# From home to school: Bridging the literacy gap in L1 Wolof children learners of L2 French in Senegal

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This study examines the acquisition of literacy in a second language (L2) in the absence of literacy in the first language (L1). Wolof children in Senegal—West Africa—develop their first literacy skills in their second language (L2), French or Arabic, not in their first language (L1), Wolof. The Wolof language is primarily oral, and even though a written system has been recently developed, children still do not read and write in their L1. This situation slows down the process of learning French as children have no pre-existing literacy skills to transfer from their L1 to their L2 (Ellis, 1994).

The very notion of cross-linguistic transfer from L1 to L2 has been an increasingly important research topic in the field of Second Language Acquisition over the past twenty years (Ellis 1994; Odlin 1989; Kasper 1989; Cummins 2000). Of equal importance has been the notion of interdependency between L1 and L2 and the effect(s) of L1 literacy on L2 learning; a dominant theory in the 1980s (Cummins, 1979, 1984, 2000- *Interdependence Hypothesis*). However, prior to Cummins' work on the notion of cross-linguistic transfer and language interdependency, the UNESCO report of 1953 and other studies presented themselves in support of the use of the mother tongue as "the best medium for teaching a child to read (UNESCO, 1953).

#### 1 Introduction

Nearly sixty years ago, experts at a UNESCO annual conference voiced their support for the use of mother tongue instruction (L1) and stated the following:

"It is axiomatic that the best medium for teaching a child to read is his mother tongue. Psychologically, it is the medium of meaningful signs that in his mind works automatically for expression and understanding. Sociologically, it is a means of identification among members of the community to which he belongs. Educationally, he learns more quickly through it than through an unfamiliar medium" (UNESCO, 1953).

Subsequent inquiry and research over the past several decades into this very issue have further demonstrated that L1 instruction plays a key role in the learning of a second language. For example, early research by Modiano (1968) on Mayan-Spanish children in Chiapas, Verhoeven's (1998) study on Turkish children living in the Netherlands, and the work of Skutnabb-Kangas and Toukomaa (1976) on Finnish immigrant children in Sweden have all concluded that L1 reading instruction enhances reading skills in the second language (Modiano, 1968; Verhoven 1998; Wagner, 1998).

Although UNESCO's report has helped spawn additional research in North America and Europe, it is in Africa that it has been taken most seriously. Since the publication of the report in 1953, many African governments have attempted to develop orthographies of unwritten vernacular languages. These are now being used to develop literacy in primary-school children (e.g. Nigeria, Tanzania). And yet, the mother-tongue literacy issue is still subject to intense debate among educators in Senegal, it is surprising to find that many researchers continue to overlook the fundamental question the UNESCO report implies: How well do children learn to read in a second language when their own mother tongue is unwritten?

In this study, I explore the acquisition of Wolof children's reading comprehension skills in L2 French in the absence of literacy in their mother tongue, Wolof. The research involves sixty children who are native speakers of Wolof and learners of L2 French in Touba, Senegal. Wolof children are raised to be functional in two language skills (i.e. listening and speaking) and, later on, they learn to read and write in French as a second language in school. In that respect, the Senegalese educational system is still not complying with the UNESCO (1953) stipulation that "the best medium for teaching a child to read is his mother tongue". Thus, how well Wolof children in Senegal develop literacy in L2 French without literacy in their mother tongue has become an inevitable concern for educators and linguists alike.

The structure of this study is as follows. First, I briefly present the sociolinguistic situation of Senegal during the French colonialism. Second, I examine one of the main theoretical frameworks of this study (e.g. Cummins' *Developmental Interdependence Hypothesis*). Finally, I discuss the methodology being used to conduct this study.

### 2 Socio-linguistic situation of Senegal during colonialism

### 2.1 Linguistic cohabitation of Wolof & French

The cohabitation between French and Wolof started back in the French colonial period. Since that time, Senegal has officially become a Francophone country

which assumes a prominent role in the community of Francophone states known as "La Francophonie" (Laughlin, 2008). Despite the importance of the French language, current estimates hold that 90% of the population of Senegal speaks Wolof as either a first or a second language. In Dakar, the capital of Senegal, more than 96 % of the people speak a form of language known as urban Wolof. This form of urban Wolof, a mixture between French and Wolof is quite different from the rural Wolof marked by its limited use of French words (Swigard, 1992).

