The 30th Annual
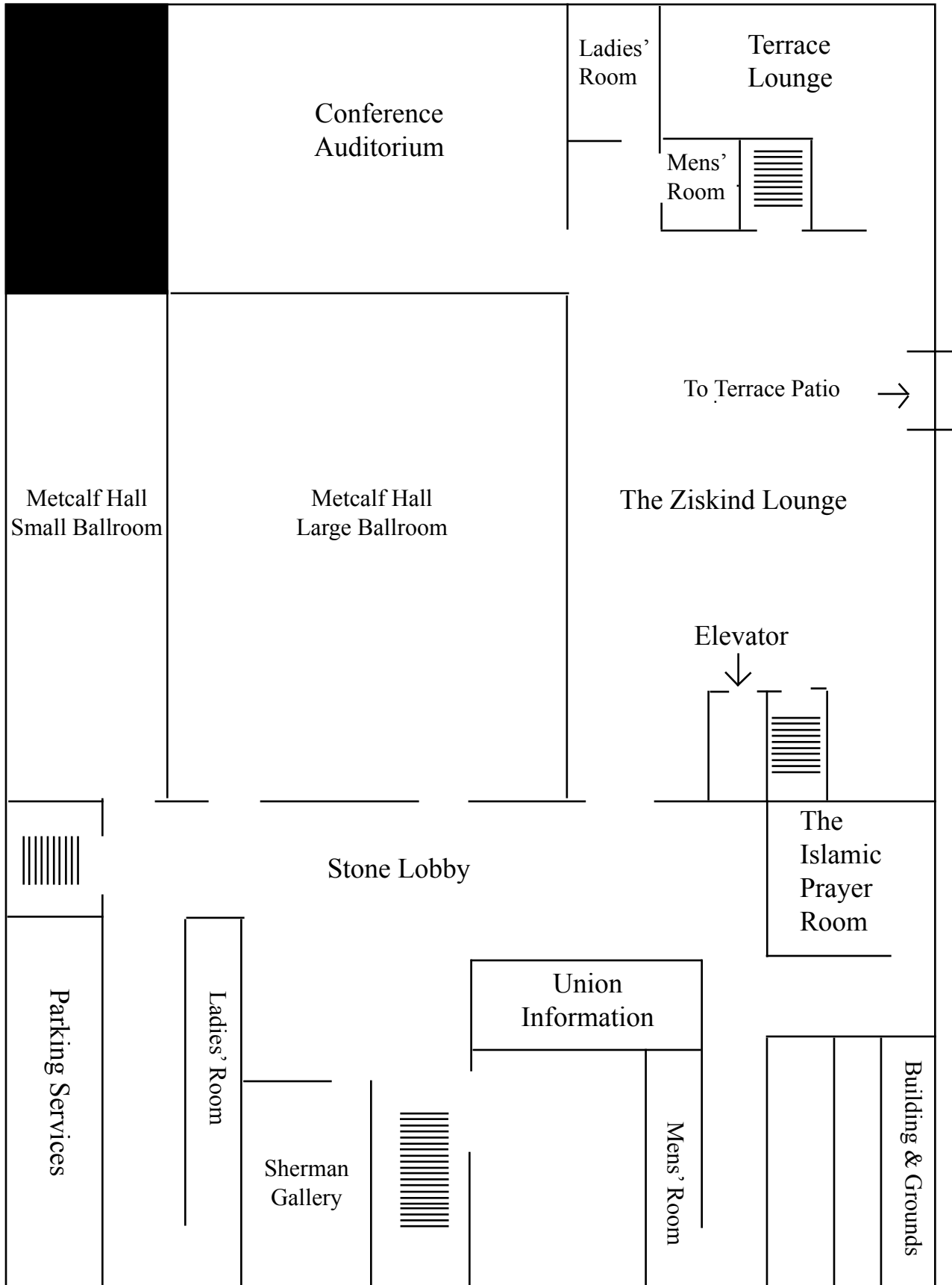
Boston University
Conference on
Language Development

November 4-6, 2005

Map of George Sherman Union (Second Floor)

