edet:poss +	Edet +	Edet:art(in)def +
	En	En:prop	En:prop	En:prop	En	Epro:noml	En	En	Eadj+En
1;9.2	-	2	-	-	-	1	-	-	-
1;11.4	1	-	-	-	-	2	-	-	-
2;0.15	1	1	-	-	1	12	-	-	-
2;1.16	3	-	-	-	-	5	-	-	-
2;2.27	3	1	-	2	-	14	1	1	1
2;4.7	1	-	2	-	-	7	-	-	1
Age	Edet:art indef +	Edet:art def +	Edet+Eadj +	En:prop:gen +	Edet +	En+	Edet:poss +	Eadj+	Edet:art indef +
	En	En	Epro:noml	En	Epro:noml	Enum	En:prop	En (pl)	En:prop
1;9.2	-	-	-	-	-	-	-	-	-
1;11.4	-	-	-	-	-	-	-	-	-
2;0.15	4	1	-	-	1	-	-	-	1
2;1.16	1	2	-	-	-	2	1	5	-
2;2.27	5	-	-	1	-	1	-	-	-
2;4.7	2	1	1	-	-	5	1	-	-
Age	Edet:art def+ En:prop	Eadj+ Epro:noml (pl)	Edet:art def+ Eadj+ Epro:noml						
1;9.2	-	-	-						
1;11.4	-	-	-						
2;0.15	-	-	-						
2;1.16	2	-	-						
2;2.27	1	-	-						
2;4.7	-	1	2						

This usage reflects the structure of English, which requires a determiner in front of a noun in a complex noun phrase.

At the age of 1;9.2, Anya produces her first complex noun phrases. Two complex noun phrases consist of a combination of a demonstrative determiner and noun (Example 145).

Ex. 145 Anya (1;9.2 – English context)

*AE: *That bear.*

⁰omor: *Edet:dem|that En:prop|bear.*

⁰ocod: *(ENPc=Edet:dem-En:prop)*

*TEA: *That bear.*

*AE: *Ye, please.*

The third complex noun phrase produced in this sample is a combination of a demonstrative determiner and nominal pronoun, as shown in the following example.

Ex.146 *Anya (1;9.2 – English context)*

**TEA: This one?*

**AE: Ye, that one.*

%mor: Eyn|ye Edet:dem|that Epro:noml|one.

%cod: (ENPc=Edet:dem-Epro:noml)

At the age of 1;11.4, Anya produces another type of complex English noun phrase, which consists of a combination of a demonstrative determiner and a common noun, as can be seen in the example below.

Ex.147 *Anya (1;11.4 – English context)*

**TEA: Are you going to look at the book?*

**AE: Door.*

%mor: En|door.

%cod: (ENPs=En)

**TEA: Do you want to look at the seasons book that you were looking at earlier?*

**AE: That door.*

%mor: Edet:dem|that En|door.

%cod: (ENPc=Edet:dem-En)

**TEA: No, not that door, that door's the toilet door for adults, isn't it?*

In the third sample (2;0.15), Anya produces a wide variety of complex English noun phrases. The one that she most frequently uses is the combination of a demonstrative determiner and a nominal pronoun ('that one' - 12 tokens), as illustrated in the example below.

Ex.148 *Anya (2;0.15 – English context)*

**TEA: Would you like to do something else?*
**AE: That one.*
%com: The child is pointing to a jigsaw puzzle.
%mor: Edet:dem|that Epro:noml|one.
%cod: (ENPc=Edet:dem-Epro:noml)
**TEA: Yes, I'll get that one.*

At this age, Anya produces a combination of either a definite (1 token) or an indefinite article (5 tokens) and a noun for the first time. Six instances of these are recorded in the third sample, examples of which can be found below.

Ex.149 *Anya (2;0.15 – English context)*

**TEA: Shall we find the top up here, who's there, who's that, do you know?*
**AE: A kangaroo.*
%mor: Edet:art indef|a En:prop|kangaroo.
%cod: (ENPc=Edet:art indef-En:prop)

Ex.150 *Anya (2;0.15 – English context)*

**AE: The end.*
%com: The child has finished reading a book.
%mor: Edet:art def|the En|end.
%cod: (ENPc=Edet:art def-En)
**TEA: The end, that's right, the end.*

In the first example, Anya appropriately supplies a determiner in front of the proper noun 'kangaroo', while the second example illustrates the use of the definite article as part of a set phrase. It should be noted that there is a possibility that Anya applies the definite article correctly as part of the particular phrase, because she has learnt the phrase as a single unit, i.e. a 'learnt item'. It is interesting to note that, although Anya supplies the

article before the noun in this sample, there are a number of examples in which she still fails to do so, which indicates that her use of determiners is not consistent yet.

One other type of complex noun phrase that Anya produces at the age of 2;0.15 is a combination of a quantifier and a noun, as the example below illustrates.

Ex.151 *Anya (2;0.15 – English context)*

***AE:** *No bus [/] no bus.*

%com: The child cannot find the bus shape that fits in the jigsaw.

%mor: *Eqn|no En|bus.*

%cod: *(ENPc=Eqn-En)*

At the age of 2;1.16, Anya produces two types of complex noun phrases for the first time.

A combination of a number and a noun is recorded twice in the sample (Example 152).

Ex.152 *Anya (2;1.16 – English context)*

***AE:** *Four legs.*

%com: The child is referring to a cow in the picture having four legs.

%mor: *Enum|four En|leg-PL.*

%cod: *(ENPc=Enum-En)*

Anya also produces a combination of a possessive determiner and a proper noun, as shown in the example below.

Ex.153 *Anya (2;1.16 – English context)*

***TEA:** *That's your mummy.*

***AE:** *My mummy.*

%mor: *Edet:poss|my En:prop|daddy.*

%cod: *(ENPs=Edet:poss-En:prop)*

***TEA:** *Your mummy, that's right.*

The above example illustrates the fact that Anya has acquired not only the possessive determiner 'my', which she uses accurately, but also the distinction between the possessive determiner in the second person 'your' and the first person 'my'.

At the age of 2;2.27, Anya produces a three word noun phrase, which is a combination of an indefinite article, an adjective and a noun for the first time, an example of which is provided below.

Ex.154 *Anya (2;2.27 – English context)*

***AE:** *This 0*v a baby doggy.*

%com: The child is referring to a jigsaw piece.

%mor: *Epro:dem|this E*0v|be&3S&PRES Edet:artindef|a Eadj|baby
En:prop|doggy.*

%cod: *(ENPs=Epro:dem/ENPc=Edet:artindef-Eadj-En:prop)*

***TEA:** *Baby doggy.*

In this sample, Anya is also recorded using a combination of a proper noun in the genitive case and a noun for the first time, in order to indicate the possessor and possession within a noun phrase (Example 155).

Ex.155 *Anya (2;2.27 – English context)*

***AE:** *This 0*v Spot's garden.*

%mor: *Epro:dem|this E*0v|be&3S&PRES En:prop:gen|spot-POSS En|garden.*

%cod: *(ENPs=Epro:dem/ENPc=En:prop:gen-En)*

***TEA:** *Spot's garden?*

In the last sample, at the age of 2;4.7, Anya produces ten different types of complex English noun phrases (24 tokens). She seems to prefer to use a combination of a demonstrative determiner and a nominal pronoun (7 tokens). At this age another three-

word noun phrase is recorded, which, in this case, is a combination of a determiner, an adjective and a nominal pronoun, as illustrated in the example below.

Ex.156 *Anya (2;4.7 – English context)*

***AE:** *There's a red one.*

%com: The child is referring to a red coloured shape she wants to thread onto some string.

%mor: *Eadv|there Ev|be&3S&PRES Edet:artindef|a Eadj|red Epro:noml|one.*

%cod: *(ENPc=Edet:artdef-Eadj-Epro:noml).*

***TEA:** *Red one, ye.*

8.2.4 English Noun Phrases with Errors

From Table 8.11, it is possible to determine that the majority of the English noun phrases with errors are complex noun phrases.

Table 8.11 Anya - English NPs with errors (English context)

Age	Single NPs	Complex NPs
1;9.2	-	-
1;11.4	-	2
2;0.15	1	61
2;1.16	-	76
2;2.27	1	45
2;4.7	3	29

At the age of 2;0.15, Anya produces a single noun phrase with a missing possessive marker on the noun, as can be seen from Table 8.12 below.

Table 8.12 Anya – Single English NPs with errors (English context)

Age	\$MOR \$NPOSSLOSS	\$MOR \$PRODEMNUMSG	\$SYN \$PROLEX	\$SYN \$PRORED
1;9.2	-	-	-	-
1;11.4	-	-	-	-
2;0.15	1	-	-	-
2;1.16	-	-	-	-
2;2.27	-	1	-	-
2;4.7	-	-	1	2

In Example 157 below, Anya fails to supply the possessive marker ('s) on the English noun 'baby'.

Ex.157 Anya (2;0.15 – English context)

*TEA: *What's this?*

*TEA: *Furniture.*

*AE: *That 0*v 0*det:art indef bed.*

*TEA: *Bed, ye.*

*AE: *That 0*v baby-0*s.*

%com: The child is referring to a picture of a cot in a book.

%mor: *Epro:dem|that E*0v|be&3S&PRES En:prop|baby-*0POSS.*

%cod: *(ENPs=Epro:dem/*ENPs=En:prop)*

%err: *0='s \$MOR \$NPOSSLOS (ERR)*

*TEA: *A baby's bed, is it?*

*AE: *Ye.*

As far as complex nouns with errors are concerned, it can be seen from Table 8.13 that

Anya produces her first complex English noun phrase with an error at the age of 1;11.4.

Table 8.13 Anya - Complex English NPs with errors (English context)

Age	\$SYN \$ARTINDEFLOS	\$SYN \$ARTDEFLOS	\$MOR \$NPOSSLOSS	\$MOR \$NPOSSLOSS \$SYN \$NPPOS
1;9.2	-	-	-	-
1;11.4	2	-	-	-
2;0.15	49	9	1	1
2;1.16	58	14	1	-
2;2.27	38	3	-	-
2;4.7	15	6	-	1
Age	\$MOR \$NPOSSLOSS \$SYN \$PRONOMLLOS	\$SYN \$ARTINDEFLOS \$SYN \$PRONOMLLOS	\$MOR \$NPPOS	\$SYN \$PROINTERROGLOS
1;9.2	-	-	-	-
1;11.4	-	-	-	-
2;0.15	-	-	-	-
2;1.16	1	1	-	-
2;2.27	-	-	1	1
2;4.7	-	-	1	-
Age	\$SYN \$ARTDEFLOS \$SYN \$PRONOMLLOS	\$MOR \$NNUMSG		
1;9.2	-	-		
1;11.4	-	-		
2;0.15	1	-		
2;1.16	-	1		
2;2.27	-	1		
2;4.7	-	1		
Age	\$MOR \$NNUMPL	\$MOR \$NPPOS \$MOR \$NPOSSLOSS; \$SYN \$NPPOS		
1;9.2	-	-		
1;11.4	-	-		
2;0.15	-	-		
2;1.16	-	-		
2;2.27	1	-		
2;4.7	2	1		
Age	\$MOR \$NPOSS; \$SYN \$NPPOSS	\$SYN \$ARTDEFLOS; \$MOR \$NPOSSLOSS		
1;9.2	-	-		
1;11.4	-	-		
2;0.15	-	-		
2;1.16	-	-		
2;2.27	-	-		
2;4.7	1	1		

In the second sample, Anya produces two complex noun phrases with errors, both involving the omission of an indefinite article. The example below illustrates one instance of Anya's failure to supply the indefinite article within the English noun phrase.

Ex.158 *Anya (1;11.4 – English context)*

***AE:** *0*det:artindef red car.*

%com: The child is referring to a picture of a red car on a card.

%mor: *E*0det:artindef|a Eadj|red En|car.*

%cod: *(*ENPc=0Edet:artindef-Eadj-En)*

%err: *0=artindef \$SYN \$ARTINDEFLOS (ERR)*

These types of errors increase in number in the third sample (2;0.15), when 58 tokens of complex noun phrases, all missing an article, are produced. This is due to the fact that Anya's MLU score reaches 1.7 and it is at this stage that all common nouns that she produces without a determiner are marked as errors (see section 4.3.4). It is from this age onwards that she produces more complex noun phrases with errors (211) than correct complex noun phrases (98). The 98 correct noun phrases include 95 in which a determiner is used appropriately. Out of the 211 complex noun phrases with errors, 195 are missing a determiner. This indicates both a developmental stage in which Anya experiments with her language, as well as a transition from a one-word to a two-word stage. This is confirmed by the data, as the number of complex noun phrases with errors decreases with age (see Table 8.11).

At the age of 2;0.15, two complex noun phrases with a missing possessive marker on the noun are also recorded (see example below).

Ex.159 *Anya (2;0.15 – English context)*

***TEA:** *What's this?*

***AE:** *That 0*v baby-0*s chair.*

%mor: *Epro:dem|that E*0v|be&3S&PRES En|baby-*0POSS En|chair.*

%cod: *(ENPs=Epro:dem/*ENPc=En-En)*

%err: *0='s SMOR SNPOSSLOS (ERR)*

***TEA:** *That's a baby's chair, that's right, ye.*

At the age of 2;1.16, Anya produces a complex noun phrase with an error, in which she fails to supply the plural inflection on the noun, resulting in the lack of agreement between the plural determiner ‘two’ and the noun it modifies (see Example 160).

Ex.160 *Anya (2;1.16 – English context)*

***AE:** Two bear-0*.
%mor: *Enum|two En:prop|bear-*0PL.*
%cod: *(*ENPc=Enum-En:prop)*
%err: *0=s \$MOR \$NNUMSG (ERR)*
***TEA:** *Two bears are trying to choose a bear.*

In the fourth sample (2;2.27), Anya produces a complex noun phrase, within which the word order is incorrect, as illustrated in the example below (see also section 5.2.2.1).

Ex.161 *Anya (2;2.27 – English context)*

***AM:** *Ima wheels blue [*].*
%mor: *Bv|imati&3S&PRES En|wheel-PL Eadj|blue.*
%cod: *(*ENPc=En-Eadj)*
%err: *wheels blue=blue wheels \$SYN \$NPPOS (ERR)*
‘It has blue wheels.’
***TEA:** *Ye, blue wheels, well done, they are.*

In this instance, Anya produces a mixed utterance, which contains a Bosnian verb and an English noun phrase. The error within the English noun phrase occurs when Anya inverts the word order by putting the head noun before its adjective, which is not acceptable in English, but is possible in Bosnian.

It is important to point out that the number of complex noun phrases which include a missing definite or indefinite article decreases considerably across the last two samples, as Anya begins to supply a determiner before a common noun more regularly.

8.3 Conclusion

In the English context, Anya produces almost exclusively English noun phrases, with only six Bosnian noun phrases and one mixed noun phrase recorded in the six samples analysed.

The majority of the English noun phrases are correct. Most of these are single noun phrases, although Anya starts producing complex noun phrases from the first recording, which continue to increase in number with age. Proper nouns are the most frequent type of single English noun phrase produced by Anya, although demonstrative and personal pronouns are used from the start. The plural inflection on nouns appears at the age of 1;9.2, while the first genitive marking on the noun is produced at the age of 2;0.15.

Anya starts using a variety of complex English noun phrases from the very first recording. The complex noun phrase that is most frequently produced is a combination of a demonstrative determiner and a nominal pronoun.

As far as the English noun phrases with errors are concerned, the majority are complex noun phrases, most of which feature an omission of either the indefinite or the definite article.

Chapter 9. Anya's Acquisition of the Noun Phrase in Bosnian

In the following chapter, Anya's development of the Bosnian noun phrase in Bosnian is analysed. An overview of all the noun phrases produced by RINA in the Bosnian context is presented first. The second part of the chapter focuses on Anya's acquisition of the Bosnian noun phrase in the Bosnian context and discusses the emergence and development of the different aspects of the Bosnian noun phrase.

9.1 Total Number of Noun Phrases (all utterances)

As far as the development of noun phrases in the Bosnian context by Anya is concerned, the number of the noun phrases increases with age (see Table 9.1; Figure 9.1).

Table 9.1 Anya – Total number of NPs incl. correct NPs and NPs with errors (Bosnian context)

Age	English NPs	Bosnian NPs	Mixed NPs	Total NPs (100%)	Proportion of NPs/Total utterances (%)
1;9.2	27 (37%)	46 (63%)	0 (0%)	73	47
1;11.4	57 (46%)	65 (52%)	2 (2%)	124	68
2;0.15	76 (54%)	62 (45%)	1 (1%)	139	64
2;1.16	53 (30%)	116 (66%)	8 (4%)	177	59
2;2.26	104 (42%)	137 (57%)	2 (1%)	243	96
2;4.7	155 (52%)	136 (45%)	8 (3%)	299	95

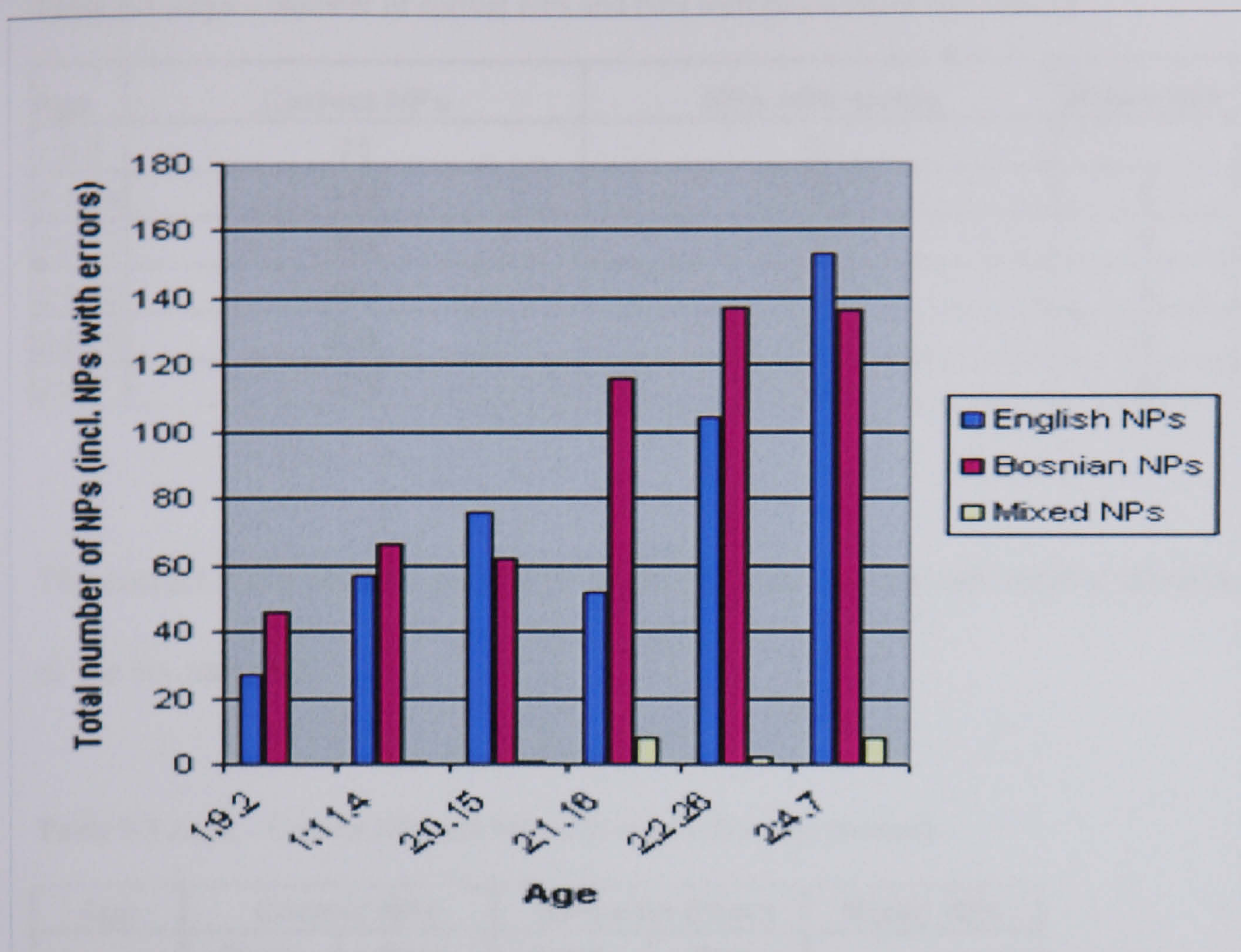


Figure 9.1 Anya – Total number of NPs incl. correct NPs and NPs with errors (Bosnian context)

However, Bosnian noun phrases are used together with a considerable number of English noun phrases in the Bosnian context. In the samples at 1;9.2, 1;11.4, 2;1.16 and 2;2.26, Anya produces more Bosnian noun phrases than English noun phrases, but at 2;0.15 and 2;4.7, Anya produces more English noun phrases than Bosnian ones.

A very low percentage of mixed noun phrases is present in Anya's speech in the Bosnian context.

The majority of the noun phrases that Anya produces in the Bosnian context are correct and the number of noun phrases with errors is also low.

Table 9.2 Anya – Number of correct NPs and NPs with errors (Bosnian context)

Age	Correct NPs	NPs with errors	Mixed NPs
1;9.2	71	2	-
1;11.4	119	3	2
2;0.15	137	1	1
2;1.16	160	9	8
2;2.26	228	13	2
2;4.7	278	13	8

The correct noun phrases produced in the Bosnian context are mostly Bosnian in four of the six samples.

Table 9.3 Anya – Correct NPs and NPs with errors (Bosnian context)

Age	Correct NPs		NPs with errors		Mixed NPs
	Engl.	Bos.	Engl.	Bos.	
1;9.2	26	45	1	1	-
1;11.4	57	62	-	3	2
2;0.15	76	61	-	1	1
2;1.16	51	109	2	7	8
2;2.26	104	124	-	13	2
2;4.7	151	127	4	9	8

At the ages of 2;0.15 and 2;4.7, Anya produces a slightly higher number of correct English noun phrases than correct Bosnian noun phrases in the Bosnian context (see Table 9.3). This is due to the fact that Anya borrows certain lexical items from English to fill a gap in her Bosnian vocabulary. In the third sample (2;0.15), Anya produces 14 types (29 tokens) of English nouns in the Bosnian context (e.g. box, puzzle, bed), whose Bosnian equivalents she is not recorded using in earlier samples. In addition, Anya only uses English personal pronouns at the age of 2;0.15, producing 16 tokens of 'it' and 'you' in this sample. There is no evidence of Anya using equivalent Bosnian personal pronouns in any of the previous samples. The English complex noun phrase 'that one' is also frequently used by Anya at the age of 2;0.15

(8 tokens). The fact that the equivalent Bosnian noun phrases are not produced at this stage or in earlier recordings indicates that Anya is borrowing the English lexical items to fill a gap in her knowledge of Bosnian vocabulary.

A similar pattern emerges in the last sample (2;4.7), when Anya again produces more correct English than correct Bosnian noun phrases in the Bosnian context. She borrows certain English nouns (e.g. playdough -3, spoon – 8; bottle – 9), as she has not yet acquired their Bosnian equivalents. In addition, Anya produces a high number of the English personal pronouns ‘you’ and ‘it’ (33 tokens), as well as the noun phrase ‘that one’ (27 tokens). She is not recorded using the Bosnian equivalents of any of the above mentioned noun phrases in earlier samples, which may suggest that she resorts to lexical borrowing from English to fill a gap in her Bosnian vocabulary.

As far as mixed noun phrases are concerned, Anya produces only 21 tokens in all six samples. The following example illustrates Anya’s usage of mixed noun phrases in the Bosnian context and involves a combination of an English demonstrative determiner ‘that’ and a Bosnian common noun ‘koku’ (‘chicken’) in the feminine accusative singular.

Ex.162 Anya (2;1.16 – Bosnian context)

**FAT: Šta hoćes sad da sastavljaš?*
‘What do you want to put together?’

**AM: That koku.*

%mor: Edet:dem|that Bn|kok-FEM:ACC:SG.

%cod: (MNPc=Edet:dem-Bn)
‘That chicken.’

In the Bosnian context, Anya produces mostly Bosnian noun phrases with errors.

Errors in the English noun phrases are rare, with only seven errors recorded in the six samples, an example of which can be found below.

Ex.163 *Anya (2;4.7 – Bosnian context)*

***AE:** *Yours spoon.*

%mor: *E*pro:poss|yours En|spoon.*

%cod: *(*ENPc=Epro:poss-En)*

%err: *yours=your \$MOR \$POSSPRO (ERR)*

This example illustrates Anya’s incorrect usage of the English second person possessive pronoun ‘yours’ instead of the possessive determiner ‘your’.

