

# BABIES ALSO LISTEN WITH THEIR EYES

**Very young infants who are exposed to a variety of languages can tell the difference between their native languages and other languages, but this ability ceases by the time they reach 8 months old unless they are familiar with the languages tested.**

*“In auditory studies, they’ve shown that, at birth, babies can tell apart the sounds from all the world’s languages and then over the 1st year of life, they lose sensitivity to sounds that aren’t part of their native language,”* said lead study author Whitney Marie Weikum. *“I wanted to see if it was similar for visual clues.”*

Her study clearly showed that it is. She found that babies distinguish between languages visually until they are 6 months old. Bilingual babies are even more capable in that they visually discern their two native languages.

To determine that babies use visual clues, researchers set up silent video clips of three bilingual speakers reciting sentences from *The Little Prince* in French and English. Babies would sit on a parent’s lap in front of a 27-inch television screen hooked up to a computer. The parents wore dark sunglasses to prevent them from seeing the screen and influencing their children. Each trial consisted of multiple clips presented to the infant for a maximum of 16 seconds. When the baby looked away, an experimenter watching the baby’s face via closed-circuit camera would press a key.

Digital video analysis verified experimenters’ response times. It was assumed that if babies looked at a clip for a longer-than-average duration, it was because they noticed the language change. Babies in the control groups would see the same speakers speaking a single language. Babies in the experimental groups saw the same speakers using both languages. Researchers then averaged the test times and compared them with the times babies stared at clips in the control and experimental groups.

They tested 96 infants, 24 of whom were exposed to a second language (French) at least 25% of the time. The others were exposed only



to English. Tests were conducted on 3 groups—4-, 6- and 8-month-old babies.

To see if babies could visually distinguish their native English from the rhythmically-different French, the researchers showed the same speakers saying different sentences. They found that at 4 and 6 months of age, the experimental group of infants looked significantly longer at clips when the languages switched. By 8 months of age, however, the babies in monolingual environments no longer noticed the switch, while those in bilingual environments continued to be able to tell the difference. *“It shows that babies’ abilities match their language environments,”* says Weikum.

*“This study is very important for two reasons,”* says Dr. Fred Genesee, a specialist in bilingual research and a professor at McGill University. *“It adds scientific evidence that infants have extremely powerful processing capacities that facilitate the challenge of learning language. It is widely believed that dual language exposure is not simply a challenge, but a*

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*burden for infants and can slow down and perhaps even impede normal development. This study shows that this perception underestimates infants’ learning capacity. The additional stimulation serves to maintain infants’ discrimination ability beyond those of monolingual children; this, in turn, lays the foundation for simultaneous bilingual acquisition.”* 🦋

**BY TRACEY ARIAL**