Commonwealth Avenue

Conference Auditorium

Ladies' Room

Terrace Lounge

Mens' Room

To Terrace Patio →

Metcalf Hall Small Ballroom

Metcalf Hall Large Ballroom

The Ziskind Lounge

Elevator

Stone Lobby

The Islamic Prayer Room

Parking Services

Ladies' Room

Union Information

Sherman Gallery

Mens' Room

Building & Grounds

↓ To First Floor and Main Entrance

Table of Contents

Welcome

Our 30th Year
We would like to welcome all of you to the Thirtieth Annual Boston University Conference on Language Development. This conference was started in 1976 and has been organized by graduate students in Boston University's Program in Applied Linguistics ever since. Over the years, various faculty members have generously given their time and energy as advisors to the conference, and several generations of graduate students have achieved continuity from one year to the next. The organizers have been honored to host participants from around the world, including linguists, psychologists, and other researchers of language acquisition and development. We thank them all for the research accomplishments they have shared with us here over the past thirty years.

Invited Speakers
At this year's conference, we are honored to have Janet Werker and Harald Clahsen as our featured speakers. Professor Werker will present Friday's keynote address, "Speech perception and language acquisition: Comparing monolingual and bilingual infants." Saturday's program will close with Professor Clahsen's plenary address, which is entitled "Grammatical processing in first and second language learners." We are pleased to once again host a symposium during the lunch period on Saturday. This year's symposium will be in the form of a panel discussion, with participants Jeff Elman, LouAnn Gerken and Mark Johnson. The title of the symposium is "Statistical learning in language development: What is it, what is its potential, and what are its limitations?"

Paper and Poster Presentations
The rest of the program is devoted to a wide range of papers and posters chosen from submitted abstracts. This year we received 390 submissions, each of which was sent out to five reviewers for anonymous review. Of these, 87 papers and 46 posters were selected for presentation, for an acceptance rate of 34%. We are sorry not to have had space to include more of the many excellent submissions we received. We have also included abstracts for those individuals who generously agreed to serve as alternates in case of cancellations.

Proceedings
Once again this year we will be publishing the Proceedings of the Conference, including both papers presented and those selected for alternate status. Information about ordering copies is available in your registration folders and at the Cascadilla Press table during the book exhibit. We will also have an online supplement to the proceedings for papers given as posters, which will be published on the web by BUCLD. A DVD of the lunch symposium will also be available to order.

Enjoy
We are committed to providing an ongoing forum for work in the diverse field of language development, here at Boston University. We hope you will enjoy the conference!

The 2005 Conference Committee
David Bamman
Tatiana Magnitskaia
Colleen Zaller

Coordinators
Eunju Bang
Heather Caunt
Nives Dal Bo-Wheeler
Marj Hogan
Enkeleida Kapia
Nehrir Khan
Samantha Kulatilake
Christina Weaver

Acknowledgements

Nameera Akhtar	Adele Goldberg	Jeffrey Lidz	Tetsuya Sano
Shanley Allen	Susan Goldin-Meadow	Jackie Liederman	Lynn Santelmann
Richard Aslin	Peter Gordon	Elena Lieven	Carson Schutze
Edith Bavin	John Grinstead	Conxita Lléo	Bonnie D. Schwartz
Heike Behrens	Andrea Gualmini	Rachel Mayberry	Amanda Seidl
Paul Bloom	Maria Teresa Guasti	Sarah Michaels	Ann Senghas
Joyce Bruhn de Garavito	Paul Hagstrom	Carol Miller	Yasuhiro Shirai
Nancy Budwig	Cornelia Hamann	James Morgan	Leher Singh
Harald Clahsen	Marco Haverkort	Letitia Naigles	William Snyder
Jeff Coady	Roger Hawkins	Elissa Newport	Rex Sprouse
Peter Coopmans	Erika Hoff	Cathy O'Connor	Daniel Swingley
Stephen Crain	Bart Hollebrandse	Janna Oetting	Margaret Thomas
Suzanne Curtin	Aafke Hulk	Anna Papafragou	Michael Tomasello
Kamil Deen	Nina Hyams	Johanne Paradis	Ianthi Maria Tsimpli
Katherine Demuth	Tania Ionin	Joe Pater	Virginia Valian
Catharine Echols	Elizabeth Johnson	William Philip	Marilyn Vihman
Richard Ely	Alan Juffs	Colin Phillips	Laura Wagner
Anne Fernald	Dorit Kaufman	Clifton Pye	Juergen Weissenborn
Paula Fikkert	Wolfgang Klein	Marnie Reed	Lydia White
Cynthia Fisher	Marie Labelle	Mabel Rice	Fei Xu
Anna Gavarró	Donna Lardiere	Tom Roeper	Andrea Zukowski
LouAnn Gerken	Claartje Levelt	Caroline Rowland	
Heather Goad	Beth Levin	Jenny Saffran	

