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INTRODUCTION

Language acquisition and bilingualism: Consequences for a multilingual society

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Language is the key interface between our social and cognitive worlds. As a social tool, it is the means by which human interactions occur, social position is determined, and educational opportunities are defined; as a cognitive instrument, it provides access to concepts and meanings, the logical system for problem solving, and creates the organizational basis for knowledge. It is not an accident that a significant portion of all developmental research is addressed to issues of language acquisition and language performance, that the primary focus of school curricula in the early years is on the language arts, and that an ongoing concern of parents is their children's language acquisition. Language has consequence. However, language acquisition occurs in a context, and differing environments are bound to influence the way language is learned and used by young children. Children growing up in bilingual environments will have different experiences than those who encounter only one language, and these differences may have a profound impact on children's social, cognitive, and linguistic development. Understanding how these linguistic environments affect children's development requires an examination of the interactions between the social and cognitive dimensions of development in different learning environments.

A complete understanding of language acquisition and language proficiency in children can only be achieved by considering how varied social and linguistic contexts alter the processes linked to language acquisition and language use. Despite this, there is surprisingly little research attention paid to a detailed examination of the context in which language acquisition occurs and the impact of variations in the context on outcomes for different types of children. Is language acquired differently, and to different degrees of proficiency if more than one linguistic system is being learned? How do children who experience different paths in

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language acquisition because of special circumstances, such as autism, specific language impairment (SLI), or deafness, respond to bilingual environments and the need to learn two languages? How does specific linguistic knowledge required by the grammar of certain languages (e.g., Inuktitut) contribute to children's ability to adapt to and learn the structures used in different languages (e.g., French or English)? What does the acquisition of two languages do to the evolving system of concepts that emanate from the words in one of those languages? Does bilingualism have implications for the ease or means by which children learn to read? Is cognitive ability and performance influenced by the acquisition of two language systems?

Investigations of these questions contribute to our understanding of development in ways that go beyond language acquisition. A scientifically based understanding of how language-learning environments interact with linguistic and cognitive processes and outcomes is also fundamental to understanding basic issues in the developmental and educational sciences. To be more specific, the linguistic and cognitive world of children of immigrants who speak one language at home and another at school, bilingual children who speak two languages at home, atypically developing children whose language abilities are compromised, congenitally deaf children who have no access to the oral linguistic environment, or socially disadvantaged children who may receive impoverished linguistic models in one or sometimes two languages, cannot be understood without a clear description of how language interacts with these social and linguistic contexts. The study of bilingual children provides a perspective on these processes that is unavailable from studies of acquisition in monolingual settings, where word and concept, language and thought, and performance and competence, are inextricably intertwined. Introducing two languages provides a prism that allows one to filter out the influences of language and cognitive systems individually and thereby to more fully appreciate their structure and development.

Models of language acquisition often ignore the social and linguistic context in which this seminal development occurs, assuming a homogeneous environment in which language has only one form, speakers only one face. However, this uniform linguistic landscape is not necessarily the norm. In much of the world, language is a matter of political obligation and social expedience: regional languages dominate in school settings, vernacular dialects sustain social interactions and family life, and official languages pervade bureaucratic interactions. To residents of these societies, this division of linguistic labor seems normal, and little energy is spent debating its consequences. In contrast, in countries such as the United States and various western European nations that are marked by linguistic homogeneity, there is active discussion about the role that the social and linguistic context plays in children's language acquisition, in particular, the consequences of a bilingual experience. In these countries, however, research on simultaneous bilingualism is often limited to minority language contexts. These examples point to a fundamental irony in the approach to research on bilingualism: the greatest concern appears to emanate from the most monolingual environments.

Canada stands partway between the traditions of multilingual countries that quietly accept linguistic pluralism and monolingual countries that actively study it. Canada is a socially diverse multilingual society with a policy of official

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bilingualism, a diversity of schools and school systems that operate in non-English languages, a rich array of indigenous languages, and an urban structure in which ethnic neighborhoods are supported for their linguistic and cultural diversity. At the same time, much of Canada, and many Canadians live in a world described in our cultural literature as "two solitudes," functioning largely as monolinguals but dipping into the bilingual pie through such choices as French immersion education for our Anglophone children and visits to Quebec for vacations that include a more complete linguistic and cultural experience. This blend of linguistic, sociocultural, and political factors has made Canada a unique forum in which to study these important issues on the interaction of societies and languages in development and on the consequences of social environments that require children to become bilingual. Our aim is to establish how environmental bilingualism, such as that created in multilingual societies, affects children's development and determines how children's developmental capacities for multilingualism are enhanced through the social context.

The insights gained from this endeavor can be used to elaborate models of language and cognitive development for children in all environments. This process will also lead to the creation of a more complete framework for understanding the subtle relations and interactions that define language acquisition. For example, the social dimension of bilingualism indicates differences in the circumstances of large bilingual populations in different countries, from poor and working class for Spanish–English bilinguals in the United States, to middle class for Welsh–English bilinguals in Wales. Similarly, the linguistic dimension of bilingualism delineates different contexts for children's language acquisition, from immigrant children growing up in Germany, where only German is officially heard, to immigrant children in Canada, where a wide range of non-English languages define community life. Even within Canada, learning French as a minority language in Alberta is substantially different from learning French as a majority language in Quebec where the linguistic context provides different types of support for bilingual language acquisition. The experiences and developmental capacities of bilingual children in these different environments are altered in important ways.

