

THE EARLY BIRD CATCHES THE WORM: BILINGUAL PRESCHOOL EDUCATION IN GERMANY – A PSYCHOLINGUISTIC PERSPECTIVE

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Bilingualism or multilingualism is not the aberration supposed by those speaking a 'big language' but rather the default situation for the majority of speech communities in the world today. Based on this perspective, the psycholinguistic foundations of second language acquisition are explored in the first part of this paper and it is argued that bilingual education in a monolingual society should start as early as preschool. It is suggested that acquiring a second language does not represent any additional burden for young children but that it rather fosters cognitive development and flexibility. In the second part of the paper I take a look at different preschool programmes in Germany with a special focus on enrichment programmes. Two German bilingual preschools (L1 German/L2 English and L1 German/L2 French) are introduced and their structures discussed in some detail. It is argued that even in a situation where the use of the L2 is limited to preschool contexts, the children develop considerable linguistic skills in the new language. These skills are evaluated and discussed with regard to bilingual education in primary school. In conclusion, it is suggested that a second language can be mastered in both comprehension and production by the time it is traditionally introduced, i.e. at age 10, so that a further language (L3) can be introduced in advance.

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WHY BILINGUAL PRESCHOOLS?

This paper is not only concerned with early bilingual education, it is also a general plea for bilingual preschools. With the Canadian models in mind, a number of secondary schools ("Gymnasien") in the north of Germany have been offering English and French late partial immersion programmes² since the early nineties. The idea is to teach traditional school subjects such as Geography or History through the medium of the second language³, thus taking away the focus from English or French as a subject and providing more naturalistic contexts for second language learning (Burmeister, 1998). Given the overwhelming success of these immersion programmes in Germany, it was only a matter of time before the question of starting a bilingual programme earlier, namely in preschool was addressed (Knauer, 1991; Hunfeld, 1992). After adapting the immersion idea to the preschool context, the two first preschools to be evaluated by a group of linguists from Kiel University started their bilingual programmes in 1995 and 1997 respectively.

Many people still entertain entrenched beliefs with regard to bilingual programmes before the age of six. These people still have to be convinced that learning two languages at a very young age is not harmful. In a modest attempt to do so, I will discuss a number of both psycho- and sociolinguistic issues related to bilingualism in order to show that such diverse factors as cognitive development, cultural identity, monolingualism, etc. have to be kept separate and do not bear on the children's natural endowment to learn more than one language. In the second part, I present a day in the life of bilingual preschools in more detail to see various theoretical considerations in practice. Before going any further now, it is necessary to specify what we actually mean by the terms 'bilingualism' and 'bilingual education'.

BILINGUALISM FROM A PSYCHOLINGUISTIC PERSPECTIVE

Defining 'bilingualism'

The term 'bilingualism' is used as a collective label for a wide range of phenomena. Some of the controversies resulting from dealing with more than one language could probably be resolved prior to any heated discussion by clarifying the meaning actually attributed to 'bilingualism' in individual cases. From a certain point of view, "everyone is bilingual", Edwards (1994: 55) states, assuming "that there is no one in the world (no adult, anyway) who does not know at least a few words in languages other than the maternal variety". This may not be the prototypical notion of 'bilingualism'; however, Bloomfield's (1933) definition as the addition of a perfectly learned

ROHDE, A.: THE EARLY BIRD...

foreign language to one's own is hardly more illuminating. Who can claim to have 'perfect' command of his/her native language to start with? It is obvious that a more differentiated view is called for. 'Bilingualism' should be viewed in terms of a continuum in which the two positions just mentioned represent the extreme ends. Accordingly, bilingualism is a matter of 'degree'. But this is of course not the end of the discussion as there are the basic language skills such as listening, speaking, reading and writing. Speaking alone, for example, includes "divergent levels of expression in vocabulary, grammar and accent" (Edwards, 1994: 56). Thus, bilingualism should best be viewed as a multidimensional phenomenon, and we have not even mentioned the fact that individuals as well as countries or states may be bilingual, that bilingualism may be restricted to specific cultural contexts, that not every linguistic variety counts as a distinct language, etc.

The degree of 'bilingualism' as later used in the main body of this paper is probably best placed in the middle of the aforementioned continuum. The children in the L1 German/L2 English bilingual preschool documented are far from being perfect or native-like in their overall command of English: their comprehension is superior to their production, they make errors on every linguistic level (phonology, morpho-syntax, lexicon), but they can of course do more than simply reproduce formulaic expressions such as "bye bye" or "good morning". Given the fact that they are between 3 and 7 years old, they are not yet able to read or write in either German or English, but they have acquired a functional communicative competence with regard to the domains predominantly covered by the preschool context.

Cognitive development and intelligence

Up to the late 1950's, even scholars believed bilingualism to have negative effects on children's cognitive development and intelligence. The Welsh headteacher D. J. Saer, for example, tested 1400 children aged 7 to 14 and found a ten point difference in IQ in favour of the monolinguals tested. His conclusion was that bilinguals were mentally confused and disadvantaged in thinking in comparison to monolinguals. The problem, however, was that this research was not controlled in terms of variables such as socio-economic background. Saer did not compare like with like. The bilinguals studied mostly belonged to lower social classes and so what was supposed to be an effect of bilingualism was in fact a social issue (Edwards, 1994: 66-71; Baker & Jones 1998: 62f.).

Peal & Lambert's (1962) study conducted with bilingual children in Canada marked a turning point in the assessment of bilingualism. The two researchers were the first to find

ROHDE, A.: THE EARLY BIRD... higher IQ's in bilinguals than monolinguals on the basis of a wide range of variables. This superiority resulted in more abstract thinking, concept formation, and more mental flexibility. This particular piece of research proved to be highly influential for all future studies. Firstly, it revised the methodological weaknesses of earlier studies and, secondly, the findings have influenced bilingual policies in different educational contexts. In Canada, Peal & Lambert's study can be seen as the basis for the diversity of immersion education in general. Canadian immersion, in turn, is the widely quoted reference point for bilingual initiatives in Germany (Wode, 1995).⁴

Sociolinguistic and psycholinguistic misconceptions

Prejudices as to any negative effects of bilingualism or multilingualism come from different sources. One seems to be that, in general, Europeans or North Americans have a strong concept of a political state associated with one national language. As especially English and Spanish are supposedly 'big languages' being spoken by 350 and 250 million mother-tongue speakers respectively, most of these people do not feel the need to acquire a second language alongside their 'world language'. States with a diglossic language situation, however, show that bilingualism or trilingualism on both the individual and the state level do not cause any psycholinguistic problems for the speakers involved. On the contrary, most of the inhabitants of small states such as Switzerland or Luxemburg speak three languages fluently as trilingualism is supported by the educational system.

Another source for prejudices is the fact that in bilingualism or multilingualism, often minority languages are involved that are not deemed prestigious. This lack of prestige is then often attributed to the speakers themselves. Accordingly, multilingual situations, e.g. in most African states, may be falsely identified with the political and socio-economic problems of these states. These cases show very often that neither bilingualism nor multilingualism are viewed in their own right but are rather mixed with negative factors that are entirely unrelated. Similarly, if a child in a bilingual school programme shows problems with regard to subject matter, the parents' scapegoat is often the second language; other factors that could lead to the child's performance are simply ignored.

The most important factor fostering negative attitudes, especially for early bilingualism, is many people's misconception of how language is manifested in the human brain. It is still widely believed that the child's brain disposes of a physically limited space that is gradually filled with knowledge like a tub is filled with water. As the child has to gather an in-

ROHDE, A.: THE EARLY BIRD... numerable amount of information anyway, there simply is no space left for a second language. According to this view, the child's brain is like a bookshelf where two dictionaries take up twice as much space as one. In the following two sections, I shall summarize some research that clearly proves this view to be wrong, especially for very young children.

The mental representation of two languages

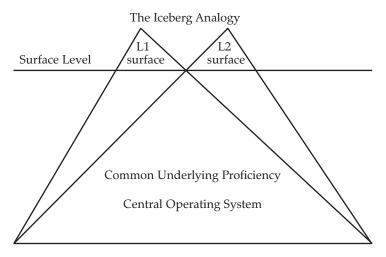
Everybody is genetically prewired to acquire more than one language. Humans have the capacity to learn (human) language. This capacity is not limited to one individual language, in fact, in view of the world population it is rather the exception to speak only one language. In other words, having some knowledge of more than one language is natural in the literal sense of the term.⁶

What do we know about the representation of two language systems? The view that two languages take up twice as much room as one language is well illustrated by the Separate Underlying Proficiency⁷ (SUP) model (Cummins, 1984; Cummins & Swain, 1986). According to this model bilingualism is conceived of as existing in two balloons inside the head. Each balloon can necessarily only be half the size of a monolingual's balloon. Accordingly, a bilingual possesses two half-filled language spaces that cannot possibly store the necessary vocabulary, grammatical structures, etc. One logical consequence of this thinking is that, given the growth of one balloon (the dominant language), the second balloon decreases. In addition, this view fosters the idea that both balloons exist independently of each other.8 This idea is absurd for several reasons: it would imply that there is no transfer between languages, a point easily refuted by the existence of code-switching and transfer phenomena on the grammatical level. More importantly, it would mean that what you learn in one language has to be relearnt in the other. However absurd this may appear, we know from experience that this is the fear of many parents when it comes to immersion starting in primary school. Some parents have uttered their fear that their children will not be able to carry out e.g. basic arithmetical operations in German once they have learnt to carry them out in English.

