

UNIVERSITY OF JYVÄSKYLÄ

**THE DEVELOPMENT OF LANGUAGE-MIXING
THROUGH DIFFERENT ACTIVITIES IN BILINGUAL
FIRST LANGUAGE ACQUISITION**

A Pro Gradu Thesis in English

by

Päivikki Pesonen

Department of Languages

2008

**HUMANISTINEN TIEDEKUNTA
KIELTEN LAITOS**

Päivikki Pesonen

**THE DEVELOPMENT OF LANGUAGE-MIXING THROUGH
DIFFERENT ACTIVITIES IN BILINGUAL FIRST LANGUAGE
ACQUISITION**

Pro Gradu -tutkielma

Englannin kieli
Lokakuu 2008

99 sivua + 2 liitettä

Vaikka kaksikielisten lasten kielenkehitys on pääosin samanlaista kuin yksikielisten lasten, niin ne eroavat toisistaan siinä, että kaksikieliset lapset kasvavat hyvin erilaisessa kielellisessä ympäristössä, jossa koodinvaihto saattaa olla tavallista. Tämä tutkimus selvittää, millaista kaksivuotiaan kaksikielisen lapsen puhe on eri tilanteissa, ja ennen kaikkea miten hän käyttää molempia kieliään yhtäaikaan näissä tilanteissa. Tutkimus selvittää, minkälaista lapsen koodin sekoittaminen on ja kuinka se muuttuu erilaisissa tilanteissa ja ajan myötä. Tutkimuksen aineisto koostuu pääosin ääninauhoituksista jotka sisältävät keskusteluita lapsen ja hänen lähisukulaistensa kesken. Lapsen puhetta äänitettiin erilaisissa tilanteissa hänen vanhempiensa sekä heidän perheittensä kanssa. Lapsen äitiä myös haastateltiin tutkimuksen loppuvaiheessa.

Tulokset osoittavat, että lapsi käyttää tietynlaisia koodin sekoittamisen ilmaisuja tietyissä tilanteissa. Tutkimuksen aikana lapsen koodin sekoittaminen myös muuttui ja kehittyi. Jotkut koodin sekoittamisen ilmaisu olivat yleisiä lapsen puheessa vain jonkun aikaa, kun taas toiset pysyivät yleisinä koko tutkimuksen ajan. Ilmaukset, jotka sisälsivät koodin sekoittamista myös lyhenivät ajan myötä. Koodin sekoittamista ilmeni ennen kaikkea sellaisten henkilöiden seurassa, jotka käyttivät koodinvaihtoa keskusteluissaan. Sen sijaan koodin sekoittaminen oli harvinaista silloin kun lapsi keskusteli yksikielisten sukulaistensa kanssa.

Tutkimuksen perusteella voidaan myös todeta, että lapsen koodin sekoittaminen on sidoksissa kielellis-sosiaaliseen kehitykseen kahdella tavalla. Ensiksi, kaksikielistä lasta saatetaan opettaa käyttämään joitakin tiettyjä sanoja tietyissä konteksteissa, vaikka niissä muuten käytettäisiinkin toista kieltä. Toiseksi, kaksikielinen lapsi saattaa kuulla paljon koodinvaihtoa ympäristössään, jolloin hän oppii myös itse käyttämään sitä puheessaan.

Asiasanat: bilingual first language acquisition, language-mixing, code-switching, language socialization

CONTENTS

<u>1 INTRODUCTION.....</u>	<u>4</u>
<u>2 BILINGUAL FIRST LANGUAGE ACQUISITION.....</u>	<u>9</u>
<u>2.1 Language socialization.....</u>	<u>11</u>
<u>2.2 Dominant language.....</u>	<u>13</u>
<u>3 THE DUAL LANGUAGE USE OF BILINGUALS.....</u>	<u>15</u>
<u>3.1 Language-mixing.....</u>	<u>15</u>
<u>3.2 Code-switching.....</u>	<u>18</u>
<u>3.3 The development of dual language use.....</u>	<u>19</u>
<u>3.4 Different activities in bilingual first language acquisition.....</u>	<u>20</u>
<u>4 THE DESIGN OF THE STUDY.....</u>	<u>21</u>
<u>4.1 Research questions.....</u>	<u>21</u>
<u>4.2 The subject.....</u>	<u>22</u>
<u>4.3 Data collection.....</u>	<u>23</u>
<u>4.4 Methods of analysis.....</u>	<u>25</u>
<u>5 QUALITATIVE ASPECTS OF LANGUAGE-MIXING.....</u>	<u>26</u>
<u>5.1 Language-mixes with everyday English words.....</u>	<u>27</u>
<u>5.1.1 Mixed utterances with “please”.....</u>	<u>27</u>
<u>5.1.2 Mixed utterances with ”look”.....</u>	<u>31</u>
<u>5.1.3 Mixed utterances with ”no”.....</u>	<u>36</u>
<u>5.2 Language-mixes with a word known only in English.....</u>	<u>40</u>
<u>5.3 Language-mixes with a more familiar English or Finnish word.....</u>	<u>43</u>
<u>5.3.1 More familiar English words.....</u>	<u>43</u>
<u>5.3.2 More familiar Finnish words.....</u>	<u>47</u>
<u>5.4 Other language-mixes.....</u>	<u>51</u>
<u>6 LANGUAGE-MIXING THROUGH DIFFERENT ACTIVITIES.....</u>	<u>58</u>
<u>6.1 Reading, free play and meal-time conversations with the parents.....</u>	<u>58</u>
<u>6.2 The child’s private talks.....</u>	<u>66</u>
<u>6.3 Meal-time conversations with the parents and the father’s family.....</u>	<u>68</u>
<u>6.4 Meal-time conversations with the parents and the mother’s family.....</u>	<u>70</u>
<u>6.5 The effect of different activities and participants on language-mixing.....</u>	<u>72</u>
<u>7 THE DEVELOPMENT OF LANGUAGE-MIXING.....</u>	<u>75</u>
<u>8 THE DEVELOPMENT OF LANGUAGE DOMINANCE.....</u>	<u>78</u>

<u>9 FROM LANGUAGE-MIXING TO CODE-SWITCHING.....</u>	<u>80</u>
<u>10 CONCLUSION.....</u>	<u>89</u>
BIBLIOGRAPHY.....	93
APPENDIX A. TRANSCRIPT NOTATION.....	97
APPENDIX B. DESCRIPTION OF DATA COLLECTION.....	99

1 INTRODUCTION

Much more research has been conducted on monolingual children's language acquisition than that of bilinguals, though there are more bilinguals compared to monolinguals (Romaine 1995: 181, De Houwer 2006: 785). Contrary to the common belief, bilinguals are a majority in the world as estimates of the bilingual population in the world vary between 60 % and 75 % (Baker 2004: 172). Brutt-Griffler (2004: 17) takes this even further by claiming that approximately 80 % of English language users in the world are bilingual or multilingual. Consequently, bilingual language acquisition, where two languages are acquired from infancy, is an important area of study. Studies conducted on monolingual language acquisition are not necessarily applicable on bilingual language acquisition, because, as Auer (2007: 323, 337) argues, "bilinguals do not usually speak like two-fold monolinguals", and the "codes" they use are not the same languages used in monolingual conversations.

Language-mixing and code-switching are the two major aspects of bilingual talk which distinguish it from monolingual talk, as bilinguals have two languages between which they are able to switch in their conversations. Consequently, language-mixing and code-switching are widely studied phenomena in the field of bilingualism. Code-switching, i.e. switching between two or more languages in a single utterance, has been studied from various different perspectives. Some of the studies have had a political point of view, Garrett (2007: 244) for example points out that the parents of some bilingual children see language-mixing a major problem that their children have. However, bilingualism and bilingual talk is generally now seen as a more positive phenomenon than before, and it has been realized that it differs in many ways from monolingualism and monolingual talk. The previous view that second language competence could be measured on the basis of monolingual competence has changed (Cenoz and Genesee 1998: 17). There are, for instance, differences in the environments where

monolingual and bilingual children learn languages, as children who have gone through bilingual first language acquisition have never been in a monolingual environment for a length of time (De Houwer 2006: 781). This is also applicable when considering the bilingual research subject of the present study. This study is a case study of a young bilingual girl's language mixing.

Romaine (1995: 183-185) distinguishes 6 types of contexts where childhood bilingual acquisition may occur. From these, type 1 (*one person – one language*) was closest to the environment where the research subject of the present study lives in, though type 6 (*mixed languages*) also had some similarities with it. The first is an environment where both parents speak only their own languages to the child, whereas the second is an environment where both parents mix between languages. However, as the *one person – one language* acquisition type is an environment where both parents speak only their own language to the child without mixing the languages, it is not precisely the environment where the research subject lives in. Actually, the child's father speaks to her only in English, but her mother speaks to her in Finnish and sometimes in English. However, the context is not similar with the acquisition type *mixed languages* either, because that would propose that both parents code-switch, which is not the case. Thus, in sum, the context where the research subject's bilingual acquisition occurred has most similarities with the *one person – one language* –context where both the parents speak their own language two the child.

Some researchers argue that it is very common in the *one person – one language* context for the child to learn to understand both languages, but speak only the dominant language of the community, especially if there is only one parent speaking the other language (Romaine 1995: 186, De Houwer 2006: 783). In contrast, the research subject's parents have noted and also the gathered data shows that she speaks Finnish very much, though the mother is the only parent who speaks Finnish, and English is the dominant language in the community. This aspect of the research subject's bilingual first language acquisition is even more interesting when it is considered that her mother does not consistently use Finnish when speaking to her.

Furthermore, as the research subject's mother understands English well, and it is the dominant language in the environment, it would not be surprising if it was the only language the child uses. But, in fact, the child uses Finnish daily in conversations with her mother and other people as well. The bilingual child is usually more proficient in one language than the other (see also De Houwer 2006: 784, Rubin and Toribio 1996: 387). This stronger or more developed language of the bilingual child is the child's dominant language, which is for instance used in private speech. In the present study, some recordings were also made when the child was speaking to herself. These are particularly interesting for their relevance for they may reveal some interesting aspects of the dominance of the languages.

Although there are various theories about why individuals switch between different codes in different situations, many of these theories have been based on studies of bilingual individuals who have acquired English as their second language in a thoroughly bilingual society where English is the official second language. In contrast, the present study is a case study about a two-year-old bilingual child living in England, who mixes between English and Finnish. Though this type of case study has some restrictions when it comes to generalizing, the results of the study bring essential information to the research area of bilingual first language acquisition that could not be noted if the goal was to generalize the results. Actually, the nature of this case study should be seen as a possibility for a deeper analysis of a bilingual child's language usage.

Unlike in most studies about code-switching adults, it is probable that a child this young does not yet fully realise her possession of two distinct codes, as she may not be old enough to be fully aware of the different languages used in her environment. Thus, she may not yet realize all the different possibilities of speaking two different languages. It has been argued that different languages are usually used according to different situations and purposes (Cenoz and Genesee 1998: 18, Baker 2004: 32). Though this may be true about code-switching adults, it seems that this is not always true when considering this bilingual child, who could be seen to use

both English and Finnish in most situations and for all purposes. However, the present study will consider whether the child's language-mixing develops according to this argument that Cenoz and Genesee put forward, thus evolving from language-mixing to purposeful situational code-switching. Accordingly, this development over time is an aspect that the present study investigates more closely during a few months, i.e. it will be shown how a bilingual child's language-mixing can evolve into purposeful code-switching used as a tool for communicating more effectively.

The time that a bilingual child seems to mix between two languages in all contexts has been considered to be quite short, as a two-year-old child begins to realize that mixing may impede understanding in some situations and with some interlocutors. Thus, there are a limited number of studies of this type. Moreover, the studies made of bilingual children's language-mixing have mainly concentrated on a single activity type, (see, for instance: Lanza 2001, Nicoladis and Secco 2000). The present study, in contrast, aims to investigate how different activities effect on language-mixing. Thus, the present study brings some new light to the study of language-mixing in bilingualism. Moreover, the study will elaborate how the mixing between languages in different activities changes over time, as the child begins to fully realise that she uses two distinct codes that are not understood by all interlocutors she communicates with. Furthermore, the fact that the languages the child uses are Finnish and English brings further interest to the research. Firstly, this has not been studied extensively, and secondly, Finnish and English are typologically very different languages. Thus, one could think that they are not the easiest languages to mix between.

To conclude, the present study strives to answer the following questions:

1. How does language-mixing occur in a bilingual child's speech?
2. Does language-mixing vary between different activities and with different interlocutors?
3. Is there apparent change in language-mixing in a few months?

2 BILINGUAL FIRST LANGUAGE ACQUISITION

According to De Houwer (2006: 781), as a child has heard two languages from birth, her language acquisition can be labelled as *bilingual first language acquisition*. The research subject's bilingualism could then also be described as *compound bilingualism*, which Romaine (1995: 79) explains as a type of bilingualism where the person learns two languages in the same environment, where they are used simultaneously, which makes the languages seem as one entity rather than two separate entities. Thus, it is not surprising if the child's speech includes a large amount of language-mixing, i.e. mixing between the two languages.

Compound bilingualism, which is also sometimes called *simultaneous bilingualism* or *infant bilingualism*, differs from *sequential bilingualism* where the child acquires a second language later, as Baker (2001: 87) explains. It cannot be argued that bilingual children or even compound bilingual children acquire their languages similarly, as great variability has been noted in individual language development. Baker (2001: 86) and Singleton (2004: 15) propose that this is due to differences between individuals and the social contexts where the languages are acquired. Thus, as Baker (2001: 86) reminds, simple generalizations about bilingual language development should not be made.

Genesee (2006: 60) and Meisel (2001: 29) argue that compound bilingual children learn their languages very similarly to monolingual children. Most English-speaking children acquire 250 to 350 words in their productive vocabulary by the age of 2, and at the same time they are able to produce multi-word sentences (Stoel-Gammon 2006: 645). According to Lieven (2006: 379), children aged from 2 to 9 years daily acquire 9 to 10 words in their vocabulary. From these, nouns form the largest single category. In addition, some utterances are learned as a whole and others as "slot-and-frame patterns", as Lieven (2006: 379, 381) points out. Lieven (2006: 386) also argues that in terms of production, around the age of 2 or after

children are able to join in routine conversations more effectively, including responding to questions and maintaining the topic of conversation. However, the quality and quantity of input also have an indisputable effect on the child's utterances.

Bilingual first language acquisition mainly goes through the same developmental stages as monolingual first language acquisition. However, the linguistic development in compound bilingualism could be seen, in some ways, as a more complex phenomenon than monolingual language development. Whereas a monolingual child receives input spoken by monolinguals and consisting of one language, a bilingual child's input may be spoken by monolinguals and bilinguals, and it consists of two languages.

The bilingual child hears only a limited amount of each of her languages, whereas a monolingual child hears all of her input in one language. Fernald (2006: 24) argues that bilingual children's speech perception skills develop slower than those of monolingual children because bilinguals hear less speech in one language than monolinguals. Moreover, according to Fernald (2006: 26), bilingual children may have difficulties in distinguishing one language from the other if there are people in her environment who speak one of the languages as their second language. There are also differences in the speech production of a bilingual child when compared to a monolingual child, the most important of these being language-mixing. When a bilingual child for instance has difficulties communicating an idea in one language, she can use the other language, thus resulting in language-mixing. Genesee (2006: 57) proposes three reasons for bilingual children's language-mixing: to fill gaps in their linguistic knowledge, for pragmatic effect (e.g. emphasis), and language socialization (promoting language-mixing). In other words, a bilingual child may mix languages if a word is more readily available in the other language, if the child wants her utterance to have a particular effect, or if language-mixing is promoted in the child's environment.

Thus, though there are major similarities in the linguistic development of monolingual and bilingual children, "...the speech perception and production skills of BFL [bilingual first language] learners appear to differ in significant ways from those of monolinguals" as Genesee (2006: 50) points out. However, the differences that bilinguals have when compared to monolinguals should not be seen as weaknesses. For instance, according to Genesee (2006: 54), language-mixing is a sign of bilingual children's communicative competence. Moreover, though bilingual children's vocabulary in one of their languages has been found to be usually smaller than monolingual children's, Genesee (2006: 61) points out that the combined vocabulary of their two languages is as large. In addition, as compound bilingual children hear two languages from birth, they are able to speak them both without a foreign accent, as Cunningham-Andersson (1999: 54) proposes.

2.1 *Language socialization*

According to Hamers (2004: 87), in compound bilingualism two forms are used in all functions, and as a result, the child develops an early metalinguistic awareness. Through this development, the bilingual child's communicative competence increases. As Garrett and Baquedano-López (2002: 345) point out, communicative competence not only involves linguistic competence, but also social competence. Thus, as Hamers (2004: 81) says, "through internalization processes the child appropriates the social values, forms, functions, and existing form-function mappings of language". In other words, through this process the bilingual child learns the different ways to use the two languages according to how the people around her use them. García (2005: 328) points out that language is an essential tool in the socialization process. According to Hamers (2004: 80), *language socialization* is a process through which the child is socialized in the use of, as well as through, language, and this process occurs in interaction.

Thus, it can be argued, a bilingual child is socialized into using language in the way that is promoted in her social environment.

Consequently, the child may learn to mix or switch between languages if this is usual in the social activities that she participates in. Reyes (2004: 79-80) argues:

as bilingual children become older, their exposure to different social and linguistic experiences increases, and these experiences in turn affect and enlarge their knowledge and ability to use their different languages and to deploy CS [code-switching] for sociolinguistic purposes.

As Kohnert et al. (2005: 257) among others propose, mixed language input does not have a negative effect on bilingual children. Accordingly, code-switching may be seen as a skill that a bilingual child learns through socialization and personal experience. Thus, in the present research, it is probable that the child may learn to code-switch purposefully, because her mother code-switches around and to her. Interaction between the child and the parent is important in the language socialization process of a young child, as has been noted by Morris and Jones (2007: 491). Morris and Jones (2007: 497) also found that grandparents have an effect on the child's language socialization. The grandparents' role in language socialization has not been studied much. It is, therefore, interesting to see how the language socialization process works in the present study, as the child's mother code-switches and her father and some of her grandparents are English and some Finnish. It is also interesting to find out whether or not the child's mother seems to socialize the child into code-switching.

2.2 *Dominant language*

As Romaine (1995: 25) points out, in bilingual environments children who are speaking a minority language in a society are usually expected to learn and mostly use the dominant language of the society they live in. Moreover, the learning of other languages may then be overlooked by the child's parents and others if the minority language is not used in the society at large. Cunningham-Andersson (1999: 47) proposes two circumstances which may lead to the child's passive command of a minority language in a bilingual family: firstly, if the father is the only person speaking the language, and secondly, if the parent speaking the minority language also uses the majority language with the child. In addition, if the parent speaking the minority language does not use it when there are majority language speakers present, the child may feel that the language is somehow inferior, Cunningham-Andersson (1999: 48) suggests. As Romaine (1995: 191) points out, the dominant language may change during bilingual first language acquisition. Consequently, it is probable that the dominant language of the society will eventually become the dominant language for the bilingual child. In contrast, however, Romaine (1995: 215) argues that if the child is closer to one of her parents, then the language spoken by that parent will develop faster than the other. According to Romaine (1995: 31), the *dominant language* is usually used in certain inner functions, such as speaking to oneself or thinking aloud.

As De Houwer (2006: 783) points out, one of the languages will always be more present in the input the child receives, and this dominant language in the input will probably change during the bilingual acquisition process. Paradis and Nicoladis (2007: 280) argue that the language to which a bilingual child has been more exposed is usually the dominant language. Actually, according to De Houwer (2006: 783), one of the languages, even if spoken by only one person in the child's environment, may be more dominant in the input if the person speaks much to the child. As Cunningham-Andersson (1999: 48) proposes, if the mother spends more time with the child, her language may initially become the dominant language for

the child, even if it is a minority language. Thus, the language which is more dominant in the input the child receives will probably become dominant in the child's output as well.