General Information

• Registration and Session Locations
All sessions will be held in the George Sherman Union, 775 Commonwealth Avenue. Registration will take place in the 2nd floor lobby (see diagram on the back of the front cover). You may register on Thursday starting at 12:00 PM, on Friday starting at 8:00 AM, or Saturday and Sunday starting at 8:30 AM. *Please register before attending the sessions.* We rely greatly upon registration fees to cover the costs of the Conference. We appreciate your willingness to wear your name badge; you may be asked to present it before entering sessions.

• Plenary Events
The **Keynote Address** will be delivered by Janet Werker on Friday at 8:00 PM in Metcalf Large. Poster Session I (attended) with desserts will immediately follow in Metcalf Small.
The **Plenary Address** will be given by Harald Clahsen on Saturday at 5:45 PM in Metcalf Large. Poster Session II (attended) with hors d'oeuvres will immediately follow the address in Metcalf Small.

• Poster Sessions
Poster Session I: 21 posters will be on display in Metcalf Small. There will be two attended Poster Sessions on Friday: one at 3:15 PM and one at 9:15 PM. Refreshments will be available at both sessions.
Poster Session II: 18 posters will be on display in Metcalf Small. There will be two attended Poster Sessions on Saturday: one at 3:30 PM and one at 7:00 PM. Refreshments will be available at both sessions.

• Special Sessions
This year we are happy again to collaborate with the **Society for Language Development**, which will hold its second annual symposium, "Prerequisites to Language in Animal Cognition," on Thursday, November 3, between 1:00 PM and 7:00 PM. Speakers include Marc D. Hauser, Timothy Gentner, and Michael Tomasello.

A special session entitled **"Federal funding: What's hot and how to apply"** will be facilitated by Peggy McCardle (NIH) and Joan Maling (NSF) on Friday at 12:30 PM in the Conference Auditorium. Bagged lunches are available on a first-come first-served basis. They must be purchased before 11:00 AM at the registration desk, and will be available for pick-up in the 2nd floor lobby at 12:15 PM. **NSF and NIH consultation** hours will be held in the Ziskind lounge on Friday 2:30-4:30 PM and on Saturday 9:00-11:30 AM and 2:00-5:00 PM.

A **BUCLD Business Meeting** will be held on Saturday at 8:00 AM in the Conference Auditorium. Coffee and bagels/muffins will be provided. Come to learn more about recent changes in BUCLD, and to give your input towards plans for the future. Topics include acceptance rates, increasing student participation, and suggestions for lunch symposia.

A **Lunchtime Symposium** on "Statistical learning in language development: What is it, what is its potential, and what are its limitations?" with presentations from Jeff Elman, LouAnn Gerken and Mark Johnson, will be held on Saturday at 12:00 PM in Metcalf Large. Bagged lunches are available on a first-come first-served basis. They must be purchased before 11:00 AM at the registration desk, and will be available for pick-up in the 2nd floor lobby at 11:45 AM.

