Bilingual first language acquisition learners and the debate over whether their language systems are unitary or differentiated and the role of the acquisition of morphosyntactic knowledge—a study in bilingualism

パイリンガルの幼児の第一言語習得（BFLA）に関して
こうした習得者が単一言語体系を持っているのか、あるいは分離言語体系を持っているのか

Mitchell FRYER
ミッチャル フライヤー

Key words: simultaneous bilingualism, differentiated language system hypothesis, unitary language system hypothesis, DLSH and morphosyntactic knowledge.

キーワード：幼児の第一言語習得、分離言語体系仮説、一言語体系、DLSH 及び形式統語的知識

Abstract

Regarding the language systems of bi-lingual first language acquisition (BFLA) learners, the debate over whether these learners have unitary or differentiated language systems has been one of the central issues regarding the research and understanding of bi-lingualism since the 1970s. This paper explores the theories regarding bi-lingual first language acquisition learners’ language systems and the debate regarding whether these language systems are unitary or differentiated. The weaknesses regarding the unitary language system hypothesis are presented and the discussion then outlines the basic tenets of the differentiated language system hypothesis (DLSH) and why this has become the commonly held view among researchers. The DLSH and the acquisition of morphosyntactic knowledge is presented and discussed.

要約

パイリンガルの幼児の第一言語習得（BFLA）に関して、こうした習得者が単一言語体系を持っているのか、あるいは分離言語体系を持っているのかをめぐる議論は、1970 年代以降、パイリンガリズムの研究及び理解に関する議論の中心的課題の一つとなっている。本論文では、パイリンガルの第一言語習得者の言語体系に関する理論と、その言語体系が単一あるいは分離したもの
Introduction

Research on childhood bilingualism has gained a great deal of exposure over the past 20 years as the debate over whether simultaneous bilingual children have one language system for both of their languages or whether in fact they have differentiated language systems for each of their languages (Lanza, 2004). In addition, there has been much debate among researchers over when it is that simultaneous bilingual children realize they are being exposed to two languages (Hoff, 2009). The focus of the discussion presented here is whether simultaneous bilingual children’s language systems are unitary or differentiated. In addition, the development of these language systems regarding morphosyntactic knowledge will be discussed.

Researchers over the years have analyzed developing bilinguals and debated whether their language systems for their respective languages are characterized by what Genesee (1989) posited as the unitary language system hypothesis (ULSH) or what other researchers such as Paradis and Genesee (1996), Genesee (2001) and Meisel (2008) posited as the differentiated or dual language system hypothesis (DL SH). I will offer evidence here to support my position that bilingual first language acquisition (BFLA) children have differentiated language systems and that their language systems develop autonomously as they mature and do not display signs of fusion (Genesee and Nicoladis, 2005). Furthermore, I will support my position that BFLA children have differentiated language systems and that they are aware of the fact that they are being exposed to two languages from their very first dealings with their respective languages and that this has become the commonly held view by researchers today (Kupisch, 2008). Finally, I will discuss the differentiation of the language systems regarding the acquisition of morphosyntactic knowledge by the bilingual child to support my argument.

Simultaneous bilingualism, ULSH and the DLSH

Hoff (2009) defines simultaneous bilingualism as when a child hears and acquires two languages at the same time which Genesee (2001) defined as bilingual first
Bilingual first language acquisition learners and the debate over whether their language systems are unitary or differentiated and the role of the acquisition of morphosyntactic knowledge—a study in bilingualism. 141

language acquisition (BFLA). Both these terms refer to children hearing and acquiring two languages from birth at the same time and this differs from sequential bilingualism which is when children acquire one language then acquire another language some time later. Research on simultaneous bilingualism in the 1970s and 1980s led to researchers such as Volterra and Taeschner (as cited in Paradis & Genesee, 1996) and Vihman (as cited in Genesee, 1989) interpreting the results and positing that differentiation of two linguistic systems during simultaneous bilingual acquisition occurs sometime in the child’s third year of life. This lead to Genesee (1989) outlining the ULSH and postulating that the ULSH was very weak and that simultaneous bilinguals in fact had a differentiated language system. This was supported by researchers such as Genesee, Nicoladis and Paradis (1995) and Paradis and Genesee (1996) supporting the DLSH, which stated as one of its fundamental tenets that simultaneous bilinguals had differentiated linguistic systems for their respective languages from the beginning of their bilingual language acquisition.