In the six samples analysed, 13 missing Bosnian noun phrases are recorded (see Table 9.4). However, there is an increase in the number of missing noun phrases in the last two samples.

Table 9.4 Anya – Missing Bosnian NPs (Bosnian context)

Age	Missing NPs
1;9.2	-
1;11.4	-
2;0.15	1
2;1.16	1
2;2.26	5
2;4.7	6

As table 9.4 illustrates, very few missing NPs are recorded in the first four samples. However, there is an increase in the number of missing noun phrases in the Bosnian context at the age of 2;2.26, all of which are missing Bosnian reflexive pronouns, as is shown in the example below.

Ex.165 *Anya (2;2.26 – Bosnian context)*

***AE:** *Kupa 0*pro:refl.*
%mor: *Bv|kup-3S:PRES *0Bpro:refl|se.*
%cod: *(NP0)*
%err: *0=pro:refl \$SYN \$PROREFLLOS (ERR)*
 'Having a bath.'
***MOT:** *Vidi kupa se beba, jeste, pokaži.*
 'Look, the baby is having a bath, yes, show.'

The verb 'kupati' ('to have a bath') is a reflexive verb which requires a reflexive pronoun 'se' ('self') in all contexts.

In the last sample (2;4.7), six missing Bosnian noun phrases are recorded. Out of these, two are missing direct objects (see the example below), three are missing subjects and one is a missing pronoun.

Ex.166 *Anya (2;4.7 – Bosnian context)*

***FAT:** *Papa Anya.*
 'Anya's eating.'
***AB:** *Tata hrani 0*d.*
%com: *The child wants her father to pretend to be feeding her.*
%mor: *Bn:prop|tat-MASC:NOM:SG Bv|hran-3S:PRES *0d.*
%cod: *(BNPs=Bn:prop/NP0)*
%err: *0=direct object \$SYN \$DLOS (ERR)*
 'Daddy's feeding.'

In the above example Anya fails to supply the direct object, which is required by the Bosnian transitive verb ‘hraniti’ (‘to feed’).

9.2 Bosnian Noun Phrases in the Bosnian Context (Bosnian and Mixed Utterances)

9.2.1 Correct Bosnian Noun Phrases

The majority of the Bosnian noun phrases that Anya produces in the Bosnian context are single noun phrases (see Table 9.5; Figure 9.2). She starts using complex Bosnian noun phrases from the age of 1;11.4 and the number of these in Anya’s speech increases in the last three samples.

Table 9.5 Anya – Correct Bosnian NPs (Bosnian context)

Age	Single NPs	Complex NPs
1;9.2	45	-
1;11.4	62	1
2;0.15	60	1
2;1.16	104	6
2;2.26	120	7
2;4.7	119	8

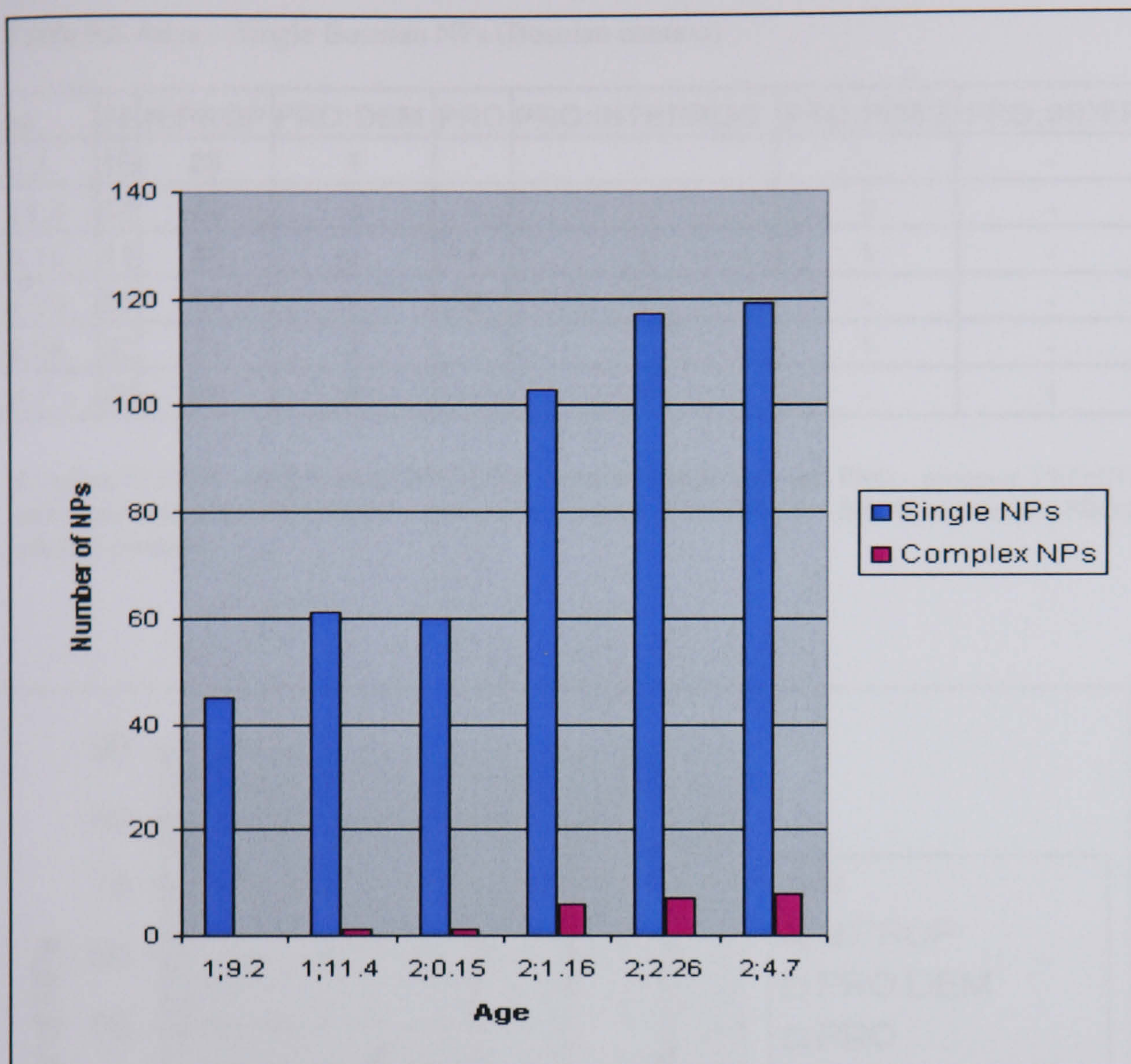


Figure 9.2 Anya – Correct Bosnian NPs (Bosnian context)

9.2.2 Single Bosnian Noun Phrases in the Bosnian Context

In the Bosnian context, Anya uses mostly Bosnian common and proper nouns, although she starts producing other types of single Bosnian noun phrases from age 1;9.2 and these increase in number with age (see Table 9.6; Figure 9.3). Compared to her usage of English single noun phrases in the English context, Anya uses far fewer types of single Bosnian noun phrases in the Bosnian context. However, it is important to stress that, although the number of single noun phrases is lower in Bosnian, the marking is more mature, as it reflects contrasts in case, gender and number.

Table 9.6 Anya – Single Bosnian NPs (Bosnian context)

Age	N	N:PROP	PRO:DEM	PRO	PRO:INTERROG	PRO:POSS	PRO:INDEF	PRO:REFL
1;9.2	16	28	1	-	-	-	-	-
1;11.4	17	42	-	-	-	3	-	-
2;0.15	11	47	-	1	-	1	-	-
2;1.16	38	64	-	2	-	-	-	-
2;2.26	37	79	2	-	-	1	-	1
2;4.7	46	63	8	-	1	-	1	-

N – noun; N:PROP – proper noun; PRO:DEM – demonstrative pronoun; PRO – pronoun; PRO:INTERROG – interrogative pronoun; PRO:POSS – possessive pronoun; PRO:INDEF – indefinite pronoun; PRO:REFL – reflexive pronoun

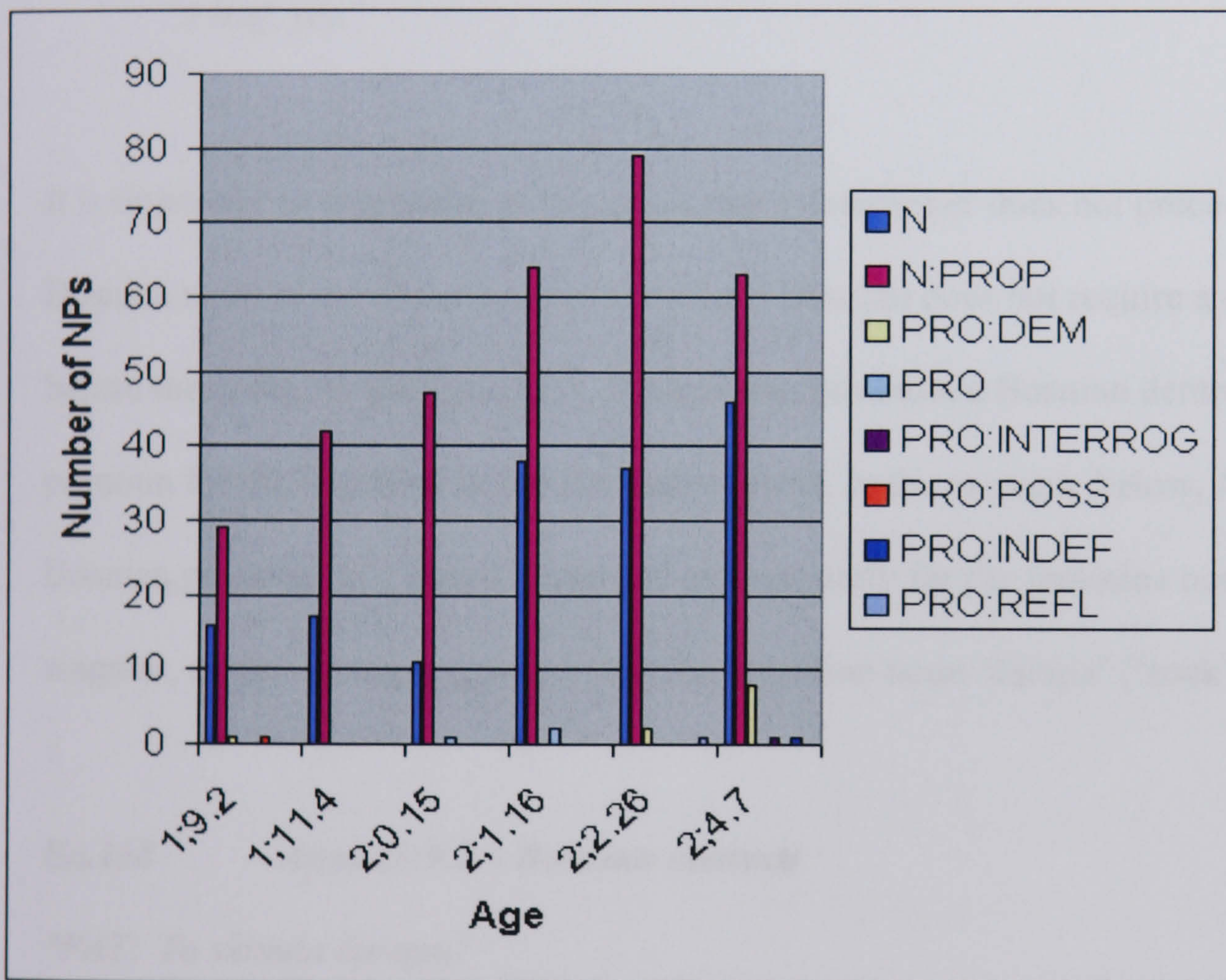


Figure 9.3 Anya – Single Bosnian NPs (Bosnian context)

At the age of 1;9.2, Anya uses slightly more proper nouns than common nouns. She produces 9 types of proper nouns (28 tokens), which are mostly names of relatives, friends and Anya's own name. The proper noun 'daddy' is used 14 times in the first sample, as it is her father Anya is playing with during this recording. As far as

common nouns are concerned, Anya produces 6 types of common nouns (16 tokens).

an example of which is shown below.

Ex.167 *Anya (1;9.2 – Bosnian context)*

**FAT: Anya, vidi, šta je ovo?*
'Anya, look, what is this?'

**AB: List.*
'A leaf.'

%mor: Bn|list-MASC:NOM:SG.

%cod: (BNPs=Bn)

**FAT: List, jeste.*
'A leaf, yes.'

It is important to emphasise at this point that a determiner does not precede the Bosnian noun in the above example, because Bosnian does not require a determiner before the noun. At the age of 1;9.2, Anya also produces a Bosnian demonstrative pronoun for the first time in the Bosnian context. In the example below, Anya uses the Bosnian pronoun 'ta', which is marked appropriately for the feminine nominative singular, as she is referring to the Bosnian feminine noun 'čarapa' ('sock').

Ex.168 *Anya (1;9.2 – Bosnian context)*

**FAT: To skinula čarapu?*
'You took your sock off?'

**FAT: Dođi da tata obuče.*
'Come so that daddy can put it on.'

**FAT: I drugu skidaš?*
'You are taking the other one off as well?'

**FAT: Nevalja to tako.*
'That's not good.'

**AB: Ta.*

°com: The child gives her sock to her father.

%mor: Bpro:dem|t-FEM:NOM:SG.

%cod: (BNPs=Bpro:dem)
'That.'

In the second sample (1;11.4), Anya still produces more Bosnian proper nouns than common nouns. As in the first sample, more types of proper nouns (16) than common nouns (12 types) are recorded. A similar usage of common and proper nouns to that discussed above is recorded across all the remaining four samples. At the age of 1;11.4, Anya produces the Bosnian possessive pronoun ‘Anya-in’ (‘Anya’s’) for the first time (3 tokens), as illustrated in the example below.

Ex.169 *Anya (1;11.4 – Bosnian context)*

***AB:** *Any-in.*

%com: The child is referring to a cup of tea.

%mor: *Bpro:poss|Any-MASC:NOM:SG.*

%cod: *(BNPs=Bpro:poss)*

‘Anya’s.’

***FAT:** *Any-ino, dobro, znam da je Any-ino.*

‘Anya’s, ok, I know it’s Anya’s.’

The possessive pronoun in the above example is appropriately marked for the masculine gender, as Anya is referring to the Bosnian common noun ‘čaj’ (‘tea’) which is also masculine in gender. At the age of 2;0.15, Anya uses a Bosnian personal pronoun for the first time. The personal pronoun ‘on’ (‘he’) is used in the accusative case, as the object of the utterance (see Example 170 below).

Ex.170 *Anya (2;0.15 – Bosnian context)*

***AB:** *Nema ga.*

%com: The child is referring to her Bugs Bunny toy.

%mor: *Bv|biti&NEG&3S&PRES Bpro|on&ACC&SG.*

%cod: *(BNPs=Bpro)*

‘He’s not here.’

***FAT:** *Nema ga, sakrio se lopov.*

‘He’s not there, he’s hiding.’

In the fifth sample (2;2.26), Anya uses a Bosnian reflexive pronoun 'se' ('self') for the first time.

Ex.171 *Anya (2;2.26 – Bosnian context)*

***AB:** *Nije se pokvarila.*

%com: The child is referring to her toy.

%mor: *Bv:aux|biti&3S&NEG&PRES Bpro:refl|se Bv|pokvari-3S:PAST:FEM.*

%cod: *(BNPs=Bpro:refl)*

'She's not broken.'

In the above example, Anya appropriately uses the reflexive pronoun 'se' with the reflexive verb 'pokvariti' ('to break').

A Bosnian indefinite pronoun is recorded in Anya's Bosnian for the first time at the age of 2;4.7, which, in this instance, is the pronoun 'nešto' ('something'), as illustrated below.

Ex.172 *Anya (2;4.7 – Bosnian context)*

***FAT:** *Šta tražiš to?*

'What are you looking for?'

***AB:** *Traži [*] nešto.*

%mor: *Bv|traž-*3S:PRES Bpro:indef|nešto-NEU:NOM:SG.*

%cod: *(BNPs=Bpro:indef)*

'Looking for something.'

9.2.2.1 Bosnian Nouns (Correct NPs and NPs with Errors)

From Table 9.7, it is possible to conclude that Anya marks Bosnian nouns for the plural, as well as for different cases, from the age of 1;9.2.

Table 9.7 Anya – Bosnian nouns (Bosnian context)

Age	Type		Gender			Number		Case						
	Common	Proper	Fem.	Masc.	Neu.	Sing.	Pl.	Nom.	Gen.	Dat.	Acc.	Voc.	Inst.	Loc.
1;9.2	16	29	12	27	6	44	1	44	-	1	-	-	-	-
1;11.4	19	44	31	27 (*1)	5	56	7 (*1)	62	-	-	1	-	-	-
2;0.15	11	49	35	25	-	59	1	57	-	-	3	-	-	-
2;1.16	46	74	66	45 (*1)	9	108	12 (*3)	108 (*2)	6	1	4	1	-	-
2;2.26	49	87	83	44	9	135	1	124 (*5)	4	3	4	1	-	-
2;4.7	58	71	62	55	12	124	5	118(*6)	1	2	6	2	-	-

(*n) indicates the number of errors

As far as Bosnian common and proper nouns are concerned, Anya supplies morphological inflections from a very early age (see Table 9.8 and Table 9.9).

Table 9.8 Anya – Bosnian common nouns (Bosnian context)

Age	Gender			Number		Case						
	Fem.	Masc.	Neu.	Sing.	Pl.	Nom.	Gen.	Dat.	Acc.	Voc.	Inst.	Loc.
1;9.2	1	10	5	15	1	16	-	-	-	-	-	-
1;11.4	3	11 (*1)	5	13	6 (*1)	19	-	-	-	-	-	-
2;0.15	8	3	-	10	1	10	-	-	1	-	-	-
2;1.16	18	19 (*1)	9	42	4	39(*3)	6	-	1	-	-	-
2;2.26	20	20	9	49 (*1)	0	44 (*6)	1	1	3	-	-	-
2;4.7	19	27	12	53	5	50(*4)	1	1	6	-	-	-

(*n) indicates the number of errors

Table 9.9 Anya – Bosnian proper nouns (Bosnian context)

Age	Gender			Number		Case						
	Fem.	Masc.	Neu.	Sing.	Pl.	Nom.	Gen.	Dat.	Acc.	Voc.	Inst.	Loc.
1;9.2	11	17	1	29	-	28	-	1	-	-	-	-
1;11.4	28	16	-	43	1 (*1)	43	-	-	1	-	-	-
2;0.15	27	22	-	49	-	47	-	-	2	-	-	-
2;1.16	48	26	-	66	8 (*2)	69	-	1	3	1	-	-
2;2.26	63	24	-	86	1	80 (*5)	3	2	1	1	-	-
2;4.7	43	28	-	71	-	68(*2)	-	1	-	2	-	-

(*n) indicates the number of errors

At the age of 1;9.2, Anya produces her first plural ending on a Bosnian common noun. The example below illustrates this usage, in which Anya uses the plural form of the noun 'kockica' ('block').

Ex.173 *Anya (1;9.2 – Bosnian context)*

**FAT: Šta imamo ovde, šta ima svašta, očemo domina da se igramo?
'What do we have here, a lot of things, shall we play dominos?'*

**AB: Kockice.*

%mor: Bn|kockic-FEM:NOM:PL.

%cod: (BNPs=Bn)

'Blocks.'

At the age of 2;1.16, contrastive use of the plural inflection on the common noun 'jaje' ('egg') is recorded. In this sample, Anya produces both the singular form of the noun ('jaje'), as well as the plural ('jaja'), as illustrated in the following examples.

Ex.174 *Anya (2;1.16 – Bosnian context)*

**AM: Jaje go [*] in here.*

'The egg goes in here.'

%com: The child is playing with a puzzle.

*%mor: Bn|jaj-NEU:NOM:SG Ev|go-*1S:PRES Eprep|in Eadv|here.*

%cod: (BNPs=Bn)

**FAT: Neide tu jaje.*

'The egg doesn't go there.'

Ex.175 *Anya (2;1.16 – Bosnian context)*

**FAT: A sta će čika Vlado da ti donese?*

**AB: Jaja.*

%mor: Bn|jaj-NEU:NOM:PL.

%cod: (BNPs=Bn)

%com: The child is referring to Easter eggs.

In the first example, Anya is referring to a piece of the puzzle with an egg on it and appropriately refers to it in the singular. The second example illustrates Anya's ability to apply the plural inflection appropriately, which indicates that she has not merely learnt the different forms of the noun, but is applying the rules of the Bosnian grammatical system as required by the context.

The first case marking on nouns in Anya's Bosnian is recorded in the first sample at the age of 1;9.2, and it involves the usage of the dative case on a proper noun, as shown in the example below.

Ex.176 *Anya (1;9.2 – Bosnian context)*

**FAT: Poslije ćemo staviti Vanji, poslije.
'We'll put it on Vanja later, later.'*

**AB: Anya-i.*

%com: The child puts the leaf on her head.

%mor: *Bn:prop|Anya-FEM:DAT:SG.*

%cod: (*BNPs=Bn:prop*)
'To Anya.'

In this instance, Anya produces the dative singular on the proper noun, which is her own name, as she wishes to put a leaf on her own head and indicates this by using the dative case. Similarly, in the third sample, at the age of 2;0.15, she uses the accusative case to show that she wishes the researcher to film her with the camera, as shown in the example below.

Ex.177 *Anya (2;0.15 – Bosnian context)*

**AB: Any-u.*

%com: The child wants the observer to film her with the camera.

%mor: *Bn:prop|Any-FEM:ACC:SG.*

%cod: (*BNPs=Bn:prop*)
'Anya.'

Anya's use of the genitive case on Bosnian common nouns is recorded at the age of 2;1.16 and involves the feminine genitive plural form of the noun, as illustrated in Example 178.

Ex.178 *Anya (2;1.16 - Bosnian context)*

**FAT: Čega ćemo sad da se igramo, čega?*
'What are we going to play with, what?'

**AB: Domina.*

%mor: Bn|domin-FEM:GEN:PL.

%cod: (BNPs=Bn)
'Dominos.'

Apart from the genitive, dative and accusative, Anya also produces vocative case endings on common, as well as proper, nouns, which appear at the age of 2;1.16.

Ex.179 *Anya (2;1.16 – Bosnian context)*

**AB: Any-o [/] Any-o.*

%mor: Bn:prop|any-FEM:VOC:SG.

%cod: (BNPs=Bn:prop)

In this example, Anya refers to something she has torn and uses the vocative ending on the proper noun (her own name) to express disapproval of her own actions. The vocative ending is used appropriately, as Anya is addressing herself.

The three examples given above (Examples 176, 177 and 179) show contrastive use of case markings in Bosnian and Anya's ability to apply case inflections appropriately.

9.2.2.2 Bosnian Pronouns (Correct NPs and NPs with Errors)

As far as Bosnian personal pronouns are concerned, Anya produces such pronouns marked for the accusative and instrumental (see Table 9.10). However, she fails to

supply the correct ending on the personal pronouns in the first person instrumental plural at the age of 2;4.7.

Table 9.10 Anya – Bosnian personal pronouns (Bosnian context)

Age	Gender			Number						Case							
	Fem.	Masc.	Neu.	Sing.			Pl.			Nom.	Gen.	Dat.	Acc.	Voc.	Inst.	Loc.	
				Person													
			1 st	2 nd	3 rd	1 st	2 nd	3 rd	1 st	2 nd	3 rd						
1;9.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1;11.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
2;0.15	-	1	-	-	-	1	-	-	-	-	-	-	1	-	-	-	
2;1.16	-	1	-	-	-	1	-	-	-	-	-	-	1	-	-	-	
2;2.26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
2;4.7	-	-	-	-	-	-	4	-	-	-	-	-	-	-	4 (*4)	-	

(*n) indicates the number of errors

The following example illustrates Anya's usage of the personal objective pronoun in the third person singular accusative 'ga' ('him').

Ex.180 Anya (2;0.15 – Bosnian context)

***AB:** *Nema ga.*

%com: The child is referring to her Bugs Bunny toy.

%mor: *Bv|biti&NEG&3S&PRES Bpro|on-3S&MASC&ACC.*

%cod: (*BNPs=Bpro*)

Table 9.11 shows Anya's ability to mark the demonstrative pronouns according to gender from the very first recording, so that they agree in marking with the item to which they refer. All of the Bosnian demonstrative pronouns are marked appropriately for the nominative singular.

