

# Provoking Dominance Shift in a Bilingual Swedish-American English 4-Year-Old Child

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## 1. Background: language dominance

Even though the ideal bilingual often described in the literature is balanced, that is having an equal ability in both of his or her languages, this is an idealized situation, and one that is almost never encountered in real life. A “real-life” bilingual is often dominant in one of the languages, and is also often dominant in different languages according to the situation and/or subject. For example, he or she might use one language in the home and with friends while the other is used mainly for work. This often results in specialized terms being more readily available in one language than in the other. A speaker’s dominant language can also shift during the course of a bilingual’s life. The popular view, as expressed by Hoffman (1991:22), is that dominance patterns can vary over relatively short periods of time. Few studies, longitudinal, case, or other, have studied changes in dominance, and even fewer have been conducted that have observed dominance shifting in young children who are acquiring two or more languages. As Lanza (1997:63), correctly it seems, points out, dominance is a feature that has not been widely considered in studies of infant and child bilingualism, or for that matter, in studies of adult bilingualism. As Caldas & Caron-Caldas (2000:366) point out, there furthermore is confusion in the usage of the term language dominance in the literature. They state that the term has been used to mean everything from degree of bilingualism to bilingual proficiency (Burt & Dulay 1978), to bilingual preference (Baetens Beardsmore 1982, Caldas & Caron-Caldas 2000, Dodson 1985), to language complexity (Döpke 1992), and speaking another language dominated by the grammatical structures (Lanza 1992) and/or idiom and vocabulary of another language (Grosjean 1982). Dodson (1985:410-411) states that a bilingual’s dominant language is his or her preferred language for a specific domain of the individual’s experience. Caldas & Caron-Caldas (2000:366) also states that there is a general agreement in the literature that a bilingual individual can have more than one dominant or preferred language, depending on the language context and/or environment, and that it is not so much that the bilingual is dominant in a given language but that he or she has a decided preference, and that this preference is context-sensitive. In this paper, language dominance will be used in the sense of *bilingual preference*, thus referring to the child’s preferred language and consequently the language mostly used by the child.

There is a range of possible explanations for an individual’s language dominance. Grosjean (1982:188) states that there are two reasons for a bilingual child’s dominance in one of his or her two languages. The first of these is that certain constructions are harder to internalize and produce in one language than in others, and the second is that the child is more exposed to and may need to use one language more than the other. Another set of explanations was suggested by Berman (1979:169) who proposed that dominance is affected by three interrelated aspects:

- I.) Quantity of situational exposure and variety of contexts of use.
- II.) Linguistic knowledge and proficiency.
- III.) Cognitive processing and the nature of bilingual strategies.

The amount and the quality of the bilingual individual’s exposure to the involved language thus greatly affects the output and a more varied linguistic input would then yield a more varied output. It is interesting to note that even simultaneous exposure from birth might result in an eventual dominance in one of the languages (Bosch & Sebastián-Gallés 2001:73). The main question we ask in this study is how dominance is affected by a shift in the linguistic environment. It has been pointed out by several

researchers, among others Lanza (1992), Leopold (1970) and Berman (1979), that dominance is not a static phenomenon and that it may change if the linguistic environment is altered.

At least two approaches to deciding an individual's dominant language have been proposed. Petersen (1988:486-487) posits four independent ways to define the dominant language. The first of these is based on behavior; the dominant language is considered to be the one in which the child is most proficient. The second measures the amount of codeswitching that takes place which the child is using each language. Petersen states that the dominant language is the one in which the bilingual child can communicate without a need to codeswitch. The third criterion is the language community, ie the language context in which the child spends most of his or her time. The fourth criterion is the ratio of lexical to grammatical morphemes in the child's use of each language. Based upon this set of criteria and her study of dominance in a Danish-English bilingual child, Petersen (1988), proposed the dominant language hypothesis:

The dominant language hypothesis states that in word-internal code-switching, grammatical morphemes of the DOMINANT language may co-occur with lexical morphemes of either the dominant or the nondominant language. However, grammatical morphemes of the NONDOMINANT language may co-occur only with lexical morphemes of the nondominant language. (p. 486)

More recently, Schlyter (1994:69) mentions a number of other factors that can be used to determine a bilingual child's dominant language. First, the child may show a marked preference for production of one language in situations where both languages could be used. Second, there might be a general reluctance to use one of the languages in utterances consisting of more than a simple yes or no. A third indication is a smaller vocabulary and a shorter Mean Length of Utterance (MLU) in one of the languages. She points out however, that the non-dominant, or weaker, language often exhibits greater variation in the acquisition of central grammatical phenomena, varying from errors to the complete non-existence of certain grammatical constructions. Furthermore, the non-dominant language often shows an absence of modals, subordinate clauses and past reference.

This paper reports on a study in which an attempt was made to provoke language dominance shift in a bilingual Swedish-American English child. After a brief review of earlier case studies examining dominance shift, the method of the study is presented before the results are presented and discussed.

### *1.1. Earlier case studies*

Berman (1979) examined the bilingual development of her daughter Shelli, who was bilingual in English and Hebrew. Shelli had Hebrew as her first and strongest language at the beginning of the study. The family then spent a period of time when the child was between 3;11 and 4;6 in an all-English environment, and within six weeks English then became the dominant language, and at this stage Shelli would not use any Hebrew except for a few isolated words (1979:160), and even seemed not to understand any Hebrew at all (1979:161). In the period between all English and the establishment of bilingualism, the child went through a stage of mixing the two languages, with at first single Hebrew items in an English framework (1979:163), and later, as her Hebrew grew stronger, single English items in a Hebrew framework (1979:165). Berman's study, though not explicitly studying language dominance and language dominance shift *per se*, is a step in that direction compared with the studies by for example Leopold (1970) and Burling (1959), who as noted earlier only mentioned the phenomenon in passing.

