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Some dynamics of bilingual language development

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Abstract

Recent empirical research on bilingual children has forced researchers to turn their attention to studies in the acquisition processes. Rather than asking how much of each language a child knows at a given moment, researchers ask what kind of developmental processes are involved in various types of bilingual language. It has been argued that some bilingual children acquire their two languages in ways almost identical to monolingual children of the two languages. It has also been argued that some bilingual children acquire their two languages, or at least one of them, in ways which differ considerably from monolingual acquirers. Such a contradiction in findings requires explanation. I therefore go on to examine language development in bilingual children who show, at a given point in their development, differing levels of competence in their two languages. I attempt first to define the notion of "weak" language. Subsequently I present research on the development of the weak language, asking whether the development of the weak language is simply slow or whether the developmental pattern observed in the weak language is very different from that observed in monolingual acquirers of that language. I argue that the study of weak language development in bilingual children contributes greatly to understanding the role of language use in language learning in general.

1. Why study bilingual acquisition?

According to conservative estimates over 50% of the world's children grow up bilingually (Grosjean, 1982). Despite this fact, until the early 80's the field of child language was predominantly monolingual. Recently, however, a consensus has emerged among researchers from various schools of linguistics and developmental psychology that the empirical investigation of bilingual acquisition contributes considerably to our understanding of language acquisition in general.

Tomason and Kaufman (1988) point to a number of reasons for societies and their children to become bilingual. Colonialisation has spread Dutch, English, French, Portuguese and Spanish all over the world to countries where other languages were or are still spoken. Many language groups can be unified into one country and with the goal of centralisation and scolarisation, national languages can coexist with regional and local languages. Children and communities can become bilingual when speakers of a given language leave their homelands and settle in countries where another language is spoken. And finally, children and their families can become bilingual when one parent is transplanted into a monolingual community. Children become bilingual in all these various contexts. Consequently, they are called upon to acquire and use their languages for different purposes in the various domains of their life. The work presented here is limited to essentially two types of bilingual children, immigrant children and children from mixed marriages. These two types of children, while they are obviously far from representing all cases of bilingual children around the globe, are probably the most studied.

However, before turning specifically to bilingual children some comment on why it is important to study bilingual acquisition seems necessary. No language can be considered as globally more difficult than another to acquire as a first language. No particular language can be seen as offering more overall expressive power for conveying human thought than another. Languages do differ, however, in the way they organise grammar for the verbalisation of human thought. In recent years cross-linguistic studies of acquisition inspired by Slobin and his many associates (1985) have shown how language systems can differ with respect to grammatical organisation. Such differences in grammar result in variation in acquisition between children acquiring differing grammars.

Slobin (1991) draws a distinction which is particularly important for the study of language acquisition. Cognitive complexity refers to the

perception and the conceptual treatment by the child of events and states in the world around her. Formal linguistic complexity refers to the phonological, morphological, lexical or syntactic means grammaticalised by the language to encode meanings.

The notion of space, currently at the centre of debate about the relationship between conceptual pre-linguistic development and formal language development is an interesting case in point. Some developmental theories (Mandler, 1996) propose that the representation of spatial relations is determined by the child's pre-linguistic, cognitive development. Children's early experience with relations such as containment and support should guide their acquisition of the particular grammatical forms. However, languages differ in the way they grammaticalise such relations. For instance in English an object is ON another object, regardless of the orientation of the target object or the manner of contact between the two objects. *A cup is ON a table* and *a picture is ON a wall*. However, in Isangu, a Bantu language spoken in Gabon, horizontal support is encoded with a locative marker, δ , while vertical support is encoded with a different locative marker, *mu* (Idiata, 1998). Bowerman has carried out extensive studies on the early influence of language specific factors on the acquisition of locative relations and concludes:

I have argued that the existence of crosslinguistic variation in the semantic packaging of spatial notions creates a complex learning problem for the child: even if learning begins by mapping spatial morphemes directly onto precompiled concepts of space - which is not at all obvious - they cannot get far in this way; instead, they must work out the meaning of the forms by observing how they are distributed across contexts in fluent speech. (Bowerman, 1996: 425)

A complete account of the relation between language and non-verbal cognition is obviously well beyond the aims of the present discussion. The important point here is that languages differ in the grammaticalisation of space and that these specificities have been shown to influence development very early on.

Another case where one might expect an influence of non-linguistic representations and linguistic forms is grammatical gender. The acquisition of grammatical gender has been studied for Indo-European languages (Mills, 1985; Karmiloff-Smith, 1979) and non Indo-European languages, in particular Bantu languages (Connelly, 1984; Demuth, 1983, 1992; Idiata,

1998; Kunene, 1979; Suzman, 1982). Bantu languages have between five to eight different grammatical genders which are marked for singular and plural by prefixes on the nouns, on the demonstratives, in associative constructions and by agreement prefixes on the verbs. Many Bantu linguists have attempted to establish semantic categories for grammatical gender, such as humans, plants, body parts, fruits, artefacts, animals (Herbert, 1981). Nevertheless, exceptions are abundant in all classes except the human class. A semantic transparency argument would argue that Bantu children first construct the categories and then use the semantics of these categories to discover grammatical gender. In fact, however, no study has as yet confirmed this. There is little evidence for early semantic overgeneralisation of items from one class to another. Instead, from the beginning children use surface linguistic cues provided by the prefixes or, "morpho-phonological bootstrapping", to discover grammatical gender (Demuth, 1992; Idiata, 1998).

These two examples, spatial relations and grammatical gender in Bantu languages, point out that the acquisition of a language can be conceived of as different from the acquisition of a concept. This should not, however, be construed to mean that non-linguistic conceptual development has no role in language development. It simply means that children can show language acquisition patterns which are specific to the language that they are learning and are not exclusively dependent on a universal conceptual development.

Slobin (1991) has argued that although we will probably never succeed in demonstrating the effects of grammar on world-view or non-linguistic behaviour, we may meet with more success in considering the special kind of thinking that is tied to language use, the type of thought that is employed on-line in the process of speaking.

Whatever effects grammar may or may not have outside of the act of speaking, the sort of mental activity that goes on while formulating utterances is not trivial or obvious, and deserves our attention. (Slobin, 1991:12)

Mental activity mobilised for speaking, or "thinking for speaking" requires that children select characteristics of objects and events that both fit some conceptualisation of the event and are readily grammaticalised in the language the child speaks.