• Additional Information
Parking is available in the lot at Granby St. for $12 on Friday and $8 on Saturday, and at the Agganis Arena (925 Commonwealth Ave.) for $8 on Friday, Saturday and Sunday. Free on-street parking in also available on Sunday.
Temporary luggage storage space will be made available next to the registration desk. The area will be staffed during conference sessions only. Although a student volunteer will be present in the registration area, participants leave their luggage at their own risk.
A **nursing room** will be available for nursing mothers in GSU 310-311.
Internet access will be available at several computer stations in the Ziskind Lounge between the hours of 8:00 AM and 6:00 PM throughout the conference and between 12:00 AM and 6:00 PM during the Society for Language Development Symposium.
Publishers' exhibits will be held in the Ziskind Lounge on Friday from 9:00 AM to 5:00 PM, Saturday from 10:00 AM to 6:00 PM and Sunday from 9:00 AM to 1:00 PM. For a list of exhibitors, see page 60.
Refreshments will be served in Ziskind Lounge before the morning sessions and during breaks, and in both Ziskind Lounge and Metcalf Small during attended poster sessions. A list of local restaurants is provided in your registration packet, and the Food Court on the ground floor of the George Sherman Union offers a wide selection.

The Registration desk provides the following services:
ASL Interpreters (Please inquire when you arrive.) ~ Message Board ~ Lost and Found ~ Campus Maps ~ MBTA Maps

The 31st Annual Boston University Conference on Language Development is tentatively scheduled to be held on November 3, 4, and 5, 2006, at Boston University.

Schedule at-a-glance

Friday, November 4

8:00 am	Registration Begins
9:00 am - 10:30 am	Talks
10:30 am - 10:45 am	Morning Break with refreshments
10:45 am - 12:15 pm	Talks
12:30 pm - 1:30 pm	Funding Symposium
1:45 pm - 3:15 pm	Talks
3:15 pm - 4:15 pm	Poster Session I Attended with refreshments and Afternoon Break with refreshments
4:15pm - 5:45 pm	Talks
5:45 pm - 8:00 pm	Dinner Break
8:00 - 9:15 pm	Keynote Address
9:15- 10:30 pm	Poster Session I Attended with refreshments

Saturday, November 5

8:00 - 9:00 am	BUCLD Business Meeting
8:30 am	Registration Begins
9:00 am - 10:30 am	Talks
10:30 am - 10:45 am	Morning Break with refreshments
10:45 am - 11:45 pm	Talks
12:00 pm -1:45 pm	Lunch Symposium
2:00 pm -3:30 pm	Talks
3:30 pm - 4:30 pm	Poster Session II Attended with refreshments and Afternoon Break with refreshments
4:30 pm -5:30 pm	Talks
5:45 - 7:00 pm	Plenary Address
7:00 - 8:15 pm	Poster Session II Attended with refreshments

Sunday, November 6

8:30 am	Registration Begins
9:00 am - 10:30 am	Talks
10:30 am - 11:00 am	Morning Break with refreshments
11:00 am - 1:00 pm	Talks