There is no evidence to support the SUP model. The more plausible architecture is what is referred to as the Common Underlying Proficiency (CUP) model. According to this model both languages are directly linked to an abstract common underlying system. In other words, this is a non-linguistic processing system which can be accessed by the different languages that an individual is able to speak. This model is

ROHDE, A.: THE EARLY BIRD...

⇒ FIGURE 1 The 'dual-iceberg' representation of bilingual proficiency (Cummins & Swain, 1986: 83) sometimes represented by means of a dual iceberg (see below). On the surface, the two languages are kept separate. Each is spoken in a specific situation. Below this surface, both languages have separate processing systems to cope with language-specific phenomena (sounds, grammatical structures, lexical fields, etc.). However, there is a large area below the surface which represents a central, common area that is equally fed through both (or all different) languages involved.



The model has a number of important implications:

- There is one integrated source of thought. Irrespective of the language used, the linguistic skills employed come from the same central system.
- The number of languages that can be learnt is not limited by the processing system.
- Information-processing skills and educational attainment may be developed through one, two, or more languages.
 The languages function as channels that feed the central processing system.
- If a second language is used, it has to be well developed to function as a channel for the central system.
- Linguistic activities in both or more languages all contribute to the cognitive system.
- When both languages are not functioning fully due to a negative attitude to learning through the second language, or pressure to replace the home language with the second language, cognitive functioning and academic performance may be negatively affected (Baker & Jones: 82f.).

Evidence for these implications come from a wide range of studies (overview in Cummins & Swain, 1986). As yet there is no sufficient neurological evidence for a difference of language processing in bilinguals.⁹

ROHDE, A.: THE EARLY BIRD... The aspect which is of primary importance for preschool programmes is the fourth implication listed above. In order to really benefit from bilingualism, second language skills have to be sufficiently developed. As we will see, this is one of the key issues at one German preschool that involves English as a second language. In such a setup the second language is not spoken or heard outside the preschool context except in the media. It can be anticipated that balanced bilingualism, i.e. the equally full development of both languages cannot be achieved in a preschool setup of the type discussed in the second part of this paper. I shall show below, however, that this does not make the preschool programmes obsolete.

Some advantages of bilingualism

Research has shown that bilinguals possibly have advantages in the general cognitive domain, because they may have access to the general processing system via two channels. Thus, they may be cognitively more flexible than monolinguals due to a looser link between concepts and linguistic labels: very young monolingual children are not aware of the arbitrariness of linguistic labels. Words for objects or actions in their mother tongue are authoritative for them. In contrast, bilinguals have two or more labels for one object, one idea or one concept. Thus the link between linguistic form and concept may be less fixed (Oren, 1981). The awareness of this looser link that is created in the bilingual can be illustrated by an utterance from our non-preschool database: 10 a 6-year-old German boy, Lars, who acquired English under naturalistic conditions in the USA, was amused by the American children asking what certain English names were in German: "They don't know that names are always the same" (Wode, 1993: 168).11

A further aspect is the bilingual's awareness or sensitivity for linguistic pragmatics. In another instance taken from our data, Lars complains that he doesn't know what to do in order to make American children play with him. His brother, Heiko, who is his senior by two years, advises him to say "come on". Heiko is asked for the meaning of "come on" by his dad. He replies: "I don't exactly know but that's what you say".

A number of studies suggest that bilinguals are also superior in creative or divergent thinking, a concept defined in terms of "fluency, flexibility, originality and elaboration" by Torrance (1974). He developed a series of straightforward questions, such as "How many interesting and unusual uses can you think of for a cardboard box?" to assess a speaker's divergent thinking. Numerous studies have shown that bilinguals tend to come up with a larger number of answers that

ROHDE, A.: THE EARLY BIRD... are both more imaginative and original than the monolingual's choices (Genesee, 1987; Bialystok, 1991; Baker, 1996).

More evidence of the bilinguals' cognitive advantages comes from a bilingual project in Alsace in the north-east of France. The bilingual German-French project is regularly reviewed and evaluated by the French education authorities. The evaluation focusses on the L1 and L2 development and, in addition, the development in Maths. The reports suggest that not only do the bilingual children perform as well as the monolinguals, but in some cases the bilinguals show even better performance in mathematics. Even if these results have to be considered with some caution until more comprehensive results are available, the most important issue seems to me that any fear for a bilingual's inferior performance in subject matter is unfounded (Petit & Rosenblatt, 1994, 1995, 1996).

Why the early bird catches the worm: bilingualism and age

In this section, I shall take a closer look at the age factor. A large number of studies suggest that older learners, i.e. youths and adults, progress more quickly and achieve more in less time than very young learners (Wode, 1993; Ellis, 1994). Why, then, should learners be confronted with a second language as early as preschool? The answer is that they may finally achieve a better mastery of the second language. In addition, what is learnt at a younger age is more stable:

Concerning the hypothesis that those who begin learning a second language in childhood in the long run generally achieve higher levels of proficiency than those who begin in later life, one can say that there is some good supportive evidence and that there is no actual counter evidence (Singleton, 1989: 137).

Thus, in terms of the title of this paper, this means that the early bird catches the worm and eats it, whereas later birds catch bigger worms but not as many, and on top of that they may have to return some of them as the worms are too big to be swallowed. In the following we will explore why this may be so.

Penfield & Roberts (1959) suggested that the optimum period for language acquisition was the first ten years. They argued that this was the time span in which the brain still retained its plasticity, when lateralization of the abstract language system (including reading and writing skills) to the left hemisphere was about to be complete. Lenneberg (1967) argued for a critical period for language acquisition prior to puberty. He reported on children suffering from brain injuries in the left hemisphere who did not show speech disorders to the same extent as adults did. His conclusion was that prior to puberty and lateralization both hemispheres are used for lan-

ROHDE, A.: THE EARLY BIRD... guage processing. In view of second language acquisition this would mean that after puberty the second language can never be native-like. This, however, has been shown to be too simplistic. Elsewhere it has been shown that lateralization is complete much earlier, probably between the ages of 5 and 6 (Krashen, 1973).

The issue remains highly controversial and before we discuss the age factor in more detail, a note of caution is appropriate. Singleton's statement indicates that it is difficult to make any more general statements at present. The problem is that the age factor is such a complex field involving such a large number of variables that individual studies are only able to cover single aspects of it. We have to be aware of the fact that language proficiency consists of several components that can only be assessed individually. These components are roughly represented by pronunciation, grammatical competence and lexical knowledge.

As for pronunciation, the majority of studies available suggests that learners who start their L2 acquisition as children are more likely to achieve a native-like accent than those who start as adolescents or adults. Henry Kissinger, who, despite living in the U.S. since the age of 15, still has an obvious German accent. Another case is the Austrian-born actress Romy Schneider, who immigrated to France as a young adult. Her German accent was only weak – but she retained it. This does not mean, however, that no adult can achieve native-like pronunciation. It may be a rare phenomenon, but there are reports on cases where the L2 pronunciation of adults was not distinguishable from that of L1 speakers (for overviews see Wode, 1993: 302ff.; Ellis, 1994: 488ff.).

A number of experimental studies on phonological development shows that infants within the first 7 months of age are able to distinguish any two consonant sounds that are not distinctive in their L1 whereas older infants, children and adults fail to notice the differences under identical conditions. It is suggested that the universal ability to distinguish speech sounds is subject to a major change at the age of 7-8 months. This does not mean that the ability is lost, but it means that the distinction of sounds not part of the native language may become more difficult in some cases and requires training (overview in Bohn, 1996). The empirical work carried out by Flege and his collaborators indicate that the ability to distinguish foreign language sounds gradually decreases from the age of 7 so that adults generally are not able to avoid an accent (Flege, 1995).

Grammatical competence is usually tested with the help of grammaticality judgement tasks. L2 learners are given lists of grammatical and ungrammatical utterances. In many cases

ROHDE, A.: THE EARLY BIRD... L1 and L2 speakers may be indistinguishable with regard to their grammatical constructions. Grammaticality judgement, on the other hand, reveals differences between the two types of speakers. The studies available suggest that there also is a critical age period for grammatical competence. This critical age is set between about 8 and 15 years of age, the differences probably resulting from the tests' degree of difficulty. Among the studies, there is agreement on one aspect, though: children show little, adults a large amount of variability (overview in Bohn, 1996).