Bilingual children are required to think for speaking in two languages. As Meisel (1990) has so eloquently put it, bilingual children have one mind and two grammars. Bilingual subjects, then, offer a privileged window for the observation of language acquisition. During the acquisition of their two languages they actively engage in cross-linguistic and cross-cultural problem solving.

In cross-linguistic studies efforts are made to control for comparable data samples across groups. Unfortunately, completely comparable childhood environments are impossible to obtain. Societies shape childhood in a myriad of different ways. Children's environments and what is considered appropriate language behaviour for children and toward children differs radically from one society to another. Ochs (1985) has shown how the child's linguistic environment can account for seemingly late acquisitions such as ergativity in Samoan. If a structure is not used in the discourse addressed to children it is not surprising that the child does not produce it. Likewise, what is a late acquisition in one language is not necessarily a late acquisition in another. Demuth (1992) has shown that passive constructions are very precocious in Sesotho children. Because there are very strong pragmatic constraints on using non-specific referents in utterance initial position, the normal way of asking a Sesotho child "Who gave you this?" is "You were given this by whom?" The pragmatic constraint, then, leads to an increase in frequency of passives in the input and thus precocious use in children.

Controlling for childhood language environments across cultures is an impossible task. The study of bilingual children, however, offers a clear research advantage in that the same child-subject is acquiring the two systems with differing grammatical and pragmatic constraints. Thus, the bilingual child offers a valuable opportunity for the study of many theoretical controversies given that such a child is her own control for cognitive and social development.

2. What is a bilingual child?

Hakuta (1986) discusses the many different answers that have been given to the question "what is a bilingual?" One early definition from Bloomfield considered that a bilingual must have "native-like control of two languages." Haugen, on the other hand, considers bilingualism to start when a person speaking a given language is able to produce meaningful utterances

in another language. Haugen's definition is much broader than Bloomfield's, and as pointed out by Hakuta, has the strong point of taking into account bilingual DEVELOPMENT. If it is difficult to determine exactly when the acquisition of the two languages ends, at least one can determine when it begins. More recent definitions of bilingualism fall between those given by Bloomfield and Haugen. An individual can be considered bilingual when capable, without serious difficulty, of passing from one language to another in everyday life (Grosjean, 1982).

These more realistic definitions force us to discard the early notions of "true" or "ideal" bilingualism. It has been argued that the notion of "ideal bilingual", may well be an artefact of a theoretical perspective which takes "monolingual" as its point of reference. The notion "true" or "ideal" balanced bilingual implies that the bilingual has to fulfill exactly the same needs in both languages. If an individual could potentially use one of the languages in any and all circumstances of daily life, with any and all potential conversational partners, one might well wonder why the individual bothers becoming bilingual. Often when a bilingual can use one language in all contexts, with all speakers of a given community, one language will die (Tomason & Kaufman, 1988). Without contexts in which the two languages differ in distribution, i.e., contexts in which only language A can be used and contexts in which only language B can be used, an individual has little need to acquire both languages.

Individuals construct their language competence based upon what they do with that language. Competence in more than one language is, indeed, very rarely completely and equally distributed across all domains of life. Grosjean (1982) underlines the importance of considering a bilingual not as the sum of two monolinguals but as an individual with a communicative competence that is equal but different in two languages. Changes in the language environment and extensions of languages to new uses will necessarily change the bilingual's competencies.

1.1. One language - one person

One of the most studied, though probably not the most typical, early bilingual situation is the "one language - one person" situation. Swain (1972) referred to children who are exposed to both languages from birth as acquiring "bilingualism as a first language." In early research, children who were exposed to a second language sometime after their third birthday were considered consecutive bilinguals and those who acquired both languages

before 3 years of age, simultaneous bilinguals (McLaughlin, 1984, 1985). More recent research in early bilingualism has restricted the concept of simultaneous bilingualism to children who have been exposed to two languages from birth (De Houwer, 1990; Padilla and Lindholm, 1984; Meisel, 1989). Meisel (1989) uses "bilingual first language acquisition" (BFLA) to refer very precisely to children who have had exposure to both languages for at least half an hour everyday from birth. This more restrictive notion of precocious simultaneous bilingualism takes into account the fact that all learning, no matter how rudimentary, can affect subsequent learning.

While the age at which the child is exposed to two languages is an important factor, it is certainly not the only one to consider. Exposure to a language is one thing, spontaneous production is yet another. Many factors, such as language of the community or attitudes of the parents and the community toward the two languages and towards bilingualism in general are important. Thus, the larger sociocultural context of acquisition for the two languages should not be ignored. Whereas some parents speak both languages to the child, others maintain a strict "one person-one language" principle within the home environment. Other parents opt to use only one language in the home. Rather than differentiating the two languages according to speakers, these parents separate the two languages according to situation.

Many studies of one parent-one language situations have shown that from the beginning, grammatical development in bilingual children (where there is relative balanced production in the two languages) proceeds simultaneously and independently, with no interference between the two systems (De Houwer, 1990; Klinge, 1990; Meisel, 1989; Müller 1990, 1995). Müller's (1990, 1995) very detailed and careful work on the acquisition of grammatical gender in two German-French bilinguals, Caroline and Ivar, shows that the grammatical category of gender emerges and develops separately in both languages. In addition, her comparison of Caroline and Ivar's development to that of monolingual German- and French-speaking children reveals no significant differences. There is ample evidence, then, that some bilingual children do attain essentially monolingual competence in both languages in the same way that a monolingual child acquires one of the two languages.

However, for many bilingual children growing up in one language - one parent situations, one language wins out over the other. Most typically, the majority language of the community in which the child lives becomes the

strong or dominant language, while the minority language, spoken by the isolated parent, becomes the weaker language (Arnberg, 1981; Jisa, 1989, 1995; Lanza, 1992, 1995a, 1995b; Schlyter, 1993, 1995).

Schlyter was one of the first to ask about the development of the weak language. While no studies have claimed that the development of the strong language differs from that of monolingual children of that language, there is growing evidence that the weak language develops in a very different way from the strong language (Jisa, 1989, 1995; Parodi, 1990; Schlyter, 1993, 1994, 1995; Schlyter and Hakansson, 1994). One may ask, then, is the development of the weak language simply delayed (Parodi, 1990; Berman, 1979), or is it deviant in comparison to the acquisition of that language by monolingual children (Jisa, 1995; Schlyter, 1993, 1994, 1995)?

3. What is a weak language?

Schlyter (1994: 69) has enumerated some aspects of production that indicate a weak language. The child may show a strong preference for using one language in situations where both languages could be used. A second indication is a general reticence to use one of the languages in utterances consisting of more than "yes" or "no". A smaller vocabulary and a shorter MLU in one language as compared to the other are also indications of a weak language. The weak language often shows an absence of modals, subordinate clauses and past reference. Finally, grammatical categories from the strong language are borrowed into the weak language.