Genesee (2001) stated that claims made by researchers postulating an initial unitary language system were based on researchers frequently finding that bilingual children were mixing morphosyntactic, lexical and phonological elements from both their languages within the same utterance or stretch of conversation. Paradis and Genesee (1996) highlighted that this evidence of language mixing formed the basic tenet of the ULSH as researchers interpreted this as evidence of a lack of differentiation on behalf of the bilingual child. Proponents of the ULSH posited that language mixing was evidence of the bilingual child attempting to form a single language system from two languages (Lanza, 2004).

Montrul (2004) highlighted that the earlier work done by researchers such as Volterra and Taeschner (as cited in Paradis & Genesee, 1996) on simultaneous bilingualism that proposed a unitary language system proved to be inconclusive and failed to contribute to the propagation of the ULSH. Genesee (1989) noted that researchers aiming to take the ULSH further did not collect their data in separate language contexts and establish that bilingual children use elements of both their languages indiscriminately across all contexts of communication in which they are participants. Researchers interpreted this as making it difficult to posit that mixing of language in one context proves a unitary language system and stated that a more appropriate measure other than mixing is required to determine whether bilinguals
have differentiated language systems (Genesee, Nicoladis & Paradis, 1995).

Bergman (as cited in Deuchar & Quay, 2001) showed that mixed utterances do not provide evidence for the ULSH as language mixing may occur as a result of mixed utterances in the input, language transfer from the bilingual’s dominant language and lexical borrowing to fill gaps in the bilingual’s utterances. Meisel (as cited in Deuchar & Quay, 2001) argued that when developing bilinguals applied the same syntactic rules to both languages it may have been as a result of the transfer from the dominant language resulting in commonalities in the use of the two languages. The degree to which developing bilinguals display mixing or code-switching will be influenced by the language model provided by the parents and that exists within the child’s language environment (Meisel, 2008). Language norms within the family, school and culture will influence the amount of language mixing and mixing cannot be taken as evidence for a unitary language system (Lipz, 2005).

Kupisch (2008) noted that developing bilinguals often borrow lexical items and produced utterances and/or discourse that contain lexical elements of both languages for the purpose of filling gaps that exist because their lexical knowledge is inadequate. Muller (1998) and Lanza (1998) posited that developing bilinguals employed this as a relief strategy. Nicoladis and Genesee (as cited in Baker, 2006) stated that proponents of the DLSH accept that mixed utterances do occur; however, it is a variety of factors such as exposure to both languages in different contexts, language competencies, peer interaction and influences from the sociolinguistic environment that will influence the developing bilingual’s use of language mixing and language choice. Moreover, evidence of cross-linguistic influence in BFLA contributes to the propagation of the DLSH as transfer of morphosyntactic and lexical elements would not be possible without a host or recipient language system (Kupisch, 2008).

The ULSH posited that the young bilingual child fused together their two languages and stored these as one language (Baker, 2006). Swain (as cited in Genesee, 1989) posited for developing bilinguals a common storage model of language elements of both languages. Genesee (2001) outlines that conclusive evidence highlights that storage of the bilingual child’s languages are represented in underlying differentiated ways and both languages develop autonomously and inter-dependently. Paradis and Genesee (1996) among others, were able to produce evidence of children having both differentiated and autonomous linguistic representations from their initial syntactic
acquisition at both the pragmatic and syntactic level. Moreover, Kupisch (2008) stated that the weaknesses identified and associated with the ULSH such as relying on code-mixing to be a valid measure of a unitary system and the research done by proponents of the DLSH has resulted in the DLSH being the current dominant view regarding BFLA children.