Caldas & Caron-Caldas (2000, 2002) studied the variation in language dominance in their three children, a boy and two twin girls. The family lived in Louisiana where the main societal language is English, and the father was a native-born American citizen reared in English, while the mother is a native French-speaker born in Québec, Canada (2000:369). All three children are infant bilinguals, i.e. they were exposed to both their languages before the age of three, even though in the case of the oldest child, the father addressed him in English and the mother in French until he was aged 1;6, after which both parents addressed him in French. The twins were addressed in French from birth, and the parents also attempted to address each other predominantly in French (2000:369). By weekly

tape recordings of family mealtime conversations over a period of six years, between December 1994 and December 1997 and again until December 2000, the parents collected longitudinal data from their children. The main conclusion that Caldas & Caron-Caldas make is that the interlocutor has less influence on the language choice in bilingual children than the linguistic environment when all participants in the conversation are bilingual (2000:377). Adolescence seems to be another factor that influenced the children's language choice (2002:510). This can be explained by the fact that adolescence is a very sensitive period in a young adult's life when it is especially difficult to be different in any way as they try to form an identity of their own. All three children shifted from predominantly using French to a preference for English in Louisiana as they moved from pre-adolescence into early adolescence, and in the older boy's case into mid-adolescence (2002:510). Interestingly, the preference for French in Québec remained at a high level, and they note that throughout the studied period, the children's language preference shifted from English to French in a remarkably short period of time after arriving in Québec (2002:511). The main conclusion that Caldas & Caron-Caldas arrive at in their papers (2000, 2002) is that of all the factors that influence the language choice in their bilingual children, the most important factor is after all the linguistic environment when all participants in the conversation are bilingual (2000:377).

Quay (2001:153) makes a note about a study on two siblings, Nabil and Nasim who were exposed to English and Persian from birth in Canada before the family moved to Hungary where they were exposed to Hungarian. The children then started to attend a monolingual Hungarian nursery school at the ages of two and three respectively. Within a year and a half, Hungarian had become established as both children's dominant language.

Jisa (2000) studied the language mixing in two French-English bilingual sisters, whose strongest language was French. She studied the first extended contact with English, their weaker language. Jisa states (2000:1364) that before their first intensive contact with English, the sisters were balanced in their comprehension of their two languages, but very dominant in French for production. The younger of the two sisters, Tiffany, was aged 2;3 at the beginning of the study and her production in French at this stage was essentially two-word combinations. The older sister, Odessa, aged 3;6 was well beyond this stage in her dominant language. As in the present study, the linguistic environment was abruptly changed and they were then forced to produce to a greater extent in their weaker language, which resulted in a large number of mixed utterances in which the dominant language, French, was required to bolster English, the weaker language (2000:1364). Both girls used more English and less French as time passed during their two-month stay in the monolingual English environment. Jisa (2000:1352) states that the data from both these children proves the importance of production for developing grammars. Neither of the sisters had any difficulties understanding any utterance addressed to them in English, production was a totally different matter. Jisa (2000:1382) states that without the two months in the English-speaking environment, their English competence would most likely have remained passive. This passive competence accumulated prior to the period of intensive contact can be turned into productive competence during a relatively short period of time (Jisa 2000:1372).

## **2. The study**

The methodological approach used in this study is the case study. Lanza (1997:81-82) discusses the case study as a method for studying language and language acquisition. The advantages of using case studies include that it is possible to concentrate on the single individual and to get at all important aspects of this individual's language usage and linguistic environment. The researcher can thus undertake a more holistic approach to the research questions, and this also means that the interrelationships between different variables can be more thoroughly investigated. A case study is also more often than not longitudinal in nature and there is often, especially in language studies, a need for closer contact with the subject, and a small number of cases makes this a more feasible task. There are of course also certain drawbacks to the method, as with all methods of course. The obvious drawback, as Lanza (1997:82) also correctly points out, is that there is a lack of generalizability. It is not possible to make generalizations about all bilingual children based on one single child. However, Lanza further points out that these case studies are cumulative, that is that the combined results from several case studies can give a good indication of general trends and that they form a solid base for comparisons

between several studies. Döpke (2000:2-3) moreover states that the longitudinal case study provides insights into the normal course of development and that the accumulative effect of many such studies will eventually yield valuable insights into the full complexity of children's language acquisition, bilingual as well as monolingual.

### *2.1. Presentation of the subject*

The subject, Clinton, was 4; 2 years at the start of the study. He is a second child and has an older sister, Summer, who is 3 years older. They were both born in Sweden and apart from the family's biannual trips to visit relatives in the USA, they have not spent extended periods of time in a monolingual English environment. Nonetheless, even monolingual children in Sweden tend to have a fairly high exposure to English through media and other sources. In fact there have been discussions in Sweden as to whether the status of English should be from that of a foreign to second language. Clinton's father is an American who grew up as a monolingual American English speaker and has good working knowledge of Swedish as a second language. Most of the time, the father addresses his children in English. Clinton's mother is a native speaker of Swedish and is an advanced learner of English with near native fluency. Since he attends Swedish daycare and lives in Sweden, Swedish is his dominant language, but he responds appropriately to everything that is said to him in English, both by his father and mother. Clinton has no problems with the fact that the same objects can have two different labels and he says things like "pappa säger motorcycle, mamma säger motorcykel" (daddy says motorcycle, mommy says motorcykel). This indicates that he is aware of the presence of two separate languages within the family, even if he does not know or use the appropriate names for them. He responds appropriately to either language, although his verbal responses are almost without exceptions in Swedish. It is clear that he understands statements and questions directed to him in English, but he seldom or never produces spontaneous utterances in that language. He can however identify items and pictures in books in English when directly asked to do so, but other than that he does not use English. Thus, the predominantly Swedish environment has, up to now, resulted in an almost complete productive dominance for the child, as well as for his older sister. When examining his language use using Peterson's four criteria presented above, we can see that according to all four of these, Swedish is indeed his dominant or preferred language.