The proficiency of one of the languages may increase a great deal in a short stretch of time if the child temporarily receives a large amount of input in that language (De Houwer 2006: 783, Cunningham-Andersson 1999: 48). Language dominance develops when there is greater exposure to one of the languages, along with the greater need to use it (Jisa 2000: 1368). This is also an aspect which the present study will examine. Though it is probable that the English language will, in the future, develop to be the dominant language for the child, for it is the dominant language of the society she lives in, at the time of the recordings she still used a vast amount of Finnish in her speech. Therefore it is interesting to find out whether her dominant language will change during the study. It is also worth remembering that bilingual children do not all fit in the same mould even if they receive similar input. As Cunningham-Andersson (1999: 53) points out:

Children are individuals even if they grow up with two languages. What is true for one child may not be for another. No two children have the same combination of strengths and weaknesses even if they are brought up in the same family.

There are many signs in language production that may indicate a weak language, as Jisa (2000: 1368) argues. For instance, the child may prefer to use one of the languages in situations where either one could be used, or she may borrow grammatical items from the dominant language to the weak language. Thus, it could be argued that if the research subject of this study repeatedly chooses one of the languages over the other when either could be used, and if she clearly borrows more grammatical items from that language to the other, that language is, at this point, her dominant language. Therefore, if one of the child's languages is much more dominant, it may be the reason for language-mixing when the child communicates in the weaker language. This will be discussed in more detail in chapter 9.

3 THE DUAL LANGUAGE USE OF BILINGUALS

As pointed out earlier, bilinguals use their two languages in different ways than monolinguals. “Bilinguals are not two monolinguals inside one person. They own a unique combination of two languages that are both separate and integrated within the thinking system” (Baker 2004: 33). Moreover, according to Baker (2001: 101), the two languages that bilinguals use are not usually completely separate, and they are mixed in complex ways. As most of the studies of bilinguals’ language acquisition have been conducted about older children or adults rather than young children, these studies have mainly considered only adult code-switching rather than children’s language-mixing. However, as Baker (2004: 63) points out, children’s language-mixing is very common in bilingual families. Thus, bilingual children’s dual language use is an important area of study, and further research is needed of the development of language-mixing.

In the following, *language-mixing* and *code-switching* will be defined and explained. It will also be described how the development of dual language use occurs in bilingual first language acquisition, thus connecting language-mixing to code-switching. It will also be discussed how different activities may affect dual language use of bilinguals.

3.1 *Language-mixing*

Language-mixing could be described as bilingual children’s mixing of two languages in their speech, thus mixing the two languages in single utterances. There are other terms that have been used to refer to this aspect of bilingual children’s talk, but the term *language-mixing* is the most common of these, and thus used in the present study as well. Though some researchers apply the term *code-switching* to refer to both language-mixing and code-switching in a broad sense, for instance Jisa (2000: 1364) points out that language-mixing is very different from code-switching. Whereas code-switching is seen as a more purposeful activity to meet various needs in a

conversation, language-mixing may occur due to gaps in a child's vocabulary. More research is needed concerning bilingual first language acquisition and language-mixing, especially about the relationship of language-mixing and code-switching, as many studies have concentrated only on code-switching, instead of the development of language-mixing into code-switching. Concerning the studies that have been conducted on this subject, Romaine (1995: 206) observes that most researchers have come to the conclusion that bilingual children under 3 years do not differentiate the two languages they use. This is one of the reasons why language-mixing occurs. Actually, Meisel (1989: 14) claims that mixing usually occurs before or around age 2.

As Barron-Hauwaert (2004: 11) argues, language-mixing is usually unintentional, for young children's keenness to communicate may result in language-mixing. Furthermore, as Romaine (1995: 2) points out, when two languages are learned simultaneously, speaking often involves material from both languages. This consequently may lead to a large amount of language-mixing in a bilingual child's speech. Actually, language-mixing is seen as the main difference that distinguishes bilingual first language acquisition from monolingual first language acquisition (De Houwer 2006: 784).

According to Barron-Hauwaert (2004: 11), language-mixing is bilingual children's early dual use of the two languages, where the sentences are usually two or three word mixed sentences, combined of both languages, and mostly consisting of lexical elements. Furthermore, De Houwer (2006: 784) explains that mixed utterances are usually mainly in one language with only a noun from the other language. As an example of language-mixing, the parents of the research subject have reported her to say utterances such as: "Missä kengät? Missä shoes?" to her mother. Romaine (1995: 199) points out that bilingual child may repeat an item in both languages (for instance "kengät" and "shoes"), as if knowing that there are two codes, but not knowing which one to use in each context.

There has not been much research on children's language-mixing when compared to adult code-switching, as pointed out before. However, Nicoladis and Secco (2000) conducted a case study to find explanations for a bilingual child's language-mixing. They point out that usually bilingual children mix languages more when speaking to the parent who speaks the child's non-dominant language (Nicoladis and Secco, 2000: 10). Meisel (1989: 14), Rubin and Toribio (1996: 387), as well as Jisa (2000: 1368) found that language-mixing is most likely to occur if one of the child's languages is much more dominant, or if the child's parents or other people in the child's environment switch freely in their speech. As Nicoladis and Secco (2000: 5) point out, language-mixing occurs for various reasons, for instance because other interlocutors are also bilingual, or because the access to one of the languages may be easier. Furthermore, Nicoladis and Secco (2000: 18) found that when language-mixing occurred, the child did not know the translation equivalent in the other language. It may take a few years before the child possesses a large enough productive vocabulary to choose which language to use in each context (Nicoladis and Secco 2000: 24). In sum, as Jisa (2000: 1364) points out:

In studies of bilingual first language acquisition, language mixing is considered something that the bilingual child will eventually overcome through further mastery and acquisition of both languages.

In contrast, Reyes (2004: 79) argues that it is incorrect to claim that bilingual children's lexical mixing is due to their incomplete knowledge of the languages. Instead, Reyes (2004: 79) continues, a lexical item may be more readily available in one of the languages, thus resulting in lexical mixing. Moreover, Friedland and Miller (1999: 443) found in their study that all language mixing cannot be considered inappropriate. Thus, as there seems to be no unanimous views about bilingual children's language-mixing and its development, more research is needed on the subject.

Lanza (1991: 633), for instance, argues that the roles of dominance and context in the bilingual children's language-mixing should

be studied more carefully. The present research specifically addresses these essential issues about language-mixing. The effect of language dominance and different activities on language-mixing will be discussed in chapters 7 and 9.

3.2 *Code-switching*

As Romaine (1995: 207) points out, language-mixing declines over time as the bilingual child's vocabulary increases and this decreases the need to borrow from one language to the other. In the present study language-mixing is distinguished from *code-switching*, which could be described as adults' or older children's switching between two (or more) languages. Romaine (1995: 121) defines code-switching as "the insertion of lexical items from different languages into a single grammatical structure". According to Heredia and Altarriba (2001: 167), code-switching tends to consist of intrusions from the dominant language when communicating in the weaker language, which makes it similar to language-mixing. Heredia and Altarriba (2001: 165) argue that code-switching occurs because of a failure in word retrieval instead of lack of knowledge. As Chung (2006: 294) points out, some researchers view code-switching as a sign of language deficiency, while others see it as a communication skill. For instance, Reyes (2004: 94) claims that code-switching is a skill developed within communicative competence. Similarly, Kohnert et al. (2005: 256) propose that code-switching is an effective communication mode used by proficient bilinguals. Code-switching is a linguistic tool for bilinguals who usually use it purposefully, as Baker (2001: 101) points out. Lanza (1991: 655) argues that code-switching is language-mixing according to context. Thus, there are similarities in language-mixing and code-switching, but the main difference between them is the awareness of the two distinct codes. In other words, whereas the language-mixing child does not yet fully distinguish the two languages from each other, the code-switching adult (or child) distinguishes the languages from each other and is able to use code-switching for different social functions.

According to Reyes (2004: 78), most of the early research on code-switching concentrated on the interaction between adults. However, Romaine (1995: 188, 227) points out that children learn to organize their two languages according to the person they are talking to, and even two-year-old children can be seen to code-switch if they are able to use the languages according to the demands of different contexts. Jisa (2000: 1365), as well as Paradis and Nicoladis (2007: 280) argue, based on vast amount of research, that compound bilingual children (bilingual children raised in one person – one language families) are able to choose the appropriate language, depending on their interlocutor, already at the age of two. Thus, in other words, these bilingual children are capable of situational code-switching. According to Baker (2001: 104), two-year-olds are able to code-switch taking the context into account.

In contrast, as Jisa (2000: 1366) adds, non-situational code-switching requires skills that young bilingual children do not yet possess. Thus, bilingual children's code-switching is different from bilingual adults' code-switching. Whereas young bilinguals often switch single words in multiword utterances, adults or older children are able to switch larger constituents (Jisa 2000: 1367). Furthermore, code-switching may function, for instance, as a signal of a shift in speech activity (Bailey 2007: 265). Code-switching has many other functions as well. As Chung (2006: 303-304) found, code-switching may be used, for instance, to promote an interlocutor's comprehension or to repeat an item to reinforce a point. Functions of code-switching also include: capturing attention, reiterating a point, or identifying with a particular group, to name a few (Cheng 2003: 61).

3.3 The development of dual language use

In both language-mixing and code-switching the mixed utterance may be produced spontaneously without awareness of the mix. Actually, the child's language-mixing may develop into code-switching over time, as she learns to distinguish the languages from each other. As Lanza (1991: 655) points out: "there are degrees of bilingual awareness", i.e. the languages are first a fused

entity in the bilingual child's brain, but through bilingual awareness are eventually distinguished from each other. Baker (2004: 53) argues that children know very early on which language to speak in different situations. However, as Barron-Hauwaert (2004: 11) points out, time as well as enough skills in both languages are required for this development to take place. According to De Houwer (2006: 784), the amount of language-mixing and the length of time it is used depend upon the acceptability of such mixing in the child's environment. Nicoladis and Secco (2000: 7) claim that the bilingual child's parents play a great role in the child's language-mixing, as they are a model for the child to use or avoid language-mixing. However, Rubin and Toribio (1996: 390) do not see language-mixing as a problem, but instead argue that as the child gains greater competence in the languages and increasingly differentiates them, language-mixing develops into code-switching. Baker (2001: 91-92) points out that recent research does not support the idea of a fused language system in a bilingual child's brain, but instead it has been reported that a bilingual child is able to use the appropriate language very early on.

3.4 Different activities in bilingual first language acquisition

Different activities have a major role in the development of bilingualism because the different contexts where the two languages are learned and used define the different competences that develop in the two languages, as Cenoz and Genesee (1998: 18) argue. Furthermore, as Romaine (1995: 13) points out, a bilingual person may be more able to express meaning in one language than the other, especially in a certain context. The amount of participants in a discourse may also have an effect on the bilingual child's language-mixing (Lanza 2001: 222). Furthermore, bilingual awareness involves knowledge of when mixing is appropriate and when not, depending on the context (Lanza 1991: 653). Thus, there may be major differences in bilingual talk through different activities and contexts, which makes it essential to study bilingual first language acquisition in different activities and with different

participants. Concentrating on a single activity type would provide merely a narrow description of bilingual first language acquisition.

However, as pointed out in chapter 1, most previous studies about bilingual children's language-mixing have been about a single activity type, namely the child reading a book with one of the parents (see, for instance: Lanza 2001, Nicoladis and Secco 2000). For instance, according to Nicoladis and Secco (2000: 10) the child in their study was filmed in two contexts: alone with his mother, and alone with his father. In contrast, according to Lanza (1991: 656), studies of conversations outside the home could reveal more about bilingual children's language-mixing. The present study examines some activities outside the home as well, for instance eating in the grandparents' home. In addition, the activities that are studied at home are not only of a single type, but of various types, i.e. free play, eating, reading a book, going to sleep. Moreover, there are various participants in these activities, i.e. the child's parents, grandparents and other relatives. Furthermore, Garret and Baquedano-López (2002: 345) say that the activity is an important unit of analysis in socialization research. Thus, the different activities in the present study may be a useful source for studying the language socialization process as well.

In conclusion, as this study examines dual language use of a bilingual child in different activities, it may reveal how different contexts and interlocutors affect language-mixing. Furthermore, it may then be seen how language-mixing develops into purposeful code-switching as the child goes through a language socialization process.

4 THE DESIGN OF THE STUDY

4.1 Research questions

The focus of the present study is on the activities in which language-mixing occurs, and more specifically the alterations of language-mixing in different activities. The research subject's language-mixing was mainly observed in

four different types of activities, also concentrating on the development of language-mixing in these activities over time. There are thus three core questions that the present study touches upon. Firstly, how does language-mixing occur in a bilingual child's speech, i.e. what are the qualitative aspects of language-mixing? Secondly, does language-mixing depend on the context? Or, in other words, does more language-mixing occur in one activity than another or with some interlocutors, and whether it takes different forms in different activities. Thirdly, does language-mixing change or even develop into code-switching, and take different forms in these activities over time or not? In sum, the present study is about the nature of the research subject's language-mixing as well as its alterations over different activities and times. The present study will thus, through the research on language-mixing, demonstrate essential aspects of the development of bilingual first language acquisition from a new activity-based perspective.

4.2 The subject

The subject of the present study is a Finnish - English bilingual little girl, Grace, who lives in England. At daytime the father was mostly working outside the home, but sometimes at home as well. Grace's mother had moved to England from Finland at the age of 20, and had lived there for several years at the time of the data collection. She was at home looking after her and her little brother, whose age was 0;3-0;6 (years; months) during the time of the study. She speaks both languages to Grace and she understands the child's language-mixed utterances. Grace's father, who is English, and other relatives seemed to have some difficulties understanding Grace, because she spoke both English and Finnish to them as well. As Barron-Hauwaert (2004: 11) argues, young children's keenness to communicate may result in language-mixing, as under three-year-old children may not be cognitively developed enough to understand who understands which language.

As the study was conducted, Grace's age was 2;2-2;6, and this seemed to be a very interesting time to study her speech, as it was probable

that her language-mixing would diminish. It was also expected that the English language would take a greater role in her speech, because, as pointed out earlier, she lives in an English-dominant environment. But at the beginning of the study Grace's speech still included quite a large amount of Finnish. Moreover, it was noted during the study that Grace spoke some words and sentences that did not seem to be either language, but a child language of her own, as even the mother did not always understand these utterances in spite of great effort.

4.3 Data collection

The research questions stated in chapter 4.1 above were addressed through qualitative methods of study, namely analysis of audio recordings, made with a Minidisk-player and a microphone attached to it, and also some video recordings. Transcripts of actual recorded speech are essential when studying "the contextual dimensions of conversational interaction" (Lanza 2001: 203). Furthermore, Lanza (1991: 636) stresses the need to study bilingual children's language-mixing within the context of conversation. However, there were very few video recordings because of two reasons: firstly, the data amount would have been too extensive with both audio and video recordings. Secondly, the research subject is familiar and interested in video cameras, and would have thus understood that she is being recorded. This could have had a negative effect on the data, as awareness of recording may be a negative issue when conducting a discourse analysis (Wood and Kroger 2000: 58).

As the study is a case study, it was evident that the methods should be qualitative. The recordings were mainly done in three different types of daily activities for five months in the years 2007 and 2008 from October to February. Data from these different activities were examined because it was expected that they would reveal different aspects of Grace's language-mixing. The three activities which were recorded were: first, conversations or reading between the child and one or both of her parents, second, private talks that the child had when she, for instance, played in her room, and third, conversations between the child, her parents and close

English relatives, namely the father's family. There was also a further context after some of the data collection had been done: a group of four Finnish-speaking people, who are close relatives to the child, were visiting the child and her family for a week. At the time of this visit, the child's age was 2;5. The data collection of this context was done to see what would happen in the child's use of languages, as there would be much more Finnish speaking people in Grace's environment. It was also expected that the mother would use more Finnish during this time, which could also affect Grace's use of languages. As De Houwer (2006: 783) points out, dramatic increase of input in one of the languages may affect the child's use of languages in a very short time.

The different activities were recorded with the aid of the child's mother. Actually, this may be seen as an advantage in getting the most accurate information about the child's language-mixing, as there were no outsiders in the situations. In contrast, as Nicoladis and Secco (2000: 10) explain, in their study about bilingual children's language-mixing, one of the two researchers was always present when the situations were filmed. This could be seen as a disadvantage, as the presence of an outsider may affect the child's language-mixing. As pointed out earlier, the recordings were done over a certain stretch of time.

The three different situations were recorded in a couple of days about twice a month during 5 months. Each recording took 10 to 50 minutes. This resulted in a large amount of data, but not all of the recordings were analysed. As the study aims to examine the different aspects of language-mixing, only those recordings which included language-mixing were analysed. It was necessary to record the child's speech this often, because it was presumed that sudden changes might take place, and language-mixing instances would not occur very often.

Table 1 below summarises the data that was analysed for the present study. The total amount of audio and video recordings which included language-mixing is indicated with a number. A dash (-) indicates

that there is no recording of that specific activity from that month. A more detailed description of the whole data is presented in table 2 in Appendix B.

Table 1. Description of analysed data during the research

Reading	Table conversations	Free play	The child's private talks	
October 2007	-	2	2	1
November 2007	5	3	6	3
December 2007	3	2	1	-
January 2008	-	4	4	-
		February 20083-2-		

4.4 Methods of analysis

The recordings were chosen for analysis on the basis of the data in them. The recordings were listened to several times. After this a preliminary identification of language-mixing instances was done, and they were collected for a more detailed analysis. There were 116 language-mixing instances found in the data. These recordings were transcribed and thoroughly analysed for instances of language-mixing. The transcription method used was based on the system developed by Gail Jefferson for conversation analysis. The language-mixing instances were arranged in four different ways: firstly, according to the typical forms of language-mixing to identify the most usual cases; secondly, according to the different activity types to see how language-mixing varies in different activities. Thirdly, the language-mixing instances were arranged in a chronological order to find out how language-mixing develops over time. Finally, the instances were arranged according to code-switching found in them to investigate if the child was able to use code-switching for communicative purposes.

Comparisons of language-mixing were made between recordings from different activities and different times. The focus was on the child's speech, but it could not be analysed without paying some attention to

the speech of others present in the conversation as well, because language-mixing cannot be analysed without taking the context where it occurs into account, as Lanza (2001: 219) argues. Rubin and Toribio (1996: 387), as well as Lanza (1991: 635) also emphasize the importance of investigating the bilingual child's language input while analysing the mixed output, because some children are socialized into mixing languages. For instance, other people, especially the mother of the child, as she knows both languages, also switched between languages.

The research was also discussed with the child's mother and this was taken into consideration in the analysis of the data, because her point of view on the matter was seen as useful information that could assist in the analysis. The discussion was carried out by listening to the recordings with the mother and asking her to comment on the child's language-mixing. The father was not involved in this discussion, because he understands Finnish only a little, and thus could not understand most of the Finnish utterances in the language-mixes. The discussion with the mother was videotaped. She told how she heard the language-mixes, and her opinion on why they may have occurred and how usual these type of mixes were in Grace's daily speech.

5 QUALITATIVE ASPECTS OF LANGUAGE-MIXING

As the 116 language-mixing instances found in the data were analysed, it was noted that there were various types of language-mixes that could be categorised according to similarities in them. The different categories thus formed were: firstly, language-mixes with everyday English words, namely "please", "look" and "no", which were mainly present in requests and negation. This was the largest group in the data, as there were 48 instances. Secondly, language-mixes with words (at least at an earlier stage) known only in English (for instance, "daddy"), was another group. Thirdly, a category was formed from the mixed utterances with an English or Finnish

word which was more familiar in the child's vocabulary compared to the equivalent in the other language. However, all language-mixes did not fit into these three categories. Moreover, these other language-mixes do not seem to share any major similarities. Examples of the three categories, as well as the other mixed utterances, will be provided below, with English translations in italics directly after each example. The description of the activity type is provided before each example. Grace's age during the example is given after each example number (years;months). An analysis follows after each example with a description and possible reasons for the language-mix. As pointed out earlier, Grace's mother was interviewed about the examples in the present study. As she listened to the recordings, she usually agreed that the transcriptions were correct. However, if she heard some examples differently or had something to add, her comments of those examples are included in the analysis.