For syntactic knowledge, the (relative) lack of variability in children is accounted for by the assumption of U(niversal) G(rammar) principles. There is a large body of research where it is claimed that children are endowed with basic syntactic knowledge from birth that limits them in their forming of hypotheses about the grammar of their native language. This knowledge is referred to as UG principles. Access to UG enables the child to rule out an infinite number of potential grammatical structures and acquire his/her native language at a mind-boggling speed (Haegeman, 1994). Upon studying L2 grammatical structures, some researchers assume that second language learners have no or only limited access to UG principles. L2 learners may apply 'general problem solving abilities' when facing the task of second language learning (e.g. White, 1989; Felix, 1996).

The lexicon appears to be the only language component underlying no critical period. The ability to acquire new words remains stable during a speaker's lifetime. Even in their native language, adults have to learn new words all the time due to technological innovations or political and economic developments. However, the number of new words that we are faced with in our L1 is drastically different from the amount of words a second language learner is confronted with. Mastering an L2 lexicon may therefore be a quantitative problem in the sense that large vocabularies are difficult to store and memorize. Recent research also suggests that there are qualitative differences among adult learners. In his extensive study on university students and their second language mental lexicon, Singleton (1999) concludes as follows:

[...] whatever may be the facts about lexico-semantic organization, the implication is that different individuals make different use of the organizational resources on offer. Thus, for example, while connectivity between the L1 and the L2 lexicon seems to be universally present, individuals vary in the extent to which they exploit such connectivity in solving their L2 lexical problems (Singleton, 1999: 265).

For children, L1 lexical acquisition is an inherent part of their exploration of the world. Getting to know an object and

ROHDE, A.: THE EARLY BIRD... labelling it are two phenomena that are inseparable for children. Once they realize that every object can be labelled, the number of words added to the child's lexicon per week increases dramatically, a process frequently referred to as the 'word spurt' (Goldfield & Reznick, 1990; Clark, 1993). Labels induce the child to look for objects and categories, and vice versa, objects and categories induce the child to acquire words (Markman, 1989; Waxman & Markow, 1995).¹²

For L1 bilinguals, those children who acquire two languages simultaneously from the start, lexical acquisition proceeds in two languages without any problem. Children easily acquire two labels for an object. Studies suggesting that bilinguals start out with a single lexical system which has only one entry from one language or the other for each meaning acquired have been proved to be false. Bilingual children separate the lexicons of the two languages they are learning from very early on and they usually acquire two terms for one concept (e.g. 'fork' and 'fourchette', 'knife' and 'couteau'). In other words, there is actually no evidence of one mixed lexical system that, for reasons of economy, has the English word 'fork' and not the French term 'fourchette', and French 'couteau' but not also the English word 'knife' (Aitchison, 1994; Quay, 1995; Köppe, 1997).¹³

For older L2 learners, the process of labelling and exploring the world is asymmetric. They have to 'revisit' their concepts for objects, actions and relationships in order to acquire new words, many of which do not even fit the concepts they have built up for their first language. Naturalistic non-preschool data from the Kiel Project on Language Acquisition suggest that below the age of 10 L2 lexical acquisition (as L2 acquisition in general) proceeds in a native-like way with regard to the speed and the sequence in which lexical structures are acquired. As for the speed, the four German learners (aged 4 to 9) in the project all experience a word spurt in their acquisition of English: the rate of new lexical items increases up to the third month of exposure before slowly decreasing again (Wode et al., 1992). Similar to early L1 acquisition, the bulk of object words belongs to the basic level of categorization. This is the level that cuts up reality in maximally informative categories as it is the most general level where we can visualize individual exemplars: 'dog', 'cat', 'chair', 'table' are basic level words rather than 'pet' or 'furniture' (Witt, 1990).

The issues raised for lexical acquisition have important repercussions for preschool education. Children who start their L2 acquisition at the age of about 3-4 are still in the midst of their L1 acquisition, which means that for many objects, actions, relationships, and abstract entities the child may actu-

ROHDE, A.: THE EARLY BIRD... ally resemble the L1 bilingual in that (s)he picks up the respective labels for both languages simultaneously. This may facilitate the process of lexical acquisition considerably. In addition, everyday routines like getting dressed, eating, going outside, playing, etc. are so strongly contextualized in the preschool situation that the children pick up lexical items and formulas associated with these routines quite easily. One observation from our Kiel data illustrates the point that L2 labels may precede L1 lexis: as the four children mentioned above developed a fishing frenzy in California, they acquired in a very short period of time various labels for different fish and fishing accessories – some of which they did not already have in their native German vocabulary.

In conclusion, we have seen that the question of the age factor in language acquisition is not easily answered as there are numerous factors involved. Adolescents or adults are cognitively more mature than young children and can possibly profit from their problem solving abilities in mastering a second language. They may get better scores in some language tests than younger learners. We should keep in mind, however, that this success is relative and usually restricted to a certain period of learning. In the long run, the age factor in second language acquisition suggests numerous advantages for young children in all linguistic areas. Amongst other things, this is documented by the learners' variability. In general, children show relatively little variability in their overall L2 achievement whereas adults show a large amount of variability, suggesting that older learners have to rely on a wider range of problem solving abilities that are no longer language specific.

Other determinants for L2 achievement: type of exposure, motivation, quantity

Alongside age, there are a number of other factors determining the attainable level of L2 acquisition which we have to be aware of in order to avoid false expectations. The first aspect is the type of exposure. Language acquisition can be naturalistic, i.e. it proceeds without any formal tuition, or it is exclusively based on formal instruction. Singleton (1989) suggests that under the constraints of formal instruction, the level of achievement is rarely native-like. Formal instruction may emulate naturalistic communicative contexts in some ways, but usually there is still a strong focus on formal linguistic aspects. Under naturalistic conditions, however, the situation is different for young children, because all areas of everyday life are usually covered by the second language and grammatical features do not have to be explicitly taught.

A second factor closely related to the type of acquisition is the amount of L2 exposure. This is in fact an extremely

ROHDE, A.: THE EARLY BIRD... important aspect as research has shown that L2 development may only proceed improperly if there is not sufficient exposure – even under naturalistic conditions (Rohde & Tiefenthal, 1999). ¹⁵ It is as yet impossible to state what the 'critical mass' of exposure has to be in order to warrant proper second language development.

Last but not least, there is the factor of motivation playing a role in second language acquisition. This is a complex term encompassing a variety of aspects that all add up to what is generally referred to as motivation. There is no research in the area of naturalistic second language acquisition and motivation but we know from our experience with preschool children that the children's attitudes towards the new language may strongly influence their motivation and therefore their L2 achievement (Tiefenthal, 1999; Westphal, 1999). As motivation plays no role in early L1 acquisition – children cannot keep from acquiring the ambient language – this is a major point for children as young as 3 years.

What is very important with regard to preschool children is that the children's attitudes towards the L2 are always influenced or even determined by their parents' attitudes. Innumerable conversations with parents suggest that their attitudes towards bilingual preschool programmes are positive. They may not be obsessed by the misconceptions discussed earlier, but still there is a growing fear that their children may face problems in school if all the instruction is continued in the second language. Discussions with involved parents often reveal that their point of reference is their own school experience and their memory of painful second language instruction. Given these bad memories, they cannot possibly imagine that their children could ever master Biology or History in the second language. Children, on the other hand, are very sensitive to their parents' fears and may even develop negative connotations with the second language and the people associated with it. Thus, a vital point in connection with bilingual preschool programmes is to communicate with the parents in order to foster a more relaxed attitude towards language learning.

Table 1 summarizes some of the factors determining the degree of L2 achievement in a schematic presentation. The higher hierarchy aspects may exert an influence on the lower ones.

⇒ TABLE 1
A hierarchy
of factors
determining
L2 achievement

acquisitional type: formal instruction naturalistic acquisition
amount of exposure attitude/motivation
mastery of L2 features: pronunciation – grammatical competence – lexis

ROHDE, A.: THE EARLY BIRD...

It has to be stressed again that, from a psycholinguistic view, a second or even a third language does not represent a burden for young children. Whenever possible detrimental effects of bilingualism are stated, several factors are usually mixed and not sufficiently differentiated. One important point for preschools is e.g. the choice of language, as some languages - especially minority languages - may be associated with the political problems of the minorities speaking them. In Wales, for example, there have been fierce battles over the acceptance of Welsh as an official language. In the same vein, negative attitudes towards particular languages may also influence the speakers using that language. Young children may be well aware of the low value attributed to their language and as language also means identity, these children may suffer from low self-esteem. This is a problem that should not be played down. However, it should be borne in mind that bilingualism as such does not cause the conflict.

BILINGUAL PRESCHOOLS

Aims and types of bilingual education¹⁶

In this section I shall look at different models of bilingual education programmes and their aims.¹⁷ The models were primarily set up for school education, hence the references to school subjects in the following. The models discussed in the following can be and have been adapted to preschools although there is as yet no comprehensive documentation or academic evaluation available for most of the bilingual preschools in Europe. After examining the general aims, three models of bilingual education will be discussed and their applicability to preschool contexts explored.