Table 9.11 Anya – Bosnian demonstrative pronouns (Bosnian context)

Age	Gender			Number		Case						
	Fem.	Masc.	Neu.	Sing.	Pl.	Nom.	Gen.	Dat.	Acc.	Voc.	Inst.	Loc.
1;9.2	1	-	-	1	-	1	-	-	-	-	-	-
1;11.4	-	-	-	-	-	-	-	-	-	-	-	-
2;0.15	-	-	-	-	-	-	-	-	-	-	-	-
2;1.16	-	-	-	-	-	-	-	-	-	-	-	-
2;2.26	-	-	2	2	-	2	-	-	-	-	-	-
2;4.7	1	-	7	8	-	8	-	-	-	-	-	-

In the example below, Anya produces the Bosnian demonstrative pronoun ‘ta’ (‘that’), which contains the feminine nominative singular ending, and it agrees in gender with the noun it refers to, which, in this case, is the feminine noun ‘čarapa’ (‘sock’).

Ex.181 Anya (1;9.2 – Bosnian context)

***AB: Ta.**

%com: The child gives the sock to her father.

%mor: *Bpro:dem|t-FEM:NOM:SG.*

%cod: (*BNPs=Bpro:dem*)

‘That’.

As far as Bosnian possessive pronouns are concerned, Anya produces five pronouns during the six recordings (see Table 9.12).

Table 9.12 Anya – Bosnian possessive pronouns (Bosnian context)

Age	Gender			Number		Case						
	Fem.	Masc.	Neu.	Sing.	Pl.	Nom.	Gen.	Dat.	Acc.	Voc.	Inst.	Loc.
1;9.2	-	1(*1)	-	-	-	-	-	-	-	-	-	-
1;11.4	-	3	-	3	-	3	-	-	-	-	-	-
2;-.15	-	1	-	1	-	1	-	-	-	-	-	-
2;1.16	-	-	-	-	-	-	-	-	-	-	-	-
2;2.26	-	-	1	1	-	1	-	-	-	-	-	-
2;4.7	-	-	-	-	-	-	-	-	-	-	-	-

(*n) indicates the number of errors

All the possessive pronouns are inflected appropriately for the nominative singular.

Anya is able to ensure that they also agree in gender with the noun to which they refer.

Ex.182 *Anya (1;11.4 – Bosnian context)*

***AB: Any-in.**

%com: The child is referring to her bed.

%mor: *Bpro:poss|Any-MASC:NOM:SG.*

%cod: (*BNPs=Bpro:poss*)

'Anya's.'

In the above example, Anya produces the Bosnian possessive pronoun in the masculine nominative singular form, as the noun she is referring to is 'krevet' ('bed'), which, in Bosnian, is masculine in gender.

9.2.3 Complex Bosnian Noun Phrases

As far as complex Bosnian noun phrases are concerned, Anya produces a far lower number of these than of complex English noun phrases in the English context. The range of combinations within Bosnian complex noun phrases in the Bosnian context is also far narrower than within English complex noun phrases in the English context (see Table 9.13; Figure 9.4).

Table 9.13 Anya – Complex Bosnian NPs (Bosnian context)

Age	Bdet:poss+ Bn	Badj+ Bn	Badj+ Bn:prop	Bdet:dem+ Bn	Bdet+ Bn:prop	Bdet:poss+ Bn:prop	Bnum+ Bn	Bqn+ Bn
1;9.2	-	-	-	-	-	-	-	-
1;11.4	-	-	-	-	1	-	-	-
2;0.15	1	-	-	-	-	-	-	-
2;1.16	-	3	-	-	-	-	2	1
2;2.26	1	5	-	-	-	1	-	-
2;4.7	-	3	3	2	-	-	-	-

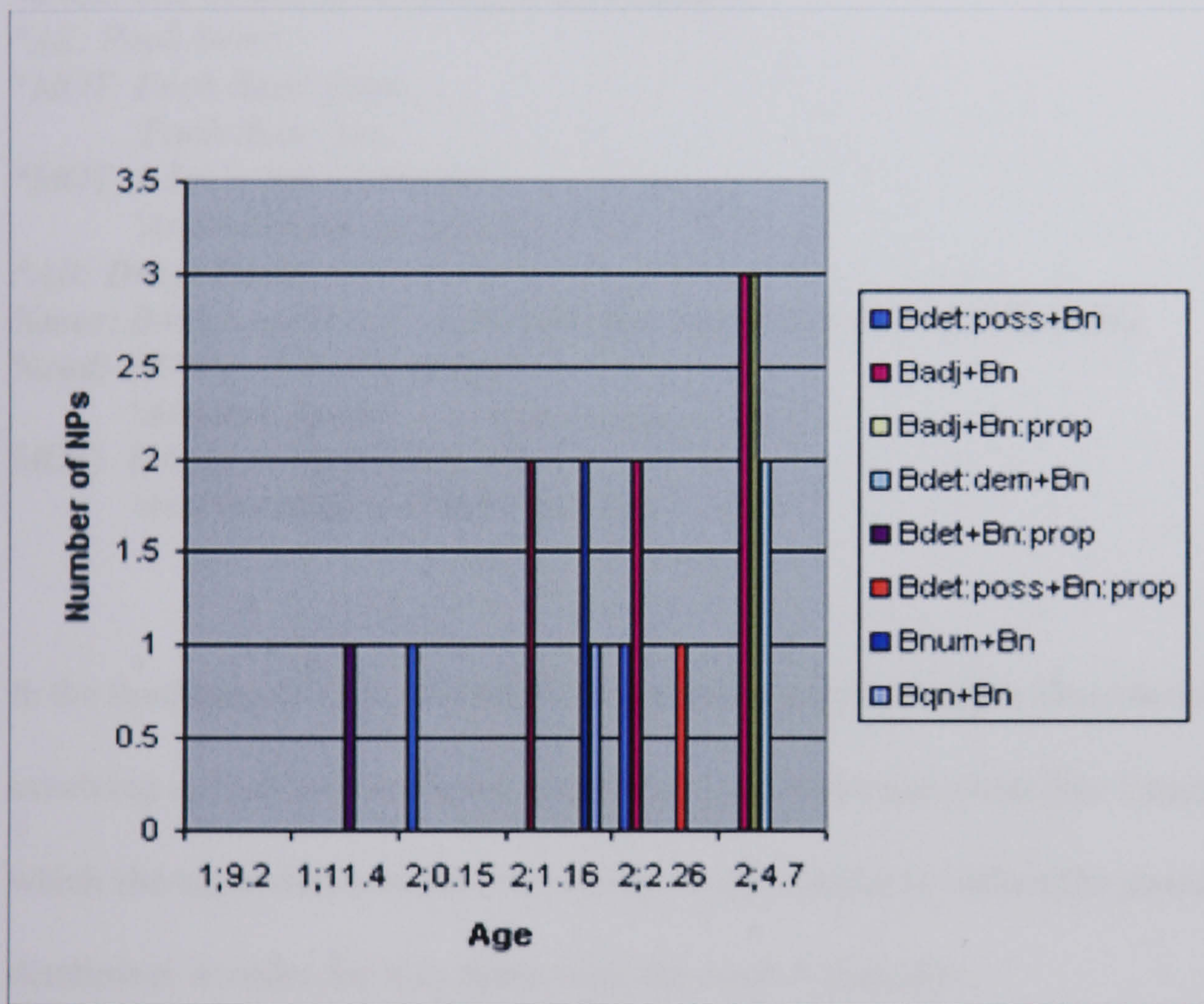


Figure 9.4 Anya – Complex Bosnian NPs (Bosnian context)

This finding does not indicate Anya's slower pace of language development in Bosnian, but a differentiation in language structures. The structure of Bosnian does not require a determiner to precede a noun, whereas English does and this is reflected in Anya's language. In addition, the fact that Bosnian is rich in morphological marking, which is not present in English, is also reflected in Anya's language.

At the age of 1;11.4, Anya produces her first complex Bosnian noun phrase, which consists of a Bosnian determiner ‘*drugi*’ (‘another’) and a Bosnian proper noun ‘*Pooh*’, as illustrated in the example below.

Ex.183 *Anya (1;11.4 – Bosnian context)*

**MOT: Šta je nacrtano?*

‘What is drawn on it?’

%com: The mother is referring to an umbrella.

**AE: Pooh Bear.*

**MOT: Pooh Bear, jeste.*

‘Pooh Bear, yes.’

**MOT: I šta je još nacrtano?*

‘And what else is on it?’

**AB: Drugi Pooh.*

%mor: Bdet|drug-MASC:NOM:SG Bn:prop|Pooh-MASC:NOM:SG.

%cod: (BNPc=Bdet-Bn:prop)

‘Another Pooh.’

MOT: I drugi je Pooh Bear, jeste.

‘And the other is Pooh Bear, yes.’

In the third sample (2;0.15), Anya is recorded using a complex Bosnian noun phrase involving a Bosnian possessive determiner and a Bosnian noun (see Example 184), in which she again demonstrates her ability to appropriately inflect the possessive determiner in order for it to agree with the noun it precedes.

Ex.184 *Anya (2;0.15 – Bosnian context)*

**FAT: A šta je ovo, šta je ovo?*

‘And what is this, what is this?’

**AB: Any-in marsovac.*

%mor: Bdet:poss|Any-MASC:NOM:SG Bn|marsovac-MASC:NOM:SG.

%cod: (BNPc=Bdet:poss-Bn)

‘Anya’s martian.’

**FAT: Marsovac, Any-in marsovac, jel?*

‘Martian, Anya’s martian, is it?’

In Example 185, another type of a Bosnian complex noun phrase recorded in Anya's speech is illustrated, which involves a Bosnian quantifier and a Bosnian noun.

Ex.185 Anya (2;1.16 – Bosnian context)

**AB: Puno ptica.*

%mor: Bqn|puno Bn|ptic-FEM:NOM:PL.

%cod: (BNPc=Bqn-Bn)

'A lot of birds.'

**FAT: Puno ptica, jeste.*

'A lot of birds, yes.'

In this instance, Anya produces a plural form of the Bosnian noun 'ptica' ('bird') and a plural quantifier 'puno' ('a lot'). At the same age (2;1.16), Anya also uses a combination of a Bosnian number and a Bosnian noun, which is appropriately marked for the plural, as shown in the example below.

Ex.186 Anya (2;1.16 – Bosnian context)

**AB: Dva vuka [/] dva vuka.*

%mor: Bnum|dv-MASC:NOM:SG Bn:prop|vuk-MASC:NOM:PL.

%cod: (BNPc=Bnum-Bn:prop)

'Two wolves.'

At the age of 2;1.16, the first complex noun phrase consisting of a Bosnian adjective and a Bosnian noun is recorded in Anya's Bosnian. This type of complex noun phrase proves to be the one most frequently used by Anya, totalling 11 tokens in the last three samples. The example below exemplifies Anya's usage of the complex noun phrase outlined above.

Ex.187 *Anya (2;1.16 – Bosnian context)*

***AB:** *Crvena jabuka.*

%com: The child referring to a toy apple.

%mor: *Badj|crven-FEM:NOM:SG Bn|jabuk-FEM:NOM:SG.*

%cod: *(BNPc=Badj-Bn)*

'Red apple.'

As in other Bosnian complex noun phrases, in this type the determiner has to agree in gender, number and case with the noun it precedes. In the above example, Anya produces a feminine Bosnian noun in the nominative singular, which is preceded by the adjective 'crvena' ('red'), to which the feminine nominative singular ending has been added correctly.

In the last recording (2;4.7), Anya produces a combination of a Bosnian demonstrative determiner and a Bosnian noun within a complex noun phrase (see Example 188).

Ex.188 *Anya (2;4.7 – Bosnian context)*

***AB:** *Sad je [*] beba ova sjedi.*

%mor: *Badv|sad B*v|biti&3S&PRES Bn|beb-FEM:NOM:SG*

Bdet:dem|ov-FEM:NOM:SG Bv|sjed-3S:PRES.

%cod: *(BNPc=Bn-Bdet:dem)*

'Now baby this is sitting.'

The above example illustrates the varying word order that is acceptable in a Bosnian complex noun phrase, in which the head noun 'beba' ('baby') can precede its determiner 'ova' ('this'). Anya again succeeds in producing agreement between the two components of the complex noun phrase, by inflecting the demonstrative determiner for the feminine nominative singular, as the head noun is also marked for the feminine nominative singular.

9.2.4 Bosnian Noun Phrases with Errors

Most of the Bosnian noun phrases with errors consist of single noun phrases, with only five complex Bosnian noun phrases with errors recorded in the six samples (see Table 9.14).

Table 9.14 Anya – Bosnian NPs with errors (Bosnian context)

Age	Single NPs	Complex NPs
1;9.2	1	-
1;11.4	3	-
2;0.15	-	1
2;1.16	4	3
2;2.26	12	1
2;4.7	9	-

As Table 9.15 shows, the majority of the single noun phrases with errors involve an incorrect usage of the nominative case on the noun (20 tokens).

Table 9.15 Anya – Single Bosnian NPs with errors (Bosnian context)

Age	\$MOR \$NNUMPL	\$MOR \$PROPOSSLOSINFL	\$MOR \$NGMASC	\$MOR \$NCNOM	\$MOR \$PROLOSINFL
1;9.2	-	1	-	-	-
1;11.4	1	-	2	-	-
2;0.15	-	-	-	-	-
2;1.16	-	-	1	3	-
2;2.26	-	-	-	12	-
2;4.7	-	-	-	5	4

In the example below, Anya uses the nominative singular inflection on the noun 'kamera' ('camera') instead of the dative singular, in order to express that the sheep is

on the camera. In addition, she fails to supply the preposition 'na' ('on'), which is always followed by a Bosnian noun in the dative.

Ex.189 *Anya (2;1.16 – Bosnian context)*

**FAT: Gdje ti je ovca?*

'Where's your sheep?'

**AB: 0*prep kamera [*] ovca.*

*%mor: B*0prep|na Bn|kamer-FEM:*NOM:SG Bn|ovc-FEM:NOM:SG.*

*%cod: (*BNPs=Bn/BNPs=Bn)*

%err: kamera=kameri \$MOR \$NCNOM (ERR)

'The sheep is on the camera.'

At the age of 1;9.2, Anya produces a Bosnian noun phrase with an error involving the omission of the masculine singular ending on the demonstrative pronoun, as illustrated in the example below.

Ex.190 *Anya (1;9.2 – Bosnian context)*

**FAT: Čiji je to vozić, jel to moj vozić?*

'Whose train is that, is that my train?'

**AB: Any-i-0*.*

*%mor: Bpro:poss|*Any-i-FEM:NOM:SG.*

*%cod: (*BNPs=Bpro:poss)*

%err: Any-i=Any-in \$MOR \$DETPOSSLOSINFL (ERR)

'Anya's.'

**FAT: Anyin vozić.*

'Anya's train.'

In the second sample (1;11.8), Anya also produces a morphological error, which this time occurs on the Bosnian noun 'dječak' ('boy'). The common noun is recorded in the masculine accusative plural, which is incorrect, as Anya is only referring to one boy (see Example 191).

Ex.191 *Anya (1;11.4 – Bosnian context)*

***AB:** *Dječake.*

%mor: *Bn|dječak-MASC:ACC:*PL.*

%cod: *(*BNPs=Bn)*

%err: *dječake=dječaka \$MOR \$NNUMPL (ERR)*
'Boys.'

At the age of 2;4.7, Anya produces four tokens of the same type of error, which involves the omission of the inflection for the instrumental case on the personal pronoun in the first person plural, as illustrated in Example 192.

Ex.192 *Anya (2;4.7 – Bosnian context)*

***FAT:** *Jesi išla na bazen?*

'Did you go swimming?'

***AB:** *Je.*

'Yes.'

***AM:** *That one [*] Joseph ide s nam-0*.*

%com: The child is telling her father who goes swimming with her.

%mor: *Edet:dem|that Epro:noanya|one Bn:prop|joseph-MASC:NOM:SG*
*Bv|id-3S:PRES Bprep|s Bpro|nam-*01P:INS.*

%cod: *(*ENPc=Edet:dem-Epro:noanya/BNPs=Bn:prop/*BNPs=Bpro)*

%err: *NP=0 \$SYN \$NPRED nam=nama \$MOR \$PROLOSINFL (ERR)*
'That Joseph goes with us.'

In the above example, Anya uses the appropriate preposition 's' ('with') to indicate in whose company the action is performed. However, she incorrectly marks the personal plural pronoun 'mi' ('we') for the instrumental case 's nama' ('with us').

As far as complex Bosnian noun phrases are concerned, Anya produces very few errors.

Table 9.16 Anya – Complex Bosnian NPs with errors (Bosnian context)

Age	\$MOR \$DETPOSSGMASC	\$MOR \$DETGMASC	\$SYN \$NPPOS	\$MOR \$NNUMPL
1;9.2	-	-	-	-
1;11.4	-	-	-	-
2;0.15	-	-	1	-
2;1.16	-	1	-	2
2;2.26	1	-	-	-
2;4.7	-	-	-	-

The following two examples (Example 193 and 194) illustrate errors which occur in the agreement within the complex noun phrase.

Ex.193 *Anya (2;1.16 - Bosnian context)*

***AB:** *Drugi [*] ptice.*

%mor: *Bdet|drug-*MASC:NOM:PL Bn|ptic-FEM:NOM:PL.*

%cod: *(*BNPc=Bdet-Bn)*

%err: *drugi=druge \$MOR \$DETGMASC (ERR)*

‘Other birds.’

In the above example, Anya produces a combination of a Bosnian determiner and a Bosnian noun. However, Anya fails to supply the appropriate ending on the determiner, which, in this case, should have been a feminine nominative plural ending, as the noun it precedes is in the feminine nominative plural. Instead, Anya marks the determiner with a masculine ending, although the number and case are correct.

Similarly, in example given below, Anya marks the possessive determiner for the incorrect gender, in this case the masculine. The ending on the determiner should have agreed with the noun, which is feminine (‘šišarka’ – cone).

Ex.194 Anya (2;2.26 – Bosnian context)

**AM: This 0*v Vanjin [*] šišarka.*

*%mor: Epro:dem|this *0v Bdet:poss|vanjin-*MASC:NOM:SG
Bn|šišark-FEM:NOM:SG.*

*%cod: (ENPs=Epro:dem/*BNPc=Bdet:poss-Bn)*

*%err: vanjin=vanjina \$MOR \$DETPOSSGMASC (ERR)
'This is Vanja's cone.'*

9.3 Conclusion

In the Bosnian context, Anya uses mostly Bosnian noun phrases, although she also produces a considerable number of English noun phrases. The percentage of mixed noun phrases is low. The majority of Bosnian noun phrases are correct, while Bosnian noun phrases with errors are infrequent. The correct Bosnian noun phrases are mostly single noun phrases, with proper and common nouns being in the majority. Anya marks Bosnian nouns for the plural, as well as different cases from the very first recording. The personal pronouns are also marked for case. In addition, Anya appropriately marks demonstrative pronouns for gender in order for them to agree with the item to which they refer. The majority of Bosnian noun phrases with errors are single noun phrases, which involve incorrect usage of the nominative case on the noun.

As far as complex Bosnian noun phrases are concerned, Anya produces a far lower number of these than of complex English noun phrases in the English context. This reflects the differences in structure of the two languages, which are evident in Anya's language. The complex noun phrase that is used most frequently is the combination of a Bosnian adjective and a Bosnian noun.

Chapter 10. Conclusion

10.1 Introduction

The central issue in studies of bilingual first language acquisition has been whether bilingual children who are acquiring two languages simultaneously are able to separate their two languages from the outset or initially operate with one language system (see Volterra and Taeschner, 1978; Vihman, 1985; De Houwer, 1990; Meisel 2000).

This area has been subject to considerable controversy and debate, and the present study aims to significantly contribute to the discussion by investigating the language development of two 20 month-old bilingual children, simultaneously acquiring English and Bosnian in England.

The study contributes to the 'separation' debate by investigating the language development of bilingual children, from the age of 1;8, who are acquiring two morphologically very different languages. The literature on bilingual children's differentiation of their languages mostly involves studies on children of 2;0 and above (see De Houwer, 1990; Lanza, 1997a), which have not been able to establish whether bilingual children are able to develop two separate systems even before the age of 2:0. The present study, on the other hand, allows a detailed analysis of the bilingual children's development of two structurally very different languages from a very early age (see also Sinka, 2000; Deuchar and Quay, 2000).

In this study, the separation issue is addressed by establishing whether the children are able to use their languages in contextually sensitive ways from an early age, as well as investigating whether the children develop language-appropriate morphological markings in the two languages, specifically the noun phrase, from the outset. The findings are interpreted in relation to parental input, which is thought to influence bilingual language development (see Lanza, 1997a).

The research presented above also involves the investigation of a combination of languages previously unresearched within the area of bilingual child language acquisition. In addition, this study represents an original contribution to the knowledge about the acquisition of the Bosnian language, on which very little research has been conducted.

This chapter is dedicated to a discussion of the major findings and is concluded with a section focusing on the implications and directions for further research.

10.2 Discussion of the Major Findings

The principal finding of this study is that bilingual children as young as 1;8 are able to differentiate their two languages according to context, which provides evidence to support the separate development hypothesis (see section 5.2.).

As far as Rina's language use is concerned, she uses more English with her mother (English context) and Bosnian with her father (Bosnian context) from the

age of 1;8 (see 5.2.1). As her language use is context appropriate, it is possible to conclude that Rina has achieved pragmatic differentiation of her two languages at a very early age. Her context-inappropriate usage of Bosnian utterances in an English context and vice versa is probably due to the borrowing of lexical items from the other language. The findings that serve as evidence of this show that Rina uses Bosnian lexical items in the English context in order to fill a gap in her knowledge of the English vocabulary. The English equivalents of such lexical items had not been recorded in the English context up to then.

The number of mixed utterances in both contexts is also very low, which indicates that Rina is able to differentiate her two languages according to context. As Genesee (1995) points out

“...a more appropriate measure of language differentiation than mixing is the prevalence of non-mixed utterances by the children in different language contexts...”
(p.612)

The presence of English utterances in Rina’s output in the Bosnian context and Bosnian utterances in the English context can also be explained by the nature of the parental input. Even though Rina’s parents report practising the ‘one person, one language’ strategy, the mother is recorded using Bosnian lexical items in the English context when interacting with her daughter (c.f. Example 40). These findings show the importance and effect of parental input in the language development of bilingual children. As Rina is used to hearing her mother use Bosnian words in the English context, she deems it appropriate to do the same on some occasions.

In addition, following the analysis of the discourse strategies that the mother employs in response to Rina's language mixing, it is found that the mother uses almost only those strategies which facilitate a bilingual context of discourse according to Lanza's (1992;1997a) typology (see 5.3 and 2.3.1). Rina's father, on the other hand, employs more 'monolingual' strategies than the mother, although he still responds to Rina's mixes positively, thus signalling the appropriateness of such usage (see 5.3.1.2).

Anya's early differentiation of the two languages is even more striking. The data show the bilingual child's ability to separate her two languages according to context from the age of 1;8 (see 5.2.2).

In the English context (nursery), Anya uses almost only English, producing only five Bosnian utterances out of the 1,592 utterances recorded in the six samples analysed (c.f. 5.2.2.1). However, the picture is very different in the Bosnian context, in which she uses a high proportion of English and mixed utterances (see 5.2.2.2).

It is important to note at this point that, although Anya's parents reported addressing Anya exclusively in Bosnian, they accept and encourage her usage of English at home. This is confirmed by the analysis of the parental discourse strategies used in response to Anya's language mixing (see 5.3.2.2). The results show that both parents employ a very high percentage of 'bilingual' strategies, such as the Move on Strategy and the Code-switching Strategy, which clearly indicate to Anya that it is appropriate to use English within the Bosnian context. The parents also tend to address their daughter in English when other English speakers are present in their home. This pattern of language use by the parents in the home signals the acceptability of using

English in the Bosnian context to the child, which could explain the high percentage of English and mixed utterances in Anya's Bosnian.

In addition, it is possible to explain the presence of English and mixed utterances in Anya's Bosnian in terms of language dominance (see 2.3.3). Lanza (1997a) believes that the amount of input the bilingual child receives in each language will create dominance of one language over another. As far as Anya is concerned, it could be concluded that she is dominant in English, as she is exposed to English during her day in the nursery. The dominance of English in Anya's input could also explain the considerable percentage of English and mixed utterances in the Bosnian context.

However, the above findings concerning Anya's language use in the Bosnian context cannot be interpreted as evidence for a single system, as Anya uses only English in the English context. She seems to be aware of the fact that the nursery teachers do not understand Bosnian and that the usage of that language would not be appropriate in the English context and would result in a failure in communication.

As in Lanza's study (1997a), the bilingual children in this study demonstrate their bilingual awareness "as the separation of languages when appropriate and the mixing of languages when the context deem(s) it appropriate" (Lanza, 1997a, p.319).