Schlyter (1993) gives a detailed investigation of French-Swedish bilingual children (2- to 4-years-old) in which for some of the children French is the dominant language and for others Swedish is the dominant language. She is particularly interested in establishing whether or not the weak language develops like a second language. Very few errors in agreement and gender are observed in the acquisition of Swedish and French as first languages. Almost error-free acquisition of gender in L1 Swedish contrasts to error-intense adult Swedish L2 acquisition (Andersson and Strömqvist, 1990). In French L1 (in monolinguals and balanced bilinguals) subject-verb agreement and gender agreement are acquired early with few errors (Meisel, 1990; Müller, 1990; 1995). In French L2 (Harley, 1984) subject-verb agreement and gender agreement are the most difficult, and last acquired, morphological items. Special word order phenomena in subordinate clauses are reported as being acquired practically error-free in

Swedish L1, but not L2 (Clahsen, 1988; Meisel, 1991; Plunkett and Strömqvist, 1990).

Based on her own study, Schlyter (1993) concludes that the strong language exhibits all characteristics of normal L1 development, as regards the central grammatical phenomena such as finiteness, word order, and placement of negation. The weaker language, however, exhibits great variation in these respects, from errors to complete non-existence of the grammatical phenomena in question. The child may avoid marking agreement in combinations of subject and verb altogether, resulting in a high frequency of isolated prepositional phrases and noun phrases. Or the child may replace the missing items by borrowing from the strong language

The acquisition route for the weak language, then, is not just delayed but appears radically different from the acquisition of that language by monolingual children. My own work on a bilingual child with a very large productive difference between her strong language, French, and her weak language, English (Jisa, 1989, 1995) comes to the same conclusion. This child, Odessa, was raised in France in a one-parent - one language situation from birth, her father's language being French, her mother's English. Her French was very dominant until the age of 3;6 when she spent two months in California in an English-speaking environment. Odessa's English is very weak according to the criteria suggested by Schlyter (1994). Before her two-month stay Odessa's English MLU was 1.3. The longest five utterances in her English production showed an MLU of 3.2. At the end of her stay, Odessa's English MLU jumped to 3.6, with the MLU of her five longest utterances at 9.2. Before her stay in California, 5 - 8% of Odessa's English utterances consisted of more than "yes" or "no". At the end of the two months, this percentage increased to 87%. In situations where both English and French could be used, she shows a clear preference for French (79 - 90% of her utterances) before her stay and a clear dispreference for French (8 - 10%) at the end of the two months. Odessa's English productive vocabulary in spontaneous discourse is restricted to a few fixed phrases ("my turn, lemme see, silly girl") and words for clothing ("shoe, sock, dress"), colours ("pink, yellow, blue") and geometrical shapes ("square, triangle"). All of her English vocabulary showed equivalents in her French vocabulary.

Her development in English was very rapid over the two months, but was distinct from monolingual children in a variety of ways. One particularly persistent and pervasive error concerns the present progressive which in English requires an auxiliary form of *be* followed by the verb+*ing*. The verb

inflection *-ing* is not stable in Odessa's production even at the end of the two months. However, the auxiliary, marked for agreement with the subject (1st, 2nd, 3rd person singular) was accurate and productive almost from the beginning. The distribution of errors in a sample of 81 attempted uses of the present progressive, taken from even-numbered pages in the transcripts of recordings made during the stay is revealing. Half of the attempts (41/81) show an auxiliary without *-ing* ("I'm eat, he's taste it, you're hurt him"). One case out of 81 shows an absence of the auxiliary and the presence of *-ing* on the verb ("I eating"). Even at the end of her stay the correct use of the auxiliary and *-ing* is only around 70%.

Odessa's error pattern is quite different from that observed for monolingual children. The verbal inflection *-ing* is always mentioned as among the first grammatical morphemes produced by monolingual English-speaking children (Brown 1973, Fletcher 1985, Richards 1990). The typical error for monolingual children in very early stages of acquisition is omission of the auxiliary. This bilingual child's development is then very atypical. Despite the fact that *-ing* is frequent, in a salient position, invariable, used with many verb types, this bilingual child was not paying attention to it.

I argued, on a similar line as Schlyter (1995), that this is error pattern results from transfer of her dominant language, spoken French, to English, her weak language. French-speaking children pay attention to preverbal position to encode grammatical agreement and temporal contrasts. Consider verbs of the first conjugation pattern (verbs ending in *-er*), which were very dominant in terms of tokens in Odessa's French production before her two-month visit to an English speaking environment. In the present tense, agreement is marked by subject clitic pronouns placed before the verb (*je mange* 'I eat', *tu manges* 'you (sg) eat', *il mange* 'he eats', *on mange* 'we eat' or *nous mangeons* 'we eat', *vous mangez* 'you (pl) eat', *ils mangent* 'they eat'). All of the verbs in this paradigm, except for one form of the first person plural (*nous mangeons*) which is rarer in spoken French than the other first person plural form (*on mange*) and the second person plural (*mangez*), are pronounced the same. In marking the *passé composé*, the auxiliary (*avoir* 'have' or *être* 'be') along with the subject clitic indicate agreement (*j'ai mangé* 'I ate', *tu as mangé* 'you (singular) ate', *il a mangé* 'he ate', *on a mangé* 'we ate', *nous avons mangé* 'we ate', *vous avez mangé* 'you (plural) ate', *ils ont mangé* 'they ate'). The main verb is in the past participle form, *verb+e/é*. In the future tense, the semi-auxiliary *aller* ('to go') is inflected for person and present tense and along with the subject clitic

indicates agreement (*Je vais manger* 'I will eat', *tu vas manger* 'you (singular) will eat', *il va manger* 'he will eat', *on va manger* 'we will eat', *nous allons manger* 'we will eat', *vous allez manger* 'you (plural) will eat', *ils vont manger* 'they will eat'). The main verb is in the infinitive form, *verb+e/é*.

One may argue, then, that for French children the preverbal position is particularly salient for marking agreement and tense. What was salient for Odessa in her strong language, spoken French, was the preverbal position and what was salient for this child in her weak language, English, was also the preverbal position. The arguments for *-ing* being salient for a monolingual English-speaking child (verb final position, frequency, few restrictions on verbs tolerating *-ing*), do not seem to be relevant for this bilingual child. In grappling with production in her weak language, she transferred the preceptual preference of preverbal position from her strong language.