Bilingual education in general pursues a number of goals not all of which are necessarily formulated in terms of proficiency in two languages. The latter may be most programmes' principal aim, yet there are more subtle ones that can be achieved through instruction involving two or more languages. If, for example, a second language is used to teach students subjects such as Biology, Maths or Geography at school (immersion), "bilingual education is defined in terms of the means through which particular educational goals are achieved" (Cummins, 1993; Cummins, 1998: 1). In this sense, proficiency in two languages is not the primary goal, albeit a welcome by-product.

Transitional programmes

More specifically, bilingual instruction may serve as a temporary measure to bridge the problems that minority group chil-

ROHDE, A.: THE EARLY BIRD... dren face when confronted with immersion in the majority language. Here, the temporary use of two languages is exclusively geared towards the mastery of subject matter. Wode (1995: 50) states that these transitional programmes are not in line with the aims of bilingual education. However, it has to be borne in mind that the use of two languages in this particular case helps the children in question keep up with their majority language peers even if bilingualism is not supported.

Language maintenance programmes

Another type is represented by language maintenance programmes, which are mostly designed to revive or maintain languages that are no longer spoken or in danger of disappearing and thus to preserve bilingualism. In most of these cases, minority languages are involved. Hebrew, for example, has been kept up as a second language in many countries outside Israel even at times when there was no Jewish state. As this language has always been associated with considerable religious significance, every attempt has been made to pass it on to the following generations. This has been achieved through private schools and evening classes (Wode, 1995: 49).

Enrichment programmes

The most common and probably least controversial type of bilingual education – for reasons to be explained later – is the enrichment programme. The term 'enrichment' refers to the fact that languages are taught in regions or even neighbourhoods where they are not usually spoken. The Canadian French immersion programmes, the German bilingual programmes or conventional foreign language teaching at school can be classified as such enrichment programmes. In these programmes children develop what is generally referred to as an additive form of bilingualism: A second language is added to the children's repertoire of skills at no cost to their L1 development (Cummins, 1998: 4).

BILINGUAL PRESCHOOLS – SOME EXAMPLES

In this section I briefly discuss a number of preschool programmes. Two of the three types of programme sketched in the previous section have been adapted to preschool contexts – transitional programmes at preschool level do not exist as such since their primary goal is to make subject matter accessible to the children and thus secure success at school. The preschools discussed in the following, however, can be classified as either maintenance or enrichment programmes. This differentiation is important as the distinct roles of and attitudes towards the languages involved may determine the second

language proficiency the children may achieve. Special emphasis will be on two preschool enrichment programmes in the north of Germany which will be discussed in some detail.

Language maintenance preschool programmes

Frisian

The first example is not taken from a German context but from the neighbouring Netherlands. Friesland is a Dutch province of about 600,000 inhabitants. Frisian, one of the minority languages of Europe, is the regional variety spoken in that province. In rural areas Frisian is still widely used although Dutch is the dominant language. About forty years ago, over 90% of the school children spoke Frisian at home, today the picture is different with Frisian speakers unevenly distributed across the province. There are bilingual Dutch-Frisian preschools in rural areas but these have not organized to form networks or foundations to develop a specific bilingual approach tailored to the preschools' needs. The situation is different in urban areas in Friesland where Frisian is not the community language but the vernacular of individual families. In 1989 Frisian-speaking preschools were organized under the auspices of a specific foundation, the 'Stifting Pjutteboartersplak' (Engl. 'foundation for children's playgroups'). At present, the foundation runs 12 groups including 200 children in four villages and three towns in different parts of the province Friesland. The foundation is the only preschool organization that operates Frisian-speaking institutions in areas where Dutch is the majority language. A modest 2.5% of all children attending preschools in Friesland is catered for at present but there is increasing enthusiasm for Frisian-speaking preschools in general (van der Goot, 1998).

Frisian is also a minority language in the north of Germany, in North Friesland. In Lindholm, near Niebuell close to the Danish border, one preschool offered activities in Frisian for a test period lasting from 1992-1996. The aim was to make the children familiar with this minority language in order to continue tuition in Frisian in primary school. For that purpose, the local primary school teacher for Frisian came to the preschool three times a week for a total of about 7 hours. The activities took place in the same room as other German speaking activities. Despite the fact that Frisian is mainly spoken by older people in the region – even most of the children's parents have only limited knowledge of that language – the project's success was so encouraging that in the future Frisian will be introduced with the beginning of primary school. An in-depth documentation of this small scale project, however, is not available (Wode, 1997).

ROHDE, A.: THE EARLY BIRD...

Low German

Low German is still spoken as a regional dialect in numerous varieties in the north of Germany, the borderline between North and South being the so-called 'Benrath line' near Düsseldorf. In 1984, 53% of the over 50-year-olds in the north of Germany stated that Low German was their mother tongue. In East Friesland (a region near the Dutch border) the percentage for this age group is as high as 70% and even 43.5% of the children hear Low German regularly. With regard to regional varieties in general, there are a lot more Low German speakers in the countryside than in the towns.

In 1997, the experiment to introduce Low German in East Frisian preschools was started, encompassing 12 institutions (about 5% of all preschools in that area). The project was initiated by the 'Ostfriesische Landschaft' (East Frisian landscape), a foundation that had also supervised a Low German pilot project for school education from 1991 to 1995. The foundation provides the participating preschools with materials such as songbooks, tapes and didactic instruction and also organizes information events. Two methods of introducing Low German are applied varying from group to group in one and the same preschool according to the available resources. The first method is person-related: each group is guided by two preschool teachers, one of whom speaks Low German to the children, the other High German (the principle of 'one language one person', see Döpke, 1992). The second method is time-related: In each preschool group both languages are spoken half of the time (Nath, 1998; Kettwig & Nath, 1998). The evaluation of the project's first year suggests that a Low German share below 50% cannot be regarded as bilingual education as the children only develop a rudimentary proficiency. Even a share of 50% does not make the children active speakers of Low German after one year although the language is also heard outside the preschool. In addition, the report reveals that problem areas are a lack of Low-German-speaking staff and methodological inconsistencies with regard to the one--person-one-language principle.

Sorbian

Sorbian is a Slavonic language still spoken by a few ten thousand people in Lusatia ("Lausitz"), a region encompassing parts of Brandenburg and Saxonia in the east of Germany. According to the UNESCO Red Book on Endangered Languages the two varieties, Lower and Upper Sorbian, are endangered languages. Reports on the number of actual speakers are contradictory; probably there are no more than 20,000 speakers (Salminen, 1999). At present there are 5,500 children learning

ROHDE, A.: THE EARLY BIRD... Sorbian in school and bilingual German/Sorbian education is also offered for preschools (Barth, 1998). However, there is no published report or any other data available.

Danish

An intermediate type between maintenance and enrichment programmes is represented by Danish schools and preschools in the north of Germany near the Danish border. ¹⁹ In most of the cases the children are either monolingual German or German is their dominant language. In the Danish preschools most of the activities are conducted in Danish so that the German children become fluent speakers. After preschool they have the possibility of continuing their bilingual education in a number of Danish schools: for secondary education there is one Grammar School (German "Gymnasium") in Flensburg (Byram, 1986).

When bilingual education is discussed in Schleswig-Holstein, the northernmost German state, the large body of Canadian research is quoted all too eagerly and the Danish educational institutions in the north of Germany are more often than not overlooked although they are very successful in terms of the children's balanced bilingualism. There may be three main reasons for this success: firstly, the Danish minority in Schleswig-Holstein has been established for decades and is represented by a political party (the SSW) that has a special status in Schleswig-Holstein. As mentioned above, there is an established network of recognized preschools and schools. Secondly, Danish has a certain prestige as it is a national language spoken by five million people. Thirdly, and perhaps most importantly, parents have a positive and relaxed attitude towards bilingualism that is transferred to their children. As mentioned earlier, this is one of the vital factors in bilingual education in an otherwise monolingual environment.

Enrichment programmes

These are bilingual programmes that involve languages not spoken in the community in which they are offered. In Germany, these programmes usually offer so-called world languages such as English, Spanish and French. The main problems that enrichment programmes in preschools have to cope with is to employ and finance native speakers of the languages offered and to apply a consistent methodology of language use. Still the number of these enrichment programmes is increasing in Germany. In most of the cases, the programmes are established by a few individuals or initiatives by parents. However, as there is no national or local network of bilingual preschools, these institutions are often not academically docu-

ROHDE, A.: THE EARLY BIRD... mented or evaluated and as such some programmes simply remain unnoticed. In other cases, financial problems put an untimely end to bilingual projects so that they do not survive their test phase.²⁰ In the following, two preschools offering French and English respectively are discussed in some detail.