5.1 *Language-mixes with everyday English words*

5.1.1 Mixed utterances with "please"

A very common aspect of Grace's language-mixing was to insert the word "please" in an otherwise Finnish utterance. Grace pronounced the word "please" in a way that it sounded like "pis" or "piis", and it was used a little differently than the word "please" commonly is. For instance, "pis" or "piis" was sometimes uttered at the end of a request after a small pause, and sometimes it was used in the beginning or even in the middle of an utterance. However, it was most common in Grace's speech to include the word "pis" or "piis" at the end of an utterance, as in the following example taken from a breakfast table conversation between Grace and her parents.

Example 1 (2;2)

- | | |
|---|--------------------------------|
| 1 | Grace: pUUO? (2) puu, (2) puu, |
| 2 | Father: what do you [want?] |
| 3 | Grace: [mä hau]an (.) ↑ pis? |
| 4 | Father: water |
| 5 | Grace: [pis] |
| 6 | Mother: [ei] (se haluaa) puu- |

7 Father: hh?
 8 Mother: roa. puuroa. (.) porridge.

1 Grace: porridge? (2) porr, (2) porr,
 2 Father: what do you [want?]
 3 Grace: [I wan]t (.) ↑ pis?
 4 Father: water
 5 Grace: [pis]
 6 Mother: [no] (she wants) porr-
 7 Father: hh?
 8 Mother: idge. porridge. (.) porridge.

Grace asks for porridge in Finnish, first pronouncing nearly the whole word and then pronouncing only the first syllable of the word twice, with pauses between. Grace's father, who does not understand what she is trying to say, inquires what she wants in English. Grace's answer in Finnish ("I want") on line 3 overlaps with the father's question on line 2. After a small pause, she says "pis" at the end of her Finnish utterance. The father asks if it is water that Grace wants, and Grace says "pis" again on line 5. It overlaps with her mother's utterance on line 6, as she explains in Finnish, for some reason, in response to Grace's father's turn, that what Grace wants is porridge. It could be added here that based on the data this was not a regular feature of the mother's speech, as she usually always spoke in English to her husband. Grace's father does not understand the mother's Finnish utterance, and he makes a sound on line 7, which is a repair initiator signalling that he has not understood the previous utterance. The term *repair* is used in this study to refer to the action of identifying errors and executing corrections in conversation (Hutchby and Wooffitt 1998: 57-61). Finally, the mother first finishes the Finnish word she started to utter before, and in the end self-repairs by repeating the word porridge in English on line 8.

It can be argued that there are two main reasons for Grace's language-mix in the previous example. Firstly, Grace begins the utterance on line 3 with the Finnish words which appear often in the data when Grace wants something, namely "mä huan" ("I want"). Grace's mother commented that Grace has often uttered the word "huan", but usually with her name before it, rather than "mä". There is an "l" sound missing in the middle of the word "haluan", which is, based on the data, a regular feature

of Grace's talk. Secondly, Grace uses the word "pis", because her parents have taught her to say "please" when she wants something. Grace's mother pointed out in the interview that Grace says "please" because she tells her to. It is important here to take the fact into consideration that Finnish does not have any commonly used equivalent to "please".

Moreover, Grace used "please" even when speaking with her mother in Finnish when the father was not present, as in example 2 below, taken from a conversation between Grace and her mother as they have finished reading bedtime stories:

Example 2 (2;2)

1 Mother: pannaan pois (.) ups ((the book falls on the floor)) (2)=
 2 =noni? (.) hyvää yötä Grace. (2) otaksä ↓ pupun.
 3 Grace: piis pupu
 4 Mother: joo ((gives Grace the bunny))
 5 Grace: pupu:

1 *Mother: let's put away (.) woops ((the book falls on the floor)) (2)=*
 2 *=okay? (.) good night Grace. (2) will you take the ↓ bunny.*
 3 *Grace: piis bunny*
 4 *Mother: yeah ((gives Grace the bunny))*
 5 *Grace: bunny:*

Grace's mother begins to put away a book they were reading, but it falls on the floor and she picks it up. Then she checks if everything is okay with Grace, and says good night to her. She then asks if Grace wants to take her toy bunny, to which Grace answers with a language-mix "piis pupu" ("please bunny") on line 3. The mother answers in Finnish on line 4, and gives Grace the bunny. On line 5 Grace repeats the word "bunny" again in Finnish, with an extension of the last vowel.

It can be seen that the language-mixes in examples 1 and 2 are different, though they include the similar words "pis" and "piis", which both mean "please" as explained above. Unlike in example 1, in example 2 Grace begins the utterance on line 3 with the word "piis", after which she says what she wants, namely the bunny. It can be argued that as Grace has been taught to use "please" in English, she overgeneralizes the use of the word in Finnish utterances as well as English.

Another instance follows below where Grace used the word "pis" in a context which was otherwise thoroughly Finnish. Grace and her family have eaten breakfast, and Grace has some porridge left on her plate:

Example 3 (2;2)

1 Mother: eksä syö sitä enää.
 2 Grace: pois
 3 Mother: pannaanko [pois]
 4 Grace: [pois] (.) pis
 5 Mother: okei

1 Mother: *won't you eat it anymore.*
 2 Grace: *away*
 3 Mother: *shall we put [away]*
 4 Grace: *[away] (.) pis*
 5 Mother: *okay*

Grace's mother inquires if Grace does not want to finish her porridge. Grace says "pois", i.e. "away", meaning "put it away" on line 2. Her mother wants to be sure that Grace wants the porridge to be put away by adding "pannaanko", i.e. "shall we put" to the beginning, thus reformulating Grace's request. Grace's utterance "pois" on line 4 overlaps with her mother's utterance of the same word on line 3, and after a small pause Grace adds the word "pis", thus confirming her mother's suggestion. The mother accepts the request by answering "okei", so she and Grace jointly decide to put the porridge away.

After Grace has answered her mother that she wants the porridge to be put away on line 2, the mother asks her again to confirm that this is what she is requesting. However, as the mother repeats the question only adding a word to the beginning of the utterance ("pannaanko") on line 3, Grace seems to take this as a hint to add something to her utterance, as she says the word "pis" on line 4. Grace's mother pointed out that Grace usually said "paa pois piis", ("put away please"). Actually, based on the data, Grace's mother and father encouraged her to add the word "please" in the end of her requests if she did not remember to do this on her own. Furthermore, on the basis of the data and the mother's comments, it could be argued that Grace has been socialized into using "please" independent of the language used. Thus, Grace's use of the word "please" could be accounted for as being a result of a socialization process through which she has learned to apply the word in every suitable context (i.e. when requesting for something), either it is otherwise English or Finnish.

5.1.2 Mixed utterances with "look"

In contrast, the same reason is not applicable when considering some other language-mixes found from the data. For instance, Grace's English and Finnish utterances quite often included the verb "look" in English, as she

wanted someone to notice or comment on something. This was most often the case when Grace was reading bedtime stories with either of her parents. Actually, Grace's parents did not usually read to her, but instead looked at various pictures in the books with her, and asked her to name the things in the pictures. As Grace talked mostly in English with her father in these situations, language-mixing did not usually occur when she said "look". In comparison, language-mixing did often occur when Grace said "look" when reading a book with her mother, as in example 4 below:

Example 4 (2;3)

- | | |
|---|---|
| 1 | Mother: okay |
| 2 | Grace: tää on mm, (2) mikä? (.) look tää bikki |
| 3 | Mother: joo se on <u>keksi</u> Grace |
| 4 | Grace: okekkis○ |
| | |
| 1 | <i>Mother: okay</i> |
| 2 | <i>Grace: this is mm, (2) what? (.) look this bikki</i> |
| 3 | <i>Mother: yeah it's a <u>biscuit</u> Grace</i> |
| 4 | <i>Grace: o'biscuit</i> |

Grace looks at a picture and wonders what to call the thing in the picture. She begins, on line 2, to name the biscuit in the picture, but pauses for a moment in the middle, and then states to her mother that there is a "bikki", i.e. biscuit in the picture. She does this last effort with a language-mix consisting of two English words and a Finnish pronoun, though her utterance thus far has been only in Finnish. After this the mother agrees on line 3 and says in Finnish that it is "keksi", which Grace tries to imitate in the next utterance.

Grace begins by starting to name the picture, but then indicates with the "mm" and a pause that she is thinking. Even though Grace asks her mother on line 2 after the pause in Finnish "mikä?", i.e. "what?", she apparently realises the answer before her mother has any time to respond. As Grace has decided that there is a "bikki" (biscuit) in the picture, which is a word she uses for biscuit and some type of bread as well, she mixes the words "look" and "bikki" with the Finnish pronoun "tää" ("this"). Though there is no apparent reason for the English verb "look" in this utterance, the use of the word "bikki" may be explained by looking at the context. First the

mother translates the word "bikki" in Finnish on line 3 for Grace with an embedded repair, as she first accepts Graces answer, but then replaces the word "bikki" with the Finnish equivalent "keksi". Then Grace accepts the repair on line 4 by quietly trying to utter the word correctly. The mother's translation and the quietness of Grace's answer thus indicate that the Finnish equivalent for "bikki", namely "keksi", is not familiar to Grace. As a result, because Grace is not familiar with the Finnish word "keksi", she uses her version of the English word ("bikki") instead. However, to understand Grace's use of the word "look" in language-mixed utterances more deeply, it is essential to look at example 5, where she also uses the word:

Example 5 (2;3)

- | | |
|---|---|
| 1 | Mother: biscui- se on <u>pulla</u> . Grace. (.) pullapoika. |
| 2 | Grace: <u>polla</u> |
| 3 | Mother: <u>pulla</u> joo. (4) ja sillä on rusinas <u>ilmä</u> ? (.) toinen rusina? |
| 4 | Grace: <u>bikki</u> . (.) look, (.) tuo, (.) tuo <u>bikki</u> . (<u>tuos</u> .) kato. |
| 5 | Mother: niin se <u>juoksee</u> . |
| | |
| 1 | Mother: biscui- it's a <u>bun</u> . Grace. (.) a bun man. |
| 2 | Grace: <u>bun</u> |
| 3 | Mother: <u>bun</u> yeah. (4) and it has a raisin <u>eye</u> ? (.) another raisin? |
| 4 | Grace: <u>bikki</u> . (.) look, (.) that, (.) that <u>bikki</u> . (<u>there</u> .) look. |
| 5 | Mother: yeah it <u>runs</u> . |

Grace's mother explains that there is a bun man in the picture, and Grace repeats the word "bun" after her on line 2, with a slightly different pronunciation. After this, the mother repeats the word but corrects the pronunciation on line 3, and after a pause explains that it has raisin eyes. On line 4 Grace says "bikki", which again means biscuit, and explains her mother with a language-mix that there is a "bikki" in the picture. Finally the mother agrees on line 5 and says that it runs.

Grace asks her mother to look in English, but identifies mostly in Finnish how there is a biscuit in the picture. There is a similar embedded repair here as in the previous example 4, as the mother corrects Grace's pronunciation of the noun "pulla". However, there is more to this language-mix, as the verb "look" is not the only mix here. Firstly, Grace begins her utterance with "bikki". In contrast, as may be found in the example 5, the

word "pulla" ("bun") is more unfamiliar to her. Thus, she applies the more familiar English word "biscuit", or her version of it, namely "bikki", to refer to "bun man" on line 4. Secondly, after Grace has said "look" in English, she finally says the same in spoken Finnish as well in the end, namely "kato". Thus, Grace's use of the verb "look" cannot be explained to be the result of unawareness of the Finnish equivalent, as she uses it as well in the same utterance with the English verb. However, the verb "look" occurred much more often in Grace's utterances than the spoken Finnish equivalent "kato".

Sometimes the verb "look" occurred in Grace's speech several times during a single conversation otherwise in Finnish to draw attention to something, as in example 6 below, taken from a conversation between Grace and her mother while reading a book:

Example 6 (2;3)

- | | |
|---|---|
| 1 | Mother: joo. (2) ja kato siinä, <u>mitä se</u> poika tekee. (3) se nostaa= |
| 2 | = <u>kädet</u> näin- |
| 3 | Grace: look (.) tuo <u>look</u> |
| 4 | Mother: joo kuinka <u>hienot</u> hiukset. |
| 5 | Grace: look |
| 6 | Mother: joo <u>seki</u> on <u>hieno</u> °se° <u>tyttö</u> nauraa. |
| 7 | Grace: look, (.) ja kaatuu. |
| 8 | Mother: joo se kaatuu ja voivoi, |
| | |
| 1 | Mother: yeah. (2) and look there, <u>what is the</u> boy doing. (3) he lifts= |
| 2 | =his <u>hands</u> like this- |
| 3 | Grace: look (.) that <u>look</u> |
| 4 | Mother: yeah how <u>nice</u> hair. |
| 5 | Grace: look |
| 6 | Mother: yeah <u>that's</u> also <u>nice</u> ° the° <u>girl</u> is laughing. |
| 7 | Grace: look, (.) and falls down. |
| 8 | Mother: yeah she falls down and oh no, |

Grace's mother shows Grace a picture of a boy, asking her what he is doing in the picture. Grace does not answer right away, and after a pause the mother continues and describes how the boy lifts his hands in the picture. Grace interrupts on line 3 and refers to a picture, asking her mother to look at it. The mother thinks that Grace is talking about the boy's nice hair, and comments that he has nice hair on line 4. Then Grace says "look" again on line 5 and points to a picture of a girl. The mother responds and agrees that the girl is nice too, explaining to Grace on line 6 that the girl is laughing.

Grace says "look" again on line 7 and continues in Finnish saying that the girl also falls down. The mother agrees and says "voivoi" ("oh no") on line 8, expressing sympathy.

As Grace points at the picture in the book and the mother names the picture, Grace learns what to call it by listening to her mother and making her own assumptions about how it relates to previous words she knows. The most interesting and noticeable detail of the example 6 above is that all three Grace's utterances begin with the word "look", the first and last one of them being language-mixes. Based on the data, Grace quite often used the word "look" when looking at a book with either of her parents. The probable reason for this is that she wanted to point to something from the book, but she did not know what to call it. Thus, instead of saying the name of the thing in the picture, she used the word "look" to get either of her parents' attention and to direct it to some particular detail in the book. This is the most probable reason especially for the first language-mix on line 3 in example 6, where Grace utters the verb "look" twice, with the Finnish pronoun "tuo" ("that") in the middle. Based on the data, this Finnish pronoun also often occurred in Grace's speech, as she wanted to draw her parents' attention to something. It is probable that if Grace would know what to call the "nice hair" in the picture, she would say it instead of repeating the word "look" on line 3. After the mother guesses what Grace wants her to look at in the picture, Grace continues to show her the next picture. As the mother explains that the girl is laughing in the picture, Grace responds by saying "look" again on line 7, but after a small pause she continues her mother's previous utterance, adding "ja kaatuu", i.e. "and falls down". Grace's mother commented on this example that she was not sure if Grace uttered the verb "kaatuu" incorrectly, namely "kaakuu".

According to the example 6 above, Grace does not seem to think that the verb "look" should not be used in a Finnish context and together with Finnish words. Moreover, it could be argued when observing the mother's responses to Grace's language-mixes that the mother does not necessarily even take any notice of the extensive use of "look" in a Finnish

context. If the mother had noticed the use of the verb "look", considering it inappropriate in the context, she would have given Grace a model for the "correct" Finnish word. However, as she does not do this, it can be claimed that she either does not notice the language-mixes, or she does not consider them as inappropriate. Actually, Grace's mother commented that Grace uses the verb "look" often in her utterances. In conclusion, though Grace is not unfamiliar with the spoken Finnish equivalent for the English verb "look", as seen in example 5, she rather uses the English verb. Based on the previous examples, the verb "look" seems to have two main functions in Grace's speech: to get the parents' attention and to get a definition for something Grace has trouble naming. On the basis of the large amount of similar instances found in the data, namely more than twenty, it can be concluded that the verb "look" is somehow more readily available in Grace's vocabulary than the spoken Finnish equivalent "kato".

5.1.3 Mixed utterances with "no"

Moreover, if it is concluded that the verb "look" is more familiar to Grace, or somehow more easy to use than the spoken Finnish equivalent "kato", a similar argument could be made about her use of negation. There is a point worth pointing out here: "no" is also a discourse particle in Finnish, which can be said to correspond to "well" in English. However, the word "no" found in the data of the present research was always clearly pronounced as the English "no", which makes its meaning clear in the utterances, distinguishing it from the Finnish word "no" which is pronounced differently. Actually, there were very few instances of the Finnish equivalent "ei" of the English word "no" in the data. Furthermore, Grace used "no" in otherwise Finnish clauses without any sign of hesitation, as in the following example 7 below, taken from a recording of Grace's mother putting her to sleep:

Example 7 (2;3)

- | | |
|---|---|
| 1 | Mother: näin? |
| 2 | Grace: ((drinking water before going to sleep)) ovette (.)= |
| 3 | =vettä (5) no peijää, |

- 4 Mother: ei leipää joo, (3) ei sängyssä saa syödä leipää.
 1 *Mother: like this?*
 2 *Grace: ((drinking water before going to sleep)) °water (.) water° (5)=*
 3 *=no bread,*
 4 *Mother: no bread yeah, (3) no eating bread in the bed.*

Grace drinks some water in her bed before going to sleep, and utters the noun "water" softly in Finnish on line 2. After a pause she says "no peijää" on line 3 with a distinct pronunciation, which means "no bread", with the word "no" in English and the noun "bread" in Finnish. This results in a language-mix with only the word "no" in English. The mother responds in Finnish on line 4, agreeing with Grace and confirming that one cannot eat bread in the bed. Again the mother corrects Grace's utterance with an embedded repair, repeating "leipää", i.e. "bread", with the correct pronunciation. After this she explains to Grace that she cannot have bread, because she should not eat bread in the bed.

As in example 7, it was very usual in the data that Grace uttered the word "no" directly before a Finnish word without a pause. In contrast, Grace did not use the word "ei" which is the Finnish equivalent, even though, based on the findings from the data, her mother used it often with her, as seen in example 7. Thus, it is clear that the word "no" was for some reason more readily available in Grace's vocabulary. Moreover, on the basis of the data, as pointed out above, the word "no" was mostly used without any apparent hesitation.

As a further instance of this aspect of Grace's language mixing, example 8 below was taken from a recording in the kitchen when Grace's mother is looking for a cup for her:

Example 8 (2;5)

- 1 Mother: siinä? (.) otaksä tään kupin.
 2 Grace: ↑ no ↓ kuppi.
 3 Mother: otaksä tään? ((showing another cup))
 4 Grace: ↑ no ↓ tää.
 5 Mother: halukko tään?
- 1 *Mother: there? (.) will you take this cup.*
 2 *Grace: ↑ no ↓ cup*
 3 *Mother: will you take this? ((showing another cup))*

4 Grace: ↑ *no* ↓ *this*
 5 Mother: *do you want this?*

Grace's mother asks Grace if she wants a certain cup, but Grace responds with a language-mix that she does not want that cup (line 2). Then the mother offers another cup on line 3, but Grace again answers with a language-mix that she does not want that either, rejecting the cup (line 4). Finally Grace's mother tries to suggest yet another cup. Grace's mother commented that she heard Grace repeating the same utterance that she said on line 4 after the mother's question on line 5. Thus, the sequence continued in the same way.