### *2.2. Method: baselining*

The linguistic environment for Clinton prior to the start of the study had Swedish as the societal language and had both English and Swedish as the languages of the home. Swedish was, however, the more used home language. In order to determine Clinton's competence in Swedish and English, in a more controlled environment, he was recorded on two occasions in the sound studio at the Department for Philosophy and Linguistics at Umeå University before the departure to the United States. The aim was to keep the linguistic environment for these recordings constant, and thus the same four people were present at both recordings. In these recordings Clinton interacted with his father, one of the authors of this paper, and a 'for Clinton' monolingual native English speaker.

### *2.2. Method: provoking dominance shift*

Dominance shift was provoked by changing Clinton's linguistic environment. The societal language became American English and the home language became primarily American English. This situation arose when Clinton and his family began an extended visit to monolingual relatives in the USA. The visit lasted just over two months. Clinton was regularly recorded during his stay. He was recorded in range of natural settings. The recorded interactions were predominantly with monolingual English-speaking relatives such as Clinton's paternal grandparents and aunt.

### 2.3. Method: data analysis

The collected material was analyzed at a number of levels. These included the number of English and Swedish turns, the number of codeswitched phrases and number of word-internal codeswitches. The change in the occurrence of these events over the duration of his stay in the USA was tracked.

## 3. Results and discussion

### 3.1 The baseline

From the recorded material and the baselining experiment, it was possible to ascertain that Clinton was productively dominant in Swedish — Clinton understood English fluently for a four-year old, yet he spoke exclusively in Swedish unless explicitly prompted to say something in English. Immediately after such prompted statements Clinton would revert to speaking Swedish. This is consistent with the study presented by Jisa (2000).

### 3.2 Dominance provoking

The recordings from Clinton's visit to the USA were analyzed for a range of factors. These are presented in the following order: word-internal codeswitching, negation, requests for clarification, self-translations and self-corrections, calques and word-level codeswitching.

#### 3.2.1 Word-internal codeswitching

In the recorded material, there are four examples of word-internal codeswitches. In all examples, Swedish will be indicated with bold, both in the actual examples as well as in the translations.

- |   |         |
|---|---------|
| (1) Brushta <b>tänderna</b> (Brush <b>the teeth</b> .)                  | 12 days |
| (2) Eaglen <b>är min favorit</b> . ( <b>The eagle is my favorite</b> .) | 12 days |
| (3) <b>pandabjörn</b> (panda <b>bear</b> )                              | 12 days |
| (4) <i>mid</i> ( <b>med</b> + with)                                     | 16 days |

Here a Swedish inflectional morpheme is added to an English word, and this is consistent with the first part of Petersen's dominant language hypothesis, and also with Redlinger & Park's (1980) category of morphological mixing. However, they found morphological mixing in only one of their subjects, and then only in the verb category (1980:346). Example (2), where we have an English noun and a Swedish determinant (which in this case is consistent with the determinant that would be affixed to the equivalent Swedish word **örn**) shows that morphological mixing also can happen with nouns in this particular language combination. The reason why Redlinger & Park do not find this in their material is most likely due to the nature of the languages involved. Danny, the child who provided the only examples of this type of mixing was bilingual in English and German. These two languages do not exhibit morphological inflection of nouns through affixes as in for example the Scandinavian languages (Sw. **örn** - **örnen**, **bil** - **bilen** (Eng. eagle - the eagle, car - the car)), but instead use separate determinant article words, i.e. English the, German die, der, etc. Lanza (1997:194) calls the phrase "**du vaske haret ditt**" (you wash your hair) spoken in a conversation with her Norwegian father, a borrowing and not a codeswitch. She claims that the syntactic integration of the English element into a Norwegian syntactic frame is more consistent with what has technically been termed a borrowing. Blends, such as for example *mid* were excluded from discussion in Lanza (1992) for less than obvious reasons. However, Lanza (1992:642) does state that there were only a few examples in Siri's speech and that they are attested for bilingual speech both in adults as well as in children, and that blends cannot be regarded as evidence for a bilingual individual's inability to differentiate between the two languages. However, we believe that blends can be regarded as an indication of a somewhat lower ability in one of the languages, and that the stronger (dominant) language is in these instances used to bolster the weaker language. This is consistent with the language use in Jisa's (2000) French-English

bilingual sisters during their first intensive exposure to English, which was their weaker (non-dominant) language.

### 3.2.2 Negation

The placing of the negation also indicates that Clinton's English proficiency is at a lower level than his Swedish. Examples of this can be seen in (5) and (6) below: where C = Clinton and A = Clinton's Aunt.

- (5) A: You know what? I don't understand this. You know why?  
C: I know not.  
A: It's Swedish. 25 days
- (6) I not.... Can do that. 25 days
- (7) A: You don't know? Who's that? Oh, is that somebody too? You know who that is?  
C: I don't know. 25 days
- (8) A. Who's that?  
C. I don't know. 25 days

In the first of these examples Clinton's utterance can be viewed as a direct translation of the Swedish phrase **jag vet inte** (I don't know, literally I know not). This form occurs four times in the recorded data, and in response to different questions on each occasion. These questions include "Who are these people? Who are they?", "You know why?", "What did you call that?" and "How do you say that in Swedish?". It seems then that the response "I don't know" is reserved for a very specific type of question. In (6), however, it is clearly not an instance where a calque can be argued, and it could also not be explained by the grammar of either language. From these examples, we can argue that Clinton seems to be using not as a general negator. This is also a stage in monolingual children's acquisition of negations. Vihman (1985:310) outlines three stages of the acquisition of negation in English. The first stage is one-word negation, using no or not as a freestanding morpheme. The second stage is two- or more word negation generally using the same morpheme no, or not. And the third step is using intra-sentential negation. However, it is interesting to note that Clinton also uses the correct form "I don't know" on two occasions, shown in (7) and (8), however since this seems to happen only in response to a specific question, namely "who's that?", it can be the use of a repeated chunk. The source of the chunk is most likely prompted utterances such as "who's that? You don't know?" or "what's that?" that has been observed by one of the authors when Clinton was reading books with his father. It seems then that "I know not" is Clinton's most commonly used form of negation in English, since this is used in more instances and in response to a variety of questions.

