8.5.2 Bilingual First-Language Acquisition

When children acquire two languages from birth or from young childhood, we usually talk of bilingual first-language acquisition. Any child who receives sufficient input from two languages will grow up fully bilingual in the sense that Bloomfield meant of having native control over two languages. Research by Barbara Pearson and her colleagues in 1997 suggests that children will become competent speakers of a language only if at least 25% of their input is in that language. In addition, not just any input will do, as was discussed in File 8.4. Children learn language by interacting with speakers of that language. It's not enough, for example, to sit a child in front of a Spanish television program and expect him to learn Spanish. The child will learn Spanish only if he interacts with others in Spanish.

One typical feature of bilingual children's speech is **language mixing** or **code-switching**: using more than one language in a conversation or even within a phrase. Mario, a boy who grew up mostly in the United States and whose parents spoke Spanish to him, frequently used both English and Spanish in the same sentence, as in the following examples (Fantini 1985: 149):

(1) *Sabes mi* school bus *no tiene un* stop sign.
"You know, my school bus does not have a stop sign."

Hoy, yo era line leader *en mi escuela.*
"Today, I was line leader at school."

Ponemos cranberries *y* marshmallows *y después se pone el* glitter *con* glue.
"Let's put cranberries and marshmallows and then we put the glitter on with glue."

The fact that bilingual children mix their languages has led some early researchers to believe that they speak neither of their languages really well. It has even been suggested that mixing in young children shows that their languages are fused into one system. That is, children have not yet figured out that they are using two different languages. However, more recent research has shown that bilingual children can differentiate their languages by the time they are four months old—long before they utter their first words. Laura Bosch and Nuria Sebastián-Gallés (2001) found that four-month-old Spanish-Catalan bilingual infants could distinguish between even these rhythmically similar languages. Since infants can differentiate two rhythmically similar languages like Spanish and Catalan, it is reasonable to hypothesize that four-month-old bilingual infants would also be able to differentiate languages that are rhythmically different (because this would be an easier task). However, more research in this area is needed to confirm this hypothesis.

If bilingual children can differentiate their languages well before they utter their first word, why do they mix languages? Let's take a closer look at Mario's utterances in (1). We can see that Mario does not just randomly mix English and Spanish. Instead, he seems to use some English nouns in what are basically Spanish sentences. Furthermore, all of the English nouns he uses are related either to his school experience in the United States (*school bus, line leader,* etc.) or to typically American items (*cranberries, marshmallows,* etc.). It's then possible that he knows these words only in English or that he uses them more frequently in English. Even if we assume that Mario does not know these words in Spanish, we certainly can't conclude that he's unable to differentiate between Spanish and English.

Alternatively, Mario may mix his languages in the examples above because he knows that the people he is talking to understand both languages. Children are very sensitive to which languages their listeners can understand. If they believe that their listeners speak, say, only Spanish, they would try to stick to Spanish. But if they believe that their listeners know, for instance, English and Spanish, there is no reason for them to make an effort to stick to one language in particular, since many bilingual children grow up in an environment in which adults also frequently code-switch.