It is clear in example 8 that Grace wants a particular cup, and responds quickly without hesitation on lines 2 and 4 as the cups presented by her mother are the one she would like to have. Her responses include language-mixes with the word "no" in English, and the words "cup" and "this" in Finnish. In example 8 it can be seen that neither Grace nor her mother seem to think that anything is wrong in Grace's first mixed utterance, as Grace uses the same type of structure twice, and there is no intervention or repair in the mother's responses. Actually, the mother understands right away what Grace means by her language-mix. Thus, Grace continues to utter a similar mix on line 4 with the same English word "no" and a different Finnish word. Grace repeats the Finnish word used by her mother in the previous question twice on lines 2 and 4. However, though Grace's mother uses only Finnish in her questions, Grace uses the English word "no". When Grace's mother heard this example, she wondered if Grace still utters this type of language-mixes. She said that at the time of the interview (Grace's age 2;7) Grace spoke definitely mostly Finnish to her Finnish-speaking relatives.

There are similarities to the preceding example in example 9 below, taken from a conversation between Grace, her mother and her Finnish aunt. In this example, Grace also uses the word "no" in an otherwise thoroughly Finnish context:

Example 9 (2;5)

1 Mother: Grace ny pitäis mennä nukhumaan.
 2 Aunt: se ↓ siivoaa.-
 3 Grace: no nukkuaan.
 4 Mother: joo:?
 5 Aunt: pyyhkeitä.

1 *Mother: Grace you should go to sleep now.*
 2 *Aunt: she's ↓ cleaning.-*
 3 *Grace: no to sleep.*
 4 *Mother: yea:h?*
 5 *Aunt: towels.*

The mother tells Grace that she should go to sleep. The word "ny" is a spoken Finnish form ("now"), and the word "nukkumaan", i.e. "to sleep" is pronounced a little differently for a comic effect, with the sound "h" in the middle ("nukhumaan") instead of the sound "k" as usually. Grace's aunt explains, on line 2, that Grace is cleaning, and there is a cutoff to her speech as Grace announces on line 3, with a language-mix, that she does not want to go to sleep. Grace's utterance is formed by the word "no" in English, and the verb "nukkumaan" in Finnish, which she pronounces without the sound "m" in the middle ("nukkuaan"). The mother insists that Grace should go to sleep, saying "joo:?" with a rising intonation on line 4. In the end Grace's aunt continues her earlier utterance that was cut off on line 2, saying that Grace is cleaning towels.

As Grace's aunt explains on line 2 to Grace's mother that Grace is cleaning, Grace probably takes it as a good reason for not to go to sleep, as she says "no nukkuaan" after it on line 3. Grace also makes her opinion clear by stressing the word "no" in her response to her mother. Grace's mother does not try to replace the English word in her utterance with the Finnish equivalent "ei", but rather responds on line 4 to her request by insisting that she should go to sleep. As a response to Grace's stressed "no", the mother says "joo:?" ("yea:h?"), stressing the word by extending the pronunciation of the vowel "o". Thus, the mother's response indicates that she does not accept Grace's refusal, but insists that she should go to sleep.

Grace's use of negation is interesting in these examples (7, 8 and 9), as there is no apparent reason why she would not use the Finnish

equivalent "ei", because it is not a longer word and probably not more difficult to utter than the English "no". However, it is possible that for some reason Grace has learned the word "no" before the word "ei". Thus, one may assume, as pointed out above, that the word "no" is more familiar to Grace than the Finnish equivalent "ei". Moreover, even though Grace uses the English "no" repeatedly, her mother does not try to repair Grace's use of the English word in a Finnish utterance, as in example 4, replacing it with a Finnish word. Thus, it could be argued that Grace has not had any particular reason to learn the Finnish word "ei", because her mother signals that she understands her as she uses the English "no".

5.2 *Language-mixes with a word known only in English*

The most common language-mix in the data which included a word known only in English was an utterance with the word "daddy", as there were 8 instances. It is worth noting that, as the data proposes, while Grace has learned to use both "mummy" and the Finnish equivalent "äiti" to refer to her mother, she uses only the word "daddy" to refer to her father. Based on the data, it can be pointed out that even Grace's mother never uses the Finnish equivalents "isi" or "isä" to refer to Grace's father, but instead uses the word "daddy", which also has an effect on Grace's use of the word even together with Finnish words. In the following example 10 below, recorded while Grace was drawing as both of her parents were in the room with her, one can observe that Grace is socialized by both of her parents into calling her father daddy:

Example 10 (2;2)

- | | |
|---|---|
| 1 | Grace: ((drawing)) wo::w. hau- (.) hauaa piittää. ROB |
| 2 | Mother: ((laughing)) [say daddy. say daddy] |
| 3 | Father: [() daddy] |
| 4 | Grace: daddy. (2) OH. <u>tu</u> o daddy. ((talking about the= |
| 5 | =microphone)) |
| 6 | Mother: [joo se on daddy's] |
| 7 | Father: [<it's,>] daddy's |
| | |
| 1 | Grace: ((drawing)) wo::w. wa- (.) want to draw. ROB |
| 2 | Mother: ((laughing)) [say daddy. say daddy] |
| 3 | Father: [() daddy] |

4 Grace: daddy. (2) OH. that daddy. ((talking about the=
5 = microphone))
6 Mother: [yeah it's daddy's]
7 Father: [<it's,>] daddy's

In the example above, Grace says in Finnish that she wants to draw, and immediately after that she says her father's name loudly. The mother laughs, and on line 2 asks Grace to say "daddy" instead, which the father also says at the same time on line 3. After this, Grace repeats the word daddy on line 4, and then goes on to explain with a language-mix that the microphone is "daddy", meaning "daddy's". The mother and father's talk again overlap on lines 6 and 7, when they agree and say, correcting Grace's pronunciation, that the microphone is "daddy's".

There were many instances in the data where Grace was interested in the microphone, though she did not know what it was, and said that it was "daddy's". Here she leaves out the possessive marker "'s" on line 4, which the mother and father both correct when they say the word "daddy's" on lines 6 and 7. In example 10 above, the mother laughs on line 2 because Grace calls her father by name, as, based on the data, Grace always called him "daddy", as pointed out above. After Grace has repeated the word "daddy" after her mother and father, she notices the microphone and remembers that it is "daddy's", saying it with a Finnish pronoun "tuo" instead of the English equivalents "that" or "this". Though it was noted that in the data Grace used the word "this" in English, she used the Finnish word in this situation. In contrast, as pointed out above, she does not even know an equivalent to the word "daddy" in Finnish, thus she uses the English word here. Grace's mother also agreed that Grace does not know the Finnish equivalent for "daddy". It is interesting to notice that both of the parents accept this language-mix "tuo daddy", though they correct the pronunciation.

However, "daddy" was not the only word that Grace used only in English because she did not know the Finnish equivalent. The words "grandma" and "granddad" were also used in a similar way as "daddy". In

the following example Grace and her parents are eating at home and talking about Grace's grandfather coming to see Grace later on the same day:

Example 11 (2;3)

- | | |
|---|---|
| 1 | Mother: see granddad today? |
| 2 | Grace: °danddad° (2) <u>mis</u> danddad. |
| 3 | Mother: granddad on <u>kotona</u> . |
| | |
| 1 | <i>Mother: see granddad today?</i> |
| 2 | <i>Grace: °danddad° (2) <u>where</u> danddad.</i> |
| 3 | <i>Mother: granddad is at <u>home</u>.</i> |

The mother asks Grace in English about Grace seeing her grandfather the same day. Grace repeats the word "granddad" on line 2 with a slightly different pronunciation, and after a small pause asks with a language-mix where he is, saying the first syllable of the word "where" in Finnish, and the word "granddad" in English. The mother answers Grace's question in Finnish on line 3, saying that he is at home, though she also utters the word "granddad" in English, again correcting Grace's pronunciation of the word.

The context of the situation is interesting, as the mother begins the conversation with Grace in English because the father is present and would not understand if the question was in Finnish. Grace repeats the word "granddad" on line 2, and pauses probably to think where he is at the moment, as she then asks about it saying the Finnish word "missä", namely "where", followed by the English word "granddad". Here again the mother corrects Grace's pronunciation, repeating the word "granddad" which Grace did not pronounce correctly. As Grace's mother does not translate the word "granddad" into Finnish, it can be claimed that Grace is socialized into referring to her grandfather in English. Actually, it could be argued that there is no reason why Grace should call her grandfather "pappa" or anything other in Finnish, because the grandfather would not know what she meant by it, because he is English and does not understand Finnish. The situation is similar when considering, for instance, Grace's father and grandmother. However, it is interesting to notice that though Grace's mother begins the conversation with Grace in English, Grace chooses a Finnish word "missä" to

ask where her grandfather is. The possible reasons for this will be discussed later in chapter 10.

5.3 *Language-mixes with a more familiar English or Finnish word*

Some words found in the data were usually always either in English or Finnish and virtually nonexistent in the other language. Based on the data, it was noted that these words were sometimes known only in one language, or for some other reason more familiar, and thus used more. As in the previous examples, the use of these words sometimes led to language-mixes, as they were used in both English and Finnish contexts. Some language-mixing instances with a more familiar English word will first be introduced, followed by the instances with a more familiar Finnish word.

5.3.1 More familiar English words

It was usual that language-mixes with a more familiar English word occurred when Grace was interacting with her mother, or other Finnish-speaking interlocutors. Example 12 below, which includes a language-mix with a more familiar English word, was taken from a conversation between Grace and her mother while reading a book:

Example 12 (2;3)

- | | |
|---|--|
| 1 | Mother: kato. mikäs <u>tuossa</u> on. |
| 2 | Grace: koia |
| 3 | Mother: koira joo.- |
| 4 | Grace: ↑ mis chicken. |
| 5 | Mother: <u>chicken</u> . (.) se on <u>kana</u> . |
| | |
| 1 | Mother: look. what's <u>there</u> . |
| 2 | Grace: dog |
| 3 | Mother: dog yeah.- |
| 4 | Grace: ↑ where chicken. |
| 5 | Mother: <u>chicken</u> . (.) it's <u>chicken</u> . |

The mother points at a picture and asks Grace to look at it, using a spoken Finnish equivalent of the English verb "look". Then she asks her to tell what there is in the picture, stressing the word "there". Grace answers on line 2 by

saying "koia", which means "dog", but should be pronounced "koira". The mother gives a positive response on line 3, but at the same time corrects Grace's pronunciation of the Finnish word by repeating it as it should be pronounced. Then there is a sharp cutoff of the mother's speech, as Grace goes on to asking where the chicken is on line 4. She does this with a language-mix, saying the first syllable of the Finnish word "missä", i.e. "where", and then the English noun chicken. The mother does not answer Grace's question, but only corrects her use of the word "chicken" on line 5. She does this by first repeating the word after Grace, stressing the first part of the word. Then, after a small pause, she offers the correct Finnish word "kana", again stressing the first part of the word.

It could be argued that the language-mix in example 12 above is not a clear language-mix, as the Finnish word in the example on line 4 is only the beginning of the word, and could mean something else than "where" in Finnish. However, based on the data, when Grace said "mis", she did in fact mean "where". Actually, there were very few instances of the whole words "missä" or "where" in Grace's speech in the data. In contrast, the word "chicken" is very clearly pronounced on line 4. When considering this language-mix, a similar point may be made as in the examples above including negation. It was noted that the reason for the English word "no" was probably not that it would be more difficult to pronounce than the Finnish equivalent "ei". Similarly, or even more so, the English word "chicken" in the example above does not seem to be easier to pronounce than the Finnish equivalent "kana". On the contrary, it could be argued that "kana" could be easier to utter than "chicken". However, as Grace uses the English word instead of the Finnish word, it must be concluded that she is more familiar with the word "chicken" than the equivalent "kana", thus it is a word which is more readily available to her use. Grace's mother agreed that at the time when the example was recorded Grace was more familiar with the English noun "chicken" than its Finnish equivalent.

In example 13 below there is a situation where Grace's mother is filming Grace and her little brother with a video camera, and there are two

similar language-mixes in Grace's speech. Grace is holding her doll in front of the camera, because she wants her mother to film it:

Example 13 (2;3)

- | | |
|---|--|
| 1 | Mother: joo hienosti. (.) ohieno nukke. o (.) hieno <u>vauva</u> . (2) = |
| 2 | =okay, ((begins to film Grace's little brother)) kuka se. lukuu. |
| 3 | Grace: tää on <u>buggy</u> . |
| 4 | Mother: mm? ((keeps on filming Grace's little brother)) |
| 5 | Grace: tuo vaa <u>buggy</u> . |
| 6 | Mother: mmh? |
| | |
| 1 | Mother: yeah nicely. (.) o nice doll. o (.) nice <u>baby</u> . (2) okay, = |
| 2 | =((begins to film Grace's little brother)) who's. lukuu. |
| 3 | Grace: this is <u>buggy</u> . |
| 4 | Mother: mm? ((keeps on filming Grace's little brother)) |
| 5 | Grace: that just <u>buggy</u> . |
| 6 | Mother: mmh? |

Grace's mother first films Grace's doll, and compliments her by saying that it is nice. First she says softly that it is a nice doll, but then corrects that it is a nice baby, as, on the basis of the data, Grace calls the doll a baby. After Grace's mother has filmed the doll, she goes to film Grace's little brother, who is sitting in a buggy, and begins to talk to him on line 2. Grace tells her mother with a language-mix on line 3 that it is a buggy. She says this with a mixed clause which includes the spoken Finnish "tää on" and the English noun phrase "buggy". But her mother does not pay much notice to this comment. She only utters "mm?" on line 4 to tell Grace that she has heard, without turning the camera away from Grace's little brother. But Grace insists that there is nothing to film there, as there is only a buggy there. She does this by uttering another language-mix on line 5 with a mixed clause; spoken Finnish noun phrase "tuo vaa" and again the English noun "buggy" in English. Her mother still does not pay any particular notice to Grace's comment, as she only utters "mmh?" on line 6 to show that she has heard.

In example 13 above, Grace's two utterances are both language-mixes consisting of spoken Finnish clauses with the English noun phrase "buggy". In the first language-mix, Grace seems to explain to her mother that there is a buggy there. However, as the mother does not stop filming Grace's little brother, Grace evidently tries to explain that there is nothing special

about the buggy, as she adds the word "just" in Finnish before the word "buggy". Grace thus changes her earlier utterance to explain to her mother in other words that she should not film the buggy. However, the word "buggy" remains the same, and Grace actually even stresses that word in both utterances, also extending the last vowel of the word. It is clear, when considering example 13 above, that the word "buggy" is more familiar to Grace than the Finnish equivalent "rattaat". The fact that the Finnish word is more difficult to pronounce may have something to do with the fact that Grace uses the English word here. However, based on the data, Grace rarely uses the Finnish equivalent at all. It is possible that she has at an early point unconsciously chosen to use the English word "buggy", which thus has become more familiar to her, and more readily available in her speech. Again, similarly to example 12, Grace's mother agreed that the English noun "buggy" was more familiar to Grace than the Finnish equivalent at the time when the example was recorded.

However, there were also other types of situations in the data where Grace's speech included language-mixes with a more familiar English word. The next example 14 below is from a situation where Grace and her Finnish-speaking aunt, who is visiting from Finland, are talking in the kitchen:

Example 14 (2;5)

- | | |
|---|---|
| 1 | Grace: hauaa kuppii ↓ vettä, |
| 2 | Aunt: ↓ joo laitetaan, (.) (heh) |
| 3 | Grace: hauaa juice, |
| 4 | Aunt: ai <u>mehuako</u> sä haluat. (2) no ↑ laitetaan mehua. |
| | |
| 1 | Grace: want ↓ water in the cup, |
| 2 | Aunt: ↓ yeah let's put, (.) (heh) |
| 3 | Grace: want juice, |
| 4 | Aunt: oh is it <u>juice</u> you want. (2) well ↑ let's put juice. |

Grace first makes a request in Finnish saying that she wants to have some water in her cup. Her aunt answers on line 2 accepting the request and laughs a little at Grace's comment. Then Grace changes her mind and says on line 3 that she wants juice instead. There is a language-mix here, as Grace uses the Finnish verb "haluaa" with the English noun "juice" in the request.

She pronounces the Finnish word without the sound "l" in the middle, as she usually did (see, for instance, examples 1 and 10 above). After this her aunt repeats the word "juice" in Finnish on line 4, as she makes sure that Grace changed her mind and wants juice. In the end Grace's aunt responds by saying that she will put some juice in the cup.

The language-mix in the example 14 above is perhaps even more interesting when considering the fact that right before Grace's language-mix she has uttered a request consisting of three Finnish words. However, after her aunt has responded to her request, she utters a new request including the verb "want" in Finnish and the noun "juice" in English. The reason for this may again be found when considering the whole data. Grace is apparently not very familiar with the Finnish noun "mehu", as she is with the English equivalent "juice". Based on the data, she knows and uses the word "water" in both languages, as she actually uses the Finnish word "vettä" in example 14 above. In contrast, she was not reported to use the Finnish equivalent for the word "juice" in the data. Thus, again, it can be claimed that the increased familiarity of the word "juice" is the reason why she prefers to use the word instead of the Finnish equivalent. Grace's mother agreed with this example as well, saying that Grace still at the time of the interview (age 2;7) was not familiar with the Finnish noun "mehu".

5.3.2 More familiar Finnish words

Language-mixes with a more familiar Finnish word usually occurred when Grace was interacting with her father or other English-speaking interlocutors. In the following example, Grace was eating breakfast with her family. The mother and father were talking with each other. Grace had porridge on her plate, and she was beginning to play with it for some reason:

Example 15 (2;2)

- | | |
|---|--|
| 1 | Father: can you (please fix) some rye bread in the toast please.= |
| 2 | =toast ^o er. ^o |
| 3 | Grace: OH, I wan <u>mummy</u> . (.) lääkeokoa. (.) lääke. ((playing= |
| 4 | =with her food)) |
| 5 | Father: GRACE, STOP DOING THAT |
| 1 | <i>Father: can you (please fix) some rye bread in the toast please.=</i> |

2 = *toast·er.°*
 3 Grace: OH, I wan *mummy*. (.) *medicineokoa*. (.) *medicine*. ((playing=
 4 =with her food))
 5 Father: GRACE, STOP DOING THAT

Grace's father asks Grace's mother to put some bread in the toaster, self-repairing the pronunciation of the word "toaster" in the end of his utterance. Then Grace says "oh" with a loud voice on line 3, as if she has realised something. She continues her utterance by saying that she wants her mother. After a small pause, she pronounces the Finnish word "lääke", i.e. "medicine", with some other sounds, thus requesting medicine. Then after another small pause, she utters the word "lääke" again. As she plays with her food at the same time, her father orders her to stop with a loud voice on line 5.

As can be seen from the previous examples, there were more instances with the word "haluaa" than with the English equivalent "want" in the data. The word "äiti" was also much more used than the English equivalent "mummy". However, in example 15 above both of these English words are used on line 3 instead of the Finnish words, as Grace says she wants her mother. Actually, it seems that Grace means that she wants her mother to give her medicine. Grace apparently is not sure how to pronounce the noun "lääke", as she adds some other sounds in the end of the word. However, after a small pause she pronounces the word correctly. As Grace utters everything else in English, it is probable that the reason why she uses the Finnish noun "lääke" is that it is more familiar to her than the English equivalent.

Sometimes the utterances in which language-mixing occurred in the data included the same word or a similar word in both English and Finnish. In the following example 16 below, Grace is drawing and her father is with her. No translation will be provided for this example, as there is only one word in Finnish, which will be translated in the description below the example. Before this conversation Grace talked to herself in Finnish and in her own child language while drawing:

Example 16 (2;2)

- | | |
|---|---|
| 1 | Father: that's called a crayon (.) ((Grace is tapping the crayon= |
| 2 | =on the table)) can you say crayon? |
| 3 | Grace: crray. |
| 4 | Father: yeah. well done |
| 5 | Grace: ah (2) väit. (.) °colour. (.) paint. ()° |
| 6 | Father: mhm? |

Grace's father explains to Grace that what she is tapping on the table is called a crayon. He asks her if she can say crayon, and Grace tries to imitate the word on line 3. The father accepts Grace's utterance as correct, and gives her positive evaluation on line 4. Then Grace seems to think about the word, as she says "ah" on line 5, and after a pause says "väit". This utterance "väit" is close to the Finnish word "värit", i.e. "colours". Actually, she pronounced the word similarly in other situations in the data when drawing, and Grace's mother also agreed that Grace meant "värit". After saying this Finnish utterance, Grace pauses for a little time, and says much more quietly the English words "colour" and "paint" with a little pause in the middle. After this there is some unclear speech. Then Grace's father signals with a sound "mhm?" on line 6 that he did not understand what Grace said.