### 3.2.3 Requests for clarification

Clinton is making requests for clarification of utterances in the other language when he does not understand or if he is unfamiliar with the words he hear. We can see examples of this in (9)-(12) below:

- (9) **Vad är** deep blue sea? (**What is...?**) 7 days
- (10) **Vad för nåt på engelska?** (**What in English?**) 16 days
- (11) **Vad säger man på engelska?** (**What do you say in English?**) 16 days
- (12) A: Was it very cold?  
C: No. **Var det jättekallt, pappa?** (**Was it very cold, daddy?**) 16 days

It is interesting to note that the Swedish in (10) is not correct as modeled on the adult form, but it is a form that is often used by children and it is still perfectly clear what he wants to say.

### 3.2.4 Self-translations and self-corrections

Self-translations and self-corrections are also present in the recorded material. This is an indication of a fairly advanced linguistic awareness and further shows that Clinton is aware of the fact that he can speak two separate and distinct languages, and as (10) and (11) shows, he is now also familiar with the label of the language.

- |   |         |
|---|---------|
| (13) <b>Det finns en ödla</b> -snake. ( <b>There is a lizard</b> -snake.)         | 12 days |
| (14) <b>Den här</b> . This.   | 12 days |
| (15) He shot <b>med den där</b> . He shoot <i>mid</i> this. ( <b>with that</b> .) | 16 days |

This type of bilingual repairs or translation equivalents has also been reported by among others Saunders (1988) and Vihman (1985). Saunders (1988:53) points out that some bilingual children, like his son Frank, go through a stage where they refer to activities or objects in both languages. Frank said “hot-heiss” when pointing to fire. This is very similar to B’s use of **ödla**-snake in the above example, even though **ödla** in fact means lizard. Vihman (1985:303) reports that her subject (son?) Raivo, who was bilingual in Estonian and English, produced a number of translation equivalents, for example horse-*hobu* and *mahla*-juice from an early age (1;8) and onwards, with an increased complexity over time. Regarding (13) it can be noted that **det finns** might be a calque of English there is, the correct Swedish in this instance would be **det är**, which is in fact the literal translation for there is, but it is usually translated as **det finns**.

### 3.2.5 Calques

Apart from the calque discussed in the previous section, there is also another instance of calquing in the recordings, see (16) below. This example, together with (17), is also an interesting example of the use of Swedish verbs in an otherwise English context.

- |   |         |
|---|---------|
| (16) You <b>ska</b> home to you. Sw: <b>Du ska hem till dig</b> . | 29 days |
| (17) No, you <b>ska</b> not home.                                 | 29 days |

Both these examples come from the last recorded session. Here, he uses the Swedish verb **ska**, which is a multifunctional verb that can be used to indicate future tense and as a modal verb with the meaning have to or must. In these cases, it is the modal function of the verb that clearly was intended. The English equivalent of the sentence in (16) would thus be “You will go home to your house”, or equally possible: “you have to go home”. This was said jokingly to grandfather. (16) can be regarded as both a direct loan translation and a codeswitch. The personal pronoun is in this example used in an incorrect manner. However, it is a direct translation of the Swedish pronoun that would be used in the same position. In (17) however, the explanation is not as straightforward. The fact that he uses the Swedish verb here instead of the corresponding English equivalent, which for the utterance in (17) would be the much longer and also rather more complex expression “No, you don’t have to go home”, could be the first of the reasons stated by Grosjean (1982:188), namely that the English construction in this case is harder for Clinton to internalize than the Swedish construction. Schlyter (1994:69) points out that the non-dominant language often shows an absence of modals, subordinate clauses and past reference. That can be why the modal here in both (16) and (17) are in Swedish, the stronger language and the language where Clinton has mastered the use of modal verb. The reason could also be, as was discussed above, that he has not mastered that English negations, and the uses a structure that he is familiar with and inserts a single word in Swedish to effectively bolster his weaker English.

### 3.2.6 Word-level codeswitches

As we can see from (18)-(22), the directionality of Clinton’s codeswitching is in most cases from Swedish. (18), however, shows an exception. This can, however, be explained by Clinton not knowing

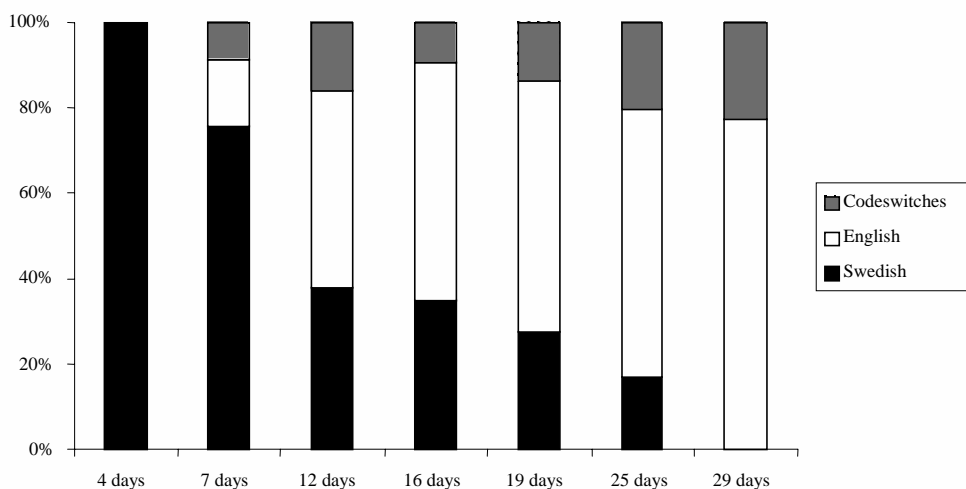
the Swedish word for dragonfly, something that was subsequently confirmed by the dialogue with his father.