**Simultaneous bilingualism and the differentiated language system**

Deuchar and Quay (2001) highlight the difficulties involved in determining whether a developing bilingual child has one or two language systems, especially syntactic systems from the initial stages of language acquisition and development. However, Nicoladis (1998) highlighted that evidence from several studies have shown that BFLA children are able to use two syntaxes differentially as soon as there is evidence of syntax acquisition and that there language systems do not fuse together. Furthermore, Lanza (2004) highlighted that evidence exists of young bilingual’s ability to separate language at both the lexical and syntactic level from the onset of language development. BFLA learners have shown that they have two developing linguistic systems through evidence of their pragmatic and socio-linguistic competence.

Genesee (2001) stated that from the earliest stages of productive language use, evidence suggests that bilingual children are capable of using their developing languages both differentially and appropriately with different interlocutors. Paradis and Genesee (1996) accept that pragmatic separation is not direct evidence of language differentiation; however, they emphasized that it makes the case very difficult for those trying to show how bilingual children could achieve pragmatic separation without differentiated language systems. This suggests that bilingual children have the cognitive capacity and linguistic ability to identify and respond appropriately, which indicates that they are able to differentiate between the languages and produce the appropriate utterances to facilitate communication (Genesee, 2001). These salient points reinforce the DLSH and add weight to the argument that BFLA children have differentiated language systems and that they are aware of their exposure to two languages from their first dealings with two languages (Lanza, Meisel & de Houwer, as cited in Genesee, 2001). Moreover, this suggests there is evidence of differentiated language systems in BFLA children as they are able to differentiate their morphosyntactic systems and produce the correct sentence structure and grammatical
Muller (1998) argued for the DLSH, stating that bilingual children are able to differentiate two linguistic systems from an early age. Genesee (as cited in Baker, 2006) claimed that this may not result totally from bilingual children's ability, but may have more to do with human cognitive ability as research shows that babies are biologically ready to acquire, store and differentiate two or more languages from birth. Baker (2006) highlighted that infants display language discrimination very early and are able to differentiate between two languages through the differentiation of prosodic patterns and the phonology of people within their language environments. Genesee, Nicoladis and Paradis (1995) showed that bilinguals as young as two were able to accommodate bilinguals and monolinguals and use the appropriate language. In addition, Baker (2006) showed that children two and under have the ability to differentiate languages and switch languages and address their interlocutors in the correct situation with the appropriate language. The differentiated language system is now generally accepted as the dominant view regarding simultaneous bilingualism, as evidence shows that infants have the ability to acquire, store and use language differentially from the moment they are born (Nicoladis, 1998). Furthermore, from the one word stage onwards children can differentiate lexical, phonological and morphosyntactic elements in their own language systems and in their language environments (Bialystok, 2001).

The differentiated language system and morphosyntactic knowledge

Genesee (2001) highlighted that children exposed to two languages from birth develop differentiated language systems through evidence of differentiation of their morphosyntactic systems. Bilingual children combine the grammatical morphemes of one language with the lexical morphemes of the same language from the time that they are able to use grammatical morphology productively when producing utterances (Grosjean, as cited in Meisel, 2008). This provides evidence of bilingual children having differentiated language systems, as they do not randomly attach inflectional morphemes from both languages to lexical items from each of the languages that they are acquiring. Bilingual children acquire and attach the morphemes correctly to the respective languages, which supports the view that simultaneous bilinguals have differentiated morphological systems and this also indicates their understanding and
Bilingual first language acquisition learners and the debate over whether their language systems are unitary or differentiated and the role of the acquisition of morphosyntactic knowledge—a study in bilingualism. 145

use of two or more differentiated languages systems (Meisel, 2008). It is possible to conclude that differentiation of morphosyntactic systems happens at a very young age, from the child’s first dealings with two languages with apparent ease and that bilingual children do not exhibit characteristics of fusion or a unitary stage of development (Lanza, 2004).

Deuchar and Quay (2001) emphasize that the countless studies over the past twenty years on ULSH and DLSH have provided more than enough evidence to highlight morphosyntactic systems as differentiated systems in simultaneous bilingual children as soon as productive use of syntax and morphology becomes evident. This is because bilingual children have been shown to be able to differentiate the linguistic input of their interlocutors and produce appropriate and correct utterances characterized by the appropriate and correct morphosyntactic items and structures (Meisel, 2008).

