UC Merced

Proceedings of the Annual Meeting of the Cognitive Science Society

Title

The Role of Learning Strategies in Second Language Acquistion

Permalink

https://escholarship.org/uc/item/4bh3d261

Journal

Proceedings of the Annual Meeting of the Cognitive Science Society, 27(27)

ISSN

1069-7977

Authors

Ratwani, Raj M. Trafton, J. Gregory

Publication Date

2005

Peer reviewed

The Role of Learning Strategies in Second Language Acquisition

Asha Halima Smith (ashas@psych.stanford.edu)

Department of Psychology, Stanford University Stanford, CA 94305 USA

Michael Ramscar (Michael@psych.stanford.edu)

Department of Psychology, Stanford University Stanford, CA 94305 USA

Introduction

A wealth of past research suggests that children are ultimately more successful at learning new languages than adults (i.e. Johnson & Newport, 1989; but see also Snow & Hoefnagel-Hoehle, 1978). On the other had, adult language learning is not universally impaired; some adults are able to become fluent in new languages (Birdsong, 1992; Mayberry, 1993) even though the majority encounter difficulty (Johnson & Newport, 1989). Overall, the evidence is for a steady *probabilistic* decline in the likelihood of successful adult second language acquisition potential. Here we examine whether children's lower capacity for complicated strategic thinking, may ultimately make them more successful at learning new languages.

We propose that adults, with their greater capacity for strategic learning, such as the use of mnemonics (Bower, Clark, Lesgold and Winzenz, 1969), memorize names of objects in a new language by translating through a first language (L1), and that this rational strategy for fact learning may actually impair their learning of aspects of grammar such as inflectional morphology that are inherently lexical (Rumelhart & McClelland, 1986; Johnson & Newport, 1989). Further, given the evidence that bilinguals learning a third language perform better than monolinguals acquiring L2 (Cenoz, 2003), we suggest that bilinguals may adopt different strategies in word learning as compared to mono-linguals.

The current study tests the hypothesis that when given the opportunity to use their L1 to assist in learning new words in a new language, children and adults with early second language (L2) experience will still rely on real world object associations. Adults without early L2 experience will be more successful at learning names for objects in a new language when they can translate the words into their L1.

Methods

Sixty naïve participants took part in this study. Twenty were between the ages of 3 and 5 years old. Forty were between the ages of 18 and 30 years old (20 with early L2 experience and 20 with late L2 experience).

Children were taught novel names for pictures of 6 objects: 3 familiar objects (possible to translate from L1) and 3 unfamiliar objects (more difficult to translate from

L1). After a filler task, they were given a comprehensive recognition task to test for memory of the names for each object. The study was repeated with adults using 12 pictures of objects: 6 familiar and 6 unfamiliar. Percentages of accurately recalled names of familiar and unfamiliar objects were recorded.

Results

There was no significant difference between the percentage of familiar and the percentage of unfamiliar object names correctly recalled by children and adults with early L2 learning experience. Adults without early L2 experience were more successful at accurately recalling the names of objects that had an English translation. There was a significant interaction between familiar and unfamiliar object names recalled by participants with and participants without early L2 learning experience.

Disscussion

The results of the current study suggest that the learning strategies employed when learning new languages differ between children and adults and between adults with different L2 learning experience.

References

Birdsong, D. (1992). Ultimate attainment in second language acquisition. *Language*, 68, 706-755.

Bower, G.H., Clark, M.C., Lesgold, A.M. & Winzenz, D. (1969). Hierarchical retrieval schemes in recall of categorized word lists. *Journal of Verbal Learning and Verbal Behavior*, 8: 323-343.

Cenoz J. (2003) The additive effect of bilingualism on third language acquisition: A review. *International Journal of Bilingualism*, 7: 1, 71-87

Johnson, J. S. & Newport, E. L. (1989). Critical period effects in second language learning: The influence of maturational state on acquisition of English as a second language. *Cognitive Psychology*, 21, 60-99.

Mayberry, R. (1993). First-language acquisition after childhood differs from second-language acquisition: The case of American Sign Language. *Journal of Speech and hearing Research*, 36, 1258-1270.

Snow, C. E., & Hoefnagel-Hoehle, M. (1978). The critical period for language acquisition: Evidence from second language learning. *Child Development*, 49, 1114-1118.