The language specific development of the noun phrase in the bilingual children's two languages also serves as evidence for the ability of young bilingual children to separate their two languages. Both Rina's and Anya's development of the English noun phrase in the English context follows the same pattern of acquisition as in a

monolingual English child (c.f. Wells, 1985; see section 2.4.3.1). However, it is impossible to establish whether their development of the Bosnian noun phrase resembles the language development of Bosnian monolingual children, as no studies focusing on Bosnian first language acquisition are currently available for comparison.

The language-appropriate and contrasting morphological markings for person, gender, case and number in Bosnian are evident from the children's first recordings in the Bosnian context (see Chapter 7 and Chapter 9). The two bilingual children are also found to mark English nouns for number and the genitive case in the English context (see Chapter 6 and Chapter 8), although this marking does not come in as early as contrasting morphological marking in Bosnian. During the first recording, at the age of 1;9.2, Anya appropriately marks the Bosnian proper noun 'Anya' both for the nominative 'Any-a' and the dative case 'Any-i' ('to Anya') in different utterances in the Bosnian context. Anya's contrastive use of the English plural inflection is recorded at the age of 1;11.4 in the English context and represents the first example of contrastive morphological marking in English. She uses the noun 'flower' in the singular, as well as the plural ('flowers') in different utterances during the recording. Similarly, at the age of 2;6.3, Rina produces two utterances including the English noun 'toe', which are the first examples of contrastive use of an English inflection in the English context. In one of the utterances, the English noun is appropriately marked for the plural ('toe-s') and in the other it is marked for the singular ('toe'). However, Rina's contrastive use of morphological marking in Bosnian is recorded in an earlier sample (1;11.8) in the Bosnian context. In this recording, Rina appropriately marks the proper noun 'tata' ('daddy') both for the nominative ('tata') and the dative case 'tat-i' ('to daddy') in different utterances. As far as marking for

the genitive case in English is concerned, it emerges even later than the plural inflection for both children in the English context (Rina – 2;4.6; Anya – 2;0.15). These examples show that morphological marking emerges first in Bosnian, indicating a lead-lag developmental pattern for the language that is more marked.

There is very little evidence of bound morphemes of one language being attached to items in the other language, with Anya only producing two instances of morphological mixing out of 3,018 utterances recorded in both contexts and Rina producing none (c.f. Sinka, 2000). This suggests that the children are able to separate their two grammatical systems from a very early age.

Apart from morphological marking, separation is also evident in the structure of the noun phrase itself. Both children produce more complex English noun phrases than Bosnian noun phrases. This is due to the fact that the structure of the complex English noun phrase requires a determiner, such as a definite or indefinite article, to precede a noun, whereas Bosnian does not have articles and does not require a determiner of any kind to precede a noun. The data from both children show no evidence of an English article being used with a Bosnian noun in any context, although the articles are appropriately used with English nouns by both children. This suggests that the children are able to differentiate the grammatical rules of their two languages and apply them accordingly.

The above findings can also be interpreted in terms of Universal Grammar's principles and parameters theory (see Chomsky, 1986a). It is possible to conclude that the bilingual children are able to set the parameters in multiple ways, in order to

account for the acquisition of two different language systems (see Foster-Cohen, 1999). For example, both children produce more varying word order patterns within the Bosnian noun phrase, which is acceptable in Bosnian, while they follow a more rigid word order in the English noun phrase, as the English language does not allow word order variation within the noun phrase (see 3.2.2 and 3.3.2). As only one example of syntactic mixing within the English noun phrase in the English context is found in the children's data (out of a total 2,739 utterances), the above example indicates that the children have two settings for the 'word order within the noun phrase' parameter, with one set to Bosnian, and the other to English. This finding also serves as evidence for the Separate Development Hypothesis.

To sum up, this study shows that both bilingual children exposed to the two languages through the one person-one language principle, as well as those receiving separate language input through different domains of language use, are able to differentiate their two languages according to context from a very early age, as well as develop the two grammatical systems in a separate fashion.

10.3 Implications and Directions for Further Research

This study has succeeded in providing evidence for the Separate Development Hypothesis (c.f. De Houwer, 1990), by examining the language development of two bilingual children aged 1;8, who are acquiring two morphologically very different languages. It is evident that more bilingual first language acquisition studies, focusing on structurally differing languages, are needed in order to address the

'single system' vs the 'separate system' debate (c.f. Meisel, 1989) more accurately and comprehensively.

The findings of the present study also emphasise the importance and need of including the different aspects of input in bilingual child language acquisition studies. However, a more detailed investigation of parental discourse strategies was beyond the scope of this thesis. A future study of the data should include an in-depth analysis of the parents' general interactional strategies in conversations with their children in order to provide a more complete picture of how parental input influences children's bilingual language development. In addition, as part of future research, the issue of language dominance in relation to the bilingual children's degree of language mixing should be examined in more detail.

It would also be beneficial to conduct cross-linguistic studies that focus on different bilingual contexts in which Bosnian is acquired as one of the two languages, such as Bosnian/German, Bosnian/Swedish and Bosnian/Dutch, in order to examine whether there are any parallels with the results of the present study.

Although this study provides a unique insight into the acquisition of Bosnian, a language which has up to now been absent from discussions within child language acquisition literature, a gap in the literature still exists. This fact strongly emphasises the need for a descriptive study of the monolingual acquisition of the Bosnian language, which would contribute greatly to the research area of child language acquisition.

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Appendix I. Consent Form

Introduction:

I am conducting a small-scale study into the language development of two Bosnian / English children. The aim is to describe how children, who are exposed to two languages from birth (in this case Bosnian and English), learn and use their two languages in everyday situations. The work is part of my study for a PhD in Linguistics at the University of Hertfordshire.

This form will be submitted to the Ethics Committee of the Faculty of Humanities, Languages and Education. If it subsequently requires amendment, it will be returned to you as parents for your consent.

Methods of study:

The children will be video- and audio taped in the parents' home and at nursery (if appropriate) for 60 minutes every two weeks for several months. Further consent will be sought from the management of the nursery/ies in question. The children will be recorded during naturally-occurring conversations in play situations with their parents and nursery staff. These sessions will be arranged at the convenience of the parents and the nursery staff.

Care of the data:

All the tapes will be listened to and analysed only by my University supervisors, and myself and used solely for scientific research purposes. All the data will be stored in a secure place and the identity of the parents will be kept confidential. It will not be possible to identify the children, their parents or any member of the family from any written text deriving from the project.

Involvement of the children and parents:

- a) The parents are not obliged to take part and may withdraw from the programme at any time without disadvantage, or having to give a reason;
- b) The parents will be given an opportunity to contact and put questions to the researcher at any time;

Form of consent:

We, the undersigned, agree to participate in and permit our child to participate in a study of childhood bilingual language development, conducted by Vanja Karanovic (PhD student in Linguistics, University of Hertfordshire) on the understanding the above principles will be strictly adhered to.

Vanja Karanovic
Research Student in Linguistics
University of Hertfordshire
Faculty of Humanities Languages and Education
Watford Campus
Wall Hall
Aldenham, Watford
WD2 8AT

Tel: 01923-494931

E-mail: vkaranovic@hotmail.com

Name/s of parent/s:

Signature of parent/s:

Date:

Signature of researcher:

Date:

Appendix II. Transcription (Rina 2;3.2 – Bosnian context)

@Font: Win95:Courier:-13:0
@Begin
@Participants: R Target_Child, RE Target_Child, RB Target_Child, RM
Target_Child, FAT Father, OBS Observer
@Date: 22-DEC-2001
@Age of R: 2;3.2
@Sex of R: Female
@Birth of R: 20-SEP-1999
@Language of FAT: Bosnian
*FAT: dodi, odi tata da ti pokaze kako to radi.
*RB: mia.
%mor: Bn:prop|mi-FEM:NOM:SG.
%cod: (BNPs=Bn:prop)
*OBS: da tata pokaze.
*FAT: da ti pokazem.
*RB: mia.
%mor: Bn:prop|mi-FEM:NOM:SG.
%cod: (BNPs=Bn:prop)
*OBS: nemozes, puknuce.
*FAT: nemozes ti sama, ti si mala.
*FAT: mia mala.
*FAT: kako neides sama spavat i nemozes ni to sama, jel tako, jesmo tako
rekli?
*FAT: kad podes sama spavati onda mozes sve ostalo sama raditi.
*FAT: dodi vamo.
*OBS: hajde igray se s tatom, vanja vidi kako se igras s kockicama s tatom.
*FAT: mia, mia.
*FAT: de tata skine, jao jest ti lijep prslucic.
*FAT: mia, gdje je teta?
*FAT: zdravo, zdravo.
*FAT: uh, pade teta.
*FAT: zdravo.
*FAT: neces da pricas?
*FAT: nece teta da prica.
*RE: stand up [/] stand up.
%mor: Ev|stand Eprep|up.
*FAT: da ustanem?
%cod: (EGS).
*FAT: reci ustani.
*FAT: evo, hoces da pricas?
*RB: da.
%mor: Byn|da.
*FAT: da?
*FAT: kako se zoves, kako se zoves?
*FAT: teta.
*FAT: kako se zoves?
*RB: oko.
%mor: Bn|ok-NEU:NOM:SG.
%cod: (BNPs=Bn)
*FAT: hm?
*R: xxx hello.

*RE: hello vanja.
 %mor: Econv|hello En:prop|vanja.
 %cod: (ENPs=En:prop)
 *OBS: zdravo mia.
 *FAT: zdravo.
 %cod: (RS).
 *FAT: ocemo zvat nekog drugog?
 *FAT: idi zovi megabloks da ti dode, megabloks da dode vamo.
 *FAT: zdravo megabloks, kako si, kako si?
 *RE: hello.
 %mor: Econv|hello.
 *FAT: oh, zdravo teto.
 %cod: (RS).
 *FAT: megabloks i teta.
 *RE: hello.
 %mor: Econv|hello.
 *FAT: gdje idemo, ocemo ic negdje?
 %cod: (MOS).
 *RB: da.
 %mor: Byn|da.
 *FAT: gdje cemo?
 *R: xxx.
 *FAT: ocemo u bazen?
 *RB: da.
 %mor: Byn|da.
 *FAT: da plivamo?
 *FAT: hajmo.
 *FAT: uh, slon je u bazenu, slon je u bazenu, ode slon.
 *FAT: oces se ti prva kupati?
 *RB: da.
 %mor: Byn|da.
 *FAT: ajde teta, teta prva se kupa.
 *RB: ciko.
 %mor: Bn:prop|cik-MASC:NOM:SG.
 %cod: (BNPs=Bn:prop)
 *FAT: ciko prvi?
 *FAT: buc.
 *FAT: jest super, kupamo se, kupamo.
 *FAT: jel plivas, jel pliva teta?
 *RE: hello.
 %mor: Econv|hello.
 *FAT: pa nemozes samo hello reci, reci jos nesto.
 %cod: (CS).
 *RE: hello [/] hello [/] hello.
 %mor: Econv|hello.
 *FAT: zdravo.
 %cod: (RS).
 *R: xxx.
 *FAT: puno nas je u bazenu.
 *FAT: sta ti radis?
 *FAT: niko nece da prica, necu ni ja da se igram vise s vama.
 *R: xxx.
 *FAT: nece da prica.
 *RB: da.
 %mor: Byn|da.
 *FAT: pricaj nesto.
 *FAT: hajde, sta, oces mi reci nesto?

*FAT: reci.
 *FAT: sta si radio danas?
 *FAT: sta je reko?
 *FAT: teta, teta prica nesto?
 *R: xxx.
 *FAT: sta?
 *R: xxx.
 *FAT: neznam sta kazes.
 *FAT: nista.
 *R: xxx.
 *RE: hello.
 %mor: Econv|hello.
 *FAT: zdravo.
 %cod: (RS).
 *RB: zdravo.
 %mor: Bconv|zdravo.
 *FAT: kako si?
 *RB: dida.
 %mor: Bn:prop|did-MASC:NOM:SG.
 %cod: (BNPs=Bn:prop)
 *FAT: hm?
 *RB: dide, bake.
 %mor: Bn:prop|did-MASC:GEN:SG Bn:prop|bak-FEM:GEN:SG.
 %cod: (BNPs=Bn:prop/BNPs=Bn:prop)
 *FAT: dide i baka.
 *FAT: gdje su dide i baka, jesu u tuzli, jesu dide i baka u tuzli?
 *FAT: dobro, ocemo se nesto drugo igrat, ovo je dosadno.
 *FAT: ocemo spremit kockice?
 *RB: ne.
 %mor: Byn|ne.
 *FAT: necemo spremit kockice?
 *FAT: hajmo spremit kockice pa nesto drugo.
 *RB: ne.
 %mor: Byn|ne.
 *FAT: ocemo crtati ciku?
 *FAT: nije vanja vidla kako ti crtati ciku, hajmo.
 *FAT: hajd nacrtaj.
 *FAT: ne tog, fino ti nacrtaj tvog ciku.
 *FAT: glavu.
 *FAT: dobro.
 *FAT: nogice.
 *FAT: ruke, dobro.
 *FAT: oci.
 *FAT: smije se.
 *FAT: tako, bravo.
 *FAT: jesi vidila?
 *FAT: sta cemo sad?
 *FAT: de nacrtaj cvjetic.
 *FAT: oce tata nesto nacrtati?
 *RE: no.
 %mor: Eyn|no.
 *FAT: necemo?
 %cod: (EGS).
 *FAT: sta hoces da radis?
 *R: xxx.
 *FAT: sta?
 *R: xxx.

*FAT: sta?
 *RE: hello.
 %mor: Econv|hello.
 *RE: hello tata.
 %mor: Econv|hello En:prop|tata.
 %cod: (ENPs=En:prop)
 *FAT: zdravo megabloks.
 %cod: (RS).
 *RE: hello tata.
 %mor: Econv|hello En:prop|tata.
 %cod: (ENPs=En:prop)
 *FAT: zdravo megabloks.
 %cod: (RS).
 *RE: hello tata [/] hello tata.
 %mor: Econv|hello En:prop|tata.
 %cod: (ENPs=En:prop)
 *FAT: zdravo.
 %cod: (RS).
 *RE: hello tata.
 %mor: Econv|hello En:prop|tata.
 %cod: (ENPs=En:prop)
 *FAT: hello.
 %com: zdravo.
 %cod: (CS).
 *FAT: jel kasljes?
 *RB: da.
 %mor: Byn|da.
 *FAT: da?
 *FAT: hello [/] hello [/] hello.
 *FAT: pa nista drugo ne pricas.
 *FAT: evo tigar dosao, tigar dosao.
 *FAT: i maylo, gdje je maylo, sta radi on, sta radi, sta radi maylo,
 sta radi?
 *RB: ne.
 %mor: Byn|ne.
 *FAT: neces?
 *FAT: dobro.
 *FAT: ti stavi tamo nek magabloks i teta nek pricaju, hajde ti ih napravi
 nek pricaju.
 *FAT: kako oni pricaju, pokazi tati?
 *RB: dihadaha.
 %mor: Bv|dihadaha.
 *FAT: dihadaha.
 *FAT: teta jase tigra.
 *FAT: ma nemoze.
 *FAT: pokazi mi kako oni pricaju.
 *RB: moze [/] moze.
 %mor: Bv|moci&3S&PRES.
 *FAT: moze?
 *RB: da.
 %mor: Byn|da.
 *FAT: ajde ti sama, da vidim ja kako oni pricaju, hajde.
 *FAT: sta pricaju?
 *RE: hello.
 %mor: Econv|hello.

*RE: maylo [/] maylo [/] maylo [/] maylo stand up.
 %mor: En:prop|maylo Ev|stand Eprep|up.
 %cod: (ENPs=En:prop)
 *RB: sedi.
 %mor: Bv|sedi-IMP.
 *RE: hello.
 %mor: Econv|hello.
 *FAT: sta radi ovde?
 %cod: (MOS).
 *FAT: zagrlj tetu, jel on zagrlj tetu?
 *RB: ne.
 %mor: Byn|ne.
 *FAT: ocemo obrisat nosic?
 *RB: ne.
 %mor: Byn|ne.
 *FAT: imas nesto u nosicu.
 *RE: no.
 %mor: Eyn|no.
 *FAT: tata obrise nosic.
 %cod: (MOS).
 *RE: no [/] no.
 %mor: Eyn|no.
 *FAT: dodj, dodj, dodj.
 %cod: (MOS).
 *FAT: jeste, vidis kako ti je kaka u nosicu, dodj, pusi, pusi, jako,
 hajde, hajde, bravo baby, uh, ajde sve je otislo sad.
 *FAT: jel cist, jel sad cist?
 *RE: hello [/] hello.
 %mor: Econv|hello.
 *RE: hello maylo.
 %mor: Econv|hello En:prop|maylo.
 %cod: (ENPs=En:prop)
 *RE: hello.
 %mor: Econv|hello.
 *RE: hello maylo [/] hello maylo.
 %mor: Econv|hello En:prop|maylo.
 %cod: (ENPs=En:prop)
 *RB: stomak.
 %pho: /tatomak/.
 %mor: Bn|stomak-MASC:NOM:SG.
 %cod: (BNPs=Bn)
 *RB: giligiligili.
 %mor: Bv|giligiligili.
 *RB: [=! laughs] giligili stomak.
 %mor: Bv|giligiligili Bn|stomak-MASC:NOM:SG.
 %cod: (BNPs=Bn)
 *FAT: golicamo u stomak, golicamo stomak tigaru.
 *RE: hello [/] hello.
 %mor: Econv|hello.
 *RB: dihadija [/] dihadija.
 %mor: Bv|dihadija.
 *RB: moze.
 %mor: Bv|moci&3S&PRES.
 *RB: nemoze 0*ptl diha.
 %mor: Bv|moci&3S&NEG&PRES B*0ptl|da Bv|diha.
 *FAT: nemoze.

*RB: moze.
 %mor: Bv|moci&3S&PRES.
 *FAT: moze?
 *RB: da.
 %mor: Byn|da.
 *FAT: maylo moze.
 *RE: hello [/] hello.
 %mor: Econv|hello.
 *FAT: nemoze teta, uh, pade.
 %cod: (MOS).
 *RE: hello.
 %mor: Econv|hello.
 *FAT: sta jos moze?
 %cod: (MOS).
 *RB: ciko [/] ciko.
 %mor: Bn:prop|cik-MASC:NOM:SG.
 %cod: (BNPs=Bn:prop)
 *FAT: mogu voze auto, oce voze auto?
 *RB: da.
 %mor: Byn|da.
 *FAT: stavi nek se voze.
 *RB: ciko [/] ciko.
 %mor: Bn:prop|cik-MASC:NOM:SG.
 %cod: (BNPs=Bn:prop)
 *FAT: kako voze?
 *RB: voze.
 %mor: Bv|voz-3P:PRES.
 *FAT: sta gledas?
 *RB: voze [/] voze.
 %mor: Bv|voz-3P:PRES.
 *FAT: jel vidis kroz prozor?
 *RB: ciko.
 %mor: Bn:prop|cik-MASC:NOM:SG.
 %cod: (BNPs=Bn:prop)
 *R: hello xxx.
 *RE: hello [/] hello.
 %mor: Econv|hello.
 *RB: dihadiha [/] dihadiha [/] dihadiha [/] dihadiha [/] dihadiha [/]
 dihadiha [/] dihadihadiha.
 %mor: Bv|dihadiha.
 *RB: sjedi [/] sjedi [/] sjedi.
 %mor: Bv|sjedi-IMP.
 *FAT: nemoze da sjedi.
 *RB: sjedi [/] sjedi.
 %mor: Bv|sjedi-IMP.
 *RB: moze 0*ptl sjedi [/] moze sjedi.
 %mor: Bv|moci&3S&PRES B*0ptl|da Bv|sjedi.
 *FAT: moze?
 *RB: nemoze.
 %mor: Bv|moci&3S&NEG&PRES.
 *FAT: ocemo nesto drugo raditi?
 *R: tigar xxx.
 *FAT: ocemo gledat tvoje mr men, mr men knjige?
 *RB: da.
 %mor: Byn|da.
 *FAT: hajde, gdje su?
 *FAT: ostavi to.

*FAT: eno ih, daj da citamo.
 *FAT: mr men?
 *RB: da.
 %mor: Byn|da.
 *FAT: hajde.
 *RB: ovo.
 %mor: Bpro:dem|ov-NEU:NOM:SG.
 *FAT: to?
 *RB: da.
 %mor: Byn|da.
 *FAT: hajde.
 *R: xxx.
 *FAT: ocemo citamo to?
 *R: xxx.
 *FAT: oces ti sama, ajde ti citaj tati.
 *FAT: sta je to, sta je to, sta je to?
 *RB: medo.
 %mor: Bn:prop|med-MASC:NOM:SG.
 %cod: (BNPs=Bn:prop)
 *FAT: ovo?
 *RB: leptir.
 %mor: Bn:prop|leptir-MASC:NOM:SG.
 %cod: (BNPs=Bn:prop)
 *FAT: leptir.
 *FAT: ovo?
 *RB: mijau.
 %mor: Bn:prop|mijau-FEM:NOM:SG.
 %cod: (BNPs=Bn:prop)
 *FAT: maca.
 *FAT: ovo?
 *RB: riba.
 %mor: Bn:prop|rib-FEM:NOM:SG.
 %cod: (BNPs=Bn:prop)
 *FAT: riba.
 *FAT: ovo?
 *RB: riba.
 %mor: Bn:prop|rib-FEM:NOM:SG.
 %cod: (BNPs=Bn:prop)
 *FAT: u, koliko ima riba?
 *RB: riba [/] riba.
 %mor: Bn:prop|rib-FEM:NOM:SG.
 %cod: (BNPs=Bn:prop)
 *FAT: koliko ima riba, koliko ima riba, ocemo izbrojati?
 *FAT: neces izbrojati ribice?
 *FAT: oce tata?
 *RB: da.
 %mor: Byn|da.
 *FAT: kolko ima?
 *FAT: jedan, dva, tri, cetri ribice.
 *FAT: sta tu ima?
 *FAT: sta je to, sta je to?
 *R: xxx four.
 *FAT: sta je to?
 *RE: four [/] four [/] four.
 %mor: En|four.
 %cod: (ENPs=En)

*FAT: four, sta je four?
 %cod: (MGS).
 *RE: four.
 %mor: En|four.
 %cod: (ENPs=En)
 *FAT: sta je to?
 %cod: (MGS).
 *RE: five.
 %mor: En|five.
 %cod: (ENPs=En)
 *FAT: nije.
 %cod: (MGS).
 *FAT: jedan.
 *RB: jedan.
 %mor: Bnum|jedan.
 *RB: dva.
 %mor: Bnum|dva.
 *RB: tri.
 %mor: Bnum|tri.
 *RB: cetri.
 %mor: Bnum|cetri.
 *FAT: cetri leptirica.
 *FAT: gotovo?
 *RB: 0*ptl spremim to.
 %mor: B*0ptl|da Bv|sprem-1S:PRES Bpro:dem|t-NEU:NOM:SG.
 %cod: (BNPs=Bpro:dem)
 *FAT: spremis to.
 *FAT: oces drugu neku?
 *RB: da.
 %mor: Byn|da.
 *FAT: hajd nadi neku drugu.
 *FAT: dobro, nema veze, ostavi je tu.
 *FAT: nema veze, hajde.
 *RB: moze [/] moze [/] moze [/] moze.
 %mor: Bv|moci&3S&PRES.
 *FAT: bravo.
 *OBS: moze, bravo.
 *RE: babies [/] babies.
 %mor: En|baby-PL.
 %cod: (ENPs=En)
 *FAT: bebe gledali?
 %cod: (EGS).
 *FAT: ajde da vidimo sta bebe rade.
 *FAT: zasto se bebe igraju?
 *RB: gola.
 %mor: Badj|gol-FEM:NOM:SG.
 *FAT: gola beba.
 *FAT: sta radi, sta radi ta beba, sta radi?
 *FAT: neznam sta je e, e?
 *R: xxx.
 *FAT: sta?
 *RB: bodi.
 %mor: Bn|bodi-MASC:NOM:SG.
 %cod: (BNPs=Bn)
 *FAT: bodi ima, jeste ima mali bodi.
 *FAT: sta je to?

