영어영문학과 BK21 FOUR 예비사업단 제 1 차 융화 인문학 콜로키엄 (5/30 (목)): 다중언어 처리의 뇌신경학적 분석

영어영문학과 BK21 FOUR 예비사업단에서는 학문 간 융합(convergence)을 넘어 융화(harmony)를 지향해 온 본교 인문학 연구의 전통을 계승하여, 영어학 및 영문학과 여타 관련 학문들 간의 통합과 응용의 새로운 원리와 방법론을 연구하고 있습니다. 오는 5월 30일에 문과대학 융합언어학 연계전공과 공동 주최하는 제 1차 융화인문학(Harmonic Humanities) 콜로키엄에서는 다중언어 처리의 뇌신경학적 분석을 다루는 특강을 마련했습니다 (자세한 내용은 아래에 있습니다). 본 콜로키엄은 최근언어학이 인지심리학과 뇌신경과학과 만남으로써 어떻게 언어와 인지의 과학적연구에 응용되고 그 영역이 확장되고 있는지 탐색하는 기회가 될 것입니다. 관심 있는모든 구성원들의 참여 바랍니다.

영어영문학과 BK21 FOUR 예비사업단 제 1 차 융화 인문학 콜로키엄

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제목: How does language distance between first language (L1) and second language (L2) affect the L2 brain network? An fMRI study of Korean-Chinese-English trilinguals 발표 요지:

How the brain learns a second language after the first language is acquired has been underspecified. The framework of assimilation and accommodation hypotheses has been used to explain the brain's responses to learning a new language (Perfetti et al., 2007). The assimilation hypothesis predicts that the brain network involved in processing L1 is largely reused during L2 learning. In contrast, the accommodation hypothesis predicts that learning L2 requires involvement of additional brain regions that are not engaged in L1. Previous findings suggest that several variables play an important role in shaping brain activation during L2 reading, such as age of acquisition, proficiency, and exposure to L1 and L2. However, the relationship between L1 and L2 have not gained much attention in neuroimaging studies of language. I will present my recent fMRI studies on how language distance between L1 and L2 influences the assimilation and accommodation pattern in Korean-Chinese-English trilinguals. The results showed that 1) the brain network involved in L2 reading is similar to the L1 network when L2 and L1 are similar in orthographic transparency (Korean-English), while significant accommodation is expected when L2 is more opaque than L1 (Korean-Chinese), and that 2) important brain regions for L1 are carried over to L2 reading, and higher L2 proficiency was associated with greater involvement of the native language network. These studies provide important evidence for neural plasticity by showing that the bilingual brain selectively engages different regions for different L2s.