- |   |         |
|---|---------|
| (18) <b>Och</b> dragonfly! ( <b>And</b> dragonfly)                    | 12 days |
| (19) <b>Putta</b> down! ( <b>Push</b> down)                           | 16 days |
| (20) <b>Jag lagt</b> stick waterfall. ( <b>I put</b> stick waterfall) | 16 days |
| (21) <b>Det fall på mitt</b> finger! ( <b>It fall on my</b> finger)   | 19 days |
| (22) <b>Titta, han</b> shoot that! ( <b>Look he</b> shoot that)       | 25 days |

Lanza (1997:173) states that the direction of mixes can be regarded as a reliable indication of language dominance. In some cases however, it might be difficult to ascertain a clear pattern. In those cases we can say that a *tendency* to use a certain direction of the mixing more than the other can be viewed as an indication of the child's dominance pattern. However, the direction can only be determined in somewhat older children who have gone through the two-word stage since it is virtually impossible to determine which word that in fact constitutes the mixed element when dealing with just a two-word utterance (Lanza 1997:182). It is undoubtedly true that the bilingual child will use the means available to him or her to be understood and to express him or herself adequately, including codeswitching and other forms of language mixing.

### 3.2.6 An examination of the shift in dominance over time

Looking at Clinton's language use we can see that it changed over the course of the visit (see Figure 1).



**Figure 1.** The percentage of Swedish, English and codeswitched utterances occurring in Clinton's speech during the visit to the USA. The numbers on the X-axis indicate the number of days since the arrival.

An utterance is in this paper defined as what is said between distinct pauses in the speech. A turn take on the other hand is what is said by one person at every turn in the conversation in between utterances by (an)other person(s). From figure 1, we can see that Clinton's usage of Swedish goes down during the stay in the USA. In the first recorded session (4 days), Clinton was doing some coloring together with his father (F), and that might be the reason for the total dominance of Swedish in Clinton's speech. Clinton is fully aware of that fact that his father speaks Swedish, and most likely sees no reason to speak English to him. In the second recording (7 days), Clinton is still interacting with his father, but has nevertheless started to incorporate some English and also a few codeswitches in his speech.



However, the English Clinton uses here is mostly in response to questions about the text, but only in two cases there is a direct prompting from F:

- (23) C: **En, två, tre!** (One, two, three.)  
F: Can you count them in English?  
C: One, two, three. 7 days
- (24) F: What's that?  
C: Apor. (**Monkeys.**)  
F: What do you call it in English though?  
C. Mo.. Monkey. 7 days

In the third recording (12 days), we have the first instance of Clinton interacting with a monolingual relative and we have a marked decrease in the amount of Swedish used as well as an increase in the use of English. This can be seen as an indication that Clinton is trying to adapt his language to the language of his interlocutor, in this case Grandma Karen. However, even here we have a request for English, but this time it is spoken by the Grandma and it can be viewed as a request for clarification:

- (25) GK: In English, what does the eagle do? Grandma Karen needs to know  
what he does in *English*. 12 days

In the last recording, which unfortunately is rather short, Clinton is again interacting with his father, but this time, the only Swedish we can find in his utterances occur in codeswitching with English. We can thus conclude from the figure that the prolonged stay with predominantly monolingual relatives had an effect on Clinton's language use and that a shift towards English can be seen in the data.

As figure 1 shows, the percentage of Swedish in Clinton's utterances is going down over the course of the trip, and by the last recorded session, the only Swedish elements that occur in Clinton's speech occur in codeswitched utterances. We can also see that the amount of English increases steadily. As was noted earlier, the interlocutor in the first two recordings, where Swedish is the predominant language, was the father F. In the third recording, where Clinton for the first time is interacting with a monolingual relative, there is a marked decrease in the use of Swedish as well as an increase in the amount of English used. The reason why the amount of English not is even higher can most likely be attributed to the fact that both his father and his older sister Summer is present, and that she tends to sometimes interpret for Grandma Karen what Clinton is saying as in (26) below: (S= Summer)

- (26) C: **Fladdermöss är min favorit. (Bats are my favorite.)**  
S: He said: bats are my favorite too. 12 days

In the fourth recording (16 days), Clinton is interacting with his aunt, and here the father is less active in the conversation than Clinton's aunt, and steps in only occasionally when Clinton does not understand. There is an increasing amount of English toward the end of the recording when Clinton is telling his aunt what they are going to do in California. Again in the fifth conversation (19 days), Clinton is more or less on his own with a monolingual relative, in this case his grandfather. The amount of English is again increasing, and this continues in the sixth recording (25 days) where again his aunt is the principal interlocutor.

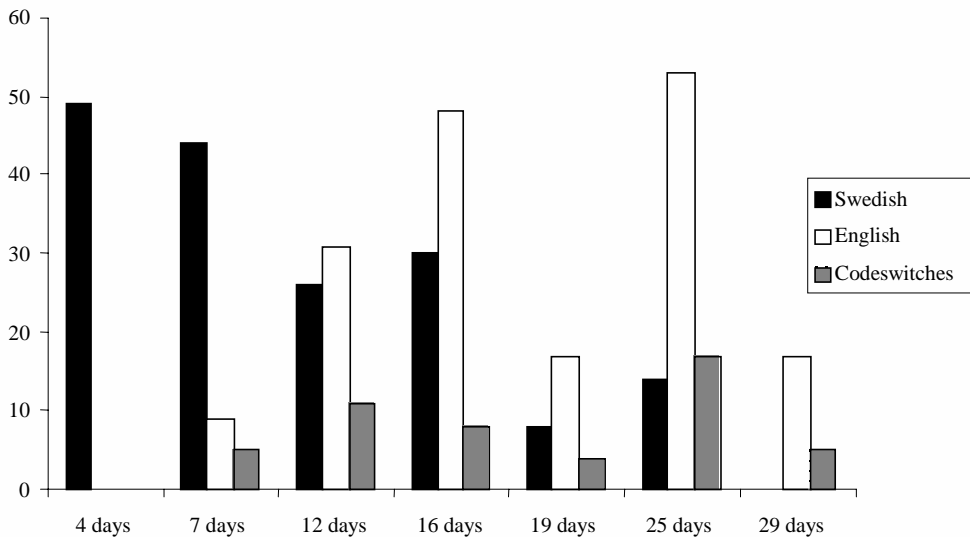
In the last recording (29 days), there are no purely Swedish utterances, and the little Swedish still occurring, does so mixed in with English. Here he is even responding to his father using either English or with a codeswitched utterance.

