

## Paragraph 7

In 2007, researchers at Harvard University, who were studying the two theories, found a clever way to test them. More than 20,000 internationally adopted children enter the US each year. Many of them no longer hear their birth language after they arrive, and they must learn English more or less the same way infants do – that is, by listening and by trial and error. International adoptees don't take classes or use a dictionary when they are learning their new tongue and most of them don't have a well-developed first language. All of these factors make them an ideal population in which to test these competing hypotheses about how language is learned.

Neuroscientists Jesse Snedeker, Joy Geren and Carissa Shafto studied the language development of 27 children adopted from China between the ages of two and five years. These children began learning English at an older age than US natives and had more mature brains with which to tackle the task. Even so, just as with American-born infants, their first English sentences consisted of single words and were largely bereft of function words, word endings and verbs. The adoptees then went through the same stages as typical American-born children, albeit at a faster clip. The adoptees and native children started combining words in sentences when their vocabulary reached the same sizes, further suggesting that what matters is not how old you are or how mature your brain is, but the number of words you know.

This finding – that having more mature brains did not help the adoptees avoid the toddler-talk stage – suggests that babies speak in babytalk not because they have baby brains, but because they have only just started learning and need time to gain enough vocabulary to be able to expand their conversations. Before long, the one-word stage will give way to the two-word stage and so on. Learning how to chat like an adult is a gradual process.

But this potential answer also raises an even older and more difficult question. Adult immigrants who learn a second language rarely achieve the same proficiency in a foreign language as the average child raised as a native speaker. Researchers have long suspected there is a 'critical period' for language development, after which it cannot proceed with full success to fluency. Yet we still do not understand this critical period or know why it ends.

- 10 What is the writer's main purpose in the seventh paragraph?
  - A to give reasons why adopted children were used in the study
  - B to reject the view that adopted children need two languages
  - C to argue that culture affects the way children learn a language
  - D to justify a particular approach to language learning
- 11 Snedeker, Geren and Shafto based their study on children who
  - A were finding it difficult to learn English.
  - B had come from a number of language backgrounds.
  - C were learning English at a later age than US children.
  - D had taken English lessons in China.
- 12 What aspect of the adopted children's language development differed from that of US-born children?
  - A their first words
  - B the way they learnt English
  - C the rate at which they acquired language
  - D the point at which they started producing sentences
- 13 What did the Harvard finding show?
  - A Not all toddlers use babytalk.
  - B Language learning takes place in ordered steps.
  - C Some children need more conversation than others.
  - D Not all brains work in the same way.
- 14 When the writer says 'critical period', he means a period when
  - A studies produce useful results.
  - B adults need to be taught like children.
  - C immigrants want to learn another language.
  - D language learning takes place effectively.