French in Rostock

In 1995, the preschool "Rappelkiste" (Engl. 'chatterbox') in Rostock started an enrichment programme involving French. This setup is part of the more far-reaching goal to establish French in preschool in order to continue it in primary school. There is an agreement between the different institutions involved (the Land Mecklenburg-Vorpommern, the city of Rostock, the Institut Français, the initiative 'bilingual preschool' that French is also offered at the primary school level.²¹ The project has been accompanied and evaluated by research groups from Rostock and Kiel University since its onset in order to document the children's achievements and to assess the language proficiency that can be realistically expected after attending the preschool.

The "Rappelkiste" is a relatively big preschool, encompassing 10 groups of up to 20 children each. The programme started with one group of 18 children, aged between 3 and 6, in October 1995. The children were from a wide range of social backgrounds, there was no dominance of any particular social layer. The children's parents did not explicitly vote for French as the medium of communication in the preschool, questionnaires revealed that it was rather foreign language proficiency in general which was favoured.

The person-related method was used from the beginning, i.e., the group was conducted by two teachers, one of whom spoke French, the other German. The Institut Français in Rostock supported the project, looking for appropriate native speakers and organizing their training. In the first year, the French group was guided by Damien, a native speaker of French with good knowledge of German. He actually was a primary school teacher with no specific preschool training: this, however, did not pose any problems. The German teacher, Carola, did at first not speak any French but took French courses at the Institut Français. Both teachers had the same share of duties and tasks in the bilingual group. This is a very important feature of the programme since favourite games and activities should not be associated with only one teacher.

In September 1996, a second bilingual group with mainly 3- and 4-year-olds was established and two female French teachers were employed. The bilingual groups now had one hour each morning for singing and playing activities in French

ROHDE, A.: THE EARLY BIRD... only, with the remaining time being organized in the way sketched above. Thus, on average the L2 was spoken at least 50% of the time.

The Kiel research group concentrated on the first bilingual group and started the group's evaluation after 1 1/2 years of L2 contact when the children were between 4;5 (years; months) and 6;10. 15 children were available for evaluation, 7 girls and 8 boys. The research group had started to see the children on a regular basis after 6 months of bilingual education to make tape recordings and obtain a more detailed impression of the children's development of French vocabulary and phonological structures. In addition, one main concern was to develop test materials tailored to the specific linguistic situation as there are no standardized procedures for bilingual programmes of this type.

In general, the results of the first evaluation, concentrating on the development of the lexicon, suggest that there is a discrepancy between receptive and productive skills. Whereas the children understand most of what is said in French after 1 1/2 years, their own production lags behind and they only produce one- or two-word utterances, often mixed with German. The lexical areas covered by French vocabulary are those concerning every day life in preschool: activities such as eating, washing, playing, going outside, etc. Thus, new lexical items can be sufficiently contextualized and are usually picked up by the children quite easily. Picture naming tests also revealed some substantial vocabulary knowledge in the fields of animals, body parts, food and drink (Westphal, 1998). These results are in line with reports on a large-scale programme involving German in Alsace, France (Petit & Rosenblatt, 1994, 1995, 1996).

English in Altenholz

The preschool in Altenholz near Kiel has been academically accompanied and evaluated by a research group from Kiel University from the onset of bilingual education. For this project there are detailed data for all the bilingual groups involved and with regard to organizational, methodological and linguistic issues, a number of important questions not yet mentioned will be discussed in this section.

The preschool was opened in 1995 and is supported by the Workers' Welfare Association Altenholz (AWO) and thus run by the state. It is located in the village of Altenholz on the outskirts of Kiel. The children are from middle-class families with no apparent social problems, although the number of children from divorced parents is relatively high. There are now five groups of about 20 children each; one of these also

ROHDE, A.: THE EARLY BIRD... contains a number of handicapped children and in all the groups there are boys and girls.

The first bilingual English/German group started informal activities in September 1996. Suzie, a young American attended the preschool two mornings a week and engaged the children in English-speaking activities. Some of the very young children became upset and cried when they were first addressed in English, so Suzie also spoke German in order to make herself understood. After a short time, the children got used to the situation and the English-speaking activities became very popular.

In March 1997, the first bilingual group was established. The method used was the 'one-person-one-language'-principle. Tracy, another American, guided this group alongside Jessica, a German preschool teacher. Tracy spoke exclusively English and only in cases of emergency did she communicate in German to the children – although she only whispered in order to make clear that German was a secret language exclusively used in very specific cases. Tracy left in April 1998 and was replaced by Lisa from Yorkshire, England. The children noticed that Lisa's English sounded different from Tracy's, although the shift towards British English did not cause any problems. In addition, the new communicative situation turned out to be more authentic, because Lisa hardly knew any German when she started and as such could not even speak German in emergencies. The agreement now is that both teachers stick to their L1. However, the children can address Lisa in both German and English. When Jessica, the German teacher, is addressed in English by the children, however, she speaks English and the language between her and Lisa is also English.

In September 1997, the second bilingual group was established with Paul, an English primary school teacher, guiding the group. At first his German was poor like Lisa's, so the situation in this second group was comparable. Since October 1998 there have been three bilingual groups so that there is only one remaining monolingual group and the integrated group mentioned above. At this point it has to be noted that children are randomly assigned to the different groups except for the integrated one so that the children in the bilingual groups are not especially motivated second language learners or put into the groups by their overenthusiastic parents.

Comparable to the French programme in the Rostock preschool discussed above, one of the aims is to prepare the children for English immersion in primary school. That is, the longterm plan is to use English as the medium to teach subject matter except for the subject German. As mentioned earlier in

ROHDE, A.: THE EARLY BIRD... this paper, one has to deal with the problem that most of the parents involved see early bilingual education as something very positive and desirable, however, when it comes to schooling the old prejudices are back and the fear of seeing their children fail in Geography, History etc. makes the parents shy away from immersion teaching. In addition, 18 children have to be found for grade 1 in primary school to make the project go ahead. In this very month (August 1999) the first primary school class is going to start the immersion programme. At present there is only one teacher qualified for this task. It is obvious that if the project is adopted by other preschools and schools, one of the main problems will be a financial one: suitable teachers have to be found and trained. Any additional staff in schools or preschools is inconceivable and unrealistic in view of the State's saving measures - especially in educational matters.

As in the French programme in Rostock, the evaluation of the children's language proficiency mainly concentrates on lexical and phonological issues, the latter being neglected here.²² And, similarly, the main result is a discrepancy between comprehension and production: whereas the children understand every English utterance within the preschool context after about a year, most children's production consists of only one- or two-word utterances.

When the children were first confronted with English, some of them were genuinely upset and reacted with exclamations such as "Hör' auf mit den blöden Wörtern, das heißt 'Ente' und nicht das, was du sagst" ("stop these stupid words, it's 'duck' and not what you say"). It took some time to convince these very young children that there are other ways of saying things than in their native language German.

As with preschool programmes in general, an important matter is the development of test materials. One element that has proved invaluable has been the inclusion of puppets (one of the lessons one learns from 'Sesame Street'). In a test situation the actual experimenter can disappear from the centre of attention and make the testing situation more relaxed if she or he interacts with the children through an L2-speaking hand puppet. Another important aspect is that children are often not willing to provide answers to questions that they think the adult experimenter knows anyway. A puppet, however, is 'allowed to ask any question' and the children are usually only too willing to provide answers. In a vocabulary and formula test, for example, the children are introduced to a puppet that is new to the preschool routines. Now the child is asked via the puppet whether (s)he can help the puppet find its way around the preschool. This kind of procedure has proved

ROHDE, A.: THE EARLY BIRD... quite successful (see also Weber & Tardif, 1991a+b; Gustavsson, 1994). In another instant the experimenters acted as puppeteers and involved the children in a puppet show in order to elicit L2 data. This turned out to be very successful and was so popular with the children that some of them wanted to do the procedure again and again (Tiefenthal, 1999).

In order to obtain standardized scores for the children's receptive lexical development, we apply the British Picture Vocabulary Scale (Dunn et al., 1997), which is the British adaptation of the 'Peabody Picture Vocabulary Test'. This test can be easily administered individually and is not time consuming, an aspect that is of primary importance with preschool children. The results so far reveal that most children's receptive vocabulary has improved considerably within one year. There are even two cases where the results for word comprehension are not distinguishable from those for native speakers of the same age. The evaluation of the lexical data is still under way, some definite data will be available in the near future.

One specific question we have addressed is to what extent the preschool children are able to perform 'fast mapping'. This refers to the ability to pick up a new word and its meaning or part of its meaning after a minimum of exposure. In the literature it is suggested that, on average, young children need only two or three exposures to a new word in order to memorize it (Carey & Bartlett, 1978; Heibeck & Markman, 1987). We introduced a new object to the L2 English children during their morning circle. The new object was a toy moose, an animal that the children did not already know. We gave the toy a novel nonce label ('swop')²³ and used this label about 10 times in a play session. After a 24-hour delay the children were administered a multiple choice task in order to check whether they still remembered the new label and its reference: 12 out of 27 children were able to match label and referent. In contrast, all 15 children from a German control group who were tested in the same way had receptive knowledge of the new lexical item (in a post-test on production, however, only 9 of the 15 children were able to *produce* the German nonce label). The results suggest that fast-mapping abilities are not absent in second language acquisition, but they may be less effective. There are two reasons for this: firstly, novel English words are not salient enough when used in connected speech, since the entire linguistic situation is still relatively new to the children and it may require more effort to follow utterances in English than in German. It can be assumed that novel words are then more difficult to identify than in German where the linguistic context requires less attention and new words are automatically more salient and easier to pick up.