The language-mix on line 5 in example 16 above is particularly interesting, as Grace repeats the Finnish and English equivalents in a single utterance. The first sound in Grace's utterance ("ah") and the pause after it indicate that she is thinking. It seems as if she realises that the somewhat unfamiliar word "crayon", that she had trouble pronouncing, has a similar meaning to the word "värit". But after a small pause she goes on to say the English words "colour" and "paint" more quietly, as if a little confused or unsure if these words also have a similar meaning. The quietness may also indicate that these English words are more unfamiliar to her than the Finnish word "värit". It is clear, when considering the example 16 above, that Grace is beginning to realise that in her environment there are two or more words for nearly everything. This aspect of Grace's language-mixing will be discussed in more detail later in chapter 10.

As can be seen from the previous examples, Grace's language-mixes did not lead to problems in comprehension when she was talking to

her mother, as she knows both languages. However, Grace's father did not always understand the Finnish words that Grace said, and had various strategies to deal with these situations. The following example 17 was taken from a conversation between Grace and her father as they were reading a book. The father is asking Grace the names of the different things in the book:

Example 17 (2;3)

1 Father: *bin* (.) good
 2 Grace: OMENA:: appei- j- [omena]
 3 Father: [what's] that
 4 Grace: cake

1 Father: *bin* (.) good
 2 Grace: APPLE:: appei- j- [apple]
 3 Father: [what's] that
 4 Grace: cake

The father first gives positive evaluation for Grace's previous answer. Then Grace apparently sees an apple in the picture, and says "apple" on line 2 in a loud voice in Finnish, extending the last vowel of the word. Immediately after this she almost says the word in English, but as she is not sure how the word should end, as she tries to add the sounds "i" and "j" in the end, she decides to say the Finnish word "omena" again instead. But at this point the father's question of the next picture on line 3 overlaps with Grace's utterance of the word "omena". Then Grace answers her father's question by naming the picture as a "cake".

As Grace's parents read with her and asked her to name the pictures in the books, she usually, based on the data, did not name the picture before she was asked to do so. However, on line 2 in the example 17 above, she names the picture of an apple before her father has asked her about it. Moreover, she does this with a loud voice and in Finnish. It appears that she was so enthusiastic when she recognised the picture that she did not stop to think what language to use in the situation. However, she does try to say the noun "apple" in English directly after the Finnish equivalent, but she hesitates in the end of the word. It can be argued that Grace is definitely more familiar with the Finnish noun "omena", as she uses it twice in the utterance, at the beginning and in the end, as she was unable to remember

the English equivalent. Grace's mother also said that Grace is more familiar with the noun "omena" than the English equivalent "apple". The father's reaction to Grace's answer is to go on, as he asks her about another picture. However, it was noticed that later during the same recording the father asked Grace about the same picture again, and as she answered in Finnish again, the father also surprisingly repeated the word in Finnish and gave positive feedback. Actually, the father probably knows this Finnish noun because, as Grace's mother commented, Grace usually never uses the English equivalent. Thus, there is a clear link between the structure of interaction and language socialization here, as the father encourages Grace to use Finnish. Grace's father seems more interested in socializing Grace into identifying and naming objects in either language than teaching her to use the English words in particular.

In conclusion, based on the examples 12-17 as well as other data not quoted here, it is clear that some words were more familiar to Grace in English, as some other words were in Finnish. The equivalents of these words from the other language were also sometimes used, but mostly these words were only used in one of the languages. There are various reasons why these words have been unconsciously chosen over their equivalents, one possible reason being that they may be easier to produce. However, as seen in the examples above, this does not explain the use of even most of the words. It would be more valid to claim that the words which are learned before their equivalents in the other language are probably used more. In addition, linguistic input also has an indisputable effect on the use of the word. For instance, if an English word is more present in the child's input than the Finnish equivalent, it will probably be more present in her output as well.

5.4 Other language-mixes

As pointed out above, some language-mixes present in the data did not share any major similarities, unlike the instances presented thus far, and were accordingly labelled as other language-mixes. It was noted that these mixes

were sometimes caused by words that were, based on the data, known in both languages. These words caused language-mixes as they were used in both languages in both linguistic contexts. The following example is taken from a conversation between Grace and her parents, as they are visiting the father's family. Grace's mother is teaching her to say "granddad":

Example 18 (2;3)

- | | |
|----|---|
| 1 | Mother: granddad [joo (.) >Grace say granddad.<] |
| 2 | Grace: [°danddad° da-] danddand (.) juice- |
| 3 | Mother: granddad- [granddad] |
| 4 | Grace: [granddand] (.) tää juice (.) ↓ juice (2)= |
| 5 | =vettä (.) vettä. (.) vettä. |
| 6 | Father: what do you say? |
| 7 | Grace: vette |
| 8 | Father: [what,] |
| 9 | M: [vettä,] |
| 10 | Grace: piis. |
| 11 | Mother: please. hyvä. |
-
- | | |
|----|---|
| 1 | Mother: granddad [yeah (.) >Grace say granddad.<] |
| 2 | Grace: [°danddad° da-] danddand (.) juice- |
| 3 | Mother: granddad- [granddad] |
| 4 | Grace: [granddand] (.) this juice (.) ↓ juice (2) <u>water</u> (.)= |
| 5 | =water. (.) water. |
| 6 | Father: what do you say? |
| 7 | Grace: water |
| 8 | Father: [what,] |
| 9 | Mother: [<u>water</u> ,] |
| 10 | Grace: piis. |
| 11 | Mother: please. good. |

Grace's mother first repeats Grace's previous utterance "granddad". Grace's utterance on line 2 overlaps with her mother's talk, when Grace repeats the word "granddad", as she probably takes her mother's comment as a request to say the word again. Grace does this with a slightly different pronunciation, i.e. "danddand". After this Grace requests for juice, but there is a sharp cutoff in her utterance as her mother repeats the word "granddad" twice on line 3 in efforts to correct Grace's pronunciation. Grace's talk again overlaps with her mother's talk, as she repeats the word "granddad" overlapping with her mother on line 4, with a more accurate pronunciation, i.e. "granddand". Then Grace continues with her request which was cut off earlier, as she says "this juice" with the pronoun "tää" in spoken Finnish and the noun "juice" in English, thus using a Finnish determiner with an English noun. After this she

repeats the word “juice” and after a pause and a change of mind begins to repeat the word “water” in Finnish.

On line 6 Grace’s father reminds her that there is something missing from the utterance, as he inquires Grace what she said. Grace probably takes this as a request to alter the pronunciation of the word, as she repeats the word “water” in Finnish on line 7 with a different sound in the end of the word. The parents’ talk overlap as the father asks “what” on line 8 thus initiating a repair, and the mother repeats the word “water” in Finnish on line 9, with an emphasis on the last syllable, thus correcting Grace’s pronunciation again. Grace realises what was missing from her request, as she says the word “piis” (“please”) on line 10, which her mother accepts on line 11, though again correcting Grace’s pronunciation with an embedded repair.

It is interesting to notice how the language-mix on lines 4 and 5 in example 18 is constructed. Grace seems to switch between the two languages continually. The utterance begins with the word “granddad” which Grace is trying to utter on line 4. After this Grace utters the spoken Finnish pronoun “tää” (“this”), which is, based on the data, a very usual word in her language-mixes. Although it was noted that the English equivalent “this” also now and then appeared in the data, Grace usually preferred to use the Finnish pronoun instead. However, as noted above, the English noun “juice”, which is repeated on line 4, was preferred to the Finnish equivalent which was unfamiliar to Grace. Finally, as Grace seems to change her mind about what she wants, she utters the Finnish noun “vettä” (“water”) repeatedly on lines 4 and 5. It is worth noting that, based on the data, Grace is also very familiar with the English equivalent “water”. Thus, it is not clear why she did not choose to use the English noun “water” after the English word “juice”, but instead uttered the word in Finnish. In sum, Grace switches between English and Finnish three times during a single utterance in example 18 above, which can be claimed to illustrate how the two languages, still at this point, are not differentiated in all situations and there are no clear signs of dominance of either Finnish or English. However, on one

hand, Grace may also be choosing Finnish to address her mother. On the other hand, the use of English may be due to the fact that both parents seem to be socializing Grace into using English with the English-speaking family members.

The English pronoun “this” and its spoken Finnish equivalent “tää” were both present in the data, though Grace seemed to prefer the Finnish word, which her mother often used when reading with her. However, in the following example, taken from a conversation between Grace and her mother as they are reading bedtime stories, Grace uses the English pronoun “this”:

Example 19 (2;3)

- | | |
|---|---|
| 1 | Mother: ja mikä <u>tää</u> o? |
| 2 | Grace: tuo:li |
| 3 | Mother: hy:vä Grace. (.) .hh mm. |
| 4 | Grace: °tis tu-° (2) [TU <u>o</u> :li] |
| 5 | Mother: [mitäs muuta-] ↓ <u>tuoli</u> joo. >↑ mitäs <u>siinä</u> . = |
| 6 | =↑ mikäs <u>se</u> on.< |
| | |
| 1 | Mother: and what's <u>this</u> ? |
| 2 | Grace: <u>chai</u> :r |
| 3 | Mother: goo:d Grace. (.) .hh mm. |
| 4 | Grace: °tis cha-° (2) [<u>chai</u> :r] |
| 5 | Mother: [what else-] ↓ <u>chair</u> yeah. >↑ what's <u>there</u> . ↑ what's = |
| 6 | = <u>that</u> .< |

Grace’s mother asks Grace to name some pictures in a book again, and as she asks about a picture of a chair, Grace replies on line 2 by uttering the Finnish noun “tuoli” (“chair”) and extending the pronunciation of the sound in the middle of the word. Grace’s mother gives her positive feedback on line 3, as she says “hyvä” (“good”) with an extension of the sound in the middle of the word. This can be argued to indicate emphasis on the positive response. After this the mother breathes in and indicates with a sound “mm” that she is going on with the book. However, on line 4 Grace tries to repeat the noun “chair” in Finnish, apparently encouraged by the positive feedback. However, she begins her utterance by whispering the pronoun “this” in English, which she pronounces with a different sound in the beginning of the word. After this she begins to say the word “chair” in Finnish, still

whispering, but stops after the first syllable of the word. After this she pauses for a moment, and says the word “chair” again in Finnish by first emphasising the first syllable of the word with a louder voice, and then extending the sound in the middle of the word, as on line 2. Thus, the language-mix consists of an English determiner and a Finnish noun, similarly to the language-mix in the previous example 18 which included a Finnish determiner and an English noun. The beginning of the mother’s utterance on line 5 overlaps with Grace’s repetition of the word “chair” in Finnish on line 4, as the mother intends to go on with the book. But then the mother gives more positive feedback to Grace, though correcting her pronunciation of the noun “chair” as she emphasises the beginning of the word. After this the mother goes on with the book.

It is not clear why the language-mix on line 4 occurs, as it was noted earlier that Grace was very familiar with the spoken Finnish pronoun “tää”. Instead of using the spoken Finnish pronoun in example 19, Grace utters the English pronoun “this” with the beginning of the Finnish noun “tuoli”. It is worth noting that, based on the data, on one hand, Grace’s mother used the spoken Finnish pronoun “tää” quite extensively when reading with Grace and asking her to name pictures. On the other hand, Grace’s father used the English pronoun “this” as much in these situations. As a result, Grace used the spoken Finnish pronoun “tää” quite much when responding to her mother’s questions, and the English pronoun “this” with her father in these situations. However, as in example 19 above, sometimes Grace seemed to mix the contexts where to use which form, as she uttered the English form to her mother and the Finnish form to her father. Moreover, as in example 19 on line 4, Grace sometimes uttered the language-mix more quietly than the surrounding talk. The possible reasons for this are discussed in detail in chapter 10 below.

There are also other words that Grace used quite extensively in both languages and in various situations, which sometimes led to language-mixing when these words were used. Some of these words are not particularly connected to some daily situations that Grace encountered,

unlike the word “this” in example 19. But usually these words were still very much present in the data, as they were, for instance, words that were very meaningful for Grace. The following example is taken from a conversation between Grace and her mother, as they are listening to some fireworks and the mother is filming Grace with Grace’s grandfather’s video camera:

Example 20 (2;3)

- | | |
|---|--|
| 1 | Mother: ka (.) ää hh. ((switches off the lights)) |
| 2 | Grace: () ((speaks a child language, and notices the camera= |
| 3 | =bag on the table)) hauaa <u>bag</u> . |
| 4 | Mother: se on <u>granddad’s</u> |
| 5 | Grace: kamma |
| | |
| 1 | <i>Mother: look (.) ah hh. ((switches off the lights))</i> |
| 2 | <i>Grace: () ((speaks a child language, and notices the camera bag=</i> |
| 3 | <i>=on the table)) want <u>bag</u>.</i> |
| 4 | <i>Mother: it’s <u>granddad’s</u></i> |
| 5 | <i>Grace: kamma</i> |

The mother first switches off the lights probably to show Grace the fireworks outside. Grace seems to be excited about the fireworks, but speaks a child language very quickly which included no English or Finnish words. Actually, based on the data, it was noted that Grace sometimes spoke this child language very quickly particularly if she was excited about something, perhaps because she could not find the right words in either Finnish or English quickly enough to express her enthusiasm. After Grace has spoken in child language, she notices a camera bag on the table, and on line 3 she announces, with a language-mix, that she wants the bag. The language-mix consists of the Finnish verb “haluaa” (“want”), which appeared repeatedly in the data as Grace requested something, and the English noun “bag”. The mother responds with a code-switch by explaining her that the bag is the grandfather’s bag. The mother uses the English noun “granddad” here because the grandfather is English and the Finnish equivalent was never used when referred to him, as explained earlier. However, the noun “granddad” has an English ending “-s” in the mother’s utterance instead of the Finnish ending “-in”. Grace’s next utterance “kamma” on line 5 instead refers to “grandmother” or “grandma”, as she either disagrees with her

mother and thinks that the bag is actually “grandmother’s”, or she was reminded of her grandmother as her mother talked about her grandfather.

As the language-mix in example 19 was uttered quietly, the language-mix in example 20, in contrast, is very clearly pronounced as the English noun “bag” is even emphasised with a louder voice. It cannot be argued that Grace uses the English noun “bag” here because she is not familiar with the Finnish equivalent, as, on the contrary, the Finnish noun “laukku” also appeared frequently in the data. However, for some reason Grace uses the English noun here though she is speaking to her Finnish speaking mother. Moreover, though it has been noted that the mother sometimes corrected Grace’s utterance by replacing an English word with a Finnish equivalent, she does not do so here for some reason. She only explains to Grace that as the bag is “granddad’s”, she cannot have it. Thus, it could be suggested that as language-mixing was mostly corrected in some activities, for instance when reading bedtime stories, it was possibly more acceptable in some other activities.

6 LANGUAGE-MIXING THROUGH DIFFERENT ACTIVITIES

As pointed out earlier, the present study did not merely include data of a single activity type, but instead the data was gathered from various activities as various participants were present. Firstly, there was free play, reading and table conversations with Grace and her family. Secondly, there were Grace's private talks, when there was no-one present in the room but her and she was, for instance, playing. Thirdly, there were table conversations with Grace, her parents and the father's or the mother's family. Fourthly, there were table conversations with Grace, her parents and their families. There is a description with examples of the language-mixing in these activities below. However, there is no description of the fourth category of activities where Grace, her parents and both of their families were present, as there was no language-mixing in these situations during the data collection. The possible reasons for this will be discussed in chapter 7.5 below.

6.1 Reading, free play and meal-time conversations with the parents

The activities where Grace was with her parents are the largest group in the data, as they were the most usual everyday situations during the data collection. Consequently, as most of Grace's speech was recorded in these situations, it was in these activities that most language-mixes occurred. As the language-mixes were analysed, there were some clear patterns in them according to the different activities. When Grace was reading with either of her parents, her language-mixes usually occurred as she tried to draw her parents' attention to a particular picture, as in example 21 below, where Grace is reading with her mother:

Example 21 (2;3)

- | | |
|---|---|
| 1 | Mother: hmm, (.) mut kato Grace hei mikä tää on. |
| 2 | Grace: look (.) thampa, (2) tuotuo aa. |
| 3 | Mother: mitä, hampaat |
| 4 | Grace: ◦hampaat◦ |
| | |
| 1 | <i>Mother: hmm, (.) but look Grace hey what's this.</i> |
| 2 | <i>Grace: look (.) teeth, (2) thatthat aa.</i> |
| 3 | <i>Mother: what, teeth</i> |
| 4 | <i>Grace: ◦teeth◦</i> |

Grace's mother asks Grace to look at and name a picture, to which Grace responds with a language-mix on line 2. The language-mix begins with the English verb "look", which was a usual word in the language-mixes, as pointed out above. Next Grace tries to pronounce the Finnish word "hampaat" ("teeth"), but she probably notices that her pronunciation was incorrect, because after a pause she tries to explain the word in another way, i.e. by saying in Finnish "thatthat aa". The mother first asks about the utterance on line 3, but then repeats the word "teeth" in Finnish with the correct pronunciation, thus again providing Grace a model for pronunciation. Grace takes this as a clarification request, as she repeats the word "hampaat" again but pronounces the word correctly. However, she is probably still a little unsure about the pronunciation, as she utters the word with a quiet voice.

The language-mix on line 2 in example 21 above is similar to many other language-mixes in the data, as it begins with the everyday English verb "look" and is followed by a Finnish word. The Finnish noun "hampaat" is uttered incorrectly and after a small pause. Based on the data, Grace's incorrectly pronounced utterances were usually a result of omission of a sound in the utterance. The language-mix in example 21 is similar in this way to the other examples, as there is an omission of the last two sounds, "a" and "t", in the Finnish noun "hampaat" ("teeth"). However, there is also a sound "t" in the beginning of the noun, which is incorrect, as the Finnish noun "hampaat" begins with the sound "h". It can be argued that Grace has mixed the pronunciation of the English noun "teeth" with the Finnish noun "hampaat", as she begins the Finnish utterance with the sound "t" which is the first sound of the English noun. After a pause, Grace herself notices that

her pronunciation was incorrect, as she begins to explain the word in other ways, i.e. by pointing at the picture, still using Finnish, and opening her mouth.

In the following example another language-mix occurs as Grace wants to draw her parent's attention to a particular picture. There is no translation for this example as it is mostly in English. The Finnish words are translated in the description below the example. This time Grace is reading a book with her father:

Example 22 (2;6)

- | | |
|---|---|
| 1 | Father: who's this, (2) ((tapping the book)) mr ↓ Greedy. |
| 2 | Grace: Geed |
| 3 | Father: Greedy.- |
| 4 | Grace: -look o makkoa |
| 5 | Father: ↑ ah ↓ yeah. (.) ↓ sausages. |
| 6 | Grace: yeah sau- ggy. |
| 7 | Father: ↓ sausages. (.) ↑ who's ↓ this. |

The father asks Grace to name a picture, but after a pause names "mr Greedy" himself, apparently thinking that Grace did not know the answer to the question. Grace tries to repeat the word "Greedy" on line 2, but her pronunciation is again a little incorrect. The father corrects Grace's pronunciation on line 3, but there is a sharp cutoff of the utterance, as Grace notices that there are sausages in the picture and she points it out with a language-mix on line 4. She does this by uttering the English verb "look" again, this time with a Finnish verb phrase "on makkaraa" ("are sausages"), with an incorrect pronunciation. Though Grace utters the Finnish words and even pronounces them incorrectly, the father immediately understands what she means, as he agrees and repeats the noun "sausages" in English on line 5. Grace agrees and tries to utter the English noun "sausages" on line 6, which she also pronounces incorrectly. Her father again corrects her pronunciation, as he repeats the noun "sausages", and then goes on to the next picture.