While for some children the two languages develop independently and simultaneously, leading to almost balanced bilingualism, other children show evidence of a weakness in one language and transfer from one language to another. The status of weak and strong languages changes over the course of a bilingual child's life. In the following section some recent work on Turkish-French consecutive bilinguals (Akinci, 1999; Akinci & Jisa, 1998) will be presented. These children are essentially monolingual in Turkish (in production) until the age of three when they go to French nursery school.

4. Turkish-French bilinguals

Children, whether they be bilingual or monolingual, go beyond sentence level syntax and morphology on their way to becoming competent speakers. The ability to weave sentences together across discourse through the use of explicit connecting devices is an important part of learning to create a coherent text (Jisa, 1987: 607). Adjacent clauses can be combined in a variety of ways to encode a number of semantic relationships, such as temporal succession, or simultaneity, cause and effect or concession. The acquisition of the ability to combine propositions to create coherent monologues is a development which extends well beyond early childhood.

Akinci & Jisa (1998) compare syntactic devices for interclausal connectivity, or 'syntactic packaging' (Berman & Slobin, 1994) in three groups of Turkish-speaking children: 2 groups of monolingual children, one

high SES (socio-economic status), one low SES, and a group of Turkish-French bilinguals. Their particular interest is in characterising the development of Turkish in the Turkish-French bilingual children.

Narrative texts were collected from 5-, 7- and 9-year-old bilingual and monolingual children. A children's picture book, *Frog, where are you?* (Mayer, 1969) was used to collect the data. The frog story book consists of twenty-four pages of pictures with no text. The story relates the adventures of a boy and his dog in their search for a runaway frog. During the search, the boy and the dog meet up with a variety of different characters. Their encounters with these other characters yield a series of episodes which make up the story.

The bilingual children's Frog stories were collected in Turkish and subsequently, two weeks to one month later, in French. A Turkish bilingual researcher (Akinci) showed the children the book. Then, a second Turkish speaker (known to the child) was asked to listen to the child's story. The children habitually speak Turkish to both adults. The majority of recordings were made in a Turkish cultural centre. Some Turkish stories were collected in the children's homes.

Table 1: Age (years;months), number, mean age, range of Turkish-French bilingual subjects, of the monolingual Turkish subjects (Low SES) (Aarsen, 1996), of the monolingual Turkish subjects (High SES) (Küntay 1990)¹

Age group	5 years	7 years	9 years
Bilingual Turkish-French			
N	20	20	20
mean age	5;7	7;5	9;5
range	5;0-6;2	6;8-8;0	8;8-9;11
Monolingual Low SES (Aarsen 1996)			
N	20	20	20
mean age	5;6	6;9	8;11
range	5;1-5;11	6;7-7;8	8;7-9;7
Monolingual High SES (Küntay 1990)			
N	20	15	15
mean age	5;6	7;3	9;3
range	4;7 - 5;11	7;0 - 7;11	9;0 - 9;10

The three groups of Turkish-speaking subjects are shown in Table 1. All of the bilingual subjects except one were born in France in Turkish-speaking families. The remaining subject was born in Turkey and came to France before the age of one year. The parents of these children were all born in Turkey. None of the mothers was working at the time of recording, but 4% had worked before in France as housekeepers. All of the fathers are workers in the construction industry. One fourth of the mothers and 10% of the fathers are illiterate. Sixty percent of the parents received a primary school education in Turkey. Eleven percent of the mothers and 25% of the fathers have some secondary education.

The low SES monolingual Turkish subjects have been studied extensively in Aarsen (1996). Aarsen's sample of monolingual informants is comparable in SES background to that of immigrant children in Europe. All of his subjects come from two neighbourhood schools in Tarsus, in the district of İçel. The monolingual high SES subjects are speakers of standard Turkish from urban middle-class backgrounds in Istanbul and have been studied by Aksu-Koç (1994) and Küntay (1990).

Table 2. Total number of clauses in Frog stories, mean number of clauses per subject, range of clauses for three Turkish-speaking populations

Age group	5-year-olds			7-year-olds			9-year-olds		
	Mono. High SES	Mono. Low SES	BI.	Mono. High SES	Mono. Low SES	BI.	Mono. High SES	Mono. Low SES	BI.
Total clauses	1199	1343	1276	799	1343	1078	761	1189	1044
Mean number of clauses per subject	60	67.5	64	53	67.5	54	50.5	60	52
Range of clauses	23-133	27-149	33-175	29-119	41-139	24-87	19-135	38-89	36-74

Information concerning the length of the texts produced is given in Table 2. Length of texts differs only for the 7-year-olds. Low SES Turkish monolinguals produce significantly longer texts than either the high SES monolinguals or the bilinguals ($F(2,52) = 3.21, p < .04$).

In the attempt to draw the developmental profile of clause linkage in the acquisition of Turkish by these children, two different types of interclausal connectivity, co-subordination and subordination (Erguvanli-Taylan 1988, Foley & Van Valin 1984, Watters 1993), and the semantic relations which these structures encode were examined. Each clause was coded for one of four types of connectivity: juxtaposition, co-ordination, co-subordination and subordination, following the criteria given in Foley & Van Valin (1984), and applied to Turkish by Watters (1993). Juxtaposed clauses show no explicit linking device between the two clauses. Co-ordinated clauses are conjoined using a co-ordinate conjunction or another connector. Co-subordinated clauses are semantically dependent, but not syntactically embedded. In English and French, co-subordinate clauses include finite clauses introduced by a subordinating conjunction. In Turkish these dependent clauses take a non-finite verb form (*V+ince* 'as soon as', *V+(er)+ken* 'while, when', *V+ip* 'afterwards', *V+erek* 'while V-ing', etc.). The verb in the main clause takes a finite form. Subordinated clauses in Turkish form a very tightly linked unit (Aksu-Koç 1994: 373). In English and French, this type of subordination includes clauses combined using non-finite forms such as participles, infinitives and gerunds. The dependent and embedded clause shows a deverbalised noun, or infinitive, which in some uses takes a case marker. Among the wide variety of forms included in this category are the infinitive *V-mEk+(için)* 'in order to', the nominaliser *V-mE+(case)* 'in order to', *mEdEn+önce/sonra* 'before/after V-ing', etc. What is important about the two categories of co-subordination and subordination is that they are late acquisitions for monolingual Turkish children (Aksu-Koç 1994, Berman & Slobin 1994: 543).