ROHDE, A.: THE EARLY BIRD... Secondly, it is possible that the children's attention regarding English is reduced anyway because they attribute less importance to a language which is only used in preschool contexts with a limited number of teachers. The exposure to the second language may be simply not sufficient to catch some of the children's full attention (Rohde & Tiefenthal, 1999).

The last point mentioned seems to be vitally important. It is true that the exposure to the second language in a preschool enrichment programme context cannot be equal to acquiring a second language in the location where it is the ambient language, in most cases the country where it is spoken. As shown in the first part of this paper, the amount of exposure is an important factor for second language proficiency. In addition, we have to be aware of the possible link between exposure and motivation. In an enrichment programme, the second language is usually linked to the teachers and there are no other native speakers around. Unlike international schools, there are usually no peers speaking the second language as their L1 – one factor that would be enormously motivating. The preschool children are very much aware of the degree of usefulness of the second language and in some cases this may influence their attitude towards that language considerably (Baetens Bearsmore, 1993).

CONCLUSION

In the first part of this paper I outlined a number of psycholinguistic factors that are relevant for early L1 bilingualism or early L2 acquisition. From a psycholinguistic perspective, human capacity for language learning is not limited to one language: therefore, acquiring more than one language simultaneously (L1 bilingualism) or in succession (L2 acquisition) is no burden for the child. A large body of research suggests that the most favourable age span for second language acquisition is before the age of 6. Up to this age, the different linguistic components such as phonology and morphosyntax are largely processed in a way that closely resembles L1 acquisition. After the age of 6, new languages can of course be learnt, but linguistic structures may begin to be processed in a way that individual strategies and general problem solving become more important. Adolescents and adults are less likely to develop a native-like command of a second language.

The bilingual child has various advantages: mastering two or more languages allows access to the resources of different cultures and may lead to more cognitive flexibility as one given concept is not only linked to one linguistic form. There is a good deal of evidence that bilinguals are more flexible and creative 'thinkers' than monolinguals. Attitudes ac-

ROHDE, A.: THE EARLY BIRD... cording to which the bilingual child's brain is overloaded as it disposes of too little space for the knowledge of two or more languages are entirely unfounded. Rather, the bilingual 'brain's ways and paths' tend to be more effectively connected than the monolingual's. "[...] where negative consequences or unhappiness have been observed it is almost always due, not to the bilingualism process itself, but rather to social, personal, cultural or other factors" (Edwards, 1994: 63). These factors have to be kept separate.

In the second part of the paper, various bilingual preschool programmes in Germany were introduced, the main focus being on two enrichment programmes in the north. The aim of these programmes is to teach the children a second language that is later used as the medium for immersion education in preschool. Accordingly, at the age of 10, when the second language is traditionally introduced, there is space for a third language in the curriculum. The programmes show that the children involved pick up the second language easily since most of the language in a preschool situation is highly contextualized so that the second language is not explicitly taught. Furthermore, preschool life covers a number of areas (eating, playing, singing, building things, etc.) that emulate a naturalistic learning situation.

A number of lexical studies in an L1 German/L2 English bilingual preschool suggest that lexical learning proceeds similarly in L1 and L2 acquisition. The children profit from the fact that they are in the midst of first language acquisition: getting to know objects and ideas on the one hand and labelling these on the other go together and can even be considered as two parts of one process. However, with regard to comprehension and production, there is a clear asymmetry: the children easily understand all English utterances within the preschool context after one year of exposure, but their own production of the L2 lags behind. The reason for this may be the fact that English is not the ambient language and is therefore not used outside the preschool context. Another reason may be the fact that there are no L1 English-speaking peers to increase the children's existing motivation for the second language.

One factor that is especially important for the success and the future of bilingual preschools is the children's parents. We should be aware that their influence on the children's attitudes is vital. Even if the parents' attitudes towards bilingualism are generally positive, it is sometimes difficult to fight their fears when it comes to coping with subject matter at school. One of the main reasons for this may be their traditional conception of a second language – fuelled by their own

ROHDE, A.: THE EARLY BIRD... school memories – as a burden that has to be carried. It is important to make them understand that the second language in primary school immersion programmes is not the worm that has to be caught but the tool to catch it with. Remember that young children are very good catchers indeed: the early bird definitely catches the worm.

NOTES

- ¹ The term 'preschool' is a collective term for different types of institutions for young children, such as kindergarten, nursery school, playgroup, creche. In Europe, the term is defined according to national or regional legislation (v. de Goot, personal communication). The German preschools ("Kindergärten") discussed in this paper are informal, i.e. there is no tuition of subject matter. The preschool children are between 3 and 6 years old.
- ² The term immersion was first used in connection with school programmes in Québec in the 1960s where anglophone parents wanted to make sure that their children achieved a higher level of French proficiency than through conventional French instruction. The idea was that the children's complete school education at least for a couple of years should be received through the foreign language (see Lambert & Tucker, 1972; Swain & Lapkin, 1982). "Late partial immersion" refers to a programme where the second language becomes the means of instruction for one or two subjects (in the German context usually Geography and/or History) in grade 7 or 8. The term 'immersion' may refer to both the method of instruction and the way the method is used. For different types of immersion in German schools and the German context see Rück (1990), Bludau (1993), Wode (1995, 1999a) and Burmeister (1998).
- ³ The terms 'second language' and 'L2' will be used alongside each other with no difference in meaning.
- ⁴ For a summary of the Peal & Lambert study, see Baker & Jones, 1998: 63ff.
- ⁵ Chinese, including a number of different varieties, has of course by far more native speakers as it is the mother tongue of about one billion people. However, its use is geographically limited (the figures are taken from Crystal, 1987: 286).
- ⁶ Admittedly, not everything labelled 'natural' has to be necessarily positive, however, in the case of bilingualism there are no negative effects to be expected at least not from a psycholinguistic perspective.
- ⁷ The term 'proficiency' may be misleading in this model as it usually refers to a degree of linguistic knowledge. I would rather suggest the neutral term 'language system' instead.
- ⁸ Edwards (1994) quotes a paper by Adler (1977), who seems to support the SUP model. He believes that bilingual children are in danger of having split personalities as they always have to move between two languages, cultures, and personalities.
- ⁹ Recent research by the neurologist Joy Hirsch, however, suggests that the Broca region which is usually associated with the 'location

ROHDE, A.: THE EARLY BIRD... of grammar' works differently depending on whether a speaker grew up bilingually or acquired the second language later in life. With the help of kernspin tomography, Hirsch monitored bilingual speakers' inner monologues and made the computer generate different colours for activities in different languages. Thus, on tomographical long sections of the human brain, one can see that a true bilingual's two languages are stored in one area of the Broca region whereas the 'ordinary L2 learner' stores his second language separately from his mother tongue (Der Spiegel 1997).

¹⁰ These data are taken from the Kiel Project on Language Acquisition that aims at an integrated perspective of language learning and language development. This database encompasses different acquisitional types (including L2 reacquisition) and various L1/L2 combinations.

¹¹ The 6-year-old still has to learn that many English names do have German equivalents – but this example suggests that a second language increases the awareness of the difference in nature between object labels and names, the latter of which, strictly speaking, really remain the same. Their differing sound shape is usually simply adapted to the phonological system of a given language.

¹² I refer to object words only as these usually form the largest part of early vocabularies. It is for this reason that the majority of accounts on early lexical acquisition are concerned with object labels. However, there is a growing interest in verbs (Tomasello, 1992; Tomasello & Merriman, 1995).

¹³ This idea of an early mixed lexicon may stem from researchers believing in the balloon idea (see above): a young child cannot possibly learn twice as many words than would be normal as a monolingual, because there simply is not enough space in the child's brain.

¹⁴ 'Native-like' is a very difficult term to define as it generally depends on native speaker judgement whether a given performance (e. g. a short spoken test passage) is rated as native-like. There are no objective criteria.

¹⁵ Insufficient exposure to one's L1 can lead to semilingualism, a situation in which mostly immigrant children neither fully master their minority variety nor the majority language. "More recently, the idea of knowing neither of two languages well has been advanced in connection with ethnic minority-group speakers [...], and this has meant that semilingualism has become extended from a solely linguistic description to a catchword with political and ideological overtones relating to majorities and minorities, domination and subordination, oppression and victimization" (Edwards, 1994: 58).

¹⁶ Note that the term 'bilingual education' may have different meanings in Europe and North America. In Europe, the implication is that the aim is knowledge of TWO languages. In the American context, however, bilingual education often means that two languages are temporarily used in order to actually foster monolingualism, the knowledge of ONE language (Edwards, 1994: 193-196).