It is particularly striking that during the French colonial period, Descemet, Governor Faidherbe's personal secretary, recognized the importance of having the native Senegalese develop literacy in their mother tongue (1886, as cited in Laughlin's study). This led to his publishing a forty eight page collection of approximately 1,200 everyday French phrases translated into Wolof (Laughlin, 2008). This monograph has had linguistic and educational implications. Most importantly, Descemet deplored in the monograph the fact that many Wolof children were exposed to reading in French without having prior strong knowledge basis in their mother tongue. Descemet was openly critical of what he observed happening at the elementary school level where Wolof children were taught to read in L2 French language without developing even minimum skills in their mother tongue, Wolof. The "deplorable result of this misguided policy", writes Descemet, "is a generation of school children who may read fluently in French after a certain number of years at school without understanding a single word of what they have read" (Laughlin, 2008).

Descemet's concerns at that time were pedagogically driven and his emphasis on the importance of the mother tongue was well intentioned. The Senegalese educational system revisited Descemet's early observations republished in the 1960s and early 1970s. In an attempt to diagnose the current underlying roots behind Wolof children's poor academic achievement in the French language, a number of school principals, school teachers and researchers in various disciplines met for three days to discuss that issue of children 'poor achievement in reading and writing in the French language. At the conclusion of the meeting, it was agreed that: «[...] le mal dont souffrait l'école dépassait le seul cadre de l'enseignement du français et demandait un examen beaucoup plus large et plus approfondi [...]» (Le Pédagogue, 1972). [...The difficulties that confront the schools go beyond the curriculum, and they need a complete and deep scrutiny [...] (Le Pedagogue, 1972).

## 3 Literature review

### 3.1 Cummins's Developmental Interdependence Hypothesis (DIH)

In a series of studies that involved immigrant children in the United States, Cummins (1979, 1981, 1983, 2001) observed that a lack of a strong development

of L1 at home caused children to have a low reading performance in L2 English. His Developmental Interdependence Hypothesis is based on the notion that development of reading and writing in the first language facilitates the development of the same skills in the second language (Cummins, 1979, 2001).

In further demonstrating the theoretical framework behind his hypothesis, Cummins (1983, 1984) dismisses previous claims of a separation between L1 and L2, and strongly argues for a relationship between L1 and L2. His hypothesis not only shows that existing relationship but also places an emphasis on the effect(s) of literacy in the mother tongue and on the learning of second language. Cummins' frequent use of this very hypothesis in recent years to suggest that bilingual readers who are literate in their L1 have a channel available to them as they develop literacy in their L2 has sparked considerable interest worldwide.

Further studies continued to support Cummins' hypothesis. For example, Catherine McBridge-Chang (2004) work on *Children's Literacy Development* links home literacy with school performance to demonstrate that children who develop early reading skills in their mother tongue will perform better than children who have no early reading skills at home (McBridge-Chang, 2004). In the same vein, Feitelson and Goldstein's study (1986, as cited in McBridge Chang, 2004) showed evidence that sixty percent of the pre-schools in Israeli neighbourhoods where children tend to do poorly do not have a single book(McBridge-Chang, 2004). In contrast pre-school children in Israeli neighbourhoods where children had a tendency to do well in school had families who owned fifty-five books each on an average (Feitelson and Goldstein, 1986)

#### 3.2 Predictions

Based on the extensive research evidence supporting both the cross-linguistic transfer of L1 to L2 and the effect(s) of mother tongue literacy on second language learning, this study predicts the following:

- 1. Lack of early literacy experience at home (i.e. playing word games, learning letters of the alphabet with parents) will affect Wolof children' decoding skills at school. Thus, first-year Wolof learners will show low levels of decoding skills at school.
- 2. As Wolof children advance in learning French, literacy experience would increase over time. Thus, third-year Wolof learners' levels of decoding skills would improve, but at what pace and with what difficulties?
- 3. Lack of early exposure to print associated with images (i.e. sharing story-book reading with parents at home) will affect Wolof children' metalinguistic awareness to conceptualize visual images from printed words at

- school. Thus, first-year Wolof learners will show low level of metalinguistic awareness at school.
- 4. As Wolof children advance learning French, meta-linguistic awareness would be enhanced. Thus, third-year Wolof learners' ability to conceptualize images from printed words would increase.
- 5. Lack of reading skills in Wolof tends to hinder the acquisition of reading comprehension in L2 French. Thus, first-year Wolof learners will show low levels of comprehension when completing reading tasks in L2 French.
- 6. As Wolof children advance learning French, comprehension would increase over time. Thus, third-year Wolof learners would improve their levels of comprehension when completing reading tasks in L2 French.