The mean proportion of clauses combined using co-subordination and subordination were calculated for each age group for the three groups of children. These results are shown in Table 3. Diagrams 1a, 1b and 1c present these data schematically.

Table 3. Mean proportions of co-subordination and subordination nexus relationships encoded by the three groups of Turkish-speaking children: 5-year-olds, 7-year-olds and 9-year-olds

	Co-subordination	Subordination
5-year-olds		
MONO High SES	7	7,5
MONO Low SES	3,5	2,5
BILINGUAL	1	0,5
7-year-olds		
MONO High SES	10	7
MONO Low SES	3	3
BILINGUAL	2	0,5
9-year-olds		
MONO High SES	11,5	12
MONO Low SES	6	4,5
BILINGUAL	2	0,5

Diagram 1a. Clause Combining Nexus across three groups of Turkish-speaking children: 5-year-olds

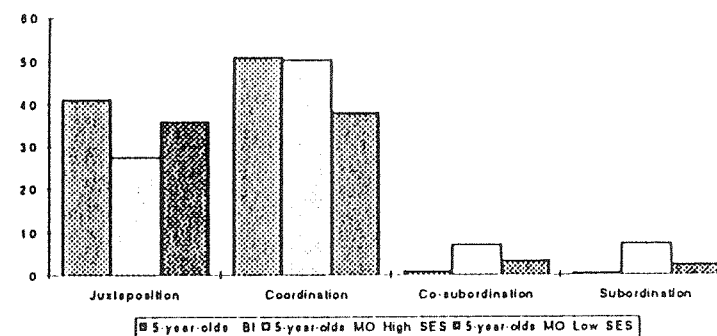


Diagram 1b. Clause Combining Nexus across three groups of Turkish-speaking children: 7-year-olds

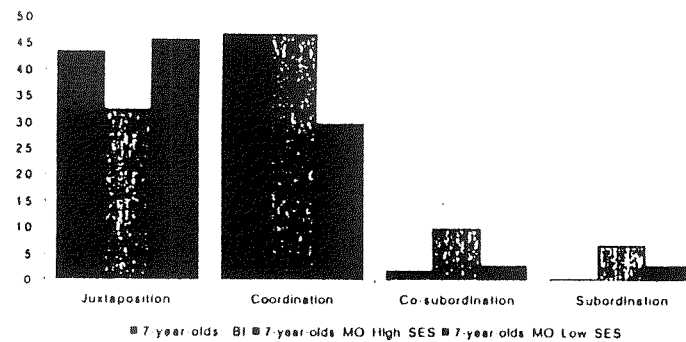
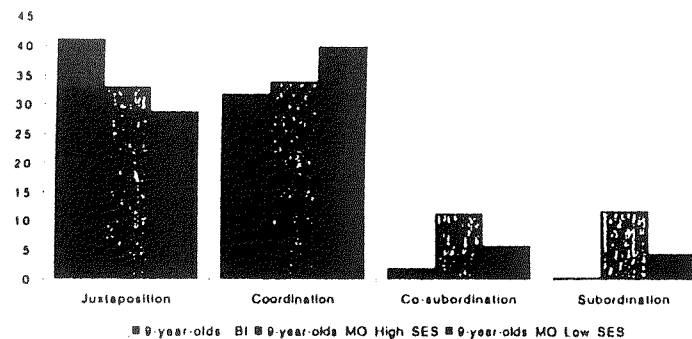


Diagram 1a. Clause Combining Nexus across three groups of Turkish-speaking children: 9-year-olds



We will restrict our attention here to co-subordination and subordination. A series of ANOVA tests reveal significant differences between the three groups. The results are summarised in Table 4 for co-subordination and in Table 5 for subordination. As can be seen on that table the differences between the three groups are highly significant. Diagrams 2 and 3 show this same information graphically. Diagram 2 shows the proportion of co-subordination forms used in the three Turkish-speaking populations at three ages. The bilingual children show a much lower proportion of co-subordination in comparison to both the low and high SES groups. The

difference between the bilingual subjects and the high SES group is significant at all ages. The difference between the bilinguals and the monolingual low SES group is significant at 5 and 7 years of age. Notice also that a significant difference is obtained for the monolingual high and low SES groups at 7 and 9 years of age. The bilingual children show some development in the use of co-subordination between 5 and 7 years of age. Then their development appears to stop. A very similar pattern emerges for subordination, shown on Diagram 3. For subordination significant differences are obtained between the bilinguals and both groups of monolinguals. Significant differences are also observed at all ages between the two monolingual groups. On this particular measure, there appears to be no development in our bilingual subjects from the age of 5 to 9.

Table 4. Co-subordination in Frog stories for the three Turkish-speaking populations

	MONOLINGUAL LOW SES	MONOLINGUAL HIGH SES
BILINGUAL TURKISH-FRENCH		
5-year-olds	$F(1,38) = 7.39, p < .009$	$F(1, 38) = 18.64, p < 0.0001$
7-year-olds	NS	$F(1, 33) = 12.48, p < 0.001$
9-year-olds	$F(1,38) = 6.79, p < .01$	$F(1, 33) = 32.61, p < 0.0001$
MONOLINGUAL LOW SES		
5-year-olds		NS
7-year-olds		$F(1, 33) = 9.61, p < 0.003$
9-year-olds		$F(1, 33) = 6.00, p < 0.01$

Table 5. Subordination in Frog stories for the three Turkish-speaking populations

	MONOLINGUAL LOW SES	MONOLINGUAL HIGH SES
BILINGUAL TURKISH-FRENCH		
5-year-olds	$F(1,38) = 7.41, p < .009$	$F(1, 38) = 37.6, p < 0.0001$
7-year-olds	$F(1,38) = 9.06, p < .004$	$F(1, 33) = 31.2, p < 0.001$
9-year-olds	$F(1,38) = 19.41, p < .01$	$F(1, 33) = 61.09, p < 0.0001$
MONOLINGUAL LOW SES		
5-year-olds		$F(1,38) = 13.07, p < .0009$
7-year-olds		$F(1, 33) = 7.91, p < 0.008$
9-year-olds		$F(1, 33) = 18.02, p < 0.0002$

Diagram 2. Proportion of co-subordination by age in three Turkish-speaking populations

