The Critical Period Hypothesis- 60 years on

For adults in today’s society, there are acknowledged social and economic advantages of learning to speak “international” languages such as English. The teaching and learning of these languages is a growth industry in the private sector and also affects Higher Education authorities across the globe. However, there are still many debates, both theoretical and evidence-based, about the nature of Second Language Acquisition (SLA) and the characteristics of late-acquired bilingualism as compared to childhood bilingualism.

Nearly 60 years after Penfield and Roberts proposed the Critical Period Hypothesis, this concept, in one form or another, continues to be influential not only among the general public but also among academics, researchers and second language learners and teachers. However, more recent research using neuroimaging and other techniques has shed new light on this classic debate about the nature and limitations of language learning after childhood.

In this talk I will briefly present some of the recent research from cognitive neuroscience exploring brain structure, function and connectivity in late learners of a second or new language and will discuss what these studies reveal about brain plasticity after childhood. How is the brain changed by learning a new language? Are there cognitive advantages and/or disadvantages associated with these changes when languages are learned later than childhood? What are the implications of these results for SLA teaching and learning?

Bio. Dr. Margaret Gillon Dowens

Dr Dowens has a PhD in Cognitive Neuroscience and post-graduate qualifications in psychology and teaching from universities in the United Kingdom and Spain. She has taught psychology, linguistics and languages and has trained language teachers and interpreters in different countries. She is currently Director of Teaching for the Faculty of Arts and Education at the University of Nottingham Ningbo China and Director of the University of Nottingham Ningbo Interdisciplinary Centre on Research in Neuroscience.

Her current research is mainly in the areas of bi/multilingualism from a cognitive neuroscience perspective, investigating character and word processing and morphosyntax processing in Spanish, Chinese and English, among other languages. A particular interest is in the effects of aging on language learning and the effects of late second language learning on cognitive aging. To study these issues, she uses both offline behavioural measures such as accuracy and reaction times and on-line neuroimaging techniques such as Event-Related Potentials (ERPs) to record and analyse the brain electrical activity of monolinguals and early and late bilinguals while they read or listen to sentences and words. She is also interested in the applications of these findings to language learning and teaching.

Selected Publications:


