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Neural Bases of Language: A Comparative study of Chinese and English

Half a century ago, William S-Y Wang published his seminal work entitled “The Chinese Language” in *Scientific American* (1973). In that article, he investigated the historical development and the unique features of the Chinese language, hypothesizing that “since Chinese does differ from the European languages in fundamental respects, some knowledge of its structure and historical development is indispensable to a general understanding of the nature of human language” (p. 53). His insightful analysis of the characteristics of the Chinese language and his hypothesis have since then played a leading role in multidisciplinary research on Chinese. In this talk, I will summarize recent neuroimaging findings of Chinese reading in contrast to reading in alphabetic languages, which provide strong empirical evidence for Wang’s hypothesis.

Li-Hai TAN is a professor of the Guangdong-Hongkong-Macau Institute of CNS Regeneration at Jinan University (Shenzhen) and Director of Shenzhen Institute of Neuroscience. His main research interest is to use neuroimaging (fMRI and ERPs) and cognitive techniques to investigate neuroanatomical and cognitive mechanisms underlying language processing, language learning, and reading disorders. He received his Ph.D. in psycholinguistics from the University of Hong Kong in 1995. Following post-doctoral research training in Learning Research and Development Center of the University of Pittsburgh, he worked in University of Hong Kong during 1999-2014 and founded the State Key Laboratory of Brain and Cognitive Sciences at the University of Hong Kong in 2005 and served as its director until 2014. He moved to Shenzhen University and helped the Shenzhen Government to establish the Shenzhen Institute of Neuroscience in 2014. Li-Hai Tan has performed research in the field of psycholinguistics and neuroscience at Jinan University (Shenzhen), Shenzhen University, University of Hong Kong, the Research Imaging Center of the University of Texas Health Science Center,



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