- (27) F: What are you eating? Show me what you're eating. What are you eating?  
 Eating pretzels?  
 C **Jag äter stick. (I'm eating...)**  
 F: You're eating what? Show me!  
 C: I eating this.

29 days

This indicates that Clinton is indeed increasing the amount of English in his spontaneous speech during the duration of the stay, and it is also reasonable to deduce from the recorded material that he is also trying to adapt his language usage after the interlocutor in each conversation. As in Jisa's (2000) study, the stronger language, in this case Swedish, is used to augment Clinton's weaker language, English, but as time progressed, Clinton's abilities in English increased slightly, and there were less and less Swedish elements in Clinton's speech.

If we then turn to the length of the various recordings, there is unfortunately a rather large amount of variation in length between the different recordings as is visible from Figure 2. However, when recording children, this is often one of the consequences.

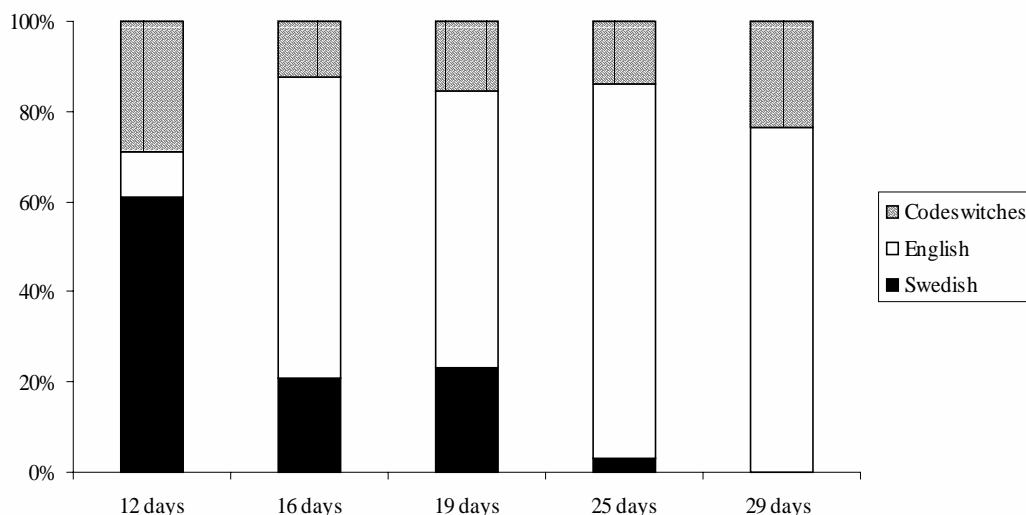


**Figure 2.** The number of Swedish, English and codeswitched utterances occurring in Clinton's speech during the studied period. The X-axis shows the number of days since the arrival.

As we can see from Figure 2 above, the last session, 29 days, is unfortunately rather short, but it still shows that Clinton here uses Swedish exclusively in codeswitched utterances, even with his father, with whom he before this has spoken solely Swedish. This can be seen as an indication that Clinton's language dominance has at least to some degree shifted away from a complete dominance in Swedish to at least a partial dominance in English. In the first recording, and also in the earlier recordings made at Umeå University during the spring of 2002, Clinton did not speak any English whatsoever to his father and this shift in preferred language is at least an indication that the linguistic environment has had an influence on Clinton's language dominance. Caldas & Caron-Caldas (2000:377) found that the strongest influence on the bilingual preference of their three children was indeed the predominant language of the community, and that the French-English bilingual family's conversations around the dinner table switched language depending on whether they occurred in Quebec (French) or Louisiana (English). However, as we can see in Figure 3 and below, in this case Clinton's preferred language seems, at least towards the end, to be more centered on the interlocutor and his or her linguistic abilities in Clinton's dominant, or preferred, language.

The interlocutor is one of the most influential factors in language choice (Hoffmann 1991:92). Because the interlocutor in the first two recordings was the father, to whom Clinton is fully aware that

he can speak Swedish and be understood, these and all other utterances directed to those whom Clinton identifies as Swedish speakers were excluded from the analysis in this section. The utterances directed to monolingual English speakers were then separated from the total number of utterances and displayed separately, see Figure 3 below.



**Figure 3.** Language usage in utterances directed to monolingual English interlocutors. The X-axis shows the number of days since the arrival.

The trend here is the same as we could see from Figure 1, but maybe even clearer. In the first recording (12 days), where Clinton primarily interacted with a monolingual speaker, in this case Grandma Karen there is still a reasonably high amount of Swedish, both as purely Swedish utterances and codeswitches, while the English utterances in most cases consist of single words such as the passage in (28): (GK = Grandma Karin).

- (28) GK: What is your favorite?  
 C: A dragon.  
 GK: A dragon is your favorite?  
 C: Yes. *12 days*

One of the reasons to why the amount of Swedish is still reasonably high could be the fact that Clinton's sister Summer is present for at least part of the recording, and as we have seen from (26) above, she sometimes acted as an interpreter for him. In the 16 days recording, the amount of Swedish drops dramatically, both in purely Swedish utterances as well as in codeswitches. The main interlocutor is in this case Aunt Stephanie who is actively trying to get Clinton to speak, probably instructed by the Father to do so. In the next recording, which also is unfortunately short, he is interacting with his Grandfather, and they are building a marble track that can be recombined. Clinton is still using some Swedish when addressing his monolingual Grandfather (G), as in (29):

- (29) C: **Var ska den här sitta? (Where does this go?)** Look!  
 G: Look what happened! Uh oh, broke, huh? We gotta fix that. Do you wanna make a different, uhm, different pattern? Do you wanna build a, build a different one?  
 C: **Ja. (Yes.)**  
 G: We should have a marble in here too. *19 days*