As pointed out earlier, though Grace's use of the English verb "look" often led to a language-mix when she was reading with her mother, the situation was different when she was reading with her father. This is due to the fact that when Grace was reading with her father, she usually uttered

the verb “look” together with an English noun. However, in example 22 above, the verb “look” is uttered together with a Finnish verb and a noun, thus resulting in an unusual language-mix, as Grace is reading with her father. Moreover, there is no pause in the language-mix between the English verb “look” and the Finnish verb “on” (“are”), as there usually was in the language-mixes with “look”. Thus, it can be argued that Grace either does not realise that she is uttering Finnish words to her father, or she does not realise that he does not understand Finnish. Based on the data, Grace did not mix between languages as much with her father as with her mother, which proposes that she did realise that her mother speaks both languages but her father does not. Thus, it could be claimed that Grace does not realise that the words she is uttering are Finnish, as she is keen to draw her father’s attention to the picture and as the languages are still not completely differentiated in her brain. However, Grace’s mother said that the father is familiar with the Finnish noun “makkara” that Grace is using in example 22 above. Thus, Grace might utter the noun in Finnish because she knows that her father is familiar with it.

Most of the language-mixes in free play activities occurred when Grace was with her mother and little brother, because the mother was at home with them while the father was working. Similarly to the reading activities presented above, there were some common language-mixing patterns in the free play activities as well. Language mixing mostly occurred as Grace was naming an item she saw when playing, or as she was naming the owner of the item, as in the following example where Grace and her mother are playing. Grace is again interested in the microphone, as she sometimes was during the data collection:

Example 23 (2;2)

- | | |
|---|--|
| 1 | Grace: (da- ddy’s) ((touches the microphone)) |
| 2 | Mother: äp- s (.) äps (.) älä nyt koske siihen |
| 3 | Grace: oh kats (2) se (.) daddy’s. |
| 4 | Mother: joo anna olla. (.) noni, |
| 5 | Grace: tää on daddy’s |
| 6 | Mother: joo niin okei okei (.) oymmärrä se○ |
| 1 | Grace: (da- ddy’s) ((touches the microphone)) |

- 2 *Mother: äp- s (.) äps (.) don't touch it*
 3 *Grace: oh look (2) it (.) daddy's.*
 4 *Mother: yeah let it be. (.) okay,*
 5 *Grace: this is daddy's*
 6 *Mother: yeah right okay okay (.) °understand it°*

Grace's first utterance in this example was a little unclear as she touched the microphone at the same time, but she apparently said that the microphone is "daddy's". The mother tells Grace not to touch the microphone on line 2. Grace utters a language-mix on line 3 as she first asks her mother to "look" in Finnish, though the last sound "o" of the verb is missing as the correct pronunciation is "katso". Then she says that the microphone is "daddy's" in English. Grace's mother tries to get Grace to leave the microphone alone by telling her to let it be on line 4. But Grace again utters with a language-mix on line 5 that the microphone is "daddy's", as she says "tää on" ("this is") in spoken Finnish, and "daddy's" in English. The mother agrees and adds "understand it" with a quiet voice in Finnish, as she wants Grace to leave the microphone alone.

There are two language-mixes in example 23, the first on line 3 and the second on line 5. Though Grace usually preferred to use the English verb "look", in the language-mix on line 3 she utters the Finnish equivalent "katso". After a pause she also utters a Finnish pronoun "se" ("it"), before saying the everyday English pronoun "daddy's". As pointed out earlier, there is no Finnish equivalent in Grace's vocabulary for the noun "daddy", which explains the use of the English noun here. Moreover, based on the data, it is clear that Grace always uses the English inflection marker "'s" when referring to something that she thinks is her father's, instead of using the Finnish equivalent "n" in the end of the noun.

The second language-mix in example 23 on line 5 begins with a noun phrase where the noun and the verb are both Finnish, the noun being a spoken Finnish version. These are followed by the same English noun form "daddy's" as in the previous language-mix. It can be argued that Grace may have somewhat differentiated the languages from each other, as her utterances to her mother in example 23 are otherwise in Finnish, but the only

English word used is a word she has been taught to use in English through all activities and with all interlocutors.

Next, another example from a free play situation follows where Grace is playing with her mother and little brother. Grace is playing in her play kitchen, as she notices a dummy there:

Example 24 (2;3)

- | | |
|---|--|
| 1 | Mother: äiti haluaa kahvia tee () |
| 2 | Grace: hauaa dummin (.) hauaa du- (.) hauaa lycy dummin.= |
| 3 | =(.) hauaa lycy dummin. ((referring to her little brother)) |
| 4 | Mother: joo vie pois. (.) vie pois. (.) ei äiti vie. (.) se on se on= |
| 5 | = <u>Gracen</u> dummy. (.) se on Gracen dummy. |
-
- | | |
|---|--|
| 1 | Mother: mummy wants coffee make () |
| 2 | Grace: wants dummy (.) wants du- (.) wants lycy dummy. (.)= |
| 3 | =wants lycy dummy. ((referring to her little brother)) |
| 4 | Mother: yeah take away. (.) take away. (.) mummy doesn't take= |
| 5 | =away. (.) it's it's <u>Grace's</u> dummy. (.) it's Grace's dummy. |

The mother tells Grace that she wants coffee and asks Grace to make some. There is some unclear speech in the end of her utterance. Grace is trying to give a dummy to her little brother, and she utters repeated language-mixes on lines 2 and 3, as she announces that her brother wants the dummy. The language-mixes consist of Grace's usual incorrect pronunciation of the Finnish verb "haluaa" ("wants"), the English noun "dummy", and the word "lycy", by which Grace means her little brother. Moreover, there is a Finnish ending in the English word "dummy", as Grace utters the word with the sound "n" in the end. Thus, Grace actually uses the correct Finnish ending in the utterance, as it would be used if the word "dummy" was in Finnish, i.e. "tutin". Grace's mother responds by asking Grace to take the dummy away on lines 4 and 5, because the dummy is Grace's. The mother first refers to the dummy in Finnish with the pronoun "it", but as she explains to Grace that it is her dummy, she also uses the English noun "dummy". Thus, the mother also uses the English noun without replacing it with the Finnish equivalent.

The use of the English noun "dummy" could be seen as the reason for the language-mix on lines 2 and 3 in example 24 above. The verb "haluaa" and the ending "n" after the English noun "dummy" are both

Finnish, whereas the noun dummy is in English. It can be argued that when the context of Grace's language-mixing in example 24 is considered, it is actually expected that Grace should use the English noun "dummy" instead of the Finnish equivalent "tutti". Because Grace's mother also utters "dummy" twice in her response on line 5, it can be seen as evidence that Grace has been socialized into using the English noun instead of the Finnish equivalent.

When the meal-time conversations between Grace and her parents were analysed, it was noted that the most usual language-mix in this activity type consisted of repetition of the same word in both languages. In the following example Grace is eating breakfast with her parents and Grace has hot porridge on her plate:

Example 25 (2;2)

- | | |
|---|--|
| 1 | Grace: mä hauan maito. (2) äit:i. mä hauan maitoa. (2)= |
| 2 | =↑ mai- ↓ too. (2) KUUMMA |
| 3 | Mother: >kuumaa joo panee äiti panee maitoa oota< |
| 4 | Grace: ↑ kuu- [kuumma] |
| 5 | Mother: [oota] äiti ↑ laittaa ↓ maitoa. odota. |
| 6 | Grace: °tää° (5) hots |
| 7 | Mother: noni- |
| 8 | Father: it's hots is it Grace |
| 9 | Mother: it's alright now |
| | |
| 1 | Grace: I want milk. (2) mum:m:y. I want milk. (2) ↑ mi- ↓ lk.= |
| 2 | =(2) HOT |
| 3 | Mother: >hot yeah puts mummy puts milk wait< |
| 4 | Grace: ↑ ho- [hot] |
| 5 | Mother: [wait] mummy ↑ puts ↓ milk. wait. |
| 6 | Grace: °this° (5) hots |
| 7 | Mother: okay- |
| 8 | Father: it's hots is it Grace |
| 9 | Mother: it's alright now |

Grace asks her mother for milk repeatedly with pauses in between in Finnish on line 1, and announces with a loud voice in Finnish that her porridge is hot on line 2. The sound "l" is again missing from the middle of the verb "haluaa" on line 1, and there is an extension of the sound "m" in the middle of the adjective "kuuma". The mother responds quickly on line 3 that she knows the porridge is hot, correcting Grace's pronunciation of the word, and that she will put milk in it in a moment. But Grace repeats the first

syllable and the whole adjective “hot” in Finnish again with incorrect pronunciation on line 4. The mother’s next utterance on line 5 overlaps with Grace’s utterance, as she asks Grace to wait and she will put milk in the porridge. She says this with a specific intonation to make the point more clear. But Grace insists on line 6 that the porridge is hot, as she utters a language-mix consisting of the spoken Finnish pronoun “tää” (“this”) said with a quiet voice, and after a pause the English adjective “hot”, with a sound “s” in the end. As Grace has uttered this, her mother responds by saying “okay” on line 7, but her utterance is cut off by the father’s question on line 8 as he inquires Grace if the porridge is hot, also pronouncing the word with the sound “s” in the end. The mother responds to this by explaining that the porridge is alright now.

The language-mix in example 25 can be explained by looking at the context. Grace’s porridge is hot, and though she points this out to her mother twice on lines 2 and 4, nothing seems to happen. Thus, it can be argued that she either feels that her mother does not understand what she is saying, or she wants to draw her father’s attention to the matter, as she utters “hot” in English on line 6 after the spoken Finnish pronoun “tää” (“this”). Grace’s mother said that Grace sometimes may repeat an utterance in the other language if no-one reacts to the first utterance. Grace first utters “tää” with a quiet voice, and after this there is a longer pause, which indicates that Grace is trying to think of the right word before saying the English adjective. Grace thus successfully draws her father’s attention with the language-mix as she utters an English word, and the father responds to her utterance on line 8.

Another meal-time conversation follows where Grace and her parents are eating dinner. Grace’s father has just said that her socks are dirty, and her mother has said the same in Finnish:

Example 26 (2;4)

- | | |
|---|--|
| 1 | Mother: muta kato syödään sitä kalaa nyt, (2) ka (.) hyvää = |
| 2 | =kalaa. |
| 3 | Grace: likaa. (.) dirty- ((talking about her socks)) |
| 4 | Mother: niin o- |

- 5 Grace: dirt, (.) öö
- 1 Mother: but look let's eat that fish now, (2) look (.) good=
 2 =fish.
 3 Grace: dirt. (.) dirty- ((talking about her socks))
 4 Mother: yeah they are-
 5 Grace: dirt, (.) öö

Grace's mother tries to get Grace to eat fish by saying that it is good, but Grace has noticed how her socks are dirty, and announces it in both languages on line 3. This is a language-mix, where Grace first utters the Finnish noun "likaa" ("dirt"), and after a small pause she says the English adjective "dirty". There is a sharp cutoff in Grace's speech here, as the mother agrees with her on line 4 that the socks are dirty. But the mother's speech is also cut off here as Grace continues by saying the noun "dirt" in English.

As pointed out above, Grace has recently heard in both languages that her socks are dirty, which may have had an effect on her repetition of the word in both languages on line 3. But this example is similar to the previous example 25 where Grace also repeated a word in both languages as both her parents were present, thus making a point to the parents in their own languages. Moreover, as Grace utters "likaa" and "dirty" one after another, only separated by a small pause, it can be argued that Grace at least recognises that the words have a similar meaning, or maybe even differentiates that they are in fact words from two distinct languages. The previous examples seem to suggest that Grace identifies both languages with the parents who speak them. It could thus be concluded that English and Finnish are not a fused entity in Grace's brain, but instead she at least seems to realize which language(s) each of the parents understand.

6.2 *The child's private talks*

Grace's private talks are an essential activity type in the present study, as there was no-one else present in these activities. Grace was not expected to use either of the languages in these situations, thus some implications may be made of the dominance of the languages. Moreover, as Grace was not in a

situation where keenness to communicate with someone could be the reason for mixed utterances, some implications may also be made of her language-mixing. Though it is difficult to draw any certain conclusions from single utterances without any conversational context, Grace's private talks can still be seen to reveal some important aspects of her bilingualism. It was actually quite usual for Grace to talk by herself during the data collection, but most of her talks were spoken in a child language which was neither English nor Finnish. However, there were some private talks where Grace spoke English and Finnish. In fact, those utterances in Grace's private talks which were not spoken in a child language were mostly language-mixes.

In the following example Grace is drawing alone and she has spoken a child language by herself:

Example 27 (2;3)

1 Grace: mä, (3) piittämässä. (2) hello.

1 Grace: I, (3) drawing. (2) hello.

Grace says what she is doing by announcing in spoken Finnish that she is drawing with a pause between the words "I" and "drawing". She pronounces the verb "piirtämässä" ("drawing") a little differently, as she pronounces a "t" sound in the word instead of the correct sound "r". After this there is another pause, after which Grace says "hello" in English.

Grace seems to talk out loud what she is thinking as she is drawing, or voicing something related to what she is drawing. A possible reason for this is that she wants to try out the words and how they sound. However, it is also possible that she imagines to be talking to someone. The first two words that Grace utters are in Finnish, but after this she says the English word "hello". She appears to be more familiar with the English word "hello" than its Finnish equivalent "hei". It can be argued that Grace may be socialized into using the English word, because the Finnish word may seem even a little rude in some situations if used with English-speaking interlocutors. Thus, the English "hello" is more preferable than "hei".

Another example follows where Grace is talking to herself. She is alone in her room after her mother has read bedtime stories to her and put her to sleep.

Example 28 (2;3)

1 Grace: look (.) tää on monkey.

1 Grace: look (.) *this is monkey.*

Grace again utters the usual everyday verb "look" in English, after which she utters the spoken Finnish noun phrase "tää on" ("this is") which is also very often present in the data. After this she utters "monkey", by which she again switches to English.

Grace probably recalls a picture from a book that she had read earlier, and explains what she saw in the picture, though she does not have the book with her anymore. She utters the verb "look" and the noun "monkey" in English, thus beginning and ending the utterance in English. However, she utters the noun "tää" and the verb "on" in Finnish in the middle of the utterance. Thus, it is possible that Grace is again imagining to be talking to someone. As pointed out earlier, she used the English verb "look" very much with her mother and father, and based on the data, the English noun "monkey" was noted to be more familiar to her than the Finnish equivalent "apina". Thus, as the noun phrase in the middle of the utterance is in Finnish, it could be argued that Grace is probably imagining to be talking to her mother.

6.3 Meal-time conversations with the parents and the father's family

There were not many instances of language-mixing in the data where Grace was eating with her parents and the father's family. The mother said that one possible reason for this may be that when she herself speaks only English, Grace also speaks only English. She also added that if she would speak to Grace in Finnish in these situations, Grace would probably respond in

Finnish. Grace's most usual utterances in these situations were actually unilingual requests which were directed to one particular person. This again indicates that she differentiates the two languages from each other quite well, knowing when and with whom to use which language. Moreover, based on the data, the requests were most commonly uttered in Finnish and directed to the mother. This may be due to the fact that the mother is daily more present than anyone else to respond to Grace's requests. An example follows where Grace's uncle gives a glass to Grace as they are beginning to eat:

Example 29 (2;5)

- | | |
|---|---|
| 1 | Uncle: () some glass for Grace |
| 2 | Grace: ↑ vet- (.) juice |
| 3 | Mother: joo. (.) heh vet- (.) juice |
| | |
| 1 | <i>Uncle: () some glass for Grace</i> |
| 2 | <i>Grace: ↑ wat- (.) juice</i> |
| 3 | <i>Mother: yeah. (.) heh wat- (.) juice</i> |

Grace's uncle gives a glass for Grace, and she begins to request for water in Finnish, as she utters the first syllable of the noun on line 2. However, she apparently changes her mind mid-word and repairs her own utterance by saying the English noun "juice" instead. The mother responds to this by first saying "joo", which is a spoken Finnish equivalent for "yes", on line 3. But after this the mother laughs and repeats Grace's utterance, namely the first syllable of the Finnish noun "vettä" ("water") with the English noun "juice". This is probably due to the unusual mixed word that Grace produces.

There are two possible reasons for the language-mix on line 2 in example 29. Firstly, as it has been pointed out earlier, Grace is unfamiliar with the Finnish noun "mehu", thus she prefers to use the English noun "juice" instead. Secondly, Grace may have already realised at some level that her uncle does not understand Finnish, and thus utters the English noun "juice" instead of finishing the Finnish noun "vettä". However, based on the data, Grace was familiar with the English noun "water" as well as its Finnish equivalent. Thus, it is probable that Grace is actually directing her request to her mother in example 29, and thus utters the noun "juice" in English because it is more familiar. Furthermore, she knows that her mother will

understand her even if she uses an English noun. Consequently, the mother responds to her request, though laughing at her language-mix.

6.4 Meal-time conversations with the parents and the mother's family

The data from the meal-time conversations with Grace, her parents and the mother's family was collected in a short period of time, as pointed out earlier. However, Grace talked very freely in these situations, possibly because the mother's family members understand English as well. Consequently, there was quite a vast amount of language-mixing as compared to the amount of data from these situations. As in the whole data, language-mixes with the verb "look" were most common in these situations. In the following example Grace is talking with her Finnish grandmother as she is holding Grace's little brother who is tearing a newspaper:

Example 30 (2;5)

- | | |
|---|--|
| 1 | Grandmother: repii lehtä. (3) vauva repii. |
| 2 | Grace: vauva wepii. |
| 3 | Grandmother: >är,< repii.- |
| 4 | Grace: look (.) wepii. |
| 5 | Grandmother: joo-o, (.) se, (.) joo (.) hm (.) kyllä se vähä ↓
repii= |
| 6 | =nyt, voivoi? |
-
- | | |
|---|---|
| 1 | Grandmother: tearing the paper. (3) baby tearing. |
| 2 | Grace: baby tearing. |
| 3 | Grandmother: >ar,< tearing.- |
| 4 | Grace: look (.) tearing. |
| 5 | Grandmother: yea-h, (.) he, (.) yeah (.) hm (.) he's really=
=↓ tearing a little now, oh dear? |
| 6 | |

Grace's Finnish grandmother says that the baby is tearing the paper. Grace repeats the grandmother's last utterance "vauva repii" ("baby tearing") on line 2, but her pronunciation of the verb "repii" is incorrect, as she begins the word with the sound "w" instead of the right sound "r". The grandmother corrects her pronunciation on line 3 by first quickly repeating the sound "r" and then the verb "repii" ("tearing"). However, Grace does not correct her pronunciation, as the grandmother's utterance is in fact cut off by Grace's language-mix on line 4, as she utters the English verb "look" and again pronounces the Finnish verb "repii" incorrectly. The grandmother does not try to correct Grace's utterance again, as she is probably concentrating on the baby who is tearing the paper. She only agrees with Grace and says how the baby's tearing the paper a little.

Grace does probably not even realise that her grandmother tried to correct her pronunciation of the Finnish verb "repii" ("tearing") on line 3, as she is concentrating on looking at the baby who is tearing the paper. Grace seems to be thinking that her little brother should not tear the newspaper, as she repeats the Finnish verb "repii" together with the English verb "look" on line 4, as if trying to make her grandmother notice what the baby is doing. The grandmother's response suggests that she either did not notice Grace's language-mix or she is used to it.

In the following example Grace, her family and the mother's family are having dinner. Food has just been put on Grace's plate in front of her:

Example 31 (2;5)

1 Grandmother: onko Grace sulla nälkä. (2) onko.
 2 Grace: look look (.) kuumaa
 3 Mother: nii:n,-
 4 Grandmother: aha
 5 Mother: kuumaa.