*RB: patkica.
 %pho: /tica/.
 %mor: Bn:prop|patkic-FEM:NOM:SG.
 %cod: (BNPs=Bn:prop)
 *FAT: mala patkica, mala patkica.
 *OBS: sta je ono prije bilo ivane, bodi, sta je to?
 *FAT: ona vesta, vestica ona, bodi.
 *RB: bodi.
 %mor: Bn|bodi-MASC:NOM:SG.
 %cod: (BNPs=Bn)
 *FAT: ma ja, majcica.
 *RB: bodi [/] bodi.
 %mor: Bn|bodi-MASC:NOM:SG.
 %cod: (BNPs=Bn)
 *OBS: jest, bodi.
 *FAT: bodi.
 *RB: bodi.
 %mor: Bn|bodi-MASC:NOM:SG.
 %cod: (BNPs=Bn)
 *OBS: jeste.
 *FAT: dobro je.
 *FAT: ovako dodi?
 *RB: [=! coughs].
 *FAT: malo ti glas promuko.
 *FAT: sta je ovo?
 *FAT: nije, nije to ruka.
 *FAT: nogica.
 *RB: nogica.
 %mor: Bn|nogic-FEM:NOM:SG.
 %cod: (BNPs=Bn)
 *FAT: jel tako?
 *R: xxx.
 *FAT: nogica je to.
 *RE: drink [/] drink.
 %mor: En|drink.
 %cod: (ENPs=En)
 *FAT: sta pije, pije sta?
 %cod: (EGS).
 *RB: dus.
 %mor: Bn|dus-MASC:NOM:SG.
 %cod: (BNPs=Bn)
 *FAT: dus pije.
 *RB: mia 0*v dus.
 %mor: Bn:prop|mi-FEM:NOM:SG *0v Bn|dus-MASC:NOM:SG.
 %cod: (BNPs=Bn:prop/BNPs=Bn)
 *FAT: i mia pije?
 *FAT: sta je ovde, sta?
 *FAT: place, place beba, jeli?
 *FAT: sta ovde radi, sta ova beba radi, sta radi?
 *FAT: smije se, smije se, a ova tuzna, tuzna beba, ova se smije sa mummy.
 *FAT: jao, sta ovde?
 *RB: kukuruz.
 %mor: Bn|kukuruz-MASC:NOM:SG.
 %cod: (BNPs=Bn)
 *FAT: kukuruz.

*RB: mia 0*v:aux papala kukuruz.
 %mor: Bn:prop|mi-FEM:NOM:SG B*0v:aux|biti&3S&PRES Bv|papa-3S:PAST:FEM
 Bn|kukuruz-MASC:NOM:SG.
 %cod: (BNPs=Bn:prop/BNPs=Bn)
 *FAT: i mia papala kukuruz, jeste.
 *OBS: jel mia voli?
 *RB: papa mia.
 %mor: Bv|papa-3S:PRES Bn:prop|mi-FEM:NOM:SG.
 %cod: (BNPs=Bn:prop)
 *RB: papa mia kukuruz.
 %mor: Bv|papa-3S:PRES Bn:prop|mi-FEM:NOM:SG Bn|kukuruz-MASC:NOM:SG.
 %cod: (BNPs=Bn:prop/BNPs=Bn)
 *FAT: dobro.
 *OBS: jel mia voli kukuruz, jel volis?
 *RE: babies.
 %mor: En|baby-PL.
 %cod: (ENPs=En)
 *FAT: bebe.
 %cod: (RS).
 *RM: puno babies.
 %mor: Bqn|puno En|baby-PL.
 %cod: (MNPs=Bqn-En)
 *FAT: puno beba.
 %cod: (RS).
 *RB: zeko [/] zeko.
 %mor: Bn:prop|zek-MASC:NOM:SG.
 %cod: (BNPs=Bn:prop)
 *FAT: koliko ima zeka?
 *R: xxx.
 *FAT: koliko ima zeka?
 *RE: one.
 %mor: Enum|one.
 *RE: two.
 %mor: Enum|two.
 *FAT: jedan, dva.
 %cod: (RS).
 *RB: jedan.
 %mor: Bnum|jedan.
 *RB: dva.
 %mor: Bnum|dva.
 *FAT: dva zeka.
 *RE: hello [/] hello.
 %mor: Econv|hello.
 *FAT: sta je to?
 %cod: (MOS).
 *RB: duda.
 %mor: Bn|dud-FEM:NOM:SG.
 %cod: (BNPs=Bn)
 *FAT: duda, nije to duda, buba.
 *RB: buba.
 %mor: Bn:prop|bub-FEM:NOM:SG.
 %cod: (BNPs=Bn:prop)
 *RM: hello buba.
 %mor: Econv|hello Bn:prop|bub-FEM:NOM:SG.
 %cod: (BNPs=Bn:prop)
 *FAT: a ovo?
 %cod: (MOS).

*R: xxx.
 *FAT: sta je to, sta je to, sta je to?
 *FAT: to oblak?
 *RB: oblak.
 %mor: Bn|oblak-MASC:NOM:SG.
 %cod: (BNPs=Bn)
 *FAT: oblak na nebu.
 *RB: nebo.
 %mor: Bn|neb-NEU:NOM:SG.
 %cod: (BNPs=Bn)
 *FAT: jeste, oblak na nebu.
 *FAT: sta radi ova beba, sta radi tako?
 *FAT: stavila prstice usta, jeli?
 *FAT: sta je to?
 *R: xxx.
 *FAT: cvijet.
 *FAT: sta je to?
 *RB: mia.
 %mor: Bn:prop|mi-FEM:NOM:SG.
 %cod: (BNPs=Bn:prop)
 *FAT: sta?
 *R: mia xxx.
 *FAT: sta?
 *R: mia xxx.
 *FAT: sladoled.
 *FAT: ovde?
 *RB: kupa se.
 %mor: Bv|kupa-3S:PRES Bpro:refl|se.
 %cod: (BNPs=Bpro:refl)
 *FAT: kupa se.
 %act: the doorbell rings.
 *RB: amidza.
 %mor: Bn:prop|amidz-MASC:NOM:SG.
 %cod: (BNPs=Bn:prop)
 *FAT: nije.
 *OBS: amidza.
 *FAT: aunty audra.
 *RB: audra.
 %mor: Bn:prop|audr-FEM:NOM:SG.
 %cod: (BNPs=Bn:prop)
 *OBS: nije amidza, nije.
 *FAT: julie.
 *OBS: hajde.
 *FAT: idemo ponovo.
 *OBS: ajmo, ajmo citamo knjigu, nije niko.
 *FAT: gdje je sladoled, sladoled, sladoled.
 *FAT: dodi, dodi.
 *OBS: ko je doso mia?
 *FAT: ko je to doso?
 *RB: audra.
 %mor: Bn:prop|audr-FEM:NOM:SG.
 %cod: (BNPs=Bn:prop)
 *FAT: audra.
 *FAT: hajde uzmi da vidimo sta jos ima u knjizi.
 *OBS: hajde citaj knjigu, vanja slusa, mia, vanja slusa kako mia cita.
 *FAT: hajde da vidimo sta jos ima.
 *OBS: hajde.

*FAT: sta jos ima, sta smo rekli ovde?
 *FAT: sladoled.
 *FAT: tu, sta radi?
 *R: xxx.
 *FAT: kupa se.
 *RB: kupa se.
 %mor: Bv|kupa-3S:PRES Bpro:refl|se.
 %cod: (BNPs=Bpro:refl)
 *FAT: kupa se.
 *FAT: a ovde?
 *FAT: pere, sta pere?
 *RB: pere rukice.
 %mor: Bv|per-3S:PRES Bn|rukic-FEM:ACC:PL.
 %cod: (BNPs=Bn)
 *FAT: pere rukice, jeste.
 *RB: mia 0*v rukice.
 %mor: Bn:prop|mi-FEM:NOM:SG B*0v|pere Bn|rukic-FEM:ACC:PL.
 %cod: (BNPs=Bn:prop/BNPs=Bn)
 *FAT: tako i mia pere.
 *FAT: jesil ti prala rukice?
 *RB: da.
 %mor: Byn|da.
 *FAT: jesi.
 *FAT: sta je to?
 *RB: mia [/] mia.
 %mor: Bn:prop|mi-FEM:NOM:SG.
 %cod: (BNPs=Bn:prop)
 *FAT: vatra, to vatra?
 *FAT: ziza.
 *RB: ziza.
 %mor: Bn|ziz-FEM:NOM:SG.
 %cod: (BNPs=Bn)
 *FAT: to, sta je to?
 *FAT: voda.
 *RB: voda.
 %mor: Bn|vod-FEM:NOM:SG.
 %cod: (BNPs=Bn)
 *FAT: voda.
 *FAT: to?
 *RB: tiktok.
 %mor: Bn|tiktok-MASC:NOM:SG.
 %cod: (BNPs=Bn)
 *FAT: tiktak.
 *R: xxx.
 *FAT: jel tako?
 *FAT: sat, sat.
 *FAT: sta ima, sta ima curica?
 *R: xxx.
 *FAT: sta ima?
 *R: xxx.
 *FAT: u bari?
 *FAT: jeste.
 *FAT: sta je obuko, sta je obuko djecak?
 *RE: boots.
 %mor: En|boot-PL.
 %cod: (ENPs=En)

*FAT: cizmice, cizmice, boots.
 %cod: (RS+CS).
 *FAT: jeste, pa je u bari, uprljo se sav, uprljo se sav.
 *FAT: sta ova curica ima?
 *RB: naocare.
 %pho: /naoci/.
 %mor: Bn|naocar-FEM:NOM:PL.
 %cod: (BNPs=Bn)
 *FAT: naocare.
 *FAT: reci curica ima naocare.
 *R: curica xxx.
 *FAT: uho.
 *RE: fingers.
 %mor: En|finger-PL.
 %cod: (ENPs=En)
 *FAT: prsti.
 %cod: (RS).
 *FAT: sta je to, sta je to?
 *FAT: velika kasika, to velika kasika?
 *FAT: velika kasika.
 RB: mali [].
 %mor: Bn|mal-*MASC:NOM:SG.
 %cod: (*BNPs=Bn)
 %err: mali=mala \$MOR \$NGMASC (ERR)
 *FAT: mala kasika.
 *RB: guza.
 %mor: Bn|guz-FEM:NOM:SG.
 %cod: (BNPs=Bn)
 *FAT: guza, bebina guza.
 *FAT: a sta ima, sta je obukla beba, sta je obukla beba, sta?
 *FAT: gace, gacice.
 *RB: gacice.
 %mor: Bn|gacic-FEM:NOM:PL.
 %cod: (BNPs=Bn)
 *FAT: gacice.
 *RE: rainbow [/] rainbow.
 %mor: En|rainbow.
 %cod: (ENPs=En)
 *FAT: duga, rainbow.
 %cod: (RS+CS).
 *RM: duga, rainbow.
 %mor: Bn|dug-FEM:NOM:SG En|rainbow.
 %cod: (BNPs=Bn/ENPs=En)
 *FAT: duga, duga.
 %cod: (RS).
 *RE: hello.
 %mor: Econv|hello.
 *FAT: hello.
 %com: zdravo.
 %cod: (CS).
 *RE: hello [/] hello [/] hello [/] hello.
 %mor: Econv|hello.
 *FAT: hello.
 %com: zdravo.
 %cod: (CS).
 *RE: hello.
 %mor: Econv|hello.

*RB: pade teta.
 %mor: Bv|pad-3S:PRES Bn:prop|tet-FEM:NOM:SG.
 %cod: (BNPs=Bn:prop)
 *FAT: pade teta.
 *RB: ciko [/] ciko.
 %mor: Bn:prop|cik-MASC:NOM:SG.
 %cod: (BNPs=Bn:prop)
 *FAT: ocemo neku drugu sad da vidimo?
 *RB: ciko.
 %mor: Bn:prop|cik-MASC:NOM:SG.
 %cod: (BNPs=Bn:prop)
 *FAT: oce ciko da vidi dugu?
 *RB: da.
 %mor: Byn|da.
 *FAT: jao jest ljepa duga, jest ljepa duga, teto vidi dugu, vidi dugu.
 *FAT: jel ljepa duga?
 *FAT: jao jest ljepa.
 *RE: hello.
 %mor: Econv|hello.
 *FAT: zdravo.
 %cod: (RS).
 *RB: zdravo.
 %mor: Bconv|zdravo.
 *FAT: sta radis, jel setas?
 *RB: da.
 %mor: Byn|da.
 *FAT: sta je ovo, sta to imas tu?
 *RB: ptica.
 %mor: Bn:prop|ptic-FEM:NOM:SG.
 %cod: (BNPs=Bn:prop)
 *FAT: pticicu imas.
 *RB: op!
 %mor: Binterj|op.
 *RB: nebo.
 %mor: Bn|neb-NEU:NOM:SG.
 %cod: (BNPs=Bn)
 *FAT: nebo, jeste.
 *RB: nebo.
 %mor: Bn|neb-NEU:NOM:SG.
 %cod: (BNPs=Bn)
 *OBS: koje je boje nebo, koje je boje?
 *RB: boja.
 %mor: Bn|boj-FEM:NOM:SG.
 %cod: (BNPs=Bn)
 *OBS: koje?
 *RB: belo.
 %mor: Bn|bel-NEU:NOM:SG.
 %cod: (BNPs=Bn)
 *FAT: bijelo.
 *OBS: bijelo, nije.
 *FAT: nije, oblaci su bijeli and nebo je?
 *RB: nema.
 %mor: Bv|ima-3S:PRES:NEG.
 *FAT: plavo.
 *RB: plavo.
 %mor: Bn|plav-NEU:NOM:SG.
 %cod: (BNPs=Bn)

*FAT: plavo.
 *RE: hello [/] hello.
 %mor: Econv|hello.
 *FAT: zdravo.
 %cod: (RS).
 *RB: dole [/] dole.
 %mor: Bprep|dole.
 *FAT: dole, gore.
 *RB: dole.
 %mor: Bprep|dole.
 *FAT: gore.
 *FAT: hajmo da vidimo drugu knjigu.
 *FAT: jos jednu.
 *RB: miki [/] miki.
 %mor: Bn:prop|miki-MASC:NOM:SG.
 %cod: (BNPs=Bn:prop)
 *FAT: nije, to je mini.
 *RB: miki.
 %mor: Bn:prop|miki-MASC:NOM:SG.
 %cod: (BNPs=Bn:prop)
 *FAT: mini maus.
 *RB: mini maus.
 %mor: Bn:prop|minimaus-FEM:NOM:SG.
 %cod: (BNPs=Bn:prop)
 *FAT: mini maus.
 *RB: masey [/] masey maus.
 %mor: Bn:prop|minimaus-FEM:NOM:SG.
 %cod: (BNPs=Bn:prop)
 *FAT: masey, masey maus.
 *R: xxx.
 *OBS: hajde izaberi jos jednu knjigu da mi citas, mia.
 *FAT: ocemo jos jednu da vidimo?
 *RB: da.
 %mor: Byn|da.
 *OBS: hajde tata ti procita jos jednu.
 *FAT: hajde neku s puno slika.
 *FAT: koja ima puno slika?
 *RB: jedan.
 %mor: Bnum|jedan.
 *RB: dva.
 %mor: Bnum|dva.
 *RB: tri.
 %mor: Bnum|tri.
 *RB: cetri.
 %mor: Bnum|cetri.
 *R: xxx.
 *RB: ovo!
 %mor: Bpro:dem|ov-NEU:NOM:SG.
 %cod: (BNPs=Bpro:dem)
 *FAT: nemozemo to citat.
 *OBS: nije to knjiga.
 *FAT: nemozemo to citati, uzmi nesto da citamo.
 *OBS: sta je to, mia, sta je to?
 *FAT: ocemo pisati, ocemo pisati?
 *FAT: ajde ti reci sta tata pise, da vidi vanja kako pise tata.
 *FAT: sta je ovo?

*RB: jedan.
 %mor: Bnum|jedan.
 *FAT: nije, sta je to?
 *RB: m.
 *FAT: m.
 *RB: ne [/] ne.
 %mor: Byn|ne.
 *FAT: cekaj da zavrismo.
 *FAT: sta je to?
 *FAT: e necu nista drugo onda.
 *OBS: ajde mia nesto nacрта, a tata pogodi.
 *FAT: mia crta.
 *FAT: moras pritisnut malo.
 *FAT: sta je to?
 *RB: oko.
 %mor: Bn|ok-NEU:NOM:SG.
 %cod: (BNPs=Bn)
 *FAT: malo oko, velka glava i malo oko.
 *OBS: sta je to?
 *RE: happy.
 %mor: Eadj|happy.
 *FAT: happy, smije se, smije se lice.
 %cod: (CS+RS).
 *RB: da.
 %mor: Byn|da.
 *FAT: oce tata nesto pise?
 *FAT: to je za drugu stranu, vidis ova ima dvije strane.
 *RB: druga [/] druga [/] druga.
 %com: the child wants to draw on the other side of the board.
 %mor: Bn|drug-FEM:NOM:SG.
 %cod: (BNPs=Bn)
 *FAT: ajde pisi brojeve, ajde, jedan.
 *RB: jedan [/] jedan.
 %mor: Bnum|jedan.
 *FAT: dva.
 *RB: dva.
 %mor: Bnum|dva.
 *FAT: tri, cetri, pet.
 *FAT: jesu svi isti, jesu svi isti brojevi?
 *FAT: neradi, neradi ovaj, hajmo nesto drugo, neradi.
 *OBS: pokvarilo se.
 *FAT: daj drugu neku.
 *RB: drugo [/] drugo.
 %mor: Bn|drug-NEU:NOM:SG.
 %cod: (BNPs=Bn)
 *FAT: daj mi knjigu.
 *RB: ovo [/] ovo.
 %mor: Bpro:dem|ov-NEU:NOM:SG.
 %cod: (BNPs=Bpro:dem)
 *FAT: tu?
 *FAT: bug's life.
 *RB: da.
 %mor: Byn|da.
 *FAT: zivot buba.
 *FAT: jesmo gledali ovaj film, jesmo film gledali, jesmol?

*RB: da.
 %mor: Byn|da.
 *FAT: gledali film?
 *RB: da.
 %mor: Byn|da.
 *FAT: mia gledala.
 *RB: mia gledala.
 %mor: Bn:prop|mi-FEM:NOM:SG Bv|gleda-3S:PAST:FEM.
 *FAT: mia gledala film.
 *RB: buba [/] buba.
 %mor: Bn:prop|bub-FEM:NOM:SG.
 %cod: (BNPs=Bn:prop)
 *FAT: buba.
 *FAT: koja buba, koja je ovo buba?
 *FAT: s lijepim krilima?
 *RB: leptir.
 %mor: Bn:prop|leptir-MASC:NOM:SG.
 %cod: (BNPs=Bn:prop)
 *FAT: leptir, a ovo?
 *FAT: mrav, mrav, mrav.
 *RB: ne.
 %mor: Byn|ne.
 *FAT: jeste, to je mrav.
 *FAT: a koja je ovo buba?
 *FAT: cekaj da vidimo, tata nade neku lijepu sliku, nevidi se, nevidi se
 bubamara, ima bubamara al se ne vidi.
 *FAT: sta je ovo, sta je to?
 *RB: ptica.
 %mor: Bn:prop|ptic-FEM:NOM:SG.
 %cod: (BNPs=Bn:prop)
 *FAT: ptica, tica.
 *RB: ptica.
 %mor: Bn:prop|ptic-FEM:NOM:SG.
 %cod: (BNPs=Bn:prop)
 *FAT: ptica.
 *FAT: dobro, hajde neku drugu.
 *OBS: izaberi najdrazu sto je tebi, sto najvise volis knjigu.
 *OBS: koju najvise volis knjigu?
 *OBS: tu volis najvise, tu.
 *OBS: ajde jos jednu.
 *FAT: gdje je ona velka, gdje je velka, s puno slika?
 *RE: heavy.
 %mor: Eadj|heavy.
 *RB: ovo.
 %mor: Bpro:dem|ov-NEU:NOM:SG.
 %cod: (BNPs=Bpro:dem)
 *FAT: to?
 *RB: da.
 %mor: Byn|da.
 *FAT: dobro.
 *FAT: tesko?
 %cod: (EGS).
 *RB: da.
 %mor: Byn|da.
 *OBS: jel rekla heavy?
 *RB: tickle [/] tickle.
 %mor: Bv|tickle.

*FAT: mr tickle se voli golicati, mr tickle se voli golicati.
 *RE: no.
 %mor: Eyn|no.
 *FAT: necemo citat mr tickla, koga cemo citat?
 %cod: (RS).
 *RB: ovo.
 %mor: Bpro:dem|ov-NEU:NOM:SG.
 %cod: (BNPs=Bpro:dem)
 *FAT: koja je to?
 *RE: happy [/] happy.
 %mor: Eadj|happy.
 *FAT: mr messy, gospodin prljavi.
 %cod: (MOS).
 *FAT: zdravo.
 *OBS: kako kazes, zdravo?
 *RB: zdravo.
 %mor: Bconv|zdravo.
 *OBS: zdravo ciko.
 *FAT: ovu cemo citat.
 *OBS: nasu legendarnu.
 *FAT: oces cedevitu?
 *FAT: reci cedevita da vanja cuje.
 *RB: cedevita [/] cedevita.
 %pho: /vita/.
 %mor: Bn:prop|cedevit-FEM:NOM:SG.
 %cod: (BNPs=Bn:prop)
 *FAT: kako?
 *RB: cedevita [/] cedevita.
 %pho: /vita/.
 %mor: Bn:prop|cedevit-FEM:NOM:SG.
 %cod: (BNPs=Bn:prop)
 *FAT: vita, vita, cedevita.
 *OBS: polako.
 *RB: cedevita.
 %mor: Bn:prop|cedevit-FEM:NOM:SG.
 %cod: (BNPs=Bn:prop)
 *FAT: tako.
 *OBS: bravo.
 *FAT: jel to tvoje najdraze pice sad?
 *OBS: evo i vanja pije cedevitu vidi, mia, i vanja pije.
 *FAT: reci zivili.
 *OBS: ajde zivili.
 *FAT: zivili sad mora.
 *FAT: bravo.
 *OBS: bravo, zivili.
 *FAT: ocemo ic kroz ove da vidimo sta su ovi.
 *RB: telefon.
 %mor: Bn|telefon-MASC:NOM:SG.
 %cod: (BNPs=Bn)
 *OBS: sta je ono prvo bilo?
 *FAT: telefon.
 *OBS: telefon.
 *OBS: gotovo.
 *FAT: ajde, sta je to?
 *RB: telefon.
 %mor: Bn|telefon-MASC:NOM:SG.
 %cod: (BNPs=Bn)

*FAT: telefon.
 *RB: banana.
 %mor: Bn|banan-FEM:NOM:SG.
 %cod: (BNPs=Bn)
 *FAT: banana.
 *R: xxx banana xxx.
 *OBS: lijepa banana.
 *RB: am!
 *OBS: sjece bananu.
 *FAT: sta je ovo?
 *R: xxx.
 *FAT: balon.
 *RB: balon.
 %mor: Bn|balon-MASC:NOM:SG.
 %cod: (BNPs=Bn)
 *RB: klaun.
 %mor: Bn:prop|klaun-MASC:NOM:SG.
 %cod: (BNPs=Bn:prop)
 *FAT: klaun, klovn.
 *RB: klaun.
 %mor: Bn:prop|klaun-MASC:NOM:SG.
 %cod: (BNPs=Bn:prop)
 *RB: ptica.
 %mor: Bn:prop|ptic-FEM:NOM:SG.
 %cod: (BNPs=Bn:prop)
 *FAT: ptica.
 *OBS: ima krila, jel ima krila ptica?
 *RB: da.
 %mor: Byn|da.
 *OBS: mase krilima.
 *FAT: a ovo, ovo?
 *RB: tigar.
 %mor: Bn:prop|tigar-MASC:NOM:SG.
 %cod: (BNPs=Bn:prop)
 *FAT: tigar.
 *FAT: sta je ovo?
 *RE: hello.
 %mor: Econv|hello.
 *RM: hello tigar.
 %mor: Econv|hello Bn:prop|tigar-MASC:NOM:SG.
 %cod: (BNPs=Bn:prop)
 *RE: hello.
 %mor: Econv|hello.
 *FAT: hello.
 %cod: (CS).
 *RM: hello tigar.
 %mor: Econv|hello Bn:prop|tigar-MASC:NOM:SG.
 %cod: (BNPs=Bn:prop)
 *FAT: ma nisi mi rekla sta je ovo.
 %cod: (MOS).
 *FAT: raketa.
 @End

Appendix III. Transcription (Anya 2;0.15 – English context)

@Font: Win95:Courier:-13:0
@Begin
@Participants: A Target_Child, AE Target_Child, AB Target_Child, AM
Target_Child, TEA Teacher, OBS Observer
@Date: 04-MAR-2002
@Age of A: 2;0.15
@Sex of A: Female
@Birth of A: 17-FEB-2000
@Language of TEA: English
*TEA: what's he doing, what's he doing, scratching his head, what's he
doing?
*AE: that one.
%mor: Edet:dem|that Epro:noml|one.
%cod: (ENPc=Edet:dem-Epro:noml)
*TEA: that one.
*TEA: shall we find his body, where's his body?
*AE: that 0*v penguin.
%mor: Epro:dem|that E*0v|be&3S&PRES En:prop|penguin.
%cod: (ENPs=Epro:dem/ENPs=En:prop)
*TEA: the penguin, it is, ye, a part of the penguin.
*AE: ye.
%mor: Eyn|ye.
*AE: there.
%mor: Eadv|there.
*AE: here.
%mor: Eadv|here.
*TEA: there he is, ye, he is, he's here, penguin's feet, isn't it?
*TEA: what's that part of?
*AE: here [/] here.
%mor: Eadv|here.
*TEA: does he go there?
*AE: no.
%mor: Eyn|no.
*TEA: no, maybe he goes.
AE: monkey go [] in here.
%mor: En:prop|monkey Ev|go-*3P:PRES Eprep|in Eadv|here.
%cod: (ENPs=En:prop)
*AE: ye.
%mor: Eyn|ye.
*TEA: there he goes, there.
*TEA: he's got a long neck.
*AE: that.
%mor: Epro:dem|that.
%cod: (ENPs=Epro:dem)
*AE: xxx.
*TEA: is that right?
*AE: ye.
%mor: Eyn|ye.
*TEA: what's that there?