In this case, the Swedish word **ja** is very similar to its English counterpart *yeah* with only a slight difference in the vowel, and regarding the first utterance in this example, it could be regarded as a part of an internal dialogue with both Clinton and the Grandfather being very focused on their building. However it is hard to make any definite conclusions based on this recording, since as we can see from Figure 2, it is unfortunately short. After 25 days, the amount of English has again increased considerably. The main interlocutor is again his aunt. Here Clinton is obviously trying to speak English to larger extent. However, it is clear that his competence in English is not on the same level as his Swedish. This is obvious from utterances such as in (30) below:

- (30) A: What's that?  
 C: Buzz Lightyear shoot that.  
 A: He shot him?  
 C: Yeah.  
 A: So is he good or is he bad?  
 C: He bad.  
 A: He's bad? Is Buzz Lightyear good? Or bad?  
 C: Yeah, Buzz Lightyear, he good. 25 days

It is clear that Clinton's command of English verb usage was not on the same level as monolingual children of the same age at the time of this recording, but he is now responding in the language in which he was addressed. In the last recording (29 days) there is no purely English utterances at all, and the little Swedish that does occur does so in codeswitching. These codeswitched utterances have already been discussed above (examples (16)-(17)), and will thus not be discussed further here. As for his English, the exchange in (31) below as well as in (30) above shows that Clinton now is able to maintain at least a simple conversation with a monolingual interlocutor.

- (31) G: So Aunt stays here, and I have to go home, is that the deal? Yes? How come?  
 C: Cause there's a long, long way home!  
 G: Well, actually that way. A long, long way home that way.  
 C: Yeah, long, long way this way.  
 G: This way. I think you are a long way from home further.  
 C: No!  
 G: Maybe you should go home.  
 C: I... I must take... A airplane home!  
 G: You have to take an airplane home?  
 C: Yes.  
 G: How come? You can't swim?  
 C: No, I must stay here! 29 days

Which types of elements that appear in the codeswitched utterance is also indicative of the language dominance and the bilingual child's linguistic abilities. The distribution of the codeswitched elements is shown in Table 1 below.

As we can see from Table 1, it is predominantly contentives, and of these mainly nouns and verbs, that are mixed where a single word is codeswitched. This was also the case with Lanza's subject Tomas (1997:184), who also mixed in predominantly contentives, and of these nouns were the most frequent single codeswitched item occurring in 96.3 percent of all codeswitches. Siri however, showed a different pattern, with functors (i.e. adverbs, determiners, pronouns, prepositions, conjunctions, modal auxiliaries and copula) mixed in, with adverbs and pronouns as the most frequently mixed items, occurring in 76.3 percent of the codeswitches.

Redlinger & Park (1980:345) states that nouns were the most frequent lexical substitution in their four two-year-old bilingual subjects, but that overall more function words than content words were substituted. The majority of phrasal mixing occurred at phrasal boundaries (1980:350). Vihman (1985) makes an important observation: in the speech of infant bilinguals, elements of the category of functors (grammatical words), are the most frequent single items that are codeswitched and that there is a larger

percentage of both types and tokens in the mixed utterances of very young bilingual children. On the other hand, in the codeswitching behavior of older bilingual children, nouns are the most frequently occurring single mixed items. This was also the case with Clinton's speech, as can be seen from Table 1 above. Thus in this aspect of his codeswitching behavior, Clinton is on a more adult-like level, even though in other cases, such as the negation in English, he is not on the same level as monolingual children of the same age. It is true that he is like other older bilingual children, such as Redlinger & Park's oldest informant Mark, who was 2;8:19 at the onset of their study. Our results are thus consistent with theirs in that aspect. Clinton seems to be more like Lanza's subject Tomas than Siri, and this can be due to the fact that Clinton, like Tomas, is on a lower linguistic level in his English than Siri is. However, Clinton is not quite as extreme in this respect as Tomas is (72.7 percent for Clinton compared with Tomas' 96.3 percent), which can indicate that he is more mature-like than Tomas, but less so than Siri. Lanza (1997:193) discusses why young children should mix functors to a greater extent than older bilingual do. Her main argument is that because the speech of infants and young children is relatively simple compared to older bilinguals, and includes comparatively more utterances consisting of one or two words, then the mixing of functors as single item become more salient in their speech. Poplack (1980:page) notes that fluent adult bilinguals tend to switch higher-level constituents, e.g. sentences or clauses more frequently than lower-level constituents, e.g. one word switches, This indicates yet another level in adult bilinguals' competence that have not yet been acquired by bilingual children. Thus, in this case Clinton behaves like an older child in his dominant, or preferred, language, while his lower level of competence in English causes him to behave like a younger child in the weaker language.

**Table 1.** The distribution of codeswitched elements in Clinton's speech by word category.

	N	%
<i>Contentives</i>		
Noun	19	43.2
Verb	11	25
Adjective	2	4.5
Subtotal	32	72.7
<i>Functors</i>		
Adverb	2	4.5
Determiner	1	2.3
Pronoun	9	20.5
Subtotal	12	27.3
Total	44	100

In all but the last of the recording, which overall included a very small amount of Swedish, and then only in codeswitched utterances, the general direction of the codeswitches were all from Swedish into English, as in (32) below:

(32) Yeah, that **är** robot. (Yeah, that **is** robot.) 25 days

As mentioned earlier, Lanza (1997:173) states that the direction of mixes can be regarded as a reliable indication of language dominance, and with the main direction of Clinton's mixing being the insertion of single English items into a Swedish utterance, such as in examples (18)-(22), this is yet another indication of Clinton's more or less total dominance in Swedish. The utterances that are "going the other way", such as (32) that do creep in towards the end of the visit could then be seen as a weak, but nonetheless still present, indication of an at least partial dominance shift and that Clinton may be starting to "think English".