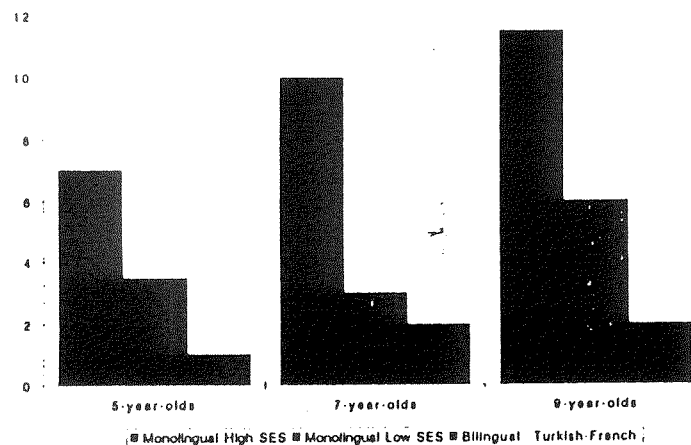
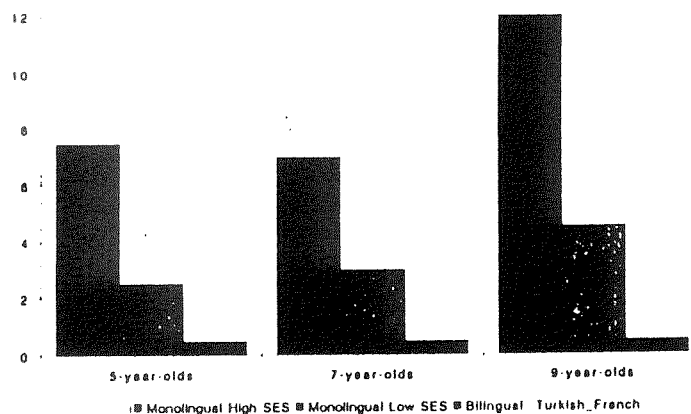


Diagram 3. Proportion of subordination by age in three Turkish-speaking populations



It is not the case that the bilingual and monolingual children were encoding different content. Systematic comparison of one episode of the story reveals that the same types of semantic relations were encoded between clauses by

the monolingual and bilingual children. However, where the Turkish monolingual children use forms of co-subordination and subordination, the bilingual children were using juxtaposition and coordination. Akinci & Jisa (1998) observed differences along the same lines between the monolingual low and high SES groups.

Akinci (1999) carried out a similar analysis, comparing the bilingual Turkish-French children to a group of middle-class French monolinguals. While there were very significant differences between the two groups at five years, no significant differences were found between the monolinguals and the bilinguals at ages seven and ten. For these two age groups, the children's performance was comparable for both co-subordination (finite subordination) and subordination (non-finite subordination).

To summarise, there are indications that the status of strong and weak language changes for these Turkish-French bilinguals with their development. While these children show Turkish as a dominant language in early childhood, their Turkish then stagnates, compared to monolingual children. While French is weak for them at five years of age, their performance on the measures examined is equivalent to French monolinguals at seven and ten years of age.

Producing fictional stories is a particularly school-related type of language task and is close to what Cummins (1984, 1991) refers to as context-reduced (or academic) language use. In French primary school, the bilingual children are required to read, to listen to and to create fictional narrative texts in French. They have no equivalent situation in Turkish. This underscores the importance of considering the kind of situations in which a bilingual child uses the two languages. It also underlines the need for very serious precaution in drawing generalisations about bilingual children. For these Turkish-French bilingual children, Turkish is weak in comparison to monolinguals for the measures examined in this one particular task. And at seven and ten years of age, their French does not show any significant differences when compared to French monolinguals on the measures examined in this particular task. Obviously, further study of other uses of both Turkish and French is necessary before any overall generalisation concerning the weaknesses and the strengths of these children's languages can be drawn.

Conclusion

Much more is known about bilingual development than was known twenty years ago. One very important finding is that there are many types of bilingual children. Important differences have been attributed to simultaneous and successive bilinguals (Bialystok & Cummins, 1991). Among successive bilinguals, the level of balance between the two languages has been shown to affect performance on verbal tests of cognitive ability (Hakuta & Diaz, 1985; Diaz & Klingler, 1991). These studies provide strong insights into problems facing educational communities.

The role played by the linguistic environment is undeniable. Balance between the two languages of the bilingual child is altered with changes in exposure patterns. These changes involve, in addition to specific aspects of morphology and syntax, aspects of usage of morphology and syntax in various verbal activities, such as picture-story telling. Assessment in educational settings tests both types of linguistic knowledge, mastery of morpho-syntactic milestones and usage in particular types of verbal activities. For educators, it is essential to grasp the strong and weak aspects of a child's linguistic performance. However, it is equally essential to understand why some aspects are strong and others are weak.

Much more remains to be learned about how bilingual children's competence in two languages changes as a result of adaptations to new acquisition contexts. Emeneau (1980/1962) predicts a rather pessimistic future for the possibility of explaining language change in a bilingual context.

Students of the historical aspects of bilingualism have usually discussed the historical situations that they studied in terms of an analysis of factors which had general application. It was almost as if they hoped to be able, once all factors were identified, to produce a calculus which, allowing for all factors and the various weightings to be given them, would on the one hand explain the past and on the other predict the future. It is a vain hope. Historical events, being unique, do not yet admit of such a calculus, and in all probability never will. (Emeneau 1980 (1962): 43)

The study of bilingual children with careful identification of factors relevant to acquisition makes such a calculus feasible. It can reveal how children adapt their language(s) to new language environments and new language situations. More importantly, it makes possible further insights into the

relationship between speakers' demonstrated language capacities and their exposure to language in contexts.

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Bibliography

- AARSEN, J. (1996) - *Relating events in two languages: Acquisition of cohesive devices by Turkish-Dutch bilingual children at school age*. Studies in Multilingualism 2. Tilburg: Tilburg University Press.
- AKINCI, M.-A. (1999) - *Les enfants bilingues turc-français en France*. Doctoral dissertation. Université Lumière-Lyon 2.
- AKINCI, M.-A., & JISA, H. (1998) - Development of Turkish Clause Linkage in the Narrative texts, of Turkish-French bilingual children in France. Paper presented at the 9th International Conference on Turkish Linguistics, Oxford, 12-14 August 1998 (to be published in the Proceedings of the conference, 1999)
- AKSU-KOÇ, A.A. (1994) - Development of Linguistic Forms: Turkish. In: R. A. BERMAN & D. I. SLOBIN (eds): *Relating events in narrative: A crosslinguistic developmental study*. Hillsdale, New Jersey: L. Erlbaum Associates, 329-385.
- ANDERSSON, A. & STRÖMQVIST, S. (1990) - Adult L2 acquisition of gender. A cross-linguistic and cross-learner type perspective. Gothenburg papers in theoretical linguistics, 61.
- ARNBERG, L. (1981) - Early childhood bilingualism in the mixed-lingual family. Linköping Studies in Education, Dissertation no. 14.
- BERMAN, R.A. (1979) - The (re)emergence of a bilingual. Case study of a Hebrew-English speaking child. *Working papers on bilingualism* 19: 21-39.
- BERMAN, R.A. & SLOBIN, D.I. (1994) - *Relating events in narrative: A crosslinguistic developmental study*. Hillsdale, New Jersey: Lawrence Erlbaum Associates.
- BIALYSTOK, E. & CUMMINS, J. (1991) - Language, cognition, and education of bilingual children. In BIALYSTOK, E., (ed), *Language processing in bilingual children*. Cambridge University Press, 222-232.
- BOWERMAN, M. (1996) - Learning how to structure space for language - A crosslinguistic perspective. In P. BLOOM, M. PERTERSON, L. NADEL &

