Trickle-down L1 attrition effects in heritage language bilingualism: The role of input in explaining difference across generations

Jason Rothman

In this talk, I will introduce the field of heritage language bilingualism studied from a formal linguistic perspective. Heritage language bilinguals are the adult byproducts of simultaneous bilingual or early child L2 acquisition in asymmetrical bilingual environments; the minority or heritage language is spoken at home whereas the larger society speaks a different language (see Montrul 2008; Rothman 2009). I will suggest and show data to support that one of the most deterministic variables that contribute to the ubiquitous differences in heritage speakers competence involves a process of trickle down L1 attrition at the communal level affecting the quality of input to which heritage speakers are exposed throughout their development. In doing so, I will challenge the very notion of incomplete acquisition as well as the perspective that somehow heritage speakers are not natives of their heritage language.

Two bee or not to be: homophone representations in monolinguals and bilinguals

Polly Barr, Britta Biedermann, Lyndsey Nickels

It is still not clear whether homophones share a word-form (Levelt et al, 1999) or have independent word-form-representations (Caramazza, 1997). Different paradigms have been used to disentangle this debate, amongst them translation-tasks with bilingual-speakers. However, can we infer about representations in monolinguals from a task using bilinguals? Consequently, our study compared monolingual and bilingual speakers in homophone picture naming. Naming performance was influenced by word-specific homophone frequency for both groups, suggesting homophones have independent-representations. We can conclude that bilingual language performance can inform both monolingual and bilingual lexical processing and storage mechanisms.
Effects of sentence position on subject-verb agreement processing in L2 Mandarin-English and L1 English adults: An ERP study

Sithembinkosi Dube, Varghese Peter, Katherine Demuth

Language acquisition research suggests that utterance-final lengthening enhances the perceptual salience of morphemes occurring sentence-finally, making them easier to acquire than those occurring sentence-medially. This study used Event-Related-Potentials (ERPs) to investigate the effects of sentence position on the auditory processing of the 3rd-person agreement violations by Mandarin L2-English learners and Monolingual-English controls. Participants actively listened to sentences varying in grammaticality and verb position. Monolinguals elicited an earlier P600 effect utterance-finally than medially while L2 learners elicited a frontal P600 utterance-finally and a posterior P600 utterance-medially. These results indicate that verb position interacts with language experience to shape neural responses to morphosyntactic processing.

Effect of socioeconomic status and literacy on bilingual cognitive control

Vishnu KK Nair, Britta Biedermann, Lyndsey Nickels

Bilingual speakers need for a constant control of language selection has been suggested to result in a bilingual advantage on a number of tasks that measure non-linguistic cognitive control (Bialystok, 2009). These advantages are replicated in older bilinguals but inconsistently found in children and younger adults, for congruent and incongruent trials (global effects) and incongruent trials (interference effect) (Hilchey & Klien, 2011). More recently, Paap & Greenberg (2013) found no compelling evidence for a bilingual advantage. It has been suggested that confounding variables may have resulted in the apparent bilingual advantage (e.g., Morton & Harper, 2007). In this study we tested thirty-six monolinguals and bilinguals (18 each) using Simon and Flanker task controlling for two potential confounding factors: Socio-economic status (SES) and literacy. Our results demonstrate no significant difference in interference and global effects between monolinguals and bilinguals suggesting a weaker link between bilingualism and cognitive control for individuals with no literacy.
Time course of Simon effect in bilinguals and monolinguals measured from ‘reach-to-touch’ paradigm

Manjunath Narra, Matthew Finkbeiner

In Simon task, studies have suggested that bilinguals outperform monolinguals on congruent and incongruent trials. The reaction time difference between congruent and incongruent trials termed Simon effect, is accounted by response activation from direct route for suppressing task irrelevant information and indirect route for processing task relevant information. However, it is unclear which route contributed for the bilingual advantage. In the present study we investigated the time course of these two independent response processes using ‘reach-to-touch’ paradigm in 19 bilinguals and 19 monolinguals matched for age, education and Raven’s score. The preliminary results are discussed in the study.

