



Learning another language

Slipping up between ear and lip

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A new Emmy Noether Research Group at LMU focuses on how we learn to pronounce the unfamiliar sounds in a foreign language, and why it is often difficult for us to avoid errors in pronunciation that we pounce on when they are made by others.



On se won händ

Like all languages, English lays out many snares for the unwary non-native speaker, and Germans regularly fall foul of one in particular, pronunciation of 'th'. A prominent recent victim was EU commissioner Günther Oettinger, who was often heard to begin his responses to reporters' questions with the phrase "On ze one händ". But you don't have to have an especially high profile in the media to stumble at articulatory hurdles like this, as the majority of those who now use English well know. "Anyone who has ever learned a foreign language may, despite years of practice, continue to pronounce certain words incorrectly," says linguist Dr. [Eva Reinisch](#) of LMU's Institute of Phonetics and Speech Processing. But why exactly is it so hard for people to speak a foreign language without betraying the accents of their native tongue? This is the question at the heart of the project on which a new Emmy Noether Junior Research Group at LMU, funded by the *Deutsche Forschungsgemeinschaft*, will focus over the coming years. The researchers plan to elucidate "the impact of auditory feedback on error monitoring and phonetic category representation in a second language", to cite the exact title of the project.

"What is paradoxical about this is that someone may have no difficulty recognizing an error in someone else's pronunciation, while remaining unable to correct that same mistake in his own speech," says Reinisch. The project hopes to shed light on the reasons for this asymmetry between perception and pronunciation. Two possible explanations suggest themselves. One is that auditory analysis of the phonetics of a foreign language is more complex than is generally assumed. "The unaccustomed sounds that occur in the foreign language are initially assimilated to the familiar sounds of one's first language. In other words, the phonetic analysis is short-circuited, and we do not really hear the properties that differentiate the foreign-language sounds from those of our native tongue," Reinisch explains. The other problem may lie in our attempts to avoid or correct errors in pronunciation – and may result from over- or undercompensating for perceived differences.

"To comprehend a conversation, our perceptual apparatus must tune in to the pronunciation and accent used by our interlocutors, and that requires a certain degree of adaptability. But if I allow myself too much flexibility, I may miss certain phonetic distinctions when a phrase is pronounced in a different way," Reinisch points out. During the next few years she and her colleagues will invite experimental participants into their language laboratory in order to characterize how they perceive strange phonemes and study their efforts to correct errors in pronunciation. In addition, the researchers hope to learn more about how exotic sounds that do not occur either in one's native or in the second language affect the flexibility of one's perception

and pronunciation.

The scourge of the English 'th'

With its focus on acoustic perception and reproduction of unfamiliar phonemes, the new project will explore an aspect of language acquisition that has so far received relatively little attention. "Up to now, researchers have tended to concentrate particularly on developmental and socioeconomic factors that make it difficult for people to learn a second language. But our knowledge of the cognitive factors that govern how we learn to pronounce unfamiliar sounds is still quite rudimentary. My goal is to learn more about this mechanism, and to understand how bilingual speakers actually process distinct languages," Reinisch says. The first phase of the project will focus on how native speakers of German pick up and use English. Attention will then shift to an analysis of the difficulties that German itself poses for non-native speakers.

In a Bachelor's research project, one of Eva Reinisch's students has been looking at the 'th' problem. The English phoneme is often pronounced by German speakers as 's'. Interestingly, Germans have no difficulty understanding the pronunciation 'birsday' to mean 'birthday'. German-speakers have apparently become so accustomed to the 's' as representing 'th' in English words that they now perceive it as an equally valid form of the 'th' sound," says Reinisch.

The results of the new project may well have wider implications for foreign language learning. "Perhaps we'll discover that hearing one's own errors in playback makes one more aware of how and why they occur, and thus makes it easier to correct them. We also want to explore whether overcompensation might actually be an effective method for picking up the correct pronunciation."