- M. GARRETT (eds), *Language and space*. Cambridge, MA.: MIT Press. (pgs. 385-436)
- BROWN, R. (1973) - *A first language, the early stages*. Cambridge, MA: Harvard University Press.
- CLAHSEN, H. (1988) - Parameterised grammatical theory and language acquisition: A study of verb placement and inflection by children and adults. In FLYNN, S & O'NEILL, W. (eds), *Linguistic theory in second language acquisition*. Dordrecht: Reidel.
- CONNELLY, M. (1984) - Basotho children's acquisition of noun morphology. PhD Dissertation, University of Essex.
- CUMMINS, J. (1984) - *Bilingualism and special education: issues in assessment and pedagogy*. Clevedon, Avon, England: Multilingual Matters.
- CUMMINS, J. (1991) - Interdependence of first- and second-language proficiency in bilingual children. In E. Bialystok (ed), *Language processing in bilingual children*. Cambridge: Cambridge University Press, 70-89.
- DE HOUWER, A. (1990) - *The acquisition of two languages from birth: a case study*. Cambridge: Cambridge University Press.
- DEMUTHI, K. (1983) - Aspects of Sesotho language acquisition. Bloomington: Indiana University Linguistics Club.
- DEMUTHI, K. (1992) - The acquisition of Sesotho. In D. I. SLOBIN (ed), *The crosslinguistic study of language acquisition, Vol 3*. Hillsdale, NJ: Lawrence Erlbaum Associates.
- DIAZ, R. M. & KLINGER, C. (1991) - Towards an explanatory model of the interaction between bilingualism and cognitive development. In BIALYSTOK, E.(ed), *Language processing in bilingual children*. Cambridge University Press, 167-192.
- EMENEAU, M. B. (1980/1962) - Bilingualism and structural borrowing. in DIL, A., ed., *Language and linguistic area*. Stanford: Stanford University Press, 38-65. (Reprinted from *Proceedings of the American philosophical society* 106: 430-442 (1962)).
- ERGUVANLI-TAYLAN, E. (1988) - The expression of temporal reference in embedded sentences in Turkish. In *Studies on Turkish Linguistics*. Ankara: Middle East technical University, 333-350.
- FLETCHER, PAUL. (1985) - *A Child's learning of English*. London: Basil Blackwell.
- FOLEY, W. & R. D. VAN VALIN. (1984) *Functional syntax and universal grammar*. New York: Cambridge University Press.
- GROSJEAN, FRANÇOIS. (1982) - *Life with two languages*. Cambridge, Mass.: Harvard University Press.
- HAKUTA, K. (1976) - Becoming bilingual: A case study of a Japanese childlearning English *Language Learning* 26:321-351.
- HAKUTA, K. (1986) - *Mirror of Language: The Debate on Bilingualism*. New York: Basic Books, Inc.
- HAKUTA, K. & DIAZ, R. M. (1985) - The relationship between degree of bilingualism and cognitive ability: a critical discussion and some new longitudinal data. In NELSON, K. E.(ed), *Children's language, Vol. 5*. Hillsdale, NJ: Erlbaum.
- HARLEY, B. (1984) - Mais apprennent-ils vraiment de français? *Langue et Société* 12: 57-62.
- HERBERT, K. R. (1981) - Gender systems and semanticity: two case histories from Bantu. In FISIAK, J. (ed), *Historical semantics*. Mouton
- IDIATA, D. FRANCK. (1998) - Quelques aspects de l'acquisition de la langue Isangu par les enfants. PhD. dissertation, Université Lumière - Lyon 2.
- JISA, H. (1987) - Sentence connectors in French children's Monologue Performance. *Journal of Pragmatics* 11, 607-621.
- JISA, H. (1989) - The process of Language Replacement. *Actes du Symposium AILA/CILA: Minorisation Linguistique et Interaction*, Commission Interuniversitaire Suisse de Linguistique Appliquée.
- JISA, H. (1995) - L'utilisation du morphème BE en anglais langue faible. *AILE* 6: 101-127.
- KARMILOFF-SMITH, A. (1978) - The interplay between syntax, semantics and phonology in language acquisition processes. In R. N. Campbell & P. T. Smith (Eds), *Recent advances in the psychology of language*. New York: Plenum Press: 1-23.
- KARMILOFF-SMITH, A. (1979) - *A functional approach to child language*. Cambridge: Cambridge University Press.
- KLINGE, S. (1990) - Prepositions in bilingual language acquisition. In J. MEISEL (ed) *Two first languages: Early grammatical development in bilingual children*. Dordrecht: Foris, 123-154.
- KUNENE, E. (1979) - *The acquisition of Siswati as a first language: A morphological study with special reference to nouns prefixes, nous class and some agreement markers*. PhD. dissertation, UCLA.
- KÜNTAY, A. (1990) - *Developing referential cohesion in elicited Turkish narratives*. Unpublished masters thesis, University of California at Berkeley.
- LANZA, E. (1992) - Can bilingual two-year-olds code-switch? *Journal of child language* 19: 633-58.
- LANZA, E. (1995a) - *Language mixing in infant bilingualism: a sociolinguistic perspective*. Oxford University Press.
- LANZA, E. (1995b) - Input parental et différenciation linguistique chez une bilingue de deux ans: interactions dyadiques et triadiques. *AILE* 6: 11-37.
- LEOPOLD, W. F. (1939-1949) - *Speech development of a bilingual child* (4 volumes), Evanston, Illinois: Northwestern University Press.