## 3.3 Research questions

The present study is designed to address the following questions:

- 1. To what extent do Wolof children's experiences about reading reflect their reading performance at school?
- 2. Are Wolof children able to identify conceptual categories from visual images and establish associations with printed words?
- 3. What levels of reading comprehension do Wolof children achieve in L2 French?
- 4. What is the effect of further exposure to reading practice in L2 French on children's overall reading comprehension?

## 4 Research methodology

## 4.1 Participants

In this study, sixty Wolof children who are learners of French as a second language will be recruited from the student population of approximately two thousand students unequally distributed in twenty- one classes in Touba primary schools. All children will be enrolled in their first Initiation Course (CI) by the time the study begins. They will follow a regular school schedule that starts at 8 am and ends approximately at 3 pm Monday through Friday.

All participants will be enrolled in the first grade, unequally divided between boys (30%) and girls (70%). Because of the school policy recruitment implemented by the Senegalese Ministry of Education to promote girls education in the last six years, there will be more girls enrolled in the first year than boys. The age of first grade children ranges from six to seven years old and third grade children from nine to ten years old. The first grade children will not know how to read in L2 French, but third grade children will be in their third year of reading the French language. Children will be randomly selected from these corresponding classes, and the first grade children and the third grade children will be tested at the end of the school year; therefore, children in both groups will be finishing their respective school years. For example, first grade children will already have two semesters of exposure to reading in the L2 French. Therefore, by the time the study starts, they will know how to read in L2 French but at a beginner level.

#### 4.2 Procedure

The instruments for this study consist of a semi-structured interview, picture-word identification and association, and a French reading comprehension passage. The tasks will elicit complementary quantitative and qualitative data analysis.

First, the pre-reading interview task will be conducted orally in Wolof for all groups. The interviews will be videotaped and subsequently transcribed into English. Due to the considerable number of children involved in the pre-reading interviews, the questionnaires will be very brief, and the time allocated to each interview will be two minutes. All the first and third grade children will be interviewed in the same manner.

Second, in the picture-word identification and association task, a set of eight words randomly associated with eight pictures will be given to the first year children. A set of eight sentences randomly associated with eight pictures will be given to the third year children. A very short time (less than 2 minutes) will be allocated to this task to see if Wolof children are able to identify concepts from visual images and establish associations with printed words in a short period of time. It is expected that the third grade Wolof children who have been exposed to reading may carry out the task more easily than the first grade who never been exposed to print before. Thus, this picture-word identification and association will further confirm the first task, and may show more concrete evidence of pre-reading experience from both groups of children.

Third, there will be a reading comprehension passage administered to examine children's abilities to extract meaning from a story written in French. Children's reading comprehension will be measured through multiple-choice questions and three open-ended questions. The two groups will complete the

reading comprehension separately but simultaneously to avoid any inconsistency. The questions are written in English to conform to PIRLS' proficiency guidelines, but they will be translated into French. These French translated texts will be submitted to independent translators to ensure reliability and to make sure that content is verified by language experts. The passage will be also designed using criteria descriptive of the four areas of reading comprehension identified in the document released by PIRLS in 2006 (PIRLS, 2006). The total time allocated to this reading comprehension test for the first grade children will be approximately forty minutes, and the total time allocated for the third grade children will be thirty minutes.

#### 5 Conclusion

This study is one of the first in Senegal that examines how Wolof children develop literacy in a second language (French) without literacy in their mother tongue (Wolof). It will contribute to the literature allowing for more research into understanding the complex nature of the relationship between mother tongue literacy and second language learning. For the past fifty years, a considerable number studies have focused on the written native languages (English, Spanish & French) yet few studies have investigated unwritten native languages. In that particular respect, the aim of this study is to find out how Wolof children who do not develop literacy in their mother tongue (Wolof) learn a second language (French).

Based on the extensive research evidence on both the effect(s) on L1 literacy on L2 learning and the cross-linguistic transfer across languages (UNESCO, 1953; Cummins, 1979, 1984; Gonzalez, 1977; Wagner, 1998), this study predicts that the lack of literacy skills in L1 (Wolof) hinders the acquisition of reading comprehension in L2 (French). If this turns out to be the case, it will have pedagogical implications for the Senegalese educational system and encourage collaboration with educators and linguists to start developing new language policy and curriculum which would require Wolof children at the elementary level to read and write in Wolof before learning the L2 French. In that particular respect, Senegal would then consider following the model of many western African countries (e.g. Nigeria, Mauritania) where children are required to develop literacy earlier in their mother tongue before learning a second language.

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