¹⁷ It is not my aim to give a comprehensive overview of all the different models of bilingual education. I have picked the three main

ROHDE, A.: THE EARLY BIRD... models that can also be applied to preschool education and that can be found in Germany and neighbouring countries such as the Netherlands. For a more comprehensive view see Baker & Jones (1998).

¹⁸ Low German was the predominant language in the north of Germany until the 16th/17th century when it was replaced by High German. From a linguistic point of view, Low German is a language in its own right. It is distinct from High German with regard to the Old High German consonant shift (6th/7th century) which separated High German from the remaining West Germanic dialects. Low German still shares its preserved consonantism with English, e.g. it still has [t] in initial position in words such as 'Tied', 'Tähn' or 'twee' (Engl. 'time', 'tooth', 'two') where High German has [ts]: 'Zeit', 'Zahn', 'zwei' (Lass, 1994: 9-29; Schweikle, 1996: 125ff.).

¹⁹ There are German and Danish minorities on both sides of the border so that the same situation applies for German schools and preschools in the region of North Schleswig (Danish 'Sonderjylland') which became Danish in 1920 after World War I.

- 20 For an overview of bilingual preschools in Germany see Hansen (1994) and Wode (1998).
- ²¹ For French in primary school there are as yet no reports available.
- ²² For lexical development see Rohde (1999), Tiefenthal (1999), Rohde & Tiefenthal (1999). For phonological issues see Berger (1999) and Wode (1998, 1999b).
- ²³ We are aware that 'swop' is in fact an English word. However, it is usually a verb and would not be used in this particular context.

REFERENCES

Aitchison, J. (1994). Words in the Mind. Second Edition. Oxford, UK & Cambridge, US.

Baetens Beardsmore, H. (1993). European models of bilingual education. In Baetens Beardsmore (ed.), *The European School Model*. Clevedon, 121-154.

Baker, C. (1995). *A Parents' and Teachers' Guide to Bilingualism*. Clevedon: Multilingual Matters.

Baker, C. (1996). Foundations of Bilingual Education and Bilingualism. Clevedon: Multilingual Matters.

Baker, C. & Jones, S. P. (1998). *Encyclopedia of Bilingualism and Bilingual Education*. School of Education, University of Wales, Bangor.

Barth, J. (1998). *Ich kann zwei Sprachen. Zweisprachigkeit – ein natürlicher Reichtum der Lausitz*. Brochure edited by the 'Sorbische Schulverein e.V.' Görlitz.

Berger, C. (1999). Pilotuntersuchungen zum Lauterwerb des Englischen in bilingualen Kindergärten am Beispiel der "roten Gruppe" in der AWO-Kindergartenstätte Altenholz, Mimeo, Kiel.

Bialystok, E. (ed.) (1991). Language Processing in Bilingual Children. Cambridge.

Bloomfield, L. (1933). Language. New York.

Bludau, M. (1993). Der frühbeginnende Fremdsprachenunterricht in den Ländern der Bundesrepublik Deutschland. *Neusprachliche Mitteilungen* 2, 74-85.

ROHDE, A.: THE EARLY BIRD... Bohn, Ocke-Schwen (1996). Lernschwach weil erwachsen? Ein Forschungsüberblick zum Faktor 'Alter' im Fremdsprachenerwerb. *Rostocker Beiträge zur Sprachwissenschaft* 2, 23-57.

Burmeister, P. (1998). Zur Entwicklung der Fremdsprachenkenntnisse im bilingualen Unterricht: Ergebnisse aus fünf Jahren Forschung. In: Hermann-Brannecke, G. & Geisler, W. (eds.), *Zur Theorie der Praxis und Praxis der Theorie des Fremdsprachenerwerbs*. Münster, 101-116.

Byram, M. (1986). Minority Education and Ethnic Survival. Case Study of a German School in Denmark. Clevedon.

Carey, S. & Bartlett, E. (1978). Acquiring a single new word. *Papers and Reports on Child Language Development* 15, 17-29.

Clark, E. V. (1993). The Lexicon in Acquisition. Cambridge.

Crystal, D. (1987). The Cambridge Encyclopedia of Language. Cambridge.

Cummins, J. (1993). Bilingualism and second language learning. *Annual Review of Applied Linguistics* 13, 51-70.

Cummins, J. (1998). *Research and theory in bilingual education*. Paper presented at the 9th European Congress on Ethnic Minorities, Spittal a. d. Drau, Austria, 15-17 October 1998.

Cummins, J. & Swain, M. (1986). Bilingualism in Education. London.

Döpke, S. (1992). One Parent One Language. An Interactional Approach. Amsterdam & Philadelphia: John Benjamins.

Dunn, L[loyd] M., Dunn, L[eota] M., Whetton, C. & Burley, J. (1997). The British Picture Vocabulary Scale. Second Edition. National Foundation for Educational Research. Windsor.

Edwards, J. (1994). *Multilingualism*. London & New York: Routledge. Ellis, N. (1994). *The Study of Second Language Acquisition*. Oxford.

Felix, S. W. (1996). Mental biology in second language acquisition. *Linguistics* 34, 1139-1158.

Flege, J. E. (1995). Second-language speech learning: Theory, findings, and problems. In: W. Strange (ed.), *Speech Perception and Linguistic Experience: Issues in Cross-Language Research*, Timonium, MD, 233-277.

Genesee, F. (1987). Learning Through Two Languages: Studies of Immersion and Bilingual Education. Cambridge, MA.

Goldfield, B. A. & Reznick, J. S. (1990). Early lexical acquisition: rate, content, and the vocabulary spurt. *Journal of Child Language* 17, 171-183.

van der Goot, A. (1998). European models of bilingual kindergartens: Perspectives and possibilities. Paper presented at the 9th European Congress on Ethnic Minorities, Spittal a. d. Drau, Austria, 15-17 October 1998

Gustavsson, R. (1994). Comprehension and production of the immersion language: Testing by using a puppet. In: C. Laurén (ed.), *Evaluating European Immersion Programs: From Catalonia to Finland*. Vaasa: Vaasa University Press, 194-204.

ROHDE, A.: THE EARLY BIRD... Haegeman, L. (1994). *Introduction to Government & Binding*. Oxford, UK & Cambridge, US.

Hansen, M. (1994). Frühvermittlung von Fremdsprachen: Bilinguale Kindergärten. M. A. thesis, Kiel.

Heibeck, T. & Markman, E. M. (1987). Word learning in children: An examination of fast mapping. *Child Development* 58, 1021-1034.

Hunfeld, H. (1992). Noch einmal: Zur Normalität des Fremden. Beispiel: Frühes Fremdsprachenlernen. *Der Fremdsprachliche Unterricht* 1, 42-44.

Kettwig, A. & Nath, C. (1998). Bestandsaufnahme zum Plattdeutscherwerb im Vorschulalter in Ostfriesland 1997. Ostfriesische Landschaft/Plattdütskbüro, Aurich. Unpublished manuscript.

Knauer, R. (1991). Wir stellen vor: I like Tracy: Ein Beitrag zur Friedens-, Kultur- und Sprachpädagogik im Elementarbereich. *Unsere Jugend* 12, 531-536.

Köppe, R. (1997). Sprachentrennung im frühen bilingualen Erstspracherwerb Französisch/Deutsch. Tübingen.

Krashen, S. D. (1973). Lateralization, language learning, and cerebral dominance revisited. *Language Learning* 23, 63-74.

Lambert, W. E. & Tucker, G. R. (1972). *The Bilingual Education of Children: The St. Lambert Experiment*. Rowley.

Lass, R. (1994). Old English. A Historical Linguistic Companion. Cambridge.

Lenneberg, E. (1967). Biological Foundations of Language. New York.

Mård, K. (1994). Testing second language comprehension in immersion kindergartens. In: C. Laurén (ed.), Evaluating European Immersion Programs: From Catalonia to Finland. Vaasa: Vaasa University Press, 184-193.

Markman, E. M. (1989). Categorization and Naming in Children. Problems of Induction. Cambridge.

Nath, C. (1998). Zweisprachigkeit im Kindergarten – ein Modellversuch in Ostfriesland. Paper presented at the 9th European Congress on Ethnic Minorities, Spittal a.d. Drau, Austria, 15-17 October 1998.

Nath, C. (1999). Der Modellversuch Zweisprachigkeit im Kindergarten. Bericht über das erste Projektjahr (1997/98). Mimeo, Aurich.

Oren, D. L. (1981). Cognitive advantages of bilingual children related to labeling ability. *Journal of Educational Research* 74, 163-169.

Peal, E. & Lambert, W. E. (1962). The relationship of bilingualism to intelligence. *Pychological Monographs* 76, 1-23.

Penfield, W. & Roberts, L. (1959). Speech and Brain Mechanisms. New York

Petit, J. & Rosenblatt, F. (1994). Evaluation des classes ABCM 1994. Unpublished manuscript.