*AE: snake.
 %mor: En:prop|snake.
 %cod: (ENPs=En:prop)
 *TEA: snake, what does the snake say, ssss?
 *AE: dolphin [/] dolphin.
 %mor: En:prop|dolphin.
 %cod: (ENPs=En:prop)
 *TEA: dolphin, ye, that's the dolphin.
 *AE: dolphin.
 %mor: En:prop|dolphin.
 %cod: (ENPs=En:prop)
 *TEA: where's the rest of him?
 *TEA: pool.
 *TEA: what's that, a lion?
 *AE: lion.
 %mor: En:prop|lion.
 %cod: (ENPs=En:prop)
 *AE: xxx.
 *TEA: is that the pool?
 *AE: xxx.
 *TEA: what's that?
 *AE: crocodile.
 %mor: En:prop|crocodile.
 %cod: (ENPs=En:prop)
 *TEA: crocodile, i don't think so.
 *TEA: where's the crocodile?
 *AE: there.
 %mor: Eadv|there.
 *TEA: there it is, there's the crocodile.
 *TEA: what's that one?
 *AE: 0*v crocodile that one [*]
 %mor: E*0v|be&3S&PRES En:prop|crocodile Edet:dem|that Epro:noml|one.
 %cod: (ENPs=En:prop/ENPc=Edet:dem-Epro:noml)
 *TEA: do you think that's a crocodile?
 *AE: no.
 %mor: Eyn|no.
 *TEA: what is it, what colour is it?
 *AE: no, here [/] here.
 %mor: Eyn|no Eadv|here.
 *TEA: it's there, yes.
 *TEA: what is it?
 *AE: panda bear.
 %mor: En:prop|pandabear.
 %cod: (ENPs=En:prop)
 *TEA: panda bear, polar bear, yes, it's a polar bear.
 *TEA: who's that?
 *AE: here [/] here.
 %mor: Eadv|here.
 *TEA: do you think it goes there?
 *TEA: well done, it perhaps does, turn it round a bit, again, turn it,
 again.
 *AE: here.
 %mor: Eadv|here.
 *TEA: there, that's right, well done.
 *TEA: it's all the penguin there, isn't it?

*AE: where 0*v:aux mummy gone?
%mor: Ewh|where *0v:aux En:prop|mummy Ev|go&PERF.
%cod: (ENPs=En:prop)
*AE: mummy 0*v:aux gone.
%mor: En:prop|mummy *0v:aux Ev|go&PERF.
%cod: (ENPs=En:prop)
*TEA: your mummy went to work, didn't she, that's another grandma that
went, that brought thomas.
*AE: mummy 0*v:aux gone.
%mor: En:prop|mummy *0v:aux Ev|go&PERF.
%cod: (ENPs=En:prop)
*TEA: your mummy's gone, gone to work.
*AE: tata 0*v:aux gone.
%mor: En:prop|tata *0v:aux Ev|go&PERF.
%cod: (ENPs=En:prop)
*TEA: daddy gone to work, haven't they?
*TEA: ye, you come into nursery and play.
*AE: xxx.
*AE: here.
%mor: Eadv|here.
*TEA: what's that one there then?
*AE: no.
%mor: Eyn|no.
*TEA: who's that?
*AE: elephant.
%mor: En:prop|elephant.
%cod: (ENPs=En:prop)
*TEA: elephant, that's right, he doesn't go there.
*AE: xxx.
*TEA: that's, what's this here?
*AE: that 0*v penguin.
%mor: Epro:dem|that E*0v|be&3S&PRES En:prop|penguin.
%cod: (ENPs=Epro:dem/ENPs=En:prop)
*TEA: a penguin, that's right, penguin.
*AE: there.
%mor: Eadv|there.
*TEA: that's it.
*AE: no.
%mor: Eyn|no.
*TEA: yes, i think it does.
*AE: no.
%mor: Eyn|no.
*TEA: where's the rest of the zebra then?
*TEA: what's this bit there?
AE: that fit-0 here.
%mor: Epro:dem|that Ev|fit-*03S:PRES Eadv|here.
%cod: (ENPs=Epro:dem)
*TEA: that fits there, that's right, ye, that fits here.
*AE: ye.
%mor: Eyn|ye.
*TEA: well done, clever girl.
*TEA: shall we find the top up here, who's there, who's that, do you know?
*AE: a kangaroo.
%mor: Edet:art indef|a En:prop|kangaroo.
%cod: (ENPc=Edet:art indef-En:prop)
*TEA: a kangaroo?
*TEA: no, i don't think it's a kangaroo.

*AE: lion.
 %mor: En:prop|lion.
 %cod: (ENPs=En:prop)
 *TEA: a lion is it?
 *AE: ye.
 %mor: Eyn|ye.
 *TEA: is that the lion?
 *AE: ye.
 %mor: Eyn|ye.
 *TEA: i don't think so.
 *TEA: it's a tiger.
 *AE: tiger.
 %mor: En:prop|tiger.
 %cod: (ENPs=En:prop)
 *TEA: that's a kangaroo, you were right there, a kangaroo.
 *AE: here.
 %mor: Eadv|here.
 *AE: no.
 %mor: Eyn|no.
 *TEA: no, it doesn't go there, does it?
 *AE: here 0*v kangaroo [/] here kangaroo.
 %mor: Eadv|here *0v En:prop|kangaroo.
 %cod: (ENPs=En:prop)
 *TEA: is that the kangaroo?
 *AE: ye.
 %mor: Eyn|ye.
 *TEA: no, it isn't, is it?
 *AE: no.
 %mor: Eyn|no.
 *TEA: no.
 *TEA: where's that one go?
 *TEA: that's the crocodile, where's the crocodile?
 *AE: here.
 %mor: Eadv|here.
 *TEA: where is it?
 *AE: here.
 %mor: Eadv|here.
 *AE: turn it round.
 %mor: Ev|turn Epro|it Eadv|round.
 %cod: (ENPs=Epro)
 *TEA: turn it round, that's right.
 *AE: here.
 %mor: Eadv|here.
 *TEA: here, that's right.
 *TEA: does it go in there?
 *AE: ye.
 %mor: Eyn|ye.
 *TEA: yes, well done, you're doing very well.
 *TEA: what about that one, whose face is?
 *AE: xxx.
 *TEA: what's that?
 *AE: duck.
 %mor: En:prop|duck.
 %cod: (ENPs=En:prop)
 *TEA: a duck?
 *TEA: well, a kind of duck, isn't it, it's got a big beak, it's got a big
 beak, pelican.

*AE: ye.
 %mor: Eyn|ye.
 *TEA: can you say pelican?
 *AE: lion.
 %mor: En:prop|lion.
 %cod: (ENPs=En:prop)
 *TEA: a lion, ye, look, there's a bit of the tiger there.
 *TEA: where's the tiger?
 *AE: tiger.
 %mor: En:prop|tiger.
 %cod: (ENPs=En:prop)
 *TEA: where's the rest of the tiger?
 *AE: there.
 %mor: Eadv|there.
 *TEA: there we are.
 *AE: there+we+are.
 %mor: Eadv|there+we+are.
 *TEA: there you are, very good.
 *TEA: we're losing space, aren't we?
 *TEA: what do we need now, piece of the kangaroo?
 *AE: kangaroo.
 %mor: En:prop|kangaroo.
 %cod: (ENPs=En:prop)
 *TEA: kangaroo.
 *AE: that 0*v 0*det:artdef kangaroo.
 %mor: Epro:dem|that E*0v|be&3S&PRES En:prop|kangaroo.
 %cod: (ENPs=Epro:dem/ENPs=En:prop)
 *TEA: is that the kangaroo?
 *AE: ye.
 %mor: Eyn|ye.
 *TEA: well done, his long tail.
 *AE: 0*det:art indef long tail.
 %mor: E*0det:art indef|a Eadj|long En|tail.
 %cod: (*ENPc=0Edet:art indef-Eadj-En)
 %err: 0=art indef \$SYN \$ARTINDEFLOS (ERR)
 *TEA: and the joey, the baby, the joey in his pouch.
 *AE: 0*det:artdef pouch.
 %mor: E*0det:artdef|the En|pouch.
 %cod: (*ENPc=0Edet:artdef-En)
 %err: 0=artdef \$SYN \$ARTDEFLOS (ERR)
 *TEA: what does he do?
 *TEA: he goes boing, boing, boing, he jumps, doesn't he?
 *AE: ye.
 %mor: Eyn|ye.
 *TEA: ye, he does.
 *TEA: right, what else is there?
 *TEA: the lion's face.
 *AE: oo!
 %mor: Einterj|oo.
 *TEA: somebody's torn it, haven't they?
 *AE: that 0*v lion.
 %mor: Epro:dem|that E*0v|be&3S&PRES En:prop|lion.
 %cod: (ENPs=Epro:dem/ENPs=En:prop)
 *TEA: that's the rest of the lion, well done.
 *TEA: they're in cages those poor lions.
 *AE: oh+dear!
 %mor: Einterj|oh+dear.

*TEA: oh dear, nevermind.
*TEA: shall we find a bit of the hippopotamus?
*AE: ye.
%mor: Eyn|ye.
*TEA: where's the, the hippopotamus there.
*TEA: who else is on that bit?
*AE: no.
%mor: Eyn|no.
*TEA: i think it does, try again.
*AE: that 0*v elephant.
%mor: Epro:dem|that E*0v|be&3S&PRES En:prop|elephant.
%cod: (ENPs=Epro:dem/ENPs=En:prop)
*TEA: elephant, that's right.
*AE: that 0*v elephant.
%mor: Epro:dem|that E*0v|be&3S&PRES En:prop|elephant.
%cod: (ENPs=Epro:dem/ENPs=En:prop)
*TEA: the elephant's trunk, trunk, and there's the bucket.
*AE: 0*det:artdef bucket.
%mor: E*0det:artdef|the En|bucket.
%cod: (*ENPc=0Edet:artdef-En)
%err: 0=artdef \$SYN \$ARTDEFLOS (ERR)
*TEA: with some water in for him to drink, and to squirt all over you.
*TEA: do you think we can fit this in?
*TEA: it's the park keeper and the seal.
*AE: seal.
%mor: En:prop|seal.
%cod: (ENPs=En:prop)
*TEA: where's the rest of him, where's the legs, where's the park keeper's legs?
*AE: that 0*v lion.
%mor: Epro:dem|that E*0v|be&3S&PRES En:prop|lion.
%cod: (ENPs=Epro:dem/ENPs=En:prop)
*TEA: that's the elephant.
*AE: elephant.
%mor: En:prop|elephant.
%cod: (ENPs=En:prop)
*TEA: and the?
*AE: there.
%mor: Eadv|there.
*TEA: who's sat on the elephant's back, who's sat on the elephant's back, who's that?
*AE: monkey.
%mor: En:prop|monkey.
%cod: (ENPs=En:prop)
*TEA: a monkey.
*TEA: what's he eating?
*AE: 0*det:art indef banana.
%pho: /nana/.
%mor: E*0det:art indef|a En|banana.
%cod: (*ENPc=0Edet:art indef-En)
%err: 0=art indef \$SYN \$ARTINDEFLOS (ERR)
*TEA: banana, that's right.
*TEA: do you like bananas?
*AE: ye.
%mor: Eyn|ye.
*TEA: you do, don't you?
*TEA: where's that one go then?

*AE: here.
%mor: Eadv|here.
*TEA: here, that's right, well done.
*AE: ye.
%mor: Eyn|ye.
*TEA: well done, maya, well done.
*TEA: you've done it all, haven't you?
*AE: ye.
%mor: Eyn|ye.
*TEA: yes, and you know all the animal's names, don't you?
*TEA: do you remember what, do you know what that one is?
*AE: dolphin.
%mor: En:prop|dolphin.
%cod: (ENPs=En:prop)
*TEA: a dolphin, that's right, clever girl.
*TEA: and what's?
*AE: crocodile.
%mor: En:prop|crocodile.
%cod: (ENPs=En:prop)
*TEA: crocodile.
*TEA: and the seal.
*AE: oh+dear!
%mor: Einterj|oh+dear.
*TEA: nevermind, it's cause the, they're not level, that's all.
*TEA: the seal.
*AE: seal.
%mor: En:prop|seal.
%cod: (ENPs=En:prop)
*TEA: and what's this one?
*AE: bird.
%mor: En:prop|bird.
%cod: (ENPs=En:prop)
*TEA: bird, what kind of a bird is it, do you know?
*AE: parrot.
%mor: En:prop|parrot.
%cod: (ENPs=En:prop)
*TEA: parrot, that's right, parrot.
*AE: oo!
%mor: Einterj|oo.
*TEA: oo, what's happened, did it fall on the floor?
*AE: xxx.
*TEA: no, it just broke, didn't it?
*AE: that one.
%mor: Edet:dem|that Epro:noml|one.
%cod: (ENPc=Edet:dem-Epro:noml)
*TEA: would you like to do something else?
*AE: that one.
%mor: Edet:dem|that Epro:noml|one.
%cod: (ENPc=Edet:dem-Epro:noml)
*TEA: yes, i'll get that one, let's put all the jigsaw together then in
a pile.
*TEA: wild animals, aren't they?
*AE: ye.
%mor: Eyn|ye.
*TEA: which ones do you like, which is the tall one?

*AE: that one.
 %mor: Edet:dem|that Epro:noml|one.
 %cod: (ENPc=Edet:dem-Epro:noml)
 *TEA: that one, the parrot.
 *TEA: which is the tall animal, the?
 *TEA: giraffe is very tall, isn't it?
 *AE: ye.
 %mor: Eyn|ye.
 *TEA: it is, yes.
 *TEA: are you tall, are you a tall girl?
 *AE: ye.
 %mor: Eyn|ye.
 *TEA: yes, you're growing.
 *AE: that one.
 %mor: Edet:dem|that Epro:noml|one.
 %cod: (ENPc=Edet:dem-Epro:noml)
 *TEA: thank you, with the snake on, sit still.
 *AE: that one.
 %mor: Edet:dem|that Epro:noml|one.
 %cod: (ENPc=Edet:dem-Epro:noml)
 *TEA: you want to do the shapes?
 *AE: ye.
 %mor: Eyn|ye.
 *TEA: can you take them off?
 *AE: oo!
 %mor: Einterj|oo.
 *TEA: oh dear, what's that?
 *TEA: give it to me.
 *AE: that 0*v yuck.
 %mor: Epro:dem|that *0v Eadj|yuck.
 %cod: (ENPs=Epro:dem)
 *TEA: i don't know, i think it must have been playdough.
 *TEA: what shape's that, do you know?
 *AE: xxx.
 *TEA: circle, circle.
 *AE: xxx.
 *TEA: they fell over the cupboard and i couldn't reach them, there should
 be some more, you're right.
 *AE: 0*det:artdef cupboard.
 %mor: E*det:artdef|the En|cupboard.
 %cod: (*ENPc=0Edet:artdef-En)
 %err: 0=artdef \$SYN \$ARTDEFLOS (ERR)
 *TEA: over the cupboard, yes, somebody knocked them, they fell over the
 cupboard.
 *TEA: what shape's that, do we know?
 *AE: yellow.
 %mor: Eadj|yellow.
 *TEA: square.
 *AE: that one.
 %mor: Edet:dem|that Epro:noml|one.
 %cod: (ENPc=Edet:dem-Epro:noml)
 *AE: there.
 %mor: Eadv|there.
 *TEA: pentagon.
 *AE: one.
 %mor: Enum|one.

*AE: two.
 %mor: Enum|two.
 *AE: three.
 %mor: Enum|three.
 *AE: four.
 %mor: Enum|four.
 *TEA: and a triangle.
 *AE: one.
 %mor: Enum|one.
 *AE: xxx.
 *AE: blue [/] blue.
 %mor: Eadj|blue.
 *TEA: thank you, one.
 *AE: two.
 %mor: Enum|two.
 *AE: three.
 %mor: Enum|three.
 *TEA: that's, one, two, three.
 *TEA: what colour's that one?
 *AE: red.
 %mor: Eadj|red.
 *TEA: red one, red pentagon.
 *TEA: and a?
 *AE: there.
 %mor: Eadv|there.
 *TEA: blue, blue one.
 *AE: that one.
 %mor: Edet:dem|that Epro:noml|one.
 %cod: (ENPc=Edet:dem-Epro:noml)
 *TEA: and that one.
 *TEA: what shape's that?
 *AE: no [/] no.
 %mor: Eyn|no.
 *TEA: does it go in there?
 *AE: ye.
 %mor: Eyn|ye.
 *TEA: circle, well done.
 *AE: here.
 %mor: Eadv|here.
 *AE: 0*det:art indef blue one.
 %mor: E*0det:art indef|a Eadj|blue Epro:noml|one.
 %cod: (*ENPc=0Edet:art indef-Eadj-Epro:noml)
 %err: 0=art indef \$SYN \$ARTINDEFLOS (ERR)
 *TEA: which one are you going to give me?
 *AE: that one.
 %mor: Edet:dem|that Epro:noml|one.
 %cod: (ENPc=Edet:dem-Epro:noml)
 *AE: here [/] here.
 %mor: Eadv|here.
 *TEA: that goes there.
 *AE: that one 0*v baby.
 %mor: Edet:dem|that Epro:noml|one *0v Eadj|baby.
 %cod: (ENPc=Edet:dem-Epro:noml)
 *AE: there.
 %mor: Eadv|there.

*AE: 0*det:artdef orange 0*pro:noml 0*v here.
 %mor: E*0det:artdef|the Eadj|orange E*0pro:noml|one *0v Eadv|here.
 %cod: (*ENPc=0Edet:artdef-Eadj-0Epro:noml)
 %err: 0=artdef \$SYN \$ARTDEFLOS 0=pro:noml \$SYN \$PRONOMLLOS (ERR)
 *TEA: orange, that's right.
 *AE: 0*det:art indef red one [/] red one.
 %mor: E*0det:art indef|a Eadj|red Epro:noml|one.
 %cod: (*ENPc=0Edet:art indef-Eadj-Epro:noml)
 %err: 0=art indef \$SYN \$ARTINDEFLOS (ERR)
 *TEA: the red one.
 *TEA: what colour's that one?
 *TEA: one, two, three blue ones, aren't there, all the same?
 *TEA: do the triangles now.
 *TEA: do you want to put the triangles on?
 *TEA: put them on the top.
 *AE: there.
 %mor: Eadv|there.
 *TEA: triangle.
 *AE: 0*det:art indef triangle.
 %mor: E*0det:art indef|a En|triangle.
 %cod: (*ENPc=0Edet:art indef-En)
 %err: 0=art indef \$SYN \$ARTINDEFLOS (ERR)
 *TEA: one, two, three, four.
 *AE: that 0*v 0*det:art indef triangle.
 %mor: Epro:dem|that E*0v|be&3S&PRES E*0det:art indef|a En|triangle.
 %cod: (ENPs=Epro:dem/*ENPc=0Edet:art indef-En)
 %err: 0=art indef \$SYN \$ARTINDEFLOS (ERR)
 *TEA: it is a triangle, ye.
 *AE: xxx.
 *TEA: is it slipping?
 *AE: ye.
 %mor: Eyn|ye.
 *TEA: where's the other ones, xxx triangle?
 *AE: ye.
 %mor: Eyn|ye.
 *TEA: where is it?
 *AE: there.
 %mor: Eadv|there.
 *TEA: there it is.
 *TEA: what colour is that one?
 *AE: one.
 %mor: Enum|one.
 *AE: two.
 %mor: Enum|two.
 *TEA: turn it a bit round.
 *AE: there.
 %mor: Eadv|there.
 *AE: xxx.
 *TEA: is it going in?
 *TEA: turn it.
 *TEA: that's it, well done.
 *AE: that.
 %mor: Epro:dem|that.
 %cod: (ENPs=Epro:dem)
 *TEA: orange triangle.

*AE: 0*det:art indef orange triangle.
 %mor: E*0det:art indef|an Eadj|orange En|triangle.
 %cod: (*ENPc=0Edet:art indef-Eadj-En)
 %err: 0=art indef \$SYN \$ARTINDEFLOS (ERR)
 *AE: ye.
 %mor: Eyn|ye.
 *TEA: do rectangles now.
 *AE: blue.
 %mor: Eadj|blue.
 *TEA: blue.
 *TEA: one, two, three.
 *TEA: is it slipping?
 *AE: there.
 %mor: Eadv|there.
 *TEA: there it is.
 *AE: ye.
 %mor: Eyn|ye.
 *TEA: well done.
 *TEA: shall i get a book?
 *AE: ye.
 %mor: Eyn|ye.
 *TEA: yes, please.
 *TEA: look at this, at the shops.
 *TEA: do you go shopping, do you go shopping?
 *TEA: what can you see there, what's this here, do you know what that is?
 *AE: jam.
 %mor: En|jam.
 %cod: (ENPs=En)
 *TEA: jam, that's right.
 *TEA: and cornflakes?
 *TEA: pasta, sorry.
 *TEA: what is it?
 *AE: pasta.
 %mor: En|pasta.
 %cod: (ENPs=En)
 *TEA: pasta?
 *AE: ye.
 %mor: Eyn|ye.
 *TEA: and that's chicken.
 *AE: that 0*v chicken.
 %mor: Epro:dem|that E*0v|be&3S&PRES En|chicken.
 %cod: (ENPs=Epro:dem/ENPs=En)
 *TEA: chicken, but you're not keen on chicken, are you?
 *AE: chicken.
 %mor: En|chicken.
 %cod: (ENPs=En)
 *TEA: ye, it's chicken.
 *TEA: what's this, do you know?
 *AE: milk.
 %mor: En|milk.
 %cod: (ENPs=En)
 *TEA: milk?
 *TEA: no, that's the milk one, the white one, that's juice, fruit juice.
 *AE: that 0*v milk.
 %mor: Epro:dem|that E*0v|be&3S&PRES En|milk.
 %cod: (ENPs=Epro:dem/ENPs=En)
 *TEA: that's milk, that's right.