The papers in this Special Issue are organized into three sections that explore specific aspects of the topic. The focus of the first section is an examination of language acquisition and language use in bilingual environments. The papers by Pearson and by de Houwer investigate how home environments are organized to foster bilingual language acquisition under specific social conditions.

There are different ways to create bilingual environments at home, including homes in which two languages are spoken and those in which the home language is different from the community language, possibly because of immigration. These decisions, however, are invariably embedded in a context that is defined by such factors as socioeconomic level and the majority or minority status of specific languages. Equally, these social factors influence the way in which adults interact in bilingual environments. It is necessary to examine social differences such as those between children in privileged social circumstances and those in more compromised social environments, and those between children whose home environment operates in a valued majority and those who speak a minority language at home

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that is not valued outside the home to fully understand how the bilingual environment impacts on language performance. We know that the social environment is immensely important in shaping children's language acquisition, constraining children's cognitive development, and predicting children's school achievement. We need to understand as well how these social factors interact with bilingualism to determine long-term outcomes for children and adults whose lives are engaged in bilingual societies.

The focus of the second section is on the cognitive and linguistic implications of early bilingualism. The papers by Verhoeven and by Nicoladis examine cognitive and nonlinguistic dimensions through investigations of the development of metalinguistic awareness and the use of gestures, respectively. The papers by Burns et al., Vihman et al., and Meisel concentrate on linguistic aspects of development for children raised in bilingual homes. These analyses are based on the acquisition of phonology, language proficiency with special attention to phonological awareness, and grammar, respectively.

Beginning from birth, infants raised in homes where two languages are spoken, or where the language spoken is different from that of the community, have a different basis for establishing phonological distinctions and early lexical and grammatical concepts than do children born into monolingual environments. Early exposure to multilingual environments, therefore, may have a significant impact on the establishment of linguistic categories that affect subsequent language learning. Therefore, children's acquisition of language, including phonology, lexicon, and grammar, is altered in bilingual acquisition. This early experience may also have implications for later linguistic and cognitive strategies. Previous research has indicated ways in which bilingualism affects development in metalinguistic awareness, literacy, and cognitive abilities, including nonlinguistic ones. Metalinguistic awareness is a significant basis for both cognitive and linguistic achievements, setting the stage for metacognitive reflection on knowledge and strategy use, so an impact of bilingualism on this development would be consequential. Moreover, the nonlinguistic dimensions of communication, such as gesture, are central to the child's communicative competence. It is important to understand how bilingualism may affect these developing skills.

The focus of the third section is on bilingual language acquisition for special populations. The paper by Allen examines the acquisition of two languages in native communities for whom neither majority language is the first language. The paper by Mayberry investigates the acquisition of a sign and spoken language by deaf adults, and the paper by Paradis considers the acquisition of two languages for children with SLI.

Not all children come to bilingual language acquisition with the same initial abilities to learn and use language. In the monolingual literature, there is considerable research on language acquisition for children with special needs, but very little research examines how these children manage to learn two languages. These situations define special relationships between the interacting forces of the linguistic environment and the child's cognitive abilities. Children with SLI, for example, experience difficulty in language acquisition despite normal intelligence and cognitive functioning, so the balance between linguistic and cognitive factors is altered when these children are placed in bilingual environments or engage in

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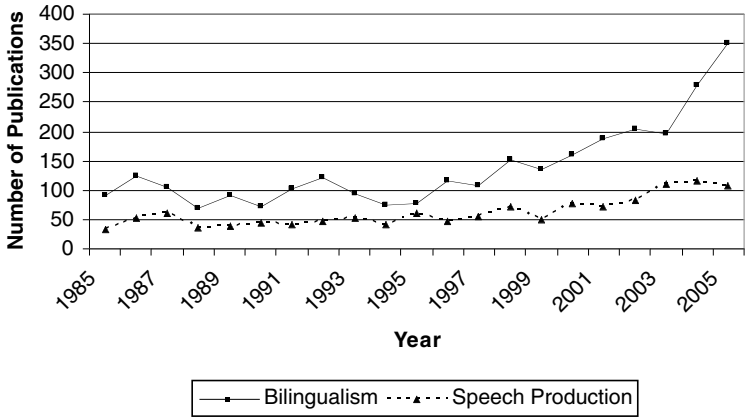


Figure 1. The number of publications with keyword "bilingualism" and with keyword "speech production" from 1985 to 2005.

learning a second language. Hearing children born to deaf parents often become bilingual from birth, using sign to communicate with their parents and spoken language to interact with the hearing world, but most deaf children are born to hearing parents and do not have this opportunity. Their bilingual development begins when they are exposed to English, usually through print. These are some of the special conditions that stretch our ability to understand how languages and environments interact in developing children's linguistic and cognitive competence.

These papers are part of a growing interest by researchers to understand the effect of multiple languages on individuals and on societies. A search of papers containing the keyword "bilingualism" in the 20 years between 1985 and 2005 indicates a dramatic increase in this trend. However, publications of all types have undoubtedly increased over these decades: there are simply more journals and more researchers producing scientific papers. Therefore, we compared the growth of studies on bilingualism to that for speech production, an area of comparable specialization and research interest. The data showing the number of publications per year for both areas of research are shown in Figure 1; it is clear that bilingualism has enjoyed a surge in interest in the past 8 or 10 years that cannot be attributed to a simple increase in research productivity. Language is the defining element in our social and cognitive lives, and to the extent that we understand how languages are learned, used, and enjoyed, we will understand as well how individuals and societies interact and how we can make those interactions more harmonious and the induction of our children into these societies more seamless and productive for everyone.

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