- MANDLER, J. (1996) - Preverbal representation and language. In P. BLOOM, M. PETERSON, L. NADEL & M. GARRETT (eds), *Language and space*. Cambridge, MA: MIT Press.
- MAYER, M. (1969) - *Frog, Where are you?* New York: Dial Press.
- MCLAUGHLIN, B. (1984) - *Second Language Acquisition in Childhood. Volume 1: The Preschool Years*. 2nd Edition Hillsdale, N.J.: Lawrence Erlbaum.
- MCLAUGHLIN, B. (1985) - *Second Language Acquisition in Childhood. Volume 2: School-aged Children*. Hillsdale, N.J.: Lawrence Erlbaum.
- MEISEL, J. M. (1989) - Early differentiation of languages in Bilingual Children. In KENNETH HYLTENSTAM AND LORAIN OBLER (eds), *Bilingualism across the lifespan: aspects of acquisition, maturity and loss*. Cambridge, MA: Cambridge University Press.
- MEISEL, J.M. (1990) - INFlection: subjects and subject-verb agreement. In J.M. MEISEL (ed) *Two first languages: early grammatical development in bilingual children*. Dordrecht: Foris.
- MEISEL, J. M. (1991) - Principles of universal grammar and strategies of language learning: some similarities and differences between first and second language acquisition. In L. EUBANK (ed), *Point Counterpoint: Universal grammar in the second language*. Benjamins.
- MILLS, A. E. (1985) - The acquisition of German. In D.I. SLOBIN (ed), *The crosslinguistic study of language acquisition. Vol 1. The data*. Hillsdale, NJ: Lawrence Erlbaum.
- MÜLLER, N. (1990) - Developing two gender assignment systems simultaneously. In J. M. MEISEL (ed) *Two first languages: Early grammatical development in bilingual children*. Dordrecht: Foris. 193-294.
- MÜLLER, N. (1995) - L'acquisition du genre et du nombre chez des enfants bilingues (français-allemand). *AILE* 6: 65-99.
- OCHS, E. (1985) - Variation and Error: A sociolinguistic approach to language acquisition in Samoa. In D.I. SLOBIN (ed), *The cross-linguistic study of child language, Volume 1: The data*. Hillsdale, N.J.: Lawrence Erlbaum Associates, 783-838.
- PADILLA, A. & K. LINDHOLM. (1984) - Child bilingualism: the same old issues revisited. In J. L. MARTINEZ & R. H. MENDOZA, eds, *Chicano Psychology*. Orlando: Academic Press, 369-408.
- PARODI, T. (1990) - The acquisition of word order regularities and case morphology. In MEISEL, J. M. (ed), *Two first languages*. Dordrecht: Foris, 157-192.
- PLUNKETT, K. & STRÖMQVIST, S. (1990) - The acquisition of Scandinavian languages. *Gothenburg Papers in theoretical linguistics* 59.
- RICHARDS, BRIAN J. (1990) - *Language development and individual differences: a study of auxiliary verb learning*. Cambridge: Cambridge University Press.

- SCHILYTER, S. (1993) - The weaker language in bilingual Swedish-French children. In KENNETH HYLTENSTAM & ÅKE VIBERG (eds), *Progression and regression in language: sociocultural, neuropsychological, and linguistic perspectives*. Cambridge University Press, 289-308.
- SCHILYTER, S. (1994) - Early morphology in Swedish as the weaker language in French-Swedish bilingual children. *Scandinavian working papers on bilingualism* 9: 67-86.
- SCHILYTER, S. (1995) - Formes verbales du passé dans des interactions en langue forte et en langue faible. *AILE* 6: 129-152.
- SCHILYTER, S. & G. HAKANSSON. (1994) - Word order in Swedish as the first language, second language and weaker language in bilinguals. *Scandinavian working papers on bilingualism* 9: 49-66.
- SLOBIN, D. I. (1985) - Crosslinguistic evidence for the language-making capacity. In D. I. SLOBIN (ed), *The crosslinguistic study of language acquisition, Volume 2: Theoretical issues*. Hillsdale, N.J.: Erlbaum.
- SLOBIN, D.I. (1991) - Learning to think for speaking: Native language, cognition, and rhetorical style. *Pragmatics* n°1: 7-26.
- SLOBIN, D. I. (1998) - The origins of grammaticizable notions: beyond the individual mind. In D.I. SLOBIN (ed) *The crosslinguistic study of language acquisition: Vol 5. Expanding the contexts*. Lawrence Erlbaum.
- SUZMAN, M. (1982) - Strategies for acquiring Zulu concord. *South African Journal of African languages* 2: 53-67.
- SUZMAN, M. (1991) - *Language acquisition in Zulu*. PhD dissertation. University of Witwatersrand, Johannesburg, South Africa.
- SWAIN, M. (1972) - *Bilingualism as a first language*. Unpublished PhD dissertation, Psychology Department, University of California at Irvine.
- THORNDYKE, P. W. (1977) - Cognitive structures in comprehension and memory of narrative discourse. *Cognitive Psychology* 9, 77-110.
- TOMASON, S. & KAUFMAN, T. (1988) - *Language Contact, Creolization and Genetic Linguistics*. University of California Press.
- WATTERS, J.K. (1993) - An investigation of Turkish Clause Linkage. In R.D. VAN VALIN (ed), *Advances in Role and Reference Grammar*. Amsterdam: John Benjamins, 535-560.

Résumé

Les résultats de recherches récentes sur les enfants bilingues ont incité les chercheurs à privilégier l'étude du processus de l'acquisition. Plutôt que de calculer le niveau de connaissance de chaque langue à un moment donné, l'attention se porte dorénavant sur les processus développementaux qui sous-entendent les différents types d'acquisition bilingue. Deux hypothèses ont été émises à propos

de cette acquisition: la première, que certains enfants bilingues acquièrent leurs deux langues de façon quasi-identique à l'acquisition monolingue; la deuxième, que certains enfants bilingues acquièrent leurs langues, ou du moins l'une d'entre elles, de façon radicalement différente de l'acquisition monolingue. Une telle contradiction mérite explication. Je passe donc en revue les travaux analysant le développement langagier d'enfants qui, à un moment donné de leur acquisition, montrent un déséquilibre dans la maîtrise de chaque langue. J'essaie d'abord de définir la notion de "langue faible" pour ensuite demander si le développement de la langue faible est simplement lente, ou si l'itinéraire constaté pour la langue faible est différent de celui observé pour l'acquisition monolingue de cette même langue. Je défends en conclusion le point de vue que l'analyse du développement de la langue faible donne des renseignements précieux quant au rôle joué en général par l'utilisation effective de la langue dans son développement.