Group A

What does the acquisition of *-er* tell us about children's acquisition of derivational vs. inflectional morphology?

Maria Durso & Andreea Sandu

What do children do when they encounter two types of English *-er* suffixes which look and sound the same on the surface, but one is inflectional and one is derivational? Both are frequent in child-directed speech. The answer to this question reveals something about child acquisition of morphemic *–er* and provides some insight into when children acquire inflectional versus derivational morphemes. For this study, transcribed child speech from the Gleason and Carterette corpora from the CHILDES database was collected and coded for both inflectional and derivational *-er* occurrences. Each category was coded for creative versus single-lexical use. The number, type, and frequency of instances of inflectional and derivational *-er* was measured over years 2, 3, 4, 6, 8, and 10, with non-child-directed adult speech as a control. The ratio of inflectional to derivational *-er* occurrences show that the children acquire them at very similar rates, though derivational *-er* is consistently more frequent. Results also indicate a possible burst in frequency between the ages of 6 and 10 prior to settling at adult norms.

Production of Past Tense Forms for Children with Down Syndrome

Abdullah Aldukhayel & Carla Cuba Rico

Children with language impairment encounter difficulties producing past tense forms. Michael (2009) provides evidence that phonology, semantics and syntax are impaired for children with Down syndrome. This study aims to investigate if morphology is also impaired by examining at which age children with Down syndrome start producing past tense forms, and compare the findings to Shiply et al. (1991) for the production of irregular past tense forms for typically developing children. The data for this study were collected from Hooshyar Corpus, where children with Down syndrome were videotaped in a conventional household setting. Data containing production of past tense forms were collected and analyzed from thirty-one recordings of children with ages from 3 to 9 years old. The findings indicate that children with Down syndrome show no sign of past tense production until the age of five, where children start producing simple irregular past tense forms "got" and "done". Regular past tense forms production starts from the age of six years old, along with an increasing range of irregular forms. These findings show that children with Down syndrome do encounter morphological difficulties with past tense production, and the acquisition of such forms is late, compared to typically developing children.

Bilingual Input and Immediate Production Effects

Darlene Fahrenkrug & Lexie Lucero-Carter

Children who hear two languages from birth progress through a language acquisition process which results in emergent bilingualism or language dominance. A bilingual child's language preference is influenced by factors such as the sociocultural status of the languages, quality of each language the child receives, and the quantity of each language the child receives during the child's acquisition process. Here, we investigate to what degree language quantity in a bilingual child's input influences that child's language preference in a particular conversation. 150 lines from six transcriptions of naturalistic bilingual child-caretaker conversations were analyzed for correlations between input (caretaker speech) and output (child speech). The caretaker and child language production was compared in terms of mean length utterance (MLU) and number of utterance (TNU). The results showed that child TNU and MLU mirrored the input TNU and MLU in three out of six speech samples each. These results suggest that analyzing the language quantity in a child's direct input is not sufficient in consistently predicting a child's language use in a given conversation—however, further testing with a larger sample size or an analysis of one child's language choice to their input over time may yield different results.

Group A

Nasal and Rhotic Acquisition in Spanish and English-Speaking Children

Dominick Clemente & Matthew Halse

Do monolingual English-speaking children acquire their rhotic and nasals before, after, or around the same age as monolingual Spanish-speaking children? The Spanish rhotics, [r], the trill, and [ɾ], the tap/flap, and the English rhotic [ɹ], the approximant, share the same place of articulation (POA). The Spanish nasal [ɲ] and the English nasal [ŋ] differ in POA but match in manner of articulation (MOA). To determine whether these differences change the rate at which children acquire these phonemes, we compared the rhotics and nasals in two samples of child speech from monolingual Spanish-speaking children and two from monolingual English-speaking children. We coded relevant phonemes and calculated the percentage of correct utterances. The Spanish-speaking children generally began pronouncing their respective rhotics and nasal earlier than the English-speakers. While the Spanish-speakers pronounced [r] and [ɾ] at a minimum of 50% correctness starting at age 2:06, the English-speakers pronounced [ɹ] beneath 50% correctness for through age 3:06. Spanish-speakers pronounced [ɲ] correctly 100% throughout all age samples, whereas English-speakers ranged from 50% to 80% correctness for [ŋ] throughout all age samples. These findings suggest that rhotic phonemes may differ in acquisition rate depending on MOA and nasal phonemes may differ depending on POA.