Consequences of bilingualism for language processing and language learning

Viorica Marian

A bilingual’s linguistic architecture is highly interactive and dynamic, both within and across languages. In this talk, I will show that knowing two languages changes spoken language comprehension and yields co-activation of lexical items across both languages. Using eye-tracking and mouse-tracking data, I will suggest that bilinguals’ domain-specific experience with cross-linguistic competition shows a relationship to domain-general executive function. One consequence of this inhibitory experience is a bilingual advantage in novel language learning. Compared to monolinguals, bilinguals are better at learning a new language and show less competition from the native language when using a newly-learned language. These differences in language processing and language learning suggest fundamental changes to linguistic and cognitive function as a result of bilingualism.

Does early informal translation experience make a difference? A psycholinguistic investigation

Jyotsna Vaid

Immigrant communities in language contact situations often call upon younger members to serve as linguistic and/or cultural intermediaries for a variety of transactions in a variety of domains – financial, medical, legal, educational, etc. These intermediaries act as language brokers, providing informal translation/interpretation on behalf of community members. Although there is by now an extensive literature on social and psychological aspects of language brokering, cognitive and/or psycholinguistic research on this topic has been scant. In my talk I will summarize recent work from our laboratory that has compared the performance of bilingual college students with or without childhood brokering experience on a range of psycholinguistic measures.
The acquisition of rhythm and related phonological factors in simultaneous bilinguals

Elaine Schmidt

This study investigates facilitatory and inhibitory effects of bilingualism on rhythmic acquisition. We analysed rhythm development overall with rhythm metrics (mathematical formulae that measure durational variability) in Spanish-English bilinguals in comparison to monolinguals in the respective languages. We then proceeded to analyse the development of phonological factors said to contribute to rhythm i.e. syllable structure, vowel reduction (Dauer, 1981; 1983), prosodic heads and edges (Prieto et al. 2012. Our findings demonstrate that bilinguals master consonantal variability and prosodic head- and edge-marking faster than monolinguals, probably as a result of more stable mental representations and more advanced motor control due to more varied structures in the input.

The acquisition of English phonology and morphology by early child second language learners

Nan Xu Rattanasone, Katherine Demuth

Mandarin is predominantly a CV language with no consonant clusters or inflectional morphology. English inflectional morphemes marking plurals occur as coda consonants (at end of words) and often form a consonant cluster (e.g., rocks), presenting challenges for Mandarin-speakers. However, it is unclear whether early child learners will have similar challenges. In this study we examined Mandarin-speaking 3-year-olds’ acquisition of English coda consonants in singular and plural words. Compared to English monolingual children, Mandarin-speaking children produced fewer coda clusters and fewer syllabic plurals (e.g., houses). This demonstrates that Mandarin-speaking children find complex coda consonants and inflectional morphemes challenging to acquire.
How does transparency of the morpho-phonological system affect the acquisition of gender in sequential bilingual children and children with SLI

Theo Marinis

Research on second language (L2) acquisition has shown that it is affected by language typology (Gathercole & Thomas, 2005). However, most studies addressing effects of language typology have focused on transfer effects from the L1 to the L2. Very few studies have investigated how the typology of the target language affects L2 acquisition. Language typology has also been found to affect language acquisition in children with Specific Language Impairment (SLI) (e.g., Leonard, 2000). In this talk I will address effects of language typology on the acquisition of grammatical gender in sequential bilingual children with Turkish as L1 and Dutch or Greek as L2 and also in monolingual Dutch and Greek speaking children with SLI. Results from production and on-line reaction time tasks demonstrate higher accuracy and better sensitivity to gender cues in Greek compared to Dutch across all groups, reflecting differences in the transparency of the gender cues in the two languages. Comparison between L2 children and children with SLI shows that transparency affects the two groups in a different way, reflecting differences between the two groups in the language acquisition process.