*TEA: what are these?
 *AE: that 0*v juice.
 %mor: Epro:dem|that E*0v|be&3S&PRES En|juice.
 %cod: (ENPs=Epro:dem/ENPs=En)
 *TEA: that's juice, that's right.
 *TEA: what kind of juice?
 *AE: that 0*v 0*det:art indef egg.
 %mor: Epro:dem|that E*0v|be&3S&PRES E*0det:art indef|an En|egg.
 %cod: (ENPs=Epro:dem/*ENPc=0Edet:art indef-En)
 %err: 0=art indef \$SYN \$ARTINDEFLOS (ERR)
 *TEA: that's eggs.
 *TEA: how many eggs are there?
 *AE: one.
 %mor: Enum|one.
 *AE: shoes.
 %mor: En|shoe-PL.
 %cod: (ENPs=En)
 *TEA: i know you've got your new shoes on, your white shoes on.
 *TEA: turn around then so you don't fall, clever girl.
 *AE: there.
 %mor: Eadv|there.
 *TEA: in a carton, yes, aren't they?
 *TEA: fruit.
 *TEA: do you know what that one is?
 *TEA: it's pineapple, prickly pineapple.
 *AE: 0*det:art indef pineapple.
 %mor: E*0det:art indef|a En|pineapple.
 %cod: (*ENPc=0Edet:art indef-En)
 %err: 0=art indef \$SYN \$ARTINDEFLOS (ERR)
 *TEA: that's right.
 *TEA: and a lemon.
 *AE: 0*det:art indef lemon.
 %mor: E*0det:art indef|a En|lemon.
 %cod: (*ENPc=0Edet:art indef-En)
 %err: 0=art indef \$SYN \$ARTINDEFLOS (ERR)
 *TEA: what's this?
 *AE: 0*det:art indef orange.
 %mor: E*0det:art indef|a En|orange.
 %cod: (*ENPc=0Edet:art indef-En)
 %err: 0=art indef \$SYN \$ARTINDEFLOS (ERR)
 *TEA: orange, that's right.
 *TEA: and what are these?
 *AE: grapes.
 %mor: En|grape-PL.
 %cod: (ENPs=En)
 *TEA: grapes, that's right.
 *TEA: and do you like this?
 *AE: 0*det:art indef apple.
 %mor: E*0det:art indef|an En|apple.
 %cod: (*ENPc=0Edet:art indef-En)
 %err: 0=art indef \$SYN \$ARTINDEFLOS (ERR)
 *TEA: apple and?
 *AE: 0*det:art indef banana.
 %pho: /nana/.
 %mor: E*0det:art indef|a En|banana.
 %cod: (*ENPc=0Edet:art indef-En)
 %err: 0=art indef \$SYN \$ARTINDEFLOS (ERR)

*TEA: bananas, that's right.
 *TEA: these are, do you know what they are?
 *TEA: peach.
 *AE: 0*det:art indef peach.
 %mor: E*0det:art indef|a En|peach.
 %cod: (*ENPc=0Edet:art indef-En)
 %err: 0=art indef \$SYN \$ARTINDEFLOS (ERR)
 *TEA: and strawberries.
 *AE: that one [/] that one.
 %mor: Edet:dem|that Epro:noml|one.
 %cod: (ENPc=Edet:dem-Epro:noml)
 *TEA: do you like that one, do you like peaches?
 *AE: ye [/] ye.
 %mor: Eyn|ye.
 *TEA: in the summer, and the strawberries.
 *TEA: what are these, do you know?
 *AE: what 0*v these?
 %mor: Epro:interrog|what E*0v|be&3P&PRES Epro:dem|this-PL.
 %cod: (ENPs=Epro:interrog/ENPs=Epro:dem)
 *TEA: what are these, what's this, do you know what that one is, makes
 you cry a bit?
 *TEA: onion, potato.
 *AE: 0*det:art indef potato.
 %mor: E*0det:art indef|a En|potato.
 %cod: (*ENPc=0Edet:art indef-En)
 %err: 0=art indef \$SYN \$ARTINDEFLOS (ERR)
 *TEA: broccoli.
 *AE: broccoli.
 %mor: En|broccoli.
 %cod: (ENPs=En)
 *TEA: carrots.
 *AE: carrots.
 %mor: En|carrot-PL.
 %cod: (ENPs=En)
 *TEA: mushrooms.
 *AE: mushrooms.
 %mor: En|mushroom-PL.
 %cod: (ENPs=En)
 *TEA: corn, corn on the cob.
 *AE: ye.
 %mor: Eyn|ye.
 *TEA: and green pepper.
 *TEA: and some, do you know what that is?
 *TEA: tomato.
 *AE: xxx.
 *TEA: is it tomato?
 *AE: ye.
 %mor: Eyn|ye.
 *TEA: yes, it is, isn't it?
 *TEA: this is where you xxx sometimes and then you get washed.
 *TEA: what's that for, what's this, do you know, a brush, what do you do
 with that?
 *TEA: brushing your hair.
 *AE: ye.
 %mor: Eyn|ye.
 *TEA: does mummy brush your hair with a hairbrush?
 *TEA: she does, doesn't she?

*AE: daddy.
 %mor: En:prop|daddy.
 %cod: (ENPs=En:prop)
 *TEA: daddy does it, does he, did daddy do your hair this morning?
 *AE: ye.
 %mor: Eyn|ye.
 *TEA: he's made it very nice, hasn't he?
 *AE: stuck.
 %mor: Eadj|stuck.
 *TEA: ye, very smart.
 *AE: stuck.
 %mor: Eadj|stuck.
 *TEA: are you stuck?
 *TEA: take your leg out, that's it.
 *AE: ye.
 %mor: Eyn|ye.
 *TEA: what's this?
 *TEA: furniture.
 *AE: that 0*v 0*det:artindef bed.
 %mor: Epro:dem|that E*0v|be&3S&PRES E*0det:artindef|a En|bed.
 %cod: (ENPs=Epro:dem/*ENPc=0Edet:artindef-En)
 %err: 0=artindef \$SYN \$ARTINDEFLOS (ERR)
 *TEA: bed, ye.
 *AE: that 0*v baby-0*s.
 %mor: Epro:dem|that E*0v|be&3S&PRES En:prop|baby-*0POSS.
 %cod: (ENPs=Epro:dem/*ENPs=En:prop)
 %err: 0='s \$MOR \$NPOSSLOS (ERR)
 *TEA: a baby's bed, is it?
 *AE: ye.
 %mor: Eyn|ye.
 *TEA: what's this?
 *AE: that 0*v baby-0*s chair.
 %mor: Epro:dem|that E*0v|be&3S&PRES En:prop|baby-*0POSS En|chair.
 %cod: (ENPs=Epro:dem/*ENPc=En:prop-En)
 %err: 0='s \$MOR \$NPOSSLOS (ERR)
 *TEA: that's a baby's chair, that's right, ye.
 *TEA: they look nice to eat.
 *AE: icecream.
 %mor: En|icecream.

 %cod: (ENPs=En)
 *TEA: icecream, that's right.
 *TEA: and, see what this is, hamburger.
 *AE: 0*det:artindef hamburger.
 %mor: E*0det:artindef|a En|hamburger.
 %cod: (*ENPc=0Edet:artindef-En)
 %err: 0=artindef \$SYN \$ARTINDEFLOS (ERR)
 *TEA: and chips.
 *AE: cheese.
 %mor: En|cheese.
 %cod: (ENPs=En)
 *TEA: chips.
 *AE: chips.
 %mor: En|chip-PL.
 %cod: (ENPs=En)
 *TEA: not cheese, chips.
 *TEA: and some banana and orange and strawberries.

*AE: 0*det:art indef orange.
 %mor: E*0det:art indef|an En|orange.
 %cod: (*ENPc=0Edet:art indef-En)
 %err: 0=art indef \$SYN \$ARTINDEFLOS (ERR)
 *AE: strawberries.
 %mor: En|strawberry-PL.
 %cod: (ENPs=En)
 *TEA: that's right.
 *TEA: and some, do you know what that is?
 *AE: leaves.
 %mor: En|leaf-PL.
 %cod: (ENPs=En)
 *TEA: leaves, that's right, leaves on tomato soup, and some juice.
 *AE: juice.
 %mor: En|juice.
 %cod: (ENPs=En)
 *TEA: what are these called, do you know what they are?
 *AE: 0*det:art indef sandwich.
 %mor: E*0det:art indef|a En|sandwich.
 %cod: (*ENPc=0Edet:art indef-En)
 %err: 0=art indef \$SYN \$ARTINDEFLOS (ERR)
 *TEA: that's right, sandwiches, caroline has sandwiches for her dinner,
 doesn't she?
 *AE: ye.
 %mor: Eyn|ye.
 *TEA: yes.
 *TEA: do you like sandwiches?
 *AE: ye.
 %mor: Eyn|ye.
 *TEA: we do, don't we?
 *TEA: what's these, do you know what these are, these are different,
 aren't they, has daddy got any of these?
 *AE: ye.
 %mor: Eyn|ye.
 *TEA: screwdrivers?
 *AE: ye.
 %mor: Eyn|ye.
 *TEA: some screws.
 *AE: ye.
 %mor: Eyn|ye.
 *TEA: and the nails.
 *TEA: what do you do with the nails?
 *TEA: bang them in with a hammer, it's that.
 *AE: 0*det:art indef hammer.
 %mor: E*0det:art indef|a En|hammer.
 %cod: (*ENPc=0Edet:art indef-En)
 %err: 0=art indef \$SYN \$ARTINDEFLOS (ERR)
 *TEA: hammer.
 *TEA: and what's this?
 *AE: painting.
 %mor: Ev|paint-PROG.
 *TEA: painting, that's right, paint brush, that's right, painting brush.
 *TEA: and that's called a trowel, i don't think you'll know what that is,
 trowel for digging the soil.
 *TEA: and that's a plant.
 *TEA: have you got some plants like that at your house?

*AE: ye.
 %mor: Eyn|ye.
 *TEA: we've got one in the nursery, haven't we?
 *TEA: that's to put the water in to water them.
 *AE: 0*v that maya [*] [/] that maya.
 %mor: *0v Epro:dem|that En:prop|maya.
 %cod: (ENPs=Epro:dem/ENPs=En:prop)
 *TEA: no, i don't think so, not today, it's boring.
 *AE: that.
 %mor: Epro:dem|that.
 %cod: (ENPs=Epro:dem)
 *TEA: what else is on here?
 *TEA: oh, that door was banging, was it?
 *AE: ye.
 %mor: Eyn|ye.
 *TEA: it's stopped now.
 *TEA: these are shorts.
 *TEA: and who's that for, have you got a suit like that when you were
 little, when you were a baby?
 *AE: teddybear.
 %mor: En:prop|teddybear.
 %cod: (ENPs=En:prop)
 *TEA: that's right.
 AE: teddybear baby-0's [*].
 %mor: En:prop|teddybear En:prop|baby-*0POSS.
 %cod: (*ENPc=En:prop-En:prop)
 %err: 0='s \$MOR \$NPOSSLOS teddybear maya's=maya's teddybear \$SYN \$NPPPOS
 (ERR)
 *TEA: teddybear for babbies, that's right.
 *TEA: and what's this, what's that one, you like to eat this, don't you,
 what is it, do you know?
 *AE: maya like-0*s it.
 %mor: En:prop|maya Ev|like-*1S:PRES Epro|it.
 %cod: (ENPs=En:prop/ENPs=Epro)
 *TEA: cake, you like the cake, do you?
 *AE: ye.
 %mor: Eyn|ye.
 *TEA: chocolate cake, with maltesers on.
 *TEA: buns.
 *TEA: what else is there, what's these?
 *TEA: you like those, those.
 *TEA: have them with a drink.
 *AE: ye.
 %mor: Eyn|ye.
 *TEA: what do you have, what are they?
 *AE: xxx.
 *AE: gone.
 %mor: Eadj|gone.
 *TEA: biscuits, biscuits?
 *TEA: blowing your hair, isn't it?
 *TEA: making wind.
 *TEA: do you know what that is?
 *TEA: you put bread in it.
 *AE: bread 0*prep it.
 %mor: En|bread E*0prep|in Epro|it.
 %cod: (ENPs=En/ENPs=Epro)
 *TEA: toaster.

*AE: 0*det:art indef toaster.
 %mor: E*0det:art indef|a En|toaster.
 %cod: (*ENPc=0Edet:art indef-En)
 %err: 0=art indef \$SYN \$ARTINDEFLOS (ERR)
 *TEA: makes it toasted.
 *TEA: there's a frying pan for eggs.
 *TEA: little more?
 *TEA: what's this?
 *AE: 0*det:art indef fork.
 %mor: E*0det:art indef|a En|fork.
 %cod: (*ENPc=0Edet:art indef-En)
 %err: 0=art indef \$SYN \$ARTINDEFLOS (ERR)
 *TEA: fork and the?
 *TEA: knife.
 *AE: 0*det:art def knife.
 %mor: E*0det:art def|the En|knife.
 %cod: (*ENPc=0Edet:art def-En)
 %err: 0=art indef \$SYN \$ARTDEFLOS (ERR)
 *TEA: makes it toasted.
 *TEA: and a?
 *AE: spoon.
 %mor: En|spoon.
 %cod: (ENPs=En)
 *TEA: spoon, to have your dinner, yes.
 *TEA: they're nice things to have.
 *TEA: have you got some slippers?
 *TEA: you have, haven't you?
 *AE: ye.
 %mor: Eyn|ye.
 *TEA: what kind of slippers have you got, what colour are they?
 *AE: maya 0*v:aux got 0*d.
 %mor: En:prop|maya E*0v:aux|have-3S:PRES Ev|get-PERF *0d.
 %cod: (ENPs=En:prop/NP0)
 %err: 0=direct object \$SYN \$DLOS (ERR)
 *TEA: have you got a bike?
 *AE: ye.
 %mor: Eyn|ye.
 *TEA: i don't think you'll have a bike like that, will you?
 *TEA: what colour are your slippers, they're not purple and green like that, are they?
 *AE: that 0*v green.
 %mor: Epro:dem|that E*0v|be&3S&PRES Eadj|green.
 %cod: (ENPs=Epro:dem)
 *TEA: they're black and white.
 *TEA: that's green, the towel's green, ye.
 *AE: 0*det:art def towel 0*v green.
 %mor: E*0det:art def|the En|towel E*0v|be&3S&PRES Eadj|green.
 %cod: (*ENPc=0Edet:art def-En)
 %err: 0=art def \$SYN \$ARTDEFLOS (ERR)
 *AE: baby.
 %mor: En:prop|baby.
 %cod: (ENPs=En:prop)
 *TEA: have you got dalmatian slippers?
 *AE: baby's.
 %mor: En:prop:gen|baby-POSS.
 %cod: (ENPs=En:prop:gen)
 *TEA: is it a baby's towel?

*AE: ye.
 %mor: Eyn|ye.
 *TEA: you've got a pale green flannel, haven't you?
 *AE: ye.
 %mor: Eyn|ye.
 *TEA: what do you do with the flannel, what do we do with the flannel, do we wash you?
 *AE: maya [/] maya.
 %mor: En:prop|maya.
 %cod: (ENPs=En:prop)
 *TEA: maya, yours, ye.
 *TEA: do you wash your face with the flannel?
 *AE: ye.
 %mor: Eyn|ye.
 *TEA: yes, you do.
 *TEA: look what that is.
 *AE: xxx.
 *TEA: a ticktock.
 *AE: that's green, the towel's green, ye.
 *AE: 0*det:art indef ticktock.
 %mor: E*0det:art indef|a En|ticktock.
 %cod: (*ENPc=0Edet:art indef-En)
 %err: 0=art indef \$SYN \$ARTINDEFLOS (ERR)
 *TEA: clock, ticktock, ticktock.
 AM: drugo [] baby.
 %mor: Bdet|drug-*NEU:NOM:SG En:prop|baby.
 %cod: (*MNPc=Bdet-En:prop)
 %err: drugo=druga \$MOR \$DETGNEU (ERR)
 *TEA: another one there, a little one.
 %cod: (RS).
 *AE: 0*det:art indef little one.
 %mor: E*0det:art indef|a Eadj|little Epro:noml|one.
 %cod: (*ENPc=0Edet:art indef-Eadj-Epro:noml)
 %err: 0=art indef \$SYN \$ARTINDEFLOS (ERR)
 *TEA: and a vase.
 *AE: polar bear.
 %mor: En:prop|polarbear.
 %cod: (ENPs=En:prop)
 *TEA: polar bears, that's right.
 *TEA: they're polar bears, aren't they?
 *AE: no xxx.
 *TEA: do you do your polar bear like that?
 *AE: that 0*v polar bear.
 %mor: Epro:dem|that E*0v|be&3S&PRES En:prop|polarbear.
 %cod: (ENPs=Epro:dem/ENPs=En:prop)
 *TEA: they're polar bears in the arctic.
 *AE: ye.
 %mor: Eyn|ye.
 *TEA: ye.
 *TEA: did you do one of those with caroline?
 *AE: the end.
 %mor: Edet:art def|the En|end.
 %cod: (ENPc=Edet:art def-En)
 *TEA: the end, that's right, the end.
 *TEA: let's get you another one then, shall i?

*AE: another one.
 %mor: Edet|another Epro:nom1|one.
 %cod: (ENPc=Edet-Epro:nom1)
 *TEA: another one.
 *TEA: what's that, do you know what that is?
 *AE: xxx.
 *TEA: pardon?
 *AE: xxx.
 *TEA: coffee?
 *AE: xxx.
 *AB: jaje [/] jaje.
 %mor: Bn|jaje-NEU:NOM:SG.
 %cod: (BNPs=Bn)
 *TEA: no, it's an egg.
 %cod: (MGS).
 *AE: 0*det:art indef egg.
 %mor: E*det:art indef|an En|egg.
 %cod: (*ENPc=0Edet:art indef-En)
 %err: 0=art indef \$SYN \$ARTINDEFLOS (ERR)
 *TEA: egg.
 *AE: tiger.
 %mor: En:prop|tiger.
 %cod: (ENPs=En:prop)
 *TEA: tiger, ye.
 *AE: that 0*v horsey.
 %mor: Epro:dem|that E*0v|be&3S&PRES En:prop|horsey.
 %cod: (ENPs=Epro:dem/ENPs=En:prop)
 *TEA: what's that one, a horsey?
 *TEA: what's this?
 *AE: 0*det:art indef telephone.
 %mor: E*det:art indef|a En|telephone.
 %cod: (*ENPc=0Edet:art indef-En)
 %err: 0=art indef \$SYN \$ARTINDEFLOS (ERR)
 *TEA: and what are those?
 *TEA: what are you looking for?
 *TEA: oh, that's, have you got that one, have you got that one on your board?
 *AE: ye.
 %mor: Eyn|ye.
 *TEA: what is it?
 *AE: maya 0*v:aux got 0*d.
 %mor: En:prop|maya E*0v:aux|have-3S:PRES Ev|get-PERF *0d.
 %cod: (ENPs=En:prop/NP0)
 %err: 0=direct object \$SYN \$DLOS (ERR)
 *TEA: maya's got it, a spinning top.
 *TEA: where is it, the one like that, where is it, where is the one like that, where is it?
 *AE: maya 0*v:aux got 0*d here.
 %mor: En:prop|maya E*0v:aux|have-3S:PRES Ev|get-PERF *0d Eadv|herr.
 %cod: (ENPs=En:prop/NP0)
 %err: 0=direct object \$SYN \$DLOS (ERR)
 *TEA: there, that's right, here, that's right, it is here.
 *TEA: it's spinning round like a spinning top.
 *TEA: got the lion.
 *AE: that.
 %mor: Epro:dem|that.
 %cod: (ENPs=Epro:dem)

*TEA: what's that, what's this?
 *AE: cow.
 %mor: En:prop|cow.
 %cod: (ENPs=En:prop)
 *TEA: that's a cow, that's right.
 *AE: that xxx.
 *TEA: what is it?
 *TEA: it's the chair.
 *AE: 0*det:artdef chair.
 %mor: E*0det:artdef|the En|chair.
 %cod: (*ENPc=0Edet:artdef-En)
 %err: 0=artdef \$SYN \$ARTINDEF (ERR)
 *TEA: chair.
 *TEA: what's that?
 *AE: dog.
 %mor: En:prop|dog.
 %cod: (ENPs=En:prop)
 *TEA: a dog.
 *TEA: what's that one, have you got that one?
 *AE: that 0*v lion.
 %mor: Epro:dem|that E*0v|be&3S&PRES En:prop|lion.
 %cod: (ENPs=Epro:dem/ENPs=En:prop)
 *TEA: that's a lion, that one, you're right, that's the lion.
 AE: that go [] 0*adv.
 %mor: Epro:dem|that Ev|go-*1S:PRES E*0adv.
 %cod: (ENPs=Epro:dem)
 *TEA: is it the same as that?
 AE: that lion go [] in.
 %mor: Edet:dem|that En:prop|lion Ev|go-*1S:PRES Eprep|in.
 %cod: (ENPc=Edet:dem-En:prop)
 *TEA: that's a lion, i think it's, ye, i think it's better that one, isn't it?
 *TEA: that's the tiger.
 *TEA: where's the tiger, can you find it, is it here?
 *AE: ye.
 %mor: Eyn|ye.
 *TEA: is it?
 *TEA: look, is it there now?
 *AE: ye.
 %mor: Eyn|ye.
 *TEA: that's right.
 *AE: better.
 %mor: Eadj|good&CP.
 *TEA: you've lost your tiger.
 *AE: 0*pro 0*v better now.
 %mor: *0pro E*0v|be&3S&PRES Eadj|good&CP Eadv|now.
 %cod: (NP0)
 %err: 0=pro \$SYN \$PROLOS (ERR)
 *TEA: there it is.
 *AE: 0*pro 0*v better now.
 %mor: *0pro E*0v|be&3S&PRES Eadj|good&CP Eadv|now.
 %cod: (NP0)
 %err: 0=pro \$SYN \$PROLOS (ERR)
 *TEA: it's better now, ye.
 *AE: dirty.
 %mor: Eadj|dirty.
 *TEA: is he dirty?

*AE: ye.
 %mor: Eyn|ye.
 *TEA: oh dear, how's he got dirty?
 *AE: panda bear.
 %mor: En:prop|pandabear.
 %cod: (ENPs=En:prop)
 *TEA: has he been falling on the floor, got a dirty nose?
 *TEA: can you find the telephone?
 *TEA: oh, what's that one?
 *AE: maya 0*v painting.
 %mor: En:prop|maya *0v Ev|paint-PROG.
 %cod: (ENPs=En:prop)
 *TEA: for painting, right.
 *AE: maya 0*v painting.
 %mor: En:prop|maya *0v Ev|paint-PROG.
 %cod: (ENPs=En:prop)
 *TEA: you like painting.
 *AE: that 0*v mine.
 %mor: Epro:dem|that E*0v|be&3S&PRES Epro:poss|mine.
 %cod: (ENPs=Epro:dem/ENPs=Epro:poss)
 *TEA: that's yours, ye, put that one there then.
 *AE: that 0*v yours, mine.
 %mor: Epro:dem|that E*0v|be&3S&PRES Epro:poss|yours, Epro:poss|mine.
 %cod: (ENPs=Epro:dem/ENPs=Epro:poss/ENPs=Epro:poss)
 *TEA: yours, i'll have this one.
 *AE: maya xxx.
 *TEA: well done.
 *TEA: what else have you got on yours, what else have you got on yours?
 *AE: xxx.
 *TEA: have you got some blue shoes?
 *TEA: i've got that man.
 *TEA: do you know what that man is, that man there, do you know what he
 is, what's his name, do you know?
 *AE: here.
 %mor: Eadv|here.
 *TEA: policeman, that's right, here.
 *AE: policeman.
 %mor: En:prop|policeman.
 %cod: (ENPs=En:prop)
 *TEA: policeman.
 *AE: policeman.
 %mor: En:prop|policeman.
 %cod: (ENPs=En:prop)
 *TEA: policeman.
 *TEA: have you got your top?
 *TEA: and the tiger, xxx horse.
 *TEA: oh, look, have you got that?
 *TEA: you might have those on your card, mighten't you?
 *TEA: what are they?
 *AE: maya 0*v one.
 %mor: En:prop|maya *0v Epro:noml|one.
 %cod: (ENPs=En:prop/ENPs=Epro:noml)
 *TEA: what is it?
 *AE: xxx.
 *AE: maya.
 %mor: En:prop|maya.
 %cod: (ENPs=En:prop)

*TEA: yours are white, aren't they?
 *TEA: and what colour are those, what colour are they?
 *TEA: blue.
 *AE: ye.
 %mor: Eyn|ye.
 *TEA: there, that's right.
 *AE: there.
 %mor: Eadv|there.
 *TEA: put the tiger back, see if you can finish them all.
 *TEA: have we got fish anywhere?
 *TEA: no, i haven't got a fish.
 *TEA: have you got a goldfish?
 *AE: ye.
 %mor: Eyn|ye.
 *TEA: where's the goldfish?
 *AE: that way.
 %mor: Edet:dem|that En|way.
 %cod: (ENPc=Edet:dem-En)
 *TEA: one in the nursery, ye, ye.
 *TEA: it goes am, am, doesn't he, when you feed him?
 *TEA: how does he go?
 *TEA: he does, doesn't he?
 *AE: that way [/] that way.
 %mor: Edet:dem|that En|way.
 %cod: (ENPc=Edet:dem-En)
 *TEA: no, we don't want to go in there and get him out, he'd be frightened.
 *TEA: he's there, look.
 *AE: there, look.
 %mor: Eadv|there, Ev|look-IMP.
 *TEA: there, look, that's right.
 *TEA: have we got anymore?
 *AE: that 0*v 0*det:artdef baby here.
 %mor: Epro:dem|that E*0v|be&3S&PRES En:prop|baby Eadv|here.
 %cod: (ENPs=Epro:dem/ENPs=En:prop)
 *TEA: the baby.
 *TEA: is that the baby?
 *AE: that 0*v baby here.
 %mor: Epro:dem|that E*0v|be&3S&PRES En:prop|baby Eadv|here.
 %cod: (ENPs=Epro:dem/ENPs=En:prop)
 *TEA: is that the baby?
 *AE: ye.
 %mor: Eyn|ye.
 *TEA: no, it's the cardigan, the cardigan's there look, here by my finger
 that one.
 *TEA: where's the baby, can you see him?
 *AE: where's baby?
 %mor: Eadv|where Ev|be&3S&PRES En:prop|baby.
 %cod: (ENPs=En:prop)
 *TEA: babies have that, don't they?
 *TEA: what do babies have?
 *AE: that 0*v baby's.
 %mor: Epro:dem|that E*0v|be&3S&PRES En:prop:gen|baby-POSS.
 %cod: (ENPs=Epro:dem/ENPs=En:prop:gen)
 *TEA: teddy bears.
 *AE: that 0*v baby's.
 %mor: Epro:dem|that E*0v|be&3S&PRES En:prop:gen|baby-POSS.
 %cod: (ENPs=Epro:dem/ENPs=En:prop:gen)