Effect of Environment on Production of Liquids in Japanese/English and Korean/English Bilingual Children

Emily Merrick & Susan Partyka

English liquids /r/ and /l/ are difficult for many Asian language speakers to produce consistently. To find common patterns of error, we examined the liquid production of two bilingual children ("A" and "J", ages 2-4) who are being raised in Asian countries (Japan and Korea respectively) where native-English speakers are scarce. Using online corpora, we identified prescribed English liquid utterances and evaluated actual utterances of the children (e.g. "already" as /awɛdiː/) in terms of environment and correctness. Environment was one of four categories, initial ("tomorrow"), non-initial onset ("truck"), non-final coda ("first"), and final ("number"). Correctness was evaluated in terms of accuracy of articulation; generalizations were made about incorrect utterances. Results showed a strong, shared tendency to elide final /r/ and significant proportion of inaccurate /r/ utterances in all environments. Neither child displayed significant interchangeability of English liquids. From these data, we gather that these bilingual children can differentiate between /r/ and /l/ phonemes and understand when to activate them, but accuracy of production is still low by this age, especially when producing liquids finally and in clusters.

A qualitative study of toddler's morphological blends explained by language learning theories

Marwa Hussien & Jumanah Alhussain

Bilingual speakers, especially children, sometimes produce blends. The current qualitative study examines how toddlers produce Morphological blends (L2 words that are affected by L1 morphology) from two language pairs (Arabic (L1)/ English(L2), and English (L1)/Urdu (L2)) in light of two L theories (The Proactive-Retroactive Inhibition theory (PI/RI) and Transfer theory). The blends originated from naturalistic observation method (parent-child interaction). In this study, we argue that the Transfer theory explains the blends as the influence of the toddler's L1 exerting over the acquisition of L2. The blends are not affected by positive transfer because they are not a correct L2 production. Moreover, there are many differences between L1 and L2. This suggests that the blends are affected by negative transfer. We also argue that The PI theory and not the RI theory can explain the blends because the blends are a result of L1 inhibiting on L2. Thus, they are considered as interlingual errors. The study can be beneficial in showing how universal the blending process is, and how helpful it is in teaching a L2 or in acquiring a L2.

Group B

Effects of Early Intervention on Speech Delay

George Lekakis & Amy Watson

Children diagnosed as "late talkers" are characterized by limited expressive lexicon with fewer than 50 words and limited word combinations by 24 months (Kelly, 1998). If left undiagnosed, late talkers can develop recurring language problems impacting their lives. This case study looks at effects of early diagnosis and intervention for the lexicon of preterm late talkers. We analyzed MacArthur-Bates Communicative Development Inventories (CDI) data for twin boys at 24 and 48 months to measure the effects of speech services over two years. This data was compared with corpora of normative CDI data (via Wordbank) for vocabulary production. Our preliminary focus was total number of words produced or attempted and complexity of syllable structure . Overall, we found that the participants had a vocabulary increase of over 600%. The Wordbank comparisons revealed that the participants ' vocabulary at 24 months was equivalent to that of typically developing 16 month olds, while at 48 months vocabulary exceeded the 100th percentile for the Wordbank data for the oldest age available (30 months). Our findings support early diagnosis of language impairment, and targeted intervention, joining a growing consensus advocating for automatic screening for language delays for preterm infants.