## 4. Conclusion

By looking at the recorded material and Clinton's language usage, we can thus conclude that Clinton's grammatical structures are more developed in Swedish than in English, i.e. he is on a higher linguistic level in his Swedish than in his English. Thus, the results indicate that even though Clinton's dominance might not have shifted all the way towards English, the prolonged visit to the predominantly monolingual relatives has resulted in at least a partial dominance shift. The main conclusion that Caldas & Caron-Caldas arrive at after studying their three English-French bilingual children (2000, 2002, 2003) is that the interlocutor has less influence on the language choice in bilingual children than the linguistic environment when all participants in the conversation are bilingual (2000:377). Caldas & Caron-Caldas (2000:377) states that the children almost stopped speaking English around the dinner table during the stays in Québec. Even though the children had a greater measured proficiency in English, they still preferred to speak French within the family while in Québec (2002:492), while the mealtime conversations in their Louisiana home were predominantly in English. In Clinton's case, the linguistic environment can also be argued to have influenced his language choice since he is using English, albeit in codeswitching, with his father, whom he up until this point has only addressed in Swedish (see (27) above).

Quay (2001:194) points out that even passive competence in one of the bilingual's two languages is valuable as the potential then exists for this language to be activated and used more at a later point in time, and this indeed seems to have been the case for Clinton. As was noted above, he has always responded appropriately to utterances directed to him in English, even though he never produced any spontaneous utterances in these languages, but the change in linguistic environment seems to have triggered the passive knowledge of the language as he tried to make active use of his English. We can only agree with Jisa (2000: 1368) when she states that changes in exposure patterns bring about changes in the non-dominant language and the child is required to use this language in more varied contexts and with a wider range of interlocutors.

As for Clinton's language dominance, we can come to the conclusion that even though the visit did not cause the language pendulum to swing all the way towards dominance in English, the effect is nonetheless a greater active use of English, which was up until the visit totally passive where all spontaneous communication in Swedish, regardless of interlocutor. He is still dominant in Swedish, but he has discovered that English is indeed a useful language, which can be used to make himself understood in situations where his competence Swedish is not useful. He is still dominant in Swedish for production, but he is now able to use English spontaneously in communication, and there is no doubt that a relocation to a predominantly English-speaking environment would have a great impact on Clinton's language usage.

## References

- BAETENS BEARDSMORE, HUGO. 1982. *Bilingualism: Basic Principles*. Clevedon: Multilingual Matters Ltd.
- BERMAN, RUTH. A. 1979. The Re-emergence of a Bilingual: A Case Study of a Hebrew-English Speaking Child. *Working Papers on Bilingualism*, **19**,157-179.
- BOSCH, LAURA & SEBASTIÁN-GALLÉS, NÚRIA. 2001. Early differentiation in bilingual infants. In: CENOZ, J. & GENESEE, F. (EDS.). *Trends in Bilingual Acquisition*, 71-93. Amsterdam/Philadelphia: John Clintons Publishing Company.
- BURT, M. & DULAY, H 1978. Some guidelines for the assessment of oral language proficiency and dominance. *TESOL Quarterly*, **12**, 177-192.
- CALDAS, STEPHEN & CARON-CALDAS, SUZANNE. 2000. The influence of family, school, and community on bilingual preference: Results from a Louisiana/Quebec case study. *Applied Psycholinguistics*, **21**, 365-381.
- CALDAS, STEPHEN & CARON-CALDAS, SUZANNE. 2002. A Sociolinguistic Analysis of the Language Preferences of Adolescent Bilinguals: Shifting Allegiances and Developing Identities. *Applied Linguistics*, **23**, 490-514.
- DODSON, C. J. 1985. Second language acquisition and bilingual development: a theoretical framework. *Journal of Multilingual and Multicultural Development*, **6**, 5, 325-346.
- DÖPKE, SUZANNE. 1992. *One Parent, One Language: An Interactional Approach*. Amsterdam: John Clintons, B.V.

- DÖPKE, SUZANNE (ED), 2000. *Cross-linguistic structures in simultaneous bilingualism*. Amsterdam, Philadelphia: John Clintons, B.V.
- GROSJEAN, FRANCOIS. 1982. *Life with Two Languages. An Introduction to Bilingualism*. Cambridge, Mass.: Harvard University Press.
- HOFFMANN, CHARLOTTE. 1991. *An Introduction to Bilingualism*. London, New York: Longman.
- JISA, HARRIET. 2000. Language mixing in the weak language: Evidence from two children. *Journal of Pragmatics*, **32**, 1363-1386.
- LANZA, ELIZABETH. 1992. Can bilingual two-year-olds code-switch? *Journal of Child Language*, **18**, 633-658.
- LANZA, ELIZABETH. 1997. *Language mixing in Infant Bilingualism. A Sociolinguistic Perspective*. Oxford: Oxford University Press.
- LEOPOLD, WERNER. 1970a-d (1<sup>ST</sup> EDITION 1939-49). *Speech Development of a Bilingual Child. Vols. 1-4*. New York: AMS Press.
- PETERSEN, JENNIFER. 1988. Word-internal code-switching constraints in a bilingual child's grammar. *Linguistics*, **26**, 479-493.
- POPLACK, SHANA. 1980. Sometimes I'll start a sentence in Spanish Y TERMINO EN ESPAÑOL: Toward a typology of code-switching. *Linguistics*, **18**, 581-618.
- QUAY, SUZANNE. 2001. Managing linguistic boundaries in early trilingual development. In: CENOZ, J. & GENESEE, F. (EDS.). *Trends in Bilingual Acquisition*, 149-199. Amsterdam/Philadelphia: John Clintons Publishing Company.
- REDLINGER, WENDY. E. & PARK, TSCHANG- ZIN. 1980. Language mixing in young bilinguals. *Journal of Child Language*, **7**, 337-352.
- SAUNDERS, GEORGE. 1988. *Bilingual Children: from Birth to Teens*. Clevedon: Multilingual Matters Ltd.
- SCHLYTER, SUZANNE. 1994. Early morphology in Swedish as the weaker language in French-Swedish bilingual children. *Scandinavian Working Papers on Bilingualism*, **9**, 67-86.
- VIHMAN, MARILYN MAY. 1985. Language differentiation by the bilingual infant. *Journal of Child Language*, **12**, 297-324.

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