*TEA: no, it's not the baby though, is it?
 *TEA: where's he gone?
 *TEA: he's got lost, that baby.
 *TEA: is he there, no, it's an apple.
 *AE: that 0*v baby's.
 %mor: Epro:dem|that E*0v|be&3S&PRES En:prop:gen|baby-POSS.
 %cod: (ENPs=Epro:dem/ENPs=En:prop:gen)
 *TEA: that's a teddy bear, isn't he, that one you've got?
 *AE: that 0*v 0*det:artdef baby.
 %mor: Epro:dem|that E*0v|be&3S&PRES E*0det:art indef|a En:prop|baby.
 %cod: (ENPs=Epro:dem/*ENPc=0Edet:artdef-En:prop)
 %err: 0=artdef \$SYN \$ARTDEFLOS (ERR)
 *TEA: that's the baby.
 *AE: that 0*v baby.
 %mor: Epro:dem|that E*0v|be&3S&PRES En:prop|baby.
 %cod: (ENPs=Epro:dem/ENPs=En:prop)
 *TEA: are you giving the teddy bear to the baby?
 *AE: ye.
 %mor: Eyn|ye.
 *TEA: oh.
 *TEA: does he love him?
 *AE: ye.
 %mor: Eyn|ye.
 *TEA: does he give him a cuddle?
 *TEA: you like that?
 *TEA: what there is there?
 *TEA: you had one of those, didn't you?
 *AE: ye.
 %mor: Eyn|ye.
 *TEA: it's a birthday cake.
 *AE: ye.
 %mor: Eyn|ye.
 *TEA: what are these on here?
 *AE: happy+birthday.
 %mor: Eadj|happ+birthday.
 *TEA: happy birthday, candles.
 *TEA: candles?
 *TEA: is it fluttery, is it fluttery?
 *AE: ye.
 %mor: Eyn|ye.
 *TEA: have you got a teapot or a fox?
 *TEA: can we see the fox?
 *TEA: where is it?
 *TEA: is it on one of mine, fox?
 *AE: fox.
 %mor: En:prop|fox.
 %cod: (ENPs=En:prop)
 *TEA: where is it?
 *TEA: go on.
 *AE: here.
 %mor: Eadv|here.
 *TEA: there he is.
 *TEA: ball, where does that go?
 *TEA: it's one the right one.
 *AE: that 0*v teddy.
 %mor: Epro:dem|that E*0v|be&3S&PRES En:prop|teddy.
 %cod: (ENPs=Epro:dem/ENPs=En:prop)

*TEA: the baby and the teddy.
 *TEA: there he is, ye, well done, and the teddy, and the football.
 *TEA: does that stay there?
 *AE: there 0*v baby.
 %mor: Eadv|there E*0v|be&3S&PRES En:prop|baby.
 %cod: (ENPs=En:prop)
 *TEA: there's the baby, there's the baby.
 *AE: there.
 %mor: Eadv|there.
 *AE: 0*det:art indef ticktock.
 %mor: E*0det:art indef|a En|ticktock.
 %cod: (*ENPc=0Edet:art indef-En)
 %err: 0=art indef \$SYN \$ARTINDEFLOS (ERR)
 *TEA: ticktock, find the ticktock.
 *AE: 0*det:art def ticktock [/] ticktock [/] ticktock.
 %mor: E*0det:art def|the En|ticktock.
 %cod: (*ENPc=0Edet:art def-En)
 %err: 0=art def \$SYN \$ARTDEFLOS (ERR)
 *TEA: ticktock.
 *TEA: can you see it anywhere?
 *AE: there 0*v two.
 %mor: Eadv|there *0v En|two.
 %cod: (ENPs=En)
 *TEA: put those back.
 *AE: two.
 %mor: Enum|two.
 *TEA: two, there two, they're right.
 *AE: two.
 %mor: Enum|two.
 *AE: one.
 %mor: Enum|one.
 *TEA: one.
 *AE: right.
 %mor: Eadj|right.
 *AE: one 0*v right.
 %mor: En|one E*0v|be&3S&PRES Eadj|right.
 %cod: (ENPs=En)
 *TEA: cardigan.
 *AE: 0*det:art indef cardigan.
 %mor: E*0det:art indef|a En|cardigan.
 %cod: (*ENPc=0Edet:art indef-En)
 %err: 0=art indef \$SYN \$ARTINDEFLOS (ERR)
 *TEA: that's it, cardigan.
 *TEA: are you wearing a cardigan?
 *AE: ye.
 %mor: Eyn|ye.
 *TEA: no, you're not, you've got a jumper.
 *AE: 0*det:art indef jumper.
 %mor: E*0det:art indef|a En|jumper.
 %cod: (*ENPc=0Edet:art indef-En)
 %err: 0=art indef \$SYN \$ARTINDEFLOS (ERR)
 *TEA: all in one, haven't you, a suit, all in one suit.
 *TEA: have you lost the chair?
 *AE: 0*det:art def chair.
 %mor: E*0det:art def|the En|chair.
 %cod: (*ENPc=0Edet:art def-En)
 %err: 0=art def \$SYN \$ARTDEFLOS (ERR)

*TEA: have you got new trousers on?
*TEA: pull you in, there we are.
*TEA: is that the teapot?
*AE: ye.
%mor: Eyn|ye.
*TEA: no, it isn't a teapot.
*AE: 0*det:art indef teapot.
%mor: E*0det:art indef|a En|teapot.
%cod: (*ENPc=0Edet:art indef-En)
%err: 0=art indef \$SYN \$ARTINDEFLOS (ERR)
*TEA: what's that?
*AE: that's 0*det:art indef teapot.
%mor: Epro:dem|that Ev|be&3S&PRES E*0det:art indef|a En|teapot.
%cod: (ENPs=Epro:dem/*ENPc=0Edet:art indef-En)
%err: 0=art indef \$SYN \$ARTINDEFLOS (ERR)
*TEA: that's a cup.
*AE: that 0*v 0*det:art indef teapot.
%mor: Epro:dem|that E*0v|be&3S&PRES E*0det:art indef|a En|teapot.
%cod: (ENPs=Epro:dem/*ENPc=0Edet:art indef-En)
%err: 0=art indef \$SYN \$ARTINDEFLOS (ERR)
*TEA: there's a teapot, well done, put the teapot on there, that's right,
handle.
*AE: 0*det:art indef handle.
%mor: E*0det:art indef|a En|handle.
%cod: (*ENPc=0Edet:art indef-En)
%err: 0=art indef \$SYN \$ARTINDEFLOS (ERR)
*TEA: handle.
*TEA: do you know that rhyme?
%act: the teacher sings the rhyme.
*AE: put it away.
%mor: Ev|put-IMP Epro|it Eadv|away.
%cod: (ENPs=Epro)
*TEA: want to put it away?
*TEA: does your mummy have tea?
*AE: ye.
%mor: Eyn|ye.
*TEA: mummy and daddy drink tea?
*TEA: put the cards in, the big cards, the big ones, these, big ones
first, thank you, one, two.
*AE: three.
%mor: Enum|three.
*TEA: three.
*AE: four.
%mor: Enum|four.
*AE: maya 0*v:aux do it.
%mor: En:prop|maya *0v:aux Ev|do-INF Epro|it.
%cod: (ENPs=En:prop/ENPs=Epro)
*TEA: ye.
*TEA: five.
*AE: six.
%mor: Enum|six.
*TEA: six, that's it, well done, six.
*TEA: can you put the pictures in now?
*AE: that 0*v baby.
%mor: Epro:dem|that E*0v|be&3S&PRES En:prop|baby.
%cod: (ENPs=Epro:dem/ENPs=En:prop)
*TEA: it's a nurse, looks after you when you're poorly in hospital.

*AE: ye.
 %mor: Eyn|ye.
 *TEA: ye.
 *TEA: and what's that one there?
 *AE: 0*det:art indef car.
 %mor: E*0det:art indef|a En|car.
 %cod: (*ENPc=0Edet:art indef-En)
 %err: 0=art indef \$SYN \$ARTINDEFLOS (ERR)
 *TEA: a car.
 *TEA: and what's this, do you know what that is?
 *AE: 0*det:art indef bumbumbum.
 %mor: E*0det:art indef|a En|bumbumbum.
 %cod: (*ENPc=0Edet:art indef-En)
 %err: 0=art indef \$SYN \$ARTINDEFLOS (ERR)
 *TEA: bumbumbum, that's right, a drum, that's it.
 *TEA: what's this one?
 *AE: 0*det:art indef tv.
 %pho: /ti: vi:/.
 %mor: E*0det:art indef|a En|tv.
 %cod: (*ENPc=0Edet:art indef-En)
 %err: 0=art indef \$SYN \$ARTINDEFLOS (ERR)
 *TEA: tv, television, tv.
 *AE: 0*det:art indef tv.
 %mor: E*0det:art indef|a En|tv.
 %cod: (*ENPc=0Edet:art indef-En)
 %err: 0=art indef \$SYN \$ARTINDEFLOS (ERR)
 *TEA: it is, tv.
 *AE: 0*det:art indef tv.
 %mor: E*0det:art indef|a En|tv.
 %cod: (*ENPc=0Edet:art indef-En)
 %err: 0=art indef \$SYN \$ARTINDEFLOS (ERR)
 *TEA: and what's this there?
 *AE: butterfly.
 %mor: En:prop|butterfly.
 %cod: (ENPs=En:prop)
 *TEA: a butterfly.
 *TEA: what does a butterfly do?
 *AE: oo!
 %mor: Einterj|oo.
 *TEA: oo, what's happened?
 *AE: there.
 %mor: Eadv|there.
 *TEA: down there?
 *AE: ye.
 %mor: Eyn|ye.
 *TEA: shall i pick them up?
 *TEA: what was it that fell on the floor?
 *AE: tiger.
 %mor: En:prop|tiger.
 %cod: (ENPs=En:prop)
 *TEA: a tiger.
 *AE: 0*det:art indef bumbumbum.
 %mor: E*0det:art indef|a En|bumbumbum.
 %cod: (*ENPc=0Edet:art indef-En)
 %err: 0=art indef \$SYN \$ARTINDEFLOS (ERR)
 *TEA: bumbumbum.

*AE: there.
 %mor: Eadv|there.
 *TEA: match one by one.
 *TEA: what's this there, what's that one there, what is it?
 *AE: parrot.
 %mor: En:prop|parrot.
 %cod: (ENPs=En:prop)
 *TEA: pretty polly, parrot, that's right.
 *AE: prettypolly.
 %mor: En:prop|prettypolly.
 %cod: (ENPs=En:prop)
 *TEA: pretty polly, pretty polly.
 *AE: yucky.
 %mor: Eadj|yucky.
 *AE: dirty.
 %mor: Eadj|dirty.
 *TEA: is he dirty again?
 *TEA: he's getting into a lot of trouble, i don't think he's dirty, mind
 you, it's just his colouring, he's got black stripes and orange
 stripes and white stripes, doesn't he?
 *TEA: there's the xxx, there's the?
 *TEA: this one, what is it?
 *AE: 0*det:art indef bus.
 %mor: E*0det:art indef|a En|bus.
 %cod: (*ENPc=0Edet:art indef-En)
 %err: 0=art indef \$SYN \$ARTINDEFLOS (ERR)
 *TEA: a bus, that's right, red bus.
 *AE: 0*det:art indef red bus.
 %mor: E*0det:art indef|a Eadj|red En|bus.
 %cod: (*ENPc=0Edet:art indef-Eadj-En)
 %err: 0=art indef \$SYN \$ARTINDEFLOS (ERR)
 *TEA: it's not neeno, is it, well done, you realised it, looks a
 bit like a fire engine, but it's not, it's got the white bit, it
 too big for a fire engine.
 *AE: no bus [/] no bus.
 %mor: Eqn|no En|bus.
 %cod: (ENPc=Eqn-En)
 *TEA: the bus.
 *AE: 0*det:art indef bus.
 %mor: E*0det:art indef|a En|bus.
 %cod: (*ENPc=0Edet:art indef-En)
 %err: 0=art indef \$SYN \$ARTINDEFLOS (ERR)
 *TEA: it's a bus.
 *AE: it's a bus.
 %mor: Epro|it Ev|be&3S&PRES Edet:art indef|a En|bus.
 %cod: (ENPs=Epro/ENPc=Edet:art indef-En)
 *TEA: it's a bus.
 *AE: it's a bus.
 %mor: Epro|it Ev|be&3S&PRES Edet:art indef|a En|bus.
 %cod: (ENPs=Epro/ENPc=Edet:art indef-En)
 *TEA: it's a bus.
 *AE: it's a bus.
 %mor: Epro|it Ev|be&3S&PRES Edet:art indef|a En|bus.
 %cod: (ENPs=Epro/ENPc=Edet:art indef-En)
 *TEA: do you go on a bus?
 *AE: ye.
 %mor: Eyn|ye.

*TEA: do you, you go on the bus with mummy and daddy?
*TEA: do you know what that is?
*AE: ye.
%mor: Eyn|ye.
*TEA: what is it, what does it do?
*TEA: it goes dingdingdingdingding.
*TEA: xylophone.
*AE: 0*det:artindef xylophone.
%mor: E*0det:artindef|a En|xylophone.
%cod: (*ENPc=0Edet:artindef-En)
%err: 0=artindef \$SYN \$ARTINDEFLOS (ERR)
*TEA: well done.
*TEA: do you sing with the xylophone?
*TEA: you like playing with the xylophone, don't you?
*TEA: do you know what that is, what's that big thing?
*AE: 0*det:artindef bus.
%mor: E*0det:artindef|a En|house.
%cod: (*ENPc=0Edet:artindef-En)
%err: 0=artindef \$SYN \$ARTINDEFLOS (ERR)
*TEA: a house, that's right.
*TEA: what's that, where does that go, up in the air, what is it?
*TEA: kite.
*AE: 0*det:artindef kite.
%mor: E*0det:artindef|a En|kite.
%cod: (*ENPc=0Edet:artindef-En)
%err: 0=artindef \$SYN \$ARTINDEFLOS (ERR)
*TEA: that's right.
*TEA: have you got a kite?
*AE: ye.
%mor: Eyn|ye.
*TEA: have you, does daddy fly your kite for you, do you fly it, you hold
the string?
*TEA: what's that called?
*AE: 0*det:artindef apple.
%mor: E*0det:artindef|an En|apple.
%cod: (*ENPc=0Edet:artindef-En)
%err: 0=artindef \$SYN \$ARTINDEFLOS (ERR)
*TEA: an apple, that's right.
*AE: 0*det:artindef bicycle.
%mor: E*0det:artindef|a En|bicycle.
%cod: (*ENPc=0Edet:artindef-En)
%err: 0=artindef \$SYN \$ARTINDEFLOS (ERR)
*TEA: what's that?
*AE: 0*det:artindef bucket 0*conj spade.
%mor: E*0det:artindef|a En|bucket E*0conj|and En|spade.
%cod: (*ENPc=0Edet:artindef-En/ENPs=En)
%err: 0=artindef \$SYN \$ARTINDEFLOS (ERR)
*TEA: bucket and spade.
*AE: sand [/] sand.
%mor: En|sand.
%cod: (ENPs=En)
*TEA: you play in the sand with it, that's right, you do, play in the sand.
*TEA: what do you do with the sand, do you dig?
*AE: fish [/] fish.
%mor: En:prop|fish.
%cod: (ENPs=En:prop)
*TEA: there are fishes.

*TEA: how many fishes?
 *TEA: they're swimming in the bucket.
 *TEA: are the fish swimming in the bucket?
 *AE: kookookookoo.
 %mor: En:prop|kookookookoo.
 %cod: (ENPs=En:prop)
 *TEA: that's right, kookookookoo, that's a hen.
 *TEA: what fell, what fell on the floor, what was it?
 AE: horsey fall [].
 %mor: En:prop|horsey Ev|fall&3S&*PRES.
 %cod: (ENPs=En:prop)
 *TEA: what was it that fell?
 *TEA: horsey, ye, horsey fell.
 *TEA: and there's the cow.
 *TEA: do you know what that is, do you know what it is?
 *TEA: it's a kettle.
 *AE: 0*det:art indef kettle.
 %mor: E*0det:art indef|a En|kettle.
 %cod: (*ENPc=0Edet:art indef-En)
 %err: 0=art indef \$SYN \$ARTINDEFLOS (ERR)
 @End

Appendix IV. Codes

NP Codes (% mor tier)

Nouns

En| (English noun)

Bn| - Gender:Case:Number

(Bosnian noun marked for gender, case and number)

En:prop| (English proper noun)

Bn:prop|-Gender:Case:Number

(Bosnian proper noun marked for gender, case and number)

En|-PL (English plural noun)

En:gen|-POSS (English noun with a possessive marker)

En:prop:gen|-POSS (English proper noun with a possessive marker)

Determiners

Edet| (English determiner)

Bdet| (Bosnian determiner)

Edet:artdef| (English definite article)

Edet:art indef| (English indefinite article)

Edet:dem| (English demonstrative determiner)

Bdet:dem| - Gender:Case:Number

(Bosnian demonstrative determiner marked for gender, case and number)

Edet:poss| (English possessive determiner)

Bdet:poss| (Bosnian possessive determiner)

Edet:neg (English negative determiner)

Pronouns

Epro| (English personal pronoun)

Bpro| (Bosnian personal pronoun)

Epro:noml| (English nominal pronoun)

Epro:dem| (English demonstrative pronoun)

Bpro:dem| - Gender:Case:Number

(Bosnian demonstrative pronoun marked for gender, case and number)

Epro:wh| (English question pronoun)

Bpro:wh| (Bosnian question pronoun)

Epro:poss| (English possessive pronoun)

Bpro:refl| (Bosnian reflexive pronoun)

Bpro:interrog| (Bosnian interrogative pronoun)

Epro:interrog| (English interrogative pronoun)

Adjectives

Eadj | (English adjective)

Badj-Gender:Case:Number (Bosnian adjective marked for gender, case and number)

General NP codes (%cod tier)

(ENPs=En) - a single English noun phrase which is a noun

(ENPc=Edet:artdef-En) –

a complex English noun phrase which consists of a determiner (definite article) and a noun

(*ENPs=Epro) - a single English noun phrase with an error which is a pronoun

(*ENPc=Edet-En) –

a complex English noun phrase with an error which consists of a determiner and a noun

(NP0) - a missing noun phrase in the utterances

(BNPs=Bn) - a single Bosnian noun phrase which is a noun

(BNPc=Badj-Bn) - a complex Bosnian noun phrase which consists of an adjective and a noun

(*BNPs=Bpro) - a single Bosnian noun phrase with an error which is a pronoun

(*BNPc=Badj-Bn) –

a complex Bosnian noun phrase with an error which consists of an adjective and a noun

(MNPs) - a single mixed noun phrase, where morphological inflections are mixed

(MNPc=Eadj-Bn) –

a complex mixed noun phrase which consists of an English adjective and a Bosnian noun

(*MNPs) - a single mixed noun phrase with an error

(*MNPc=Epro:poss-Bn) -

a complex mixed noun phrase with an error which consists of an English possessive pronoun and a Bosnian noun

(*ENPc=E0det:artdef-En) –

a complex English noun phrase with an error which consists of a missing determiner and a noun

NP Error Codes (%err tier)

Nouns

\$MOR \$NPL

(incorrect use of the plural marker on the noun)

0=s \$MOR \$NPOSSL0S

(\$morphological error; missing possessive marker on the noun)

\$MOR \$NPOSS

(incorrect use of possessive marker on the noun)

\$MOR \$NCNOM (\$noun;case;nominative - error);

(incorrect use of the nominative case on the noun)

\$MOR \$NCDAT (\$noun;case;dative - error)

\$MOR \$NCVOC (\$noun;case;vocative - error)

\$MOR \$NNUMSG (\$noun;number;singular - error)

\$MOR \$NNUMPL (\$noun;number;plural - error)

\$MOR \$NPNUMSG (\$noun phrase;number;sing-error)

\$MOR \$NBOSINFL0S

(\$English noun in Bosnian context; loss of appropriate inflection)

Determiners

0=artdef \$SYN \$ARTDEFLOS (syntactic error; missing definite article)

0=artindef \$SYN \$ARTINDEFLOS (syntactic error, missing indefinite article)

\$MOR \$DETGFEM (\$determiner;gender;feminine - error)

\$MOR \$DETGNEU (\$determiner;gender;neuter - error)

\$MOR \$DETPOSSL0SINFL (morphological error, missing inflection on a possessive determiner)

Pronouns

0=pro \$SYN \$PROLOS (syntactic error, missing pronoun)

\$PROLEX (wrong pronoun used)

pro=0 \$SYN \$PRORED (reduplicated pronoun)

\$MOR \$POSSPRO (incorrect use of the possessive pronoun)

0=pro:refl \$SYN \$REFLPROLOS (missing reflexive pronoun)

0=pro:wh \$SYN \$WHPROLOS (missing interrogative pronoun)

\$MOR \$PROLOSINFL (missing inflection on a pronoun)

NP=0 \$SYN \$NPRED (reduplicated noun phrase)

0=pro:noml \$SYN \$PRONOMLLOS (missing nominal pronoun)

Adjectives

\$MOR \$ADJCNOM (\$adjective;case;nominative - error)
\$MOR \$ADJGNEU (\$adjective;gender;neuter - error)
\$MOR \$ADJGFEM (\$adjective;gender;feminine - error)

Other

0=subj \$SYN \$SUBJLOS (missing subject - %err tier)
\$SYN \$NPPOS (error in the order of elements in the NP - %err tier)
\$MOR \$NUMGMASC (\$number;gender;masculine - error)
0*_ (ungrammatical omission - main line)
***0_** (ungrammatical omission - %mor tier)
[*] (error on main line)
***** (used on the %mor tier to indicate an error)
omission of affix (main line) - **0***
0*d (ungrammatical omission of the direct object - main line)
***0d** (ungrammatical omission of the direct object - %mor tier)
0=direct object \$SYN \$DLOS (missing direct object - %err tier)

Other Codes (%mor tier)

Verbs

Bv| - **person number:tense** (Bosnian verb marked for person, number and tense)
Ev| (English verb)
Ev| -3S:PRES (English verb marked for the 3rd person singular present tense)
Ev| - PAST (English verb marked for the past tense)
Ev| - PROG (English verb marked for the progressive)
Ev|-IMP (English verb in the imperative)
Bv| - IMP (Bosnian verb in the imperative)
Ev| irregular verb in the infinitive&person number&tense (form of an English irregular verb)
Bv| irregular verb in the infinitive&person number&tense (form of a Bosnian irregular verb)
Bv| irregular verb in the infinitive&NEG&person number&tense
(negative form of a Bosnian irregular verb)
Ev|-INF (English verb in the infinitive)
Bv| - INF (Bosnian verb in the infinitive)
Ev:aux| (English auxiliary verb)
Bv| irregular auxiliary verb in the infinitive&person number&tense
(Bosnian irregular auxiliary verb marked for person, number and tense)

Adverbs

Badv| (Bosnian adverb)
Eadv| (English adverb)

Prepositions

Eprep| (English preposition)
Bprep| (Bosnian preposition)

Other

Binterj| (Bosnian interjection)
Einterj| (English interjection)
Bnum| (Bosnian number)
Enum| (English number)
Bconv| (Bosnian convention)
Econv| (English convention)
Byn| (Bosnian yes/no word)
Eyn| (English yes/no word)

Parental Discourse Strategies (%cod tier)

MGS	(Minimal Guess Strategy)
EGS	(Expressed Guess Strategy)
RS	(Repetition Strategy)
CS+RS	(Code-switching + Repetition Strategy)
MOS	(Move on Strategy)
CS	(Code-switching)