1 Grandmother: are you Grace hungry. (2) are you.
 2 Grace: look look (.) hot
 3 Mother: yea:h,-
 4 Grandmother: oh
 5 Mother: hot.

Grace's Finnish grandmother asks Grace if she's hungry. Grace does not answer her question, but instead repeats the everyday English verb "look" twice on line 2, and utters the Finnish adjective "kuumaa" after a small pause. Grace's mother agrees, as she says "niin" ("yeah") in Finnish and extends the pronunciation of the sound "i" in the middle of the word on line 3. The Finnish grandmother replies by saying "aha" ("oh") on line 4, as if surprised or not understanding what Grace meant. The mother explains it to her by saying "kuumaa" ("hot") in Finnish.

Grace does not directly reply to her grandmother, but says with a language-mix that the food is hot. She utters the everyday English verb "look" but repeats it twice which is quite unusual in the data. As in example 30 above, Grace again utters the verb "look" to draw someone's attention, but in this example 31 she repeats the verb twice without a pause to draw even more attention, as if explaining that she cannot eat because the food is too hot. Grace's language-mix on line 2 can also be taken as a request, probably directed to the mother, to make the food cooler.

6.5 The effect of different activities and participants on language-mixing

When looking at the data it becomes clear that different activities and different participants had an effect on the nature and even the amount of language-mixing. Consequently, language-mixing was more usual in certain activities and with certain participants, and virtually non-existent with some

interlocutors. However, the different activities did not have an impact on the amount of language-mixing, unlike the different interlocutors who had a remarkable effect.

As pointed out above, Grace mixed between languages even when she was speaking to herself, but as there were not that many instances of private talks, no certain conclusions can be drawn from them. Of the whole data, language-mixing clearly occurred most often when Grace's mother was present. When Grace was alone with her father, there was some language-mixing. However, when some of the father's family members were present, language-mixing was very rare, as only 3 language-mixing instances were found in the data during these times. In contrast, more language-mixing occurred when some of the mother's Finnish family members were present, namely 17 instances.

Though the amount of language-mixing did not seem to depend on the activity, it was noted that the activity had an effect on the qualitative aspects of language-mixing. When Grace was reading, or looking at, books with either of her parents, the most usual language-mix included the everyday English verb "look" together with a Finnish word or words. Many other language-mixes in this activity type included a Finnish noun or a verb uttered with an English noun which was unfamiliar to Grace in Finnish. There were more different types of language-mixes in the free play activity. Language-mixes with the everyday English words "look" and "no" were common, as well as mixes with a Finnish verb and / or a noun together with an English noun. In the third activity type, namely meal-time conversations, the language-mixes usually included Finnish words uttered with an English noun, or the English words "please", "look" or "no" with a Finnish noun.

In conclusion, based on the data of the present research, there seemed to be most language-mixing when the mother or her Finnish-speaking relatives were present, whereas the presence of the father's English-speaking relatives decreased the amount of language-mixing. Moreover, when the father was present there was some language-mixing, but the presence of other people had a greater effect. However, the different activity

types did not have an effect on the amount of language-mixing, but rather on the quality of it; some language-mixes were more present in a certain activity type. One possible reason for this is the fact that some words closely connected to an activity type often resulted in a language-mix, for instance the verb "look" which was usual when reading.

It could be argued that the most language-mixing occurred with the mother because she herself switches between languages, thus socializing Grace into mixing languages. But as the mother mostly used Finnish in conversations with Grace, it was apparent that she also socialized Grace into using Finnish. In addition, the mother's Finnish family members understand both languages, thus allowing Grace to mix languages with them as well, as they responded to Grace's language-mixes. In contrast, since the father knows only some Finnish, Grace could mix languages with him somewhat but not extensively, as it would have impeded understanding. Moreover, Grace has probably learned that the father's English family members do not understand Finnish, as she does not mix languages with them.

7 THE DEVELOPMENT OF LANGUAGE-MIXING

As the time of the data collection in the present study was quite short (Grace's age 2;2-2;6), it could be expected that there was no clear development in the child's language-mixing during the study. However, some changes were found when the language-mixes from the analyzed data were compared with each other. For instance, language-mixes with certain words were very usual at some time of the data collection and virtually nonexistent some other time. There were also some changes in the forms of language-mixing during the study. The changes in the language-mixes as well as the possible reasons for these will be discussed below.

The amount of language-mixes with the English noun "daddy", as well as the amount of language-mixes with the Finnish verb "haluaa", was greatest in the beginning of the study, and the amount of both decreased after this. However, language-mixes with the verb "haluaa" were also present later in the study, whereas language-mixes with the noun "daddy" were very rare in the data after Grace's age was 2;4. There is no clear reason why the Finnish verb "haluaa" was more usual in the beginning of the study than later, because it was not replaced by the English equivalent. It could be that Grace learned to use the verb with other Finnish words more accurately, thus not resulting in language-mixes as often as before. However, the noun "daddy" was mostly used in language-mixes when Grace uttered that the microphone was "daddy's". Thus, as Grace got used to the microphone during the study, she did not utter this language-mix anymore.

Language-mixes with the English noun "mummy" were only present in the data as Grace's age was 2;3-2;4. These mixes were actually quite usual when Grace was 2;4. The noun "mummy" was usually used similarly in language-mixes as the noun "daddy". As Grace knew the equivalent to "mummy" in Finnish, namely "äiti", she usually used that when speaking to her. However, when she wanted to say that something was her mother's, she usually uttered the English noun "mummy's". Grace also

sometimes said that the microphone was “mummy’s”. It seemed usual during the data collection that if Grace knew she could not touch something, she said that it was someone’s, usually “mummy’s” or “daddy’s”, and repeated this many times.

There were only a few language-mixes with the English word “no” in the data in the beginning of the study. However, as Grace was 2;5 there was a larger amount of language-mixes with the word “no”, namely 7 instances. This seems to have been the only month when these types of mixes were usual. The reason for this could be that Grace was in a certain developmental age when she often answered “no” when she was asked if she wanted something. When Grace’s age was 2;5, language-mixes with the verb “look” were as usual as language-mixes with the word “no”. As most of the language-mixes with the verb “look” at that time were directed to the mother’s Finnish family members to draw attention, it could be argued that as Grace had more people whose attention she could draw to something, she uttered the verb “look” more often. Moreover, as the people she was talking to were Finnish, the result was a large amount of language-mixes with the verb “look”.

The most common Finnish words in the language mixes were the spoken Finnish noun “tää” and the verb “haluaa”, and these were present during the whole data. The amount of language-mixes with the Finnish noun “tuo” was not as large, though it increased steadily when Grace was 2;2-2;4, but these language-mixes were rare after this. There is no clear reason why this noun was not used in language-mixes after this. Language-mixes with the spoken Finnish noun “tää” were also most usual when Grace was 2;4, and it was mostly used in the utterances where Grace said that the microphone was “mummy’s” i.e. *tää on mummy’s* (this is mummy’s).

The complexity of the mixed utterance was noted to decrease during the data collection. When Grace’s age was 2;2-2;3, it was quite usual for her to switch between languages two or three times during a single utterance. However, this began to change when she was 2;4 as the language-mixes became simpler, though not always shorter. Consequently, as she was

2;6, multiple switching between languages was very rare in her language-mixes. In the end of the data collection, the language-mixes were usually quite short and included only one switch between languages. Moreover, nearly all of the language-mixes in the end of the study seemed to be a result of a word unknown in the other language and thus leading to a language-mix.

In conclusion, there were no extensive changes in Grace's language-mixing during the study, as the data was collected in quite a short stretch of time. However, some development occurred during the study, as the words used in language-mixes and the complexity of the mixed utterance changed. During the whole study, language-mixes usually included a word that was unfamiliar to Grace in the other language and thus a reason for the mix. Thus, as Grace wanted to communicate an idea to her interlocutors, she used the language that was more easily accessible for her, independent of the language. However, as she probably learned how to use some words in the other language or in the right linguistic context, language-mixes with these words did not occur as often as before.

Though the complexity of language-mixing decreased during the study, the amount of language-mixing did not seem to. The main reason for this is probably found in language socialization, as Grace's mother code-switched and did not give Grace negative feedback for language-mixing. However, as code-switching is promoted in Grace's environment, she may thus learn to apply it for communicative purposes. This will be discussed further in chapter 10.

8 THE DEVELOPMENT OF LANGUAGE DOMINANCE

Language dominance was studied by concentrating on three aspects of the data that have been found to determine language dominance most effectively (see chapter 2.3 above). The three aspects were, firstly, the language preferred in the child's private speech, secondly, the language preferred when both languages were acceptable. Thirdly, it was studied whether more grammatical items were borrowed from one of the languages when spoken in the other. It was thus concluded that if language A was preferred in the child's private speech as well as when either language was acceptable, this language could be argued to be the dominant language for the child. Moreover, if grammatical items were often borrowed from language A when spoken in language B, then language A could again be claimed to be the dominant language.

As it was noted earlier, on one hand it is expected that English will probably become the dominant language for Grace, as she receives her daily input of Finnish only from her mother. On the other hand, however, Grace receives a large amount of input from her mother, as she is her primary caregiver, thus Finnish may at this point be Grace's dominant language. In contrast, as the mother speaks both languages and the father only speaks English, it could have an effect on Grace's language preference.

It can be noted, however, based on the data, that Grace did not have a clear language preference during the data collection of the present study. From the 6 instances when Grace spoke to herself, she used Finnish twice as much as English. In contrast, when either of the languages was acceptable, Grace preferred English a little more than Finnish, namely in 23 instances, as Finnish was preferred in 19 instances. However, it was again twice as usual for her to borrow grammatical items from Finnish when speaking in English than vice versa. When looking at the development of language dominance in the data, it can be claimed that Finnish was more

dominant as Grace was 2;2, whereas English was more dominant as she was 2;3. After this the preference of the languages was quite equal, though Finnish was more dominant during the rest of the study (8 instances of Finnish preference as opposed to 2 instances of English). However, it could be argued that whereas neither of the languages was clearly more dominant during the study, the mixed output was most common. Thus, it can be argued that the dominant language for Grace during the present study was the mixed form of English and Finnish. This is actually very understandable, as Grace receives her primary input from her mother who understands both languages and code-switches between them. Thus, as pointed out earlier, Grace is socialized into code-switching.

9 FROM LANGUAGE-MIXING TO CODE-SWITCHING

It was noted throughout the present study that the switches between Finnish and English could not always merely be labelled as language-mixes, as they sometimes also shared qualities with code-switching. This group of switches between the languages often seemed to serve a certain communicative purpose in the child's utterance, for instance clarification. The child's code-switches often included repetition of the same word or a similar word in the other language.

The following example 16 was introduced earlier in chapter 6.3.2. In this example Grace is drawing and her father is with her. No translation will be provided for this example, as there is only one word in Finnish, which will be translated in the description below the example. Before this conversation Grace talked to herself in Finnish and in her own child language while drawing:

Example 16 (2;2)

- | | |
|---|---|
| 1 | Father: that's called a crayon (.) ((Grace is tapping the crayon= |
| 2 | =on the table)) can you say crayon? |
| 3 | Grace: crray. |
| 4 | Father: yeah. well done |
| 5 | Grace: ah (2) väit. (.) ocolour. (.) paint. ()o |
| 6 | Father: mhm? |

Grace's father explains to Grace that what she is tapping on the table is called a crayon. He asks her if she can say crayon, and Grace tries to imitate the word on line 3. The father accepts Grace's utterance as correct, and gives her positive feedback on line 4. Then Grace seems to think about the word, as she says "ah" on line 5, and after a pause says "väit". This utterance "väit" is close to the Finnish word "värit", i.e. "colours". Actually, she pronounced the word similarly in other situations in the data when drawing and Grace's mother also agreed that Grace meant "värit". After saying this Finnish utterance, Grace pauses for a little time, and says much more quietly the

English words "colour" and "paint" with a little pause in the middle. After this there is some unclear speech. Then Grace's father signals with a sound "mhm?" on line 6 that he did not understand what Grace said.

As Grace tries to utter the unfamiliar noun "crayon" on line 3, she seems to stop to think about the meaning of the word on line 5 as she utters the Finnish noun "värit" ("colours"), and after this the English nouns "colour" and "paint". Grace seems to think aloud about the meanings of these similar words. It appears that she is explaining to herself that all of these words are somehow similar in meaning, though they are uttered in two different languages. Based on example 16 it can be argued that Grace already distinguishes the two languages from each other. Moreover, she uses this knowledge when trying to learn the meaning of new words by applying her knowledge of both vocabularies. She does this by trying to find possible synonyms or similar words to understand the meaning of a new word. Thus, she uses her already existing bilingual vocabulary to assimilate the meaning of new words.

The following example 17 was also introduced earlier in chapter 6.3.2. This example was taken from a conversation between Grace and her father as they were reading a book. The father is asking Grace the names of the different things in the book:

Example 17 (2;3)

1	Father: <i>bin</i> (.) good
2	Grace: OMENA:: appei- j- [omena]
3	Father: [what's] that
4	Grace: cake

1	Father: <i>bin</i> (.) good
2	Grace: APPLE:: appei- j- [apple]
3	Father: [what's] that
4	Grace: cake

The father first gives positive feedback for Grace's previous answer. Then Grace apparently sees an apple in the picture, and says "apple" on line 2 in a loud voice in Finnish, extending the last vowel of the word. Immediately after this she almost says the word in English, but as she is not sure how the word should end, as she tries to add the sounds "i" and "j" in the end, she

decides to say the Finnish word “omena” again instead. But at this point the father’s question of the next picture on line 3 overlaps with Grace’s utterance of the word “omena”. Then Grace answers her father’s question by naming the picture as a “cake”.

Grace is clearly more familiar with the Finnish noun “omena” than she is with the English equivalent “apple”. However, as she still tries to utter the English noun to her father, it can be argued that she not only distinguishes the two languages from each other, but is also sensitive to the fact that she should use English with her father. Thus, Grace applies code-switching in a way that indicates her awareness of the preferred language in this particular context. However, though her awareness seems to be quite developed, her vocabulary is not developed enough to enable her to code-switch more effectively.

The following example 25 was introduced in chapter 7.1. In this example Grace is eating breakfast with her parents and Grace has hot porridge on her plate:

Example 25 (2;2)

- | | |
|---|---|
| 1 | Grace: mä hauan maito. (2) äit:i. mä hauan maitoa. (2)= |
| 2 | =↑ mai- ↓ too. (2) KUUMMA |
| 3 | Mother: >kuumaa joo panee äiti panee maitoa oota< |
| 4 | Grace: ↑ kuu- [kuumma] |
| 5 | Mother: [oota] äiti ↑ laittaa ↓ maitoa. odota. |
| 6 | Grace: °tää° (5) hots |
| 7 | Mother: noni- |
| 8 | Father: it’s hots is it Grace |
| 9 | Mother: it’s alright now |
| | |
| 1 | Grace: I want milk. (2) mumm:y. I want milk. (2) ↑ mi- ↓ lk.= |
| 2 | =(2) HOT |
| 3 | Mother: >hot yeah puts mummy puts milk wait< |
| 4 | Grace: ↑ ho- [hot] |
| 5 | Mother: [wait] mummy ↑ puts ↓ milk. wait. |
| 6 | Grace: °this° (5) hots |
| 7 | Mother: okay- |
| 8 | Father: it’s hots is it Grace |
| 9 | Mother: it’s alright now |

Grace asks her mother for milk repeatedly with incorrect pronunciation and with pauses in between in Finnish on line 1, and announces with a loud voice and again with incorrect pronunciation in Finnish that her porridge is hot on line 2. The sound “l” is missing from the middle of the verb “haluaa” on line

1, and the there is an extension of the sound “m” in the middle of the adjective “kuuma”. The mother responds quickly on line 3 that she knows the porridge is hot, correcting Grace’s pronunciation of the word, and that she will put milk in it in a moment. But Grace repeats the first syllable and the whole adjective “hot” in Finnish again with incorrect pronunciation on line 4. The mother’s next utterance on line 5 overlaps with Grace’s utterance, as she asks Grace to wait and she will put milk in the porridge. She says this with a specific intonation to make the point more clear. But Grace insists on line 6 that the porridge is hot, as she utters a language-mix consisting of the spoken Finnish pronoun “tää” (“this”) said with a quiet voice, and after a pause the English adjective “hot”, with a sound “s” in the end. As Grace has uttered this, her mother responds by saying “okay” on line 7, but her utterance is cut off by the father’s question on line 8 as he inquires from Grace if the porridge is hot, also pronouncing the word with the sound “s” in the end. The mother responds to this by explaining that the porridge is alright now.

Grace’s utterance on line 6 in example 25 could be seen as a code-switch, as she clearly knows how to say “hot” in Finnish, but still chooses to use the English noun. Thus, it could not be claimed, based on this example, that Grace utters the English word because it is more available. Instead she utters a code-switch to clarify what she needs as her mother does not respond to her request quickly enough. It can be argued that Grace applies code-switching here to attract the attention of both her parents, as her mother often code-switches herself and the father understands English. Thus, Grace can be seen to be able to apply code-switching to clarify the meaning of her utterance when she feels that it has not been understood.

The following example 32 was taken from a conversation between Grace and her parents. They are in the kitchen and Grace wants to draw:

Example 32 (2;2)

- | | |
|---|---|
| 1 | Mother: ↑ <u>nice</u> , (.) hyvä. |
| 2 | Father: is it <u>yours</u> Grace? |
| 3 | Grace: hauaa ↓ piittää. (2) hauaa d- (.) odraw? (.) yes?o |

- 4 Mother: what [is that anyway]
 5 Grace: [>want a want a want a<] (.) ton
 6 Father: think it's () in there.
 7 Mother: >odota Grace äiti hakee,<
 8 Grace: draw? (väit-) haluaa draw. (.) ah. ()
 9 Mother: näin.
 10 Grace: ahh.
 11 Mother: nyt saa Grace piirtää.
- 1 Mother: ↑ nice, (.) good.
 2 Father: is it yours Grace?
 3 Grace: want to ↓ draw. (2) want to d- (.) °draw? (.) yes?°
 4 Mother: what [is that anyway]
 5 Grace: [>want a want a want a<] (.) that
 6 Father: think it's () in there.
 7 Mother: >wait Grace mummy gets,<
 8 Grace: draw? (colours-) want to draw. (.) ah. ()
 9 Mother: here.
 10 Grace: ahh.
 11 Mother: now Grace can draw.

The mother utters a code-switch on line 1 as she gives Grace positive feedback. The father asks Grace about something on line 2, but Grace does not reply. Instead, she first says on line 3 in Finnish that she wants to draw, and then utters a language-mix with the Finnish verb “haluaa” (“want to”) and the English verb “draw” with a rising intonation. After this she utters “yes” with a rising intonation, as a request. On line 4 the mother asks the father about something in English, and Grace quickly says repeatedly in English that she wants something, and ends her utterance with the spoken Finnish noun “ton” (“that”) on line 5, probably referring to a pen. The father says where he thinks the pen may be on line 6, and the mother responds to Grace’s request on line 7 by saying quickly that she will get it. On line 8 Grace again utters a language-mix as she first utters the English verb draw with a rising intonation, and then apparently says the Finnish noun “värit” (“colours”) and then the Finnish verb “haluaa” (“want to”) with the English verb “draw”. Then she utters “ah” and there is some unclear speech. The mother brings Grace the pen and says on line 11 in Finnish that now Grace can draw.

There are two instances in example 32 above where Grace repeats the same word or similar words in both languages. In the first instance on line 3 it can again be seen that Grace does not switch between

languages because either of the languages is more available. Grace actually repeats the exact synonym in both languages, namely the verbs “draw” and “piirtää”. As she utters both the English verb “draw” and after it the word “yes” with a rising intonation, it can be argued that she is either asking herself aloud or her parents if she is using the correct word. In the second instance on line 8 Grace again utters the English verb “draw” with a rising intonation, as if to check again if the word is correct. After this she utters a code-switch “haluaa draw” (“want to”). As it can be noted, based on the data, Grace often proclaimed in Finnish if she wanted to draw. It can thus be argued that she chose to use the English verb “draw” here because her father was present. Moreover, Grace has learned that her mother also code-switches and thus understands her if she does the same.