Investigations into differentiated syntactic systems by Meisel, de Houwer, Paradis and Genesee (as cited in Deuchar & Quay, 2001) and Baker (2006) highlight that a clear consensus exists that there is evidence for differentiated morphosyntactic systems in bilingual children from their first dealings with language. Paradis and Genesee (1996) were able to produce evidence of children having both differentiated and autonomous linguistic representations from their initial acquisition of syntactic elements. Most of the analyses conducted focused on children learning two languages that were parametrically different and focused on morphosyntax. These analyses showed that children learning languages that are parametrically different will set the parameters for each language early on and that bilingual children are able to correctly produce utterances that adhere to the morphosyntactic rules of the respective languages from the time they are able to produce these types of utterances (Montrul, 2004). Deuchar and Quay (2001) posited that bilingual children’s morphosyntactic development advances as two different language systems and at varying rates and that their respective language systems develop in a way that resembles the language systems of monolingual children.

Further evidence that reinforces the argument for the DLSH comes from Muller (1998), as she highlighted the importance of the degree to which language development of bilingual children resembles that of monolingual children. It has been shown that bilingual children possess early language differentiation at the syntactic
level from research conducted by Kaiser, Meisel and Parodi (as cited in Paradis & Genesee, 1996) on verb placement, tense and case marking in two languages. Juan-Garau and Perez-Vidal (2000) stated that the issue of what counts as evidence of language differentiation at the morphosyntactic level has been settled. Meisel and De Houwer (as cited in Juan-Garau and Perez-Vidal, 2000) posited that areas in adult language that contain different structures and forms for the purpose of fulfilling the same purpose are valid for analysis in order to propagate the DLSH. Meisel's study (as cited in Juan-Garau and Perez-Vidal, 2000) showed that morphosyntactic acquisition by simultaneous bilinguals provides evidence that bilingual children have differentiated language systems as the subjects in Meisel's study showed that they used different word order sequences and have cross-linguistic references in both of their languages as soon as they start producing multi-word utterances. Moreover, the developing bilingual's morphosyntactic knowledge and syntactic development resembles that of two monolingual children.

Genesee and Paradis (2005) stated that there is widespread agreement that BFLA learners acquire language specific properties of the target languages very early in their development and at very young ages, which corresponds for the most part to the language acquisition and development exhibited by monolinguals of the same age. Research findings on BFLA learners have shown that generally the morphosyntactic development of bilingual children is the same as monolingual children and that if simultaneous bilingual's morphosyntactic development resembles two monolingual children, then the bilingual children's language systems must be differentiated (Meisel, 2008). Yip and Matthews (2000) highlighted that the focus of research regarding bilingual development has now moved beyond the debate and issue of unitary or differentiated language systems, as the predominant view is that simultaneous bilinguals have differentiated language systems and because understanding of bilingual development has moved onto addressing precise questions regarding degrees of separation and interaction between languages.

**Conclusions**

The question of whether BFLA learners have a unitary or differentiated language system has been at the center of bilingual development research for the past twenty years. Researchers that proposed a unitary language system based their assumptions
on the fact that simultaneous bilingual children displayed language mixing by incorporating various lexical, phonological and syntactic elements of both languages when producing utterances (Genesee & Paradis, 2005). The ULSH proved to be very weak as research on mixing showed that this could result due to dominant language transfer, lexical borrowing to fill gaps in developing language systems and as a result of input (Nicoladis, 1998). Proponents of the DLSH showed that infants are both biologically ready and capable of language differentiation and that young bilingual children were able to understand phonological, prosodic and lexical elements of both languages in addition to applying the correct grammatical morphemes and syntax to produce appropriate and correct utterances regarding their interlocutor (Baker, 2006; Genesee, 2001). Bilingual children's acquisition of morphosyntactic knowledge reinforces the DLSH as evidence shows that from early on bilingual children have differentiated syntactic systems and children can attach the correct lexical morphemes to the correct grammatical morphemes from both languages (Meisel, 2008). The differentiation of simultaneous bilingual children's language systems in regard to phonological and morphosyntactic knowledge highlight that children were aware of the fact that they were being exposed to two languages and that the acquisition of their languages developed differentially and at no stage showed signs of fusion (Bialystok, 2001).

**References cited**