Petit, J. & Rosenblatt, F. (1995). Evaluation des classes ABCM 1995 dans le Haut-Rhin. Unpublished manuscript.

Petit, J. & Rosenblatt, F. (1996). *Rapport d'évaluation sur les classes ABCM du Haut-Rhin. Année 1996*. Unpublished manuscript.

ROHDE, A.: THE EARLY BIRD... Quay, S. (1995). The bilingual lexicon: Implications for studies of language choice. *Journal of Child Language* 22, 369-387.

Rohde, A. (1998). Frühe Mehrsprachigkeit. Bewußtseinserweiternde Wundermedizin? Paper presented at the 9th European Congress on Ethnic Minorities, Spittal a.d. Drau, Austria, 15-17 October 1998.

Rohde, A. (1999). Early lexical development in naturalistic L2 acquisition. In: Foster-Cohen, S., Lambert, M., Perdue, C. & Rast, R. (eds.), *Proceedings of 8th Eurosla Conference Paris. Vol.2: From Word to Structure*, 49-59.

Rohde, A. & Tiefenthal, C. (1999). Fast mapping in early L2 lexical acquisition. Paper presented at Eurosla 9, Lund, Sweden, 10-12 June 1999.

Rück, H. (1990). Früher Fremdsprachenunterricht: Warum? Wie? Durch wen? *Neusprachliche Mitteilungen* 4, 217-219.

Schweikle, G. (1996). Germanisch-deutsche Sprachgeschichte im Überblick. Fourth edition. Stuttgart & Weimar.

Singleton, D. (1989). Language Acquisition: The Age Factor. Clevedon, Avon.

Singleton, D. (1999). Exploring the Second Language Mental Lexicon. Cambridge.

Der Spiegel, 29/1997, Hirnforschung: Anatomie der Mühsal, 158-159.

Swain, M. & Lapkin, S. (1982). Evaluating Bilingual Education: A Canadian Case Study. Clevedon.

Tiefenthal, C. (1999). Die Entwicklung des Wortschatzes der Fremdsprache in einem deutsch-englisch bilingualen Kindergarten. Mimeo, Kiel.

Tomasello, M. (1992). First Verbs. A Case Study of Early Grammatical Development. Cambridge.

Tomasello, M. & Merriman, W. E. (eds.) (1995). *Beyond Names for Things: Young Children's Acquisition of Verbs*. Hillsdale, NJ & Hove, UK.

Torrance, E. P. (1974). Torrance Tests of Creative Thinking: Directions Manual and Scoring Guide. Lexington, MA.

Waxman, S. R. & Markow, D. B. (1995). Words as invitations to form categories: Evidence from 12- to 13-month-old infants. *Cognitive Psychology* 29, 257-302.

Weber, S. & Tardif, C. (1991a). Assessing L2 competency in early immersion classrooms. *Canadian Modern Language Review* 47, 916-932.

Weber, S. & Tardif, C. (1991b). Culture and meaning in French immersion kindergarten. In: Malaré, L. & G. Duquette (eds.), Language, Culture and Cognition: A Collection of Studies in First and Second Language Acquisition. Clevedon: Multilingual Matters, 93-109.

Westphal, K. (1998). *Pilotuntersuchungen zum L2-Erwerb in bilingualen Kindergärten. Bericht zum deutsch-französisch bilingualen Kindergarten* "Rappelkiste" in Rostock. Mimeo, Universität Kiel.

White, L. (1989). *Universal Grammar and Second Language Acquisition*. Amsterdam.

Witt, Kathrin (1990). Der L2-Erwerb der Bezeichnungen für Natural Categories. M. A. Thesis, Kiel.

Wode, H. (1981). Learning a Second Language. An Integrated View of Language Acquisition. Tübingen.

ROHDE, A.: THE EARLY BIRD... Wode, H. (1993). Psycholinguistik: Eine Einführung in die Lehr- und Lernbarkeit von Sprachen. Ismaning: Hueber.

Wode, H. (1995). Lernen in der Fremdsprache: Grundzüge von Immersion und bilingualem Unterricht. Ismaning: Hueber.

Wode, H. (1997). Bilinguale Kindergärten: Wieso? Weshalb? Warum? *KiTa* 10, 203-207.

Wode, H. (1998). Bilinguale Kindergärten: Wieso? Weshalb? Warum? Revised and extended version of Wode 1997. Mimeo, Kiel.

Wode, H. (1999a). Evaluierung von bilingualem Unterricht. Abschlußbericht, März 1999. Mimeo, Kiel.

Wode, H. (1999b). L2 phonological acquisition in preschool children (age 3;0-5;6). Paper presented at Eurosla 9, Lund, Sweden, 10-12 June 1999.

Wode, H., Rohde, A., Gassen, F., Weiss, B., Jekat, M. & Jung, P. (1992). L1, L2, L3: Continuity vs. discontinuity in lexical acquisition. In: P. J. L. Arnaud & H. Béjoint (eds.), *Vocabulary and Applied Linguistics*. Basingstoke, 52-61.

Tko rano rani dvije sreće grabi: dvojezična predškolska izobrazba u Njemačkoj – psiholingvističko stajalište

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Dvojezičnost ili višejezičnost nije zastranjenje, kako to zamišljaju govornici "velikih jezika", već redovito stanje u većini jezičnih zajednica današnjega svijeta. Stoga se u prvom dijelu rada proučavaju psiholingvistički temelji vještine usvajanja drugoga jezika te se zastupa stajalište da dvojezična izobrazba u jednojezičnom društvu valja započeti već u predškolsko doba. Tvrdi se da usvajanje drugoga jezika ne predstavlja nikakvo dodatno opterećenje za malo dijete, već naprotiv, da unapređuje kognitivni razvoj i fleksibilnost. U drugom dijelu rada autor razmatra različite predškolske programe u Njemačkoj, s posebnim naglaskom na programe obogaćivanja. Predstavljene su dvije njemačke dvojezične predškolske ustanove (L1 njemački / L2 engleski i L1 njemački / L2 francuski) te neke pojedinosti njihova ustrojstva. Autor tvrdi da čak i u situaciji u kojoj se upotreba L2 ograničava na predškolske sadržaje, djeca razvijaju važne lingvističke vještine u novom jeziku. Te se vještine zatim procjenjuju i o njima se raspravlja s obzirom na dvojezičnu izobrazbu u osnovnoj školi. Na kraju, autor drži da se drugim jezikom može ovladati i u razumijevanju i jezičnoj proizvodnji, i to prije uobičajenoga uvođenja jezika u nastavu, na primjer u dobi od 10 godina, tako da se još jedan jezik (L3) može uvesti ranije.

ROHDE, A.: THE EARLY BIRD...

Morgenstund hat Gold im Mund: Zweisprachigkeit in der Vorschulerziehung in Deutschland. Ein psycholinguistischer Ansatz

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Zwei- oder Mehrsprachigkeit ist keine abwegige Erscheinung, wie es sich die Repräsentanten der "großen Sprachen" vorstellen, sondern der reguläre Zustand in den meisten Sprachgemeinschaften der heutigen Welt. Daher untersucht der Verfasser im ersten Teil seiner Arbeit die psycholinguistischen Grundlagen, die den Erwerb einer Zweitsprache ermöglichen, und vertritt die These, dass zweisprachige Erziehung und Bildung in einer einsprachig dominierten Gesellschaft schon im Vorschulalter ansetzen muss. Der Autor stellt die Behauptung auf, dass der Erwerb einer Zweitsprache für ein kleines Kind keinerlei zusätzliche Belastung darstellt, sondern im Gegenteil dessen kognitive Entwicklung und Flexibilität nur fördert. Im zweiten Teil der Arbeit werden verschiedene in Deutschland angewandte Vorschulprogramme untersucht, wobei solchen Programmen, die über den Rahmen des bestehenden Angebots hinausgehen und es bereichern, besondere Aufmerksamkeit entgegengebracht wird. Vorgestellt werden zwei zweisprachige Vorschuleinrichtungen in Deutschland (L1 Deutsch / L2 Englisch und L1 Deutsch / L2 Französisch) sowie bestimmte Strukturmerkmale dieser Institutionen. Selbst da, wo die Zweitsprache auf Vorschulinhalte beschränkt bleibt, entwickeln die Kinder nach Meinung des Verfassers bedeutende linguistische Fähigkeiten in der neuen Sprache. Diese Fähigkeiten werden einer Bewertung unterzogen und hinsichtlich des zweisprachigen Unterrichts an Hauptschulen diskutiert. Der Autor ist der Ansicht, dass die Zweitsprache sowohl passiv als auch aktiv noch vor dem üblichen Zeitpunkt, zu dem in den offiziellen Schulprogrammen die Einführung der Zweitsprache vorgesehen ist (etwa im Alter von 10 Jahren), erworben werden kann. Es könnte also zusätzlich eine dritte Sprache (L3) vor dem üblicherweise vorgesehenen Zeitpunkt in den Schulunterricht eingeführt werden.