In the following example Grace and her parents are eating dinner at home and Grace wants something.

Example 33 (2;4)

- | | |
|---|---|
| 1 | Mother: onko <u>hyvää</u> |
| 2 | Grace: hyvä |
| 3 | Mother: mmm? |
| 4 | Grace: haluaa <u>tämä</u> . haluaa this (.) tämä. |
| 5 | Mother: Grace always says aua (.) aua. |
| | |
| 1 | <i>Mother: is it <u>good</u></i> |
| 2 | <i>Grace: good</i> |
| 3 | <i>Mother: mmm?</i> |
| 4 | <i>Grace: want <u>this</u>. want this (.) this.</i> |
| 5 | <i>Mother: Grace always says aua (.) aua.</i> |

Grace’s mother first asks Grace if she likes the food, and Grace responds on line 2 that it is good. The mother agrees by uttering “mmm” with a rising intonation. Then Grace wants something and first utters her request in Finnish on line 4. Then she says the same with a language-mix with the Finnish verb “haluaa” (“want”) and the English pronoun “this”. After a small pause she also repeats the noun in Finnish. Grace’s mother does not respond to Grace’s request, but only says to Grace’s father that Grace always says “aua”, by which she refers to Grace’s pronunciation of the verb “haluaa” (“want”).

Again Grace repeats the exact synonym on line 4 in example 33 in both languages, as in the previous example 32. The use of the English noun “this” can be seen to have two functions in the code-switch. Firstly, Grace may again choose an English word because she wants her father to understand her request as well. Secondly, Grace may choose to use code-switching to clarify the meaning of her request more clearly to her mother. Thus, Grace uses repetition to stress her request. As pointed out earlier, Grace’s mother also said that Grace often repeated the same request in English if her mother did not respond to her request uttered in Finnish right away. All in all, it is again clear that Grace does not switch between languages by accident, but is instead able to use code-switching for specific communicative purposes.

In the following example Grace is with her mother, and she talks to herself after her mother leaves the room.

Example 34 (2;3)

- | | |
|---|--|
| 1 | Mother: orota ((leaves the room)) |
| 2 | Grace: ooota. ooota. wait. oota oota oota (.) wait. (.) oota.= |
| 3 | =(.) wait () |

The mother first orders Grace to wait by using the Finnish verb “odota” with a specific dialect, namely “orota” (“wait”), after which she leaves the room. Grace repeats the Finnish verb in its’ spoken Finnish form “oota” on line 2 first quietly to herself and after a pause louder. After this Grace utters the verb repeatedly in English and Finnish.

It can be argued that, based on this example, Grace definitely distinguishes the two languages from each other, as it is very unlikely that she would repeat the same word in one of the languages this many times. As the mother has already left the room as Grace is speaking, it is clear that she is speaking to herself. She apparently tells herself to wait perhaps because she does not want to. Thus, she clarifies the mother’s order to herself by applying code-switching. It is also possible that she is playing with words as she has understood that though they are from different languages they share the same meaning.

In the following example 35 Grace's mother is filming her in the kitchen while she talks with her. The father is upstairs, and responds to the mother's comment that Grace just said "granddad", apparently for the first time. The mother is trying to get Grace to repeat the word:

Example 35 (2;3)

- | | |
|---|--|
| 1 | Father: ((upstairs)) did she? |
| 2 | Mother: yeah (.) hh <u>granddad</u> |
| 3 | Grace: look tuo <u>bag</u> on ↓ <u>laukku</u> . ((pointing at the camera bag)) |
| 4 | Mother: niin se on granddad. (.) granddad's- |
| 5 | Grace: tuo <u>laukku</u> . |
-
- | | |
|---|--|
| 1 | <i>Father: ((upstairs)) did she?</i> |
| 2 | <i>Mother: yeah (.) hh <u>granddad</u></i> |
| 3 | <i>Grace: look that <u>bag</u> is ↓ <u>bag</u>. ((pointing at the camera bag))</i> |
| 4 | <i>Mother: yes it's granddad. (.) granddad's-</i> |
| 5 | <i>Grace: that <u>bag</u>.</i> |

Grace's father first responds to the mother's previous comment that Grace said "granddad" with a question, and Grace's mother answers "yeah" on line 2. After a small pause the mother again repeats the word "granddad", trying to get Grace to repeat the pronoun once again. After this Grace utters a five-word code-switch on line 3 explaining that the bag on the table is "laukku" ("bag"). She does this by pointing at the bag and begins the utterance with the English verb "look". Then she utters the Finnish pronoun "tuo" ("that"), the English noun "bag" with emphasis, and the Finnish verbal phrase "on lauukku" ("is bag") again emphasising the noun "bag". The mother responds to this on line 4 by again trying to get Grace to say that the bag is "granddad's". But Grace only responds by uttering in Finnish "tuo lauukku" ("that bag"), again emphasising the noun.

Grace switches between languages without a pause three times during her utterance on line 3. She again repeats the exact synonym in both languages, namely "lauukku" and "bag". As she emphasises the same noun three times in the example, twice on line 3 and once on line 5, it is clear that she knows the words refer to the same thing. In the code-switch on line 3 Grace clearly explains to her mother that the bag is also called "lauukku". There is no reason why Grace would explain to her mother in one language

that “that bag is bag”. In contrast, Grace applies code-switching to explain to her that the words mean the same.

In conclusion, it can be argued that some of Grace’s language-mixes are code-switches which serve a specific communicative purpose. In examples 16 and 17 Grace uses code-switching as she does not know a word as well in English as she does in Finnish. In example 25 Grace code-switches to emphasize a particular point. In examples 32 and 33 code-switching is used to reinforce a request. In examples 34 and 35 Grace uses code-switching to clarify a point. Moreover, these switches between the two languages are used effectively depending on the participants present as well as the context in which they are uttered. However, as Grace still has a limited vocabulary in both of the languages, English and Finnish, she still has quite much to learn before she can fully code-switch purposefully in the right contexts instead of mixing languages without a specific purpose.

10 CONCLUSION

Though the present study provides only limited information about language-mixing, as it is a case study and conducted on a short stretch of time, it still provides some actual data about the linguistic development of a Finnish-English bilingual child. Thus, though the results cannot be generalized, the present study gives an inside perspective, through different daily activities, to language-mixing and its' development. The study was set out to answer three core questions introduced earlier in chapter 4. Firstly, what are the qualitative aspects of language-mixing? Secondly, does language-mixing depend on the context? Or, in other words, does more language-mixing occur in one activity than another, or with some participants, and whether it takes different forms in different activities. Thirdly, does language-mixing change or even develop into code-switching and take different forms in these activities over a few months or not? The answers to these three questions, as found in the analysis, will be discussed below with their possible explanations.

When considering the qualitative aspects of language-mixing, it was found that most of the language-mixes included everyday English words such as "please", "look" and "no" which often occurred together with Finnish words. The language-mixes also often included an English word known only in English, such as "daddy", or a more familiar English or Finnish word, such as "buggy" or "omena" ("apple"). In addition, some language-mixes were a result of a word used in the "wrong" linguistic context (for instance a Finnish word used in an otherwise English context) though known in both languages, such as "vettä" instead of "water" and "bag" instead of "laukku". It was found that at least some of the language-mixes were a result of a socialization process. For instance, it can be claimed that Grace has been socialized into adding "please" to her requests, whether they are otherwise in English or Finnish. In addition, she has been socialized into referring to her father, as well as her English relatives, in English even

when speaking in Finnish. Moreover, the most common language-mixes with English words did not initiate a repair from the mother. Thus, it can be claimed that most language-mixes were acceptable and even expected, consequently resulting in high occurrence of those specific mixes.

When considering the data from the point of view of context and activity type, it can be noted that especially the form of language-mixing varied according to them. On one hand, the amount of language-mixing did not vary much between different activities as Grace mixed between languages in every activity type, even in her private talks. On the other hand, the participants present seemed to have a great effect on the amount of language-mixing. Most language-mixing occurred when Grace's mother was present, probably because she understands both languages and code-switches herself. In contrast, the least language-mixing occurred when the father's family was present, because Grace has probably realised that they do not understand Finnish, as they only speak English. This shows that Grace's metalinguistic awareness is quite developed.

The type of activity had an effect on the quality of the language-mix, however, as some words were more present in the language-mixes of specific activities. For instance, language-mixes with the English verb "look" were most usual when Grace was reading with either of her parents, as she often wanted to draw her parents' attention to something while reading. The English words "look" and "no" were common in the language-mixes in the free play activity type when Grace wanted to capture attention or say her opinion of something. Language-mixes with a Finnish noun or a verb with an English noun were also usual in this activity type. The everyday English words "please", "look" and "no" were largely present in the language-mixing data from meal-time conversations, as well as language-mixes including Finnish words with an English noun.

When considering the development of language-mixing through different activities, it can be argued that changes were found in the dual language use during the data collection, as the words mixed as well as the length of the mix changed. For instance, language-mixes with the English

noun “daddy” decreased during the study as Grace did not refer to the microphone to her mother as “daddy’s” anymore. Instead, as she referred to the microphone as “mummy’s” after this, the language-mixes with this English noun increased for a while. The English word “no”, as well as the English verb “look”, were clearly most present in the data as Grace was 2;5. At this age, Grace often responded to questions with a language-mix including “no” and a Finnish noun or a verb, and she uttered “look” often as she wanted to draw her Finnish relatives’ attention. The length of language-mixes decreased clearly during the study. It was also noted that the mixes in the end of the study were most often the result of a word unknown in the other language.

It can be concluded, based on the data of the present study, that language-mixing is an essential aspect of bilingual first language acquisition, and thus an important aspect of childhood bilingualism to be studied even further. Moreover, it is clear that language-mixing develops even in a short stretch of time, as the type of the mix changes according to different contexts and the participants present. Different activities have an effect on the type of the language-mix, whereas different participants have an effect on the amount of language-mixing.

However, it can be argued that the language socialization process has the greatest effect on language-mixing in two ways. Firstly, the child going through bilingual first language acquisition may be socialized into applying certain words in certain contexts, independent of the language used. For instance, the child may be taught to use “please” in all requests, whether the context is English or not. Secondly, the compound bilingual child may receive a large amount of code-switched input, thus socializing her into mixed output. However, as the bilingual child is socialized into mixing languages early in her linguistic development, she may learn to use code-switching for specific purposes from an early age. Consequently, the child’s communicative competence may increase because she has learned to use two languages simultaneously and effectively early on.

There is an aspect of bilingual first language acquisition and code-switching that could be studied further on the basis of the findings of the present study. Namely, as a bilingual child has been socialized into code-switching, will she code-switch to her younger siblings as well? Moreover, how does this affect the linguistic development of the younger siblings? It could be expected that the younger siblings will learn to mix languages purposefully earlier in their linguistic development if their older siblings have been socialized into code-switching. There is a need for further research on the effect of older siblings on language-mixing and code-switching.

BIBLIOGRAPHY

- Bailey, B. 2007. Heteroglossia and boundaries. In M. Heller (ed.), *Bilingualism: a social approach*, New York: Palgrave Macmillan, 257-274.
- Baker, C. 2004. *A parents' and teachers' guide to bilingualism*, Clevedon: Multilingual Matters.
- Baker, C. (ed.) 2001. *Bilingual Education and Bilingualism, 27: Foundations of Bilingual Education and Bilingualism*, Clevedon: Multilingual Matters.
- Barron-Hauwaert, S. 2004. *Language Strategies For Bilingual Families: The One-Parent-One-Language Approach*, Clevedon: Multilingual Matters.
- Brutt-Griffler, J. 2004. *World English: A Study of its Development*, Clevedon: Multilingual Matters.
- Cenoz, J and F. Genesee. 1998. Psycholinguistic perspectives on multilingualism and multilingual education. In Cenoz. J. and F. Genesee (eds.), *Beyond bilingualism, multilingualism and multilingual education*, Clevedon: Multilingual Matters, 16-32.
- Cheng, K. K. Y. 2003. Code-switching for a purpose: Focus on pre-school Malaysian children, *Multilingua* 22, 59-77.
- Chung, H. H. 2006. Code Switching as a Communicative Strategy: A Case Study of Korean-English Bilinguals, *Bilingual Research Journal* 30, 2, 293-307.
- Cunningham-Andersson, U. *Growing up with Two Languages: A Practical Guide*, London: Routledge.
- De Houwer, A. 2006. Bilingual language development: early years, *Encyclopedia Of Language And Linguistics*. Elsevier, 781-787.

- Fernald, A. 2006. When Infants Hear Two Languages: Interpreting Research on Early Speech Perception by Bilingual Children. In P. McCardle and E. Hoff (eds.), *Childhood Bilingualism: Research on Infancy through School Age*, Clevedon: Multilingual Matters, 19-29.
- Friedland, D and N. Miller. 1999. Language mixing in bilingual speakers with Alzheimer's dementia: a conversation analysis approach. *Aphasiology* 13, 4/5, 427-444.
- García, P. 2005. Parental Language attitudes and Practices to Socialise Children in a Diglossic Society. *The International Journal of Bilingual Education and Bilingualism* 8, 4, 328-344.
- Garrett, P. B. 2007. Language socialization and the (re)production of bilingual subjectivities. In M. Heller (ed.), *Bilingualism: a social approach*, New York: Palgrave Macmillan, 233-256.
- Garrett, P. B. and P. Baquedano-López. 2002. Language socialization: Reproduction and Continuity, Transformation and Change, *Annual Review of Anthropology* 31, 339-361.
- Genesee, F. 2006. Bilingual First Language Acquisition in Perspective. In P. McCardle and E. Hoff (eds.), *Childhood Bilingualism: Research on Infancy through School Age*, Clevedon: Multilingual Matters, 45-67.
- Hamers, J. F. 2004. A Socio-cognitive Model of Bilingual Development. *Journal of Language and Social Psychology* 23, 70-98.
- Heredia, R. R. and J. Altarriba. 2001. Bilingual Language Mixing: Why Do Bilinguals Code-Switch? *Current Directions in Psychological Science* 10, 5, 164-168.
- Hutchby, I. and R. Wooffitt. 1998. *Conversation analysis. Principles, practices and applications*, Cambridge: Polity Press.
- Jisa, H. 2000. Language mixing in the weak language: Evidence from two children. *Journal of Pragmatics* 32, 1363-1386.

- Kohnert, K., Dongsun, Y., Nett, K., Pui, F. K. and L. Duran. 2005. Intervention With Linguistically Diverse Preschool Children: A Focus on Developing Home Language(s). *Language, Speech and Hearing Services in Schools* 36, 251-263.
- Lanza, E. 2001. Bilingual first language acquisition: A discourse perspective on language contact in parent-child interaction. In Cenoz, J. and F. Genesee (eds.) *Trends in Bilingual Acquisition*, Philadelphia, PA: John Benjamins, 201-229.
- Lanza, E. 1991. Can bilingual two-year-olds code-switch? *Journal of Child Language* 19, 633-658.
- Lieven, E. 2006. Language Development: Overview. In Keith Brown (ed.) *Encyclopedia of Language & Linguistics*, Elsevier, 376-391.
- Meisel, J. M. 2001. The simultaneous acquisition of two first languages: Early differentiation and subsequent development of grammars. In J. Cenoz and F. Genesee (eds.), *Trends in Bilingual Acquisition*, Amsterdam: John Benjamins, 11-42.
- Meisel, J. M. 1989. Early differentiation of languages in bilingual children. In Hyltenstam, K. and L. K. Obler (eds.), *Bilingualism across the lifespan*, Cambridge: Cambridge University press, 13-40.
- Morris, D. and K. Jones. 2007. Minority Language Socialisation within the Family: Investigating the Early Welsh Language Socialisation of Babies and Young Children in Mixed Language Families in Wales. *Journal of multilingual and multicultural development* 28, 6, 484-501.
- Nicoladis, E. and G. Secco. 2000. The role of a child's productive vocabulary in the language choice of a bilingual family. *First Language* 20, 3-28.
- Paradis, J. and E. Nicoladis. 2007. The Influence of Dominance and Sociolinguistic Context on Bilingual Preschoolers' Language Choice. *The International Journal of Bilingual Education and Bilingualism* 10, 3, 277-297.
- Reyes, I. 2004. Functions of Code Switching in Schoolchildren's

- Conversations. *Bilingual Research Journal* 28, 1, 77-98.
- Romaine, S. 1995. *Bilingualism*. Oxford: Blackwell.
- Rubin, E. J. and A. J. Toribio. 1996. The role of functional categories in bilingual children's language mixing and differentiation. *World Englishes* 15, 3, 385-393.
- Singleton, D. M. 2004. *Language Acquisition: The Age Factor*, Clevedon: Multilingual Matters.
- Stoel-Gammon, C. 2006. Infancy: Phonological development. In Keith Brown (ed.) *Encyclopedia of Language & Linguistics*, Elsevier, 642-648.
- Wood, L. A. and R. O. Kroger. 2000. *Doing discourse analysis. Methods for studying action in talk and text*, California: Sage Publications.

Appendix A. Transcript Notation

(derived from Wood and Kroger 2000)

some [talk]	Square brackets between lines or bracketing two lines of talk indicate the onset ([) and end (]) of overlapping talk
[overlap]	
end of line= =start of line	Equal signs indicate latching (no interval) between utterances
(.)	Untimed pause (just hearable; <.2sec.)
(1)	Pause timed to the nearest second
bu-	A dash shows a sharp cutoff of speech
<u>under</u> ; <u>pie</u>	Underlining indicates emphasis
CAPITALS	Capital letters indicate talk that is noticeably louder than surrounding talk
◦soft◦	Degree signs indicate talk that is noticeably more quiet than surrounding talk
>fast<	“Less than” and “greater than” signs indicate talk that is noticeably faster or slower than the surrounding talk
<slow>	
ho:me	A colon indicates an extension of the sound or syllable that it follows
↑ word ↓ word	Upward and downward pointing arrows indicate marked rising and falling shifts in intonation in the talk immediately following
., ?	Punctuation marks are used to mark speech delivery rather than grammar. A period indicates a stopping fall in tone; a comma indicates a continuing intonation; a question mark indicates a rising inflection.

heh	Indicates laughter
.hh	Audible inbreath
hh	Audible outbreath
w(h)ord	An “h” in parentheses denotes laughter within words
rilly	Modified spelling is used to suggest pronunciation
(word)	Transcriber’s guess at unclear material
()	Unclear speech or noise
((coughs))	Double parentheses enclose transcriber’s descriptions of nonspeech sounds or other features of the talk ((whispered)) or scene ((telephone rings))

Note: repeated symbols, for example, :::, ○○, and hhhh, indicate, respectively, greater elongation, quiet, outbreaths, and so on.

Appendix B. Description of data collection

Table 2. Detailed description of data collection during the research

	Month(s)	Location	Activity	Audio/video
Grace with her family	October 2007, November 2007, December 2007, January 2008, February 2008	Home	Eating breakfast or dinner, free play	Audio, video
Grace with her mother	October 2007, November 2007, December 2007, January 2008, February 2008	Home	Free play, reading	Audio, video
Grace with her father	November 2007, December 2007	Home	Free play, reading	Audio
Grace with her mother and brother	November 2007	Home	Free play	Audio, video
Grace and her family with the father's family	November 2007	Grandparents' home	Eating dinner, free play	Audio, video
Grace and her family with the mother's family	January 2008	Home	Free play, eating breakfast or dinner	Audio
Grace and her family with the parents' families	January 2008	Grandparents' home	Eating dinner, free play	Audio
Grace alone	October 2007, November 2007	Home	Free play	Audio
Grace's mother and the researcher	March 2008	Home	Conversation about the data	Audio