First Language Acquisition of Grammatical Gender in Determiner Phrases: Case Study of German and Portuguese Children

Lauren Jones & Ana Carolina Machado Silva

Production of grammatical gender markings in the determiner phrases of German speaking children is noted by Szagun as beginning around one-year-and-five-months, though the rate of accuracy nears perfect by three years of age. In acquisition research on English, which lacks grammatical gender, the process has been noted to take just as long.This paper aims to answer the rate at which children acquire grammatical gender markings, and how far along in the acquisition process this occurs. Productions by 9 children children 1;5 to 3;0 years old were collected from both Szagun's and Freitas's data in CHILDES in German and Portuguese respectively. Collected productions included those with definite or indefinite determiners, such as "der" and "ein" in German, or when contracted within prepositional phrases, such as "na" which is derived from "em a" in Portuguese. Through manual collection and coding of the productions, we found that Portuguese speaking children by 1;8 and German speaking children by 2;5 produce gender marked determiner phrases with rates of accuracy higher than 90%. In conclusion, children, regardless of the presence of grammatical gender in their first language, acquire determiner phrases around the same time frame, implying a robust statistical learning process.

Separation of Phoneme Categories for Spanish-English Bilingual Children

Nicole Braccia & Jasmine Chavez

Do Spanish-English bilingual children aged 2-3 years old create separate categories for the phonemes [b] [β] [r] [ɹ]? This study provides insight into how early bilingual language learners produce different sounds depending on the language they are speaking. To determine if a bilingual child is creating separate articulatory categories for the different phonemes in both languages, we collected a set of these sounds produced during free speech from CHILDES corpora and took measurements using Praat. In both monolingual and bilingual English and Spanish speech, we measured the duration of /r/ and /s/ and used judgment to measure frication of /b/ in both Spanish speaker types. We then compared the measurements of bilingual sounds produced to monolingual sounds produced. We determined that there is no significant variation between sounds produced by a monolingual speaker in each language and a bilingual speaker speaking both languages. The results suggest that Spanish-English bilingual children do create separate articulatory categories.

Group B

Do Gestures Aid in Vocabulary Acquisition in Children?

Lara Garrity & Richard Wentworth

Young children rapidly attain a significant vocabulary through means of observation of speakers' gestures and linguistic clues. McNeill, Cassell, and McCullough (1994) conclude from a study of adults and speech-gesture mismatch that information conveyed through concurrent speech and gesture is combined into one mental representation by the listener/observer, showing that gesture relays similar information as speech. From this, we examine if iconic gesture concurrent with speech without any other contextual clues can provide enough information for a child's acquisition of new vocabulary. We tested whether two four-year-old children can identify the intended meaning of a novel verb after the observation of iconic gesture and with no other linguistic clues. We presented each child with four sentences containing novel verbs - two accompanied with gestures, and two without gestures. With a total of eight sentences between the two participants, 75% of the verbs accompanied with a gesture were identified correctly, while only 50% of the verbs without were identified correctly. From these findings, we conclude that gesture without other contextual clues is sufficient for children to acquire new vocabulary, as opposed to solely linguistic clues.

Do bilingual children semantically overgeneralize colors more than monolingual children?

Madison Schrews & Matthew Letourneau

Semantic generalization, or the clustering of different colors into the specific categories of red, blue, yellow, etc., has been researched within the recent years. While this research has focused solely on monolingual English speakers, our study explored the relationship between monolingualism and bilingualism. Our experiment involved two preschool-age children—one English-speaking monolingual child, and one Malayalam/English-speaking bilingual child. The researchers laid out different-colored balls and instructed children to pick out specific colors. There were two or three balls each of a primary color, and the children were selected of preschool-age and based on home language(s). Key comparisons in the study between the children involved the number of correct responses, whether overgeneralization occurred (choosing more than one color), and which colors were most correctly chosen. Our research found that while both children did not present overgeneralization (including more than one color per trial), the bilingual child was the only one to correctly choose the correct color on each trial. Furthermore, the monolingual child confused the yellow, red, and orange color names during the trials, while both children correctly chose the blue and green. In conclusion, there seems to be immediate evidence that bilingualism aids children in learning each color, but that both children by preschool-age do not exhibit overgeneralization.

Schedule

7:00 Set-up
7:30 Group A posters attended
8:00 Group B posters attended
8:30 All posters attended
9:00 Clean up