Time	Session A Metcalf Large	Session B Conference Auditorium	Session C Terrace Lounge
9:00	L. Pelzer, B. Höhle: The impact of morphological markers on infants' and adults' speech processing	E. Gavruseva: Semantic changes in root infintives: A cross-linguistic perspective	I. Arteagoitia, L. Howard: Can yu rid guat ay rout? The role of cross-linguistic factors in the development of English spelling ability
9:30	D. Weiss, H. Gerfen: Statistical word segmentation in a bilingual environment	D. Brun, M. Babyonyshev: Aspectual properties of root infinitive verbs in child Russian	H. Deacon, L. Wade-Wooley, K. Kelly: Flex those muscles: The variety of skills that developing bilingual children use when they read
10:00	S. Peperkamp, K. Skoruppa, E. Dupoux: The role of phonetic naturalness in phonological acquisition	D. Rus, P. Chandra: Child language imperatives: Questioning the "Imperative as an RI-analogue" Hypothesis	M. Collins: ELL preschoolers' rare vocabulary learning: The effect of storybook reading on word classes
10:30	BREAK (Ziskind Lounge)		
10:45	J. Morgan, P. Duran, D. Layton: A U-shaped pattern in infants' lexical representations?	J. Aguado-Orea, J. Pine: Testing Wexler's Unique Checking Constraint with data from early child Spanish	B. Huang, D. Barner, P. Li: Is there count-mass distinction in classifier languages?
11:15	D. Swingley: Representation and process in young one-year-olds' word recognition	M. Nakipoglu, N. Ketrez: Children's over-regularizations and irregularizations of the Turkish aorist	A. Munn, K. Miller, C. Schmitt: Maximality and plurality in children's interpretation of definites
11:45	S. van der Feest, P. Fikkert: Phonological asymmetries in perception and production	J. Viau: Give = CAUSE + HAVE/GO: Evidence for early lexical decomposition of dative verbs in English child corpora	S. Armon-Lotem: Subject-object asymmetry and specificity effects: Children's comprehension of scalar implicatures
12:30	NSF/NIH FUNDING SYMPOSIUM: What's Hot and How to Apply (Conference Auditorium)		
1:45	C. Fennell: Infants of 14 months use phonetic detail in novel words embedded in naming phrases	S. Brandt: First steps in the acquisition of relative clauses in German and English	P. Dussias, T. Cramer: The role of L1 verb bias on L2 sentence parsing
2:15	M. Soderstrom, K. White, E. Conwell: Evidence for grammatical knowledge of content words in 16-month-olds	C. Rowland, S. Fletcher: How big is big enough? Assessing the reliability of data from naturalistic samples	H. Hopp: Subject-object ambiguities in the L2 parsing of embedded clauses
2:45	K. Graf Estes, J. Evans, M. Alibali, J. Saffran: Can infants map meaning to newly segmented words? Statistical segmentation and word learning	E. Lieven, S. Stoll, K. Abbot-Smith: Item-specificity in constructions: German and Russian child directed speech	L. Dekydtspotter, B. Donaldson, A. Edmonds, A. Liljestrand, R. Petrush: Intermodular interactions in English-French relative clause attachment disambiguation
3:15	POSTER SESSION I Attended (Metcalf Small)		BREAK (Ziskind Lounge)
4:15	K. Fernandes, G. Marcus, J. Little: On domain-specificity and a possible dissociation between rule acquisition and rule generalization	A. Grimm: Intonation patterns and foot structure in early child German	M. Hughes, S. Allen: A discourse-pragmatic analysis of argument omission in child English
4:45	J. Lany, R. Gomez: 12-month-old infants benefit from prior experience in statistical learning	T. Zamuner, A. Kerkhoff, P. Fikkert: Acquisition of voicing neutralization and alternations in Dutch	M. Pinto, A. van Oosten: Economy considerations in bilingual acquisition
5:15	D. Cavar, J. Herring, T. Ikuta, P. Rodrigues, G. Schrementi: Computational bootstrapping of lexicon and grammar	Y. Rose, B. MacWhinney, R. Byrne, G. Hedlund, K. Maddocks, P. O'Brien, T. Wareham: Introducing Phon: A software solution for the study of phonological acquisition	E. Casielles, J. Andruski, S. Kim, G. Nathan, R. Work: Syntactic and discourse features of subjects in child Spanish: Evidence from Spanish/English bilingual acquisition
5:45	DINNER BREAK		
8:00	KEYNOTE ADDRESS: "Speech Perception and Language Acquisition: Comparing Monolingual and Bilingual Infants" Janet Werker, University of British Columbia		
9:15	POSTER SESSION I Attended (Metcalf Small)		

Time	Session A Metcalf Large	Session B Conference Auditorium	Session C Terrace Lounge
8:00	BUCLD Business Meeting (Conference Auditorium)		
9:00	D. BARNER, D. THALWITZ, J. WOOD, S. CAREY: Plural morphology as a possible source of "more than one"	H. GOAD, L. WHITE: Prosodic transfer: L1 effects on the production of L2 determiners	R. FURMAN, A. ÖZYÜREK, S. ALLEN: Learning to express causation across languages: What do speech and gesture patterns reveal?
9:30	H. SUMIYA, E. COLUNGA: The effect of familiarity and semantics on early acquisition of Japanese numerical classifiers	M. AKITA: Global Foreign Accent and the effectiveness of the prosody-oriented approach	A. BUNGER, J. LIDZ: Constrained flexibility in the acquisition of causative verbs
10:00	P. LI, Y. DUNHAM, S. CAREY: Object-substance construal	R. MAYBERRY, P. WITCHER: Age of acquisition effects on lexical access in ASL: Evidence for the psychological reality of phonological processing in signed language	J.-P. MARCOTTE: "No positive evidence," and a non-innatist account of causative alternation errors
10:30	BREAK (Ziskind Lounge)		
10:45	K. STROMSWOLD, K. SCHRAMM, D. MOLNAR, S. HOLODAK, E. SHEFFIELD: Biological and psychosocial factors affect linguistic and cognitive development differently: A twin study	E. LEDDON, J. LIDZ: Reconstruction effects in child language	J. SMITH, M. DURHAM, L. FORTUNE: Morphosyntax vs. phonology in the acquisition of variation in a Scottish dialect
11:15	M. RICE, S. ZUBRICK, K. TAYLOR, D. SLEGERS: Predictors of late language emergence: Child characteristics are predominant	L. GREBENYOVA: Multiple interrogatives in child language	K. MILLER, C. SCHMITT: The effect of variable input on comprehension: evidence from Spanish
12:00	LUNCH SYMPOSIUM: (Metcalf Large) "Statistical Learning in Language Development: What is it, What is its Potential, and What are its Limitations?" Jeff Elman, University of California at San Diego LouAnn Gerken, University of Arizona Mark Johnson, Brown University		
2:00	M. WILBOURN, M. CASASOLA: A helping hand: Gestures facilitate infants' ability to form word-object associations	R. DEPAOLIS: The influence of production on perception: Output as input	S. BETZ, M. RICE: ERP measures of syntactic and semantic processing in children with and without SLI
2:30	M. ROWE, S. ÖZÇALISKAN, S. GOLDIN-MEADOW: The added value of gesture in predicting vocabulary growth	C. NARAYAN: Follow your nose: Non-native nasal consonant discrimination in infancy	M. BABYONYSHEV, L. HART, E. GRIGORENKO: The acquisition of passives by Russian-speaking children with SLI
3:00	W. GOODRICH, C. HUDSON KAM: Gesture as input in language acquisition: Can learners use co-speech gestures to inform verb learning?	M. BLOSSOM, J. MORGAN: Does the face say what the mouth says? A study of infants' sensitivity to visual prosody	A. PEROVIC, K. WEXLER: New data on passives in Williams syndrome: Evidence for a grammatical delay
3:30	POSTER SESSION II Attended (Metcalf Small)		BREAK (Ziskind Lounge)
4:30	M. COPPOLA, W.C. SO, S. GOLDIN-MEADOW: The seeds of spatial grammar in the manual modality	B. HÖHLE, R. VAN DE VIJVER, S. BARTELS, J. WEISSENBORN: Phonological specificity of early lexical representations in German 19-month-olds at risk for SLI	A. GAVARRÓ, V. TORRENS: Participle agreement in Catalan and Spanish and some of its implications
5:00	E. NICOLADIS: Cross-linguistic transfer in adjective-noun constructions by French-English bilingual children	J. EVANS, J. SAFFRAN: Statistical learning in children with Specific Language Impairment	N. HYAMS, W. SNYDER: Reflexive clitics and the Universal Phase Requirement
5:45	PLENARY ADDRESS: (Metcalf Large) "Grammatical Processing in First and Second Language Learners" Harald Clahsen, University of Essex		
7:00	POSTER SESSION II Attended (Metcalf Small)		

Time	Session A Metcalf Large	Session B Conference Auditorium	Session C Terrace Lounge
9:00	K. Thorpe, H. Baumgartner, A. Fernald: The development of children's ability to interpret adjectives that modify nouns	K. Alcock, K. Rimba, M. Tellaie, C. Newton: Learning the passive in natural(istic) settings	E. Hoff, C. Core: Nonword repetition assesses phonological development and predicts vocabulary size in one-year-olds
9:30	M. Thothathiri, J. Snedeker: Syntactic priming during sentence comprehension in 4-year-olds	C. Hirsch, K. Wexler: By the way, children don't know "by"	H. Storkel, J. Hoover: Whole-word versus part-word phonotactic probability/neighborhood density in word learning by children
10:00	Y. Choi, J. Trueswell: Do Korean children hop frogs like English children?	K. O'Brien, E. Grolla, D. Lillo-Martin: Non-actional passives are understood by young children	A. Ninio: Kernel vocabulary and Zipf's Law in maternal input to syntactic development
10:30	BREAK (Ziskind Lounge)		
11:00	S. Pruden, K. Hirsh-Pasek: Foundations of verb learning: Labels promote action category formation	B. Schulz: Evidence for wh-scope-marking in advanced Japanese-English interlanguage grammars	R. Mugitani, K. Ishizuka, S. Amano: Longitudinal development of mora-timed rhythmic structure in Japanese
11:30	A. Brandone, D. Addy, R. Pulverman, R. Golinkoff, K. Hirsh-Pasek: One-for-one and two-for-two: Anticipating parallel structure between events and language	K. Dempsey, N. Duffield, A. Matsuo, G. Wood: Something different (in English and Japanese)	B. Gauthier, R. Shi, Y. Xu: Variable input and the discovery of lexical tones in infants: A connectionist approach
12:00	S. Yuan, C. Fisher: Two-year-olds learn distributional facts about verbs in the absence of a referential context	T. Kras: Age effects on the L2 acquisition of the lexicon-syntax inferface	R. Santos: Word stress acquisition: A comparison of Brazilian Portuguese and Dutch
12:30	C. Kemp, J. Snedeker: Combining Cross-situational and structural cues to verb meaning	I. M. Tsimpli, A. Sorace: Differentiating "interfaces": L2 performance in syntax-semantics and syntax-discourse phenomena	R. Shi, A. Marquis, B. Gauthier: Segmentation and Representation of Function Words in Preverbal French-Learning Infants

ALTERNATES

S. Baauw, S. Avrutin, J. de Lange	The omission of D and T in Dutch-speaking children
E. Colunga	The effect of priming on preschooler's extensions of novel words: How far can "dumb" processes go?
E. Conwell	The role of semantic generality in verb acquisition
J. Geren	Patterns of syntactic development in cochlear implant users
J.-H. Kim, S. Montrul, K. Yoon	On the logophoric long-distance binding interpretation of the Korean local anaphor 'caki-casin' by early bilinguals
L. Naigles, A. Kuntay, T. Goskun, J. Lee	Language-specific properties influence children's acquisition of arguement structure
E. Nurmsoo, P. Bloom	Preschoolers attend to speaker's knowledge when learning words
E. Oh, M. L. Zubizaretta	The role of age in the L2 acquisition of English double object constructions
L. Singh, S. Nestor, H. Bortfeld	Lexical and prelexical factors in infant word recognition
A.-M. Tessier	Testing for OO-faithfulness in artificial phonological acquisition
H. Zobl, J. Liceras	Competing grammars and parametric shifts in second language acquisition and the history of English and Spanish

Friday, November 4	
Posters will be on display from 9:00 AM to 10:30 PM	

Authors	Title
M. Becker	Learning without subsets: The puzzle of raising vs. control
J. Berger-Morales	Nominal inflection and NP structure in child German: An experimental study
J. Bhagwat, M. Casasola	Learning labels in one versus two languages: 18-month-old infants' sensitivity to the word-learning context
L. Chen, J. Guo	The asymmetric development of structural and discourse patterns of motion event descriptions in Mandarin as an equipollently-framed language
E. Conwell	The role of semantic generality in verb acquisition
L. Correa, M. Augusto, J. Ferrari-Neto	The early processing of number agreement in the DP: Evidence from the acquisition of Brazilian Portuguese
C. Erdos, F. Genesee, M. Crago, K. Debas	Does bilingual input decelerate the acquisition of grammatical schemas?
C. Foursha, J. Austin, G. van de Walle	Is language processing identical in monolinguals and early balanced bilinguals?
J. Geren	Patterns of syntactic development in cochlear implant users
M. Hodgson	Object movement and the acquisition of telicity
T. Matsui, Y. Miura, P. McCagg	"The rabbit told me": Young preschoolers' understanding of sources of knowledge in dealing with testimony
K. Matsouka, N. Miyoshi, K. Hoshi, M. Ueda, I. Yabu, M. Hirata	The acquisition of Japanese focus particles: *Dake* (only) and *mo* (also)
K. Mattock, S. Rvachew, L. Polka	Cross-linguistic influences on infants' babbling: The role of input and intake factors
N. Modyanova	The genitive of negation construction in Russian-English bilinguals
E. Nurmsoo, P. Bloom	Preschoolers attend to speaker's knowledge when learning words
C. Shea, S. Curtin	Learning allophones from the input
J. Y. Song	The acoustic properties of vowels in child-directed read and spontaneous speech
A.-M. Tessier	Testing for OO-faithfulness in artificial phonological acquisition
C. Williams, A. Fernald	Spanish-learning children use grammatical gender in on-line referent recognition
C. Wiltshire	Word-final consonant and cluster acquisition in Indian English(es)
X. Yang	Syntactic complexity and productivity before 2: A longtitudinal study of early grammar in L1 acquisition of Mandarin Chinese

	Saturday, November 5
	Posters will be on display from 9:00 AM to 8:15 PM
Authors	Title
B. Ambridge, . Rowland, J. Pine	Structure-dependence: An innate constraint?
F. Arosio, F. Adani, M. T. Guasti	Processing subject and object relatives in Italian
S. Baauw, S. Avrutin, J. de Lange	The omission of D and T in Dutch-speaking children
E. Colunga	The effect of priming on preschooler's extensions of novel words: How far can "dumb" processes go?
K. Dewar, F. Xu	Do 9-month-old infants expect distinct words to refer to kinds?
M. Dittmar, K. Abbot-Smith, M. Tomasello	Acquiring the German transitive: Pointing and looking measures
A. Fulkerson, S. Waxman, J. Seymour	Object naming and categorization: evidence for a specific linkage in 6- and 12-month-olds
J. Herschensohn	Beauty before age? Developing tense and aspect in L2 French
C. Hudson Kam	Early use of *uh* and *um* in native English-speaking children: Not quite right, but not quite wrong
C. Kwan, Y. Shirai	Adjectives in early developmental Cantonese: Time-stability and the use of property concept terms
J. Maye	Development of phonotactic constraints on phonetic discrimination in infancy
M. Miyao, A. Omaki	No Ambiguity about it: Korean learners of Japanese have a clear attachment preference
L. Naigles, A. Kuntay, T. Goskun, J. Lee	Language-specific properties influence children's acquisition of arguement structure
E. Oh, M. L. Zubizaretta	The role of age in the L2 acquisition of English double object constructions
K. Ono, N. Budwig	Caregiver input and young children's use of unaccusative intransitives in novel verb experiments
S. Stavrakaki, H. Clahsen	Past tense formation in Greek children with Williams syndrome
G. Szenkovits, F. Ramus	Developmental dyslexia: The phonological deficit under the magnifying glass
A. van Hout	Perfect and imperfect comprehension of Dutch past tenses

Session A--Metcalf Large

The impact of morphological markers on infants' and adults' speech processing

Lydia Pelzer and Barbara Höhle
University of Potsdam

We present results from a series of cross-linguistic experiments that investigated the role of concordant morphological markers (identical affixes in a sequence of words forming a phrase, e.g. Spanish: *los gatos negros*) for language processing in German and English infants and adults. While German has concordantly marked phrases, English does not make use of concordant markings.

We found that infants and adults from both language groups are sensitive to concordant markers. However, we observed cross-linguistic differences: German subjects responded to concordant markers only if they appeared as suffixes, while English subjects responded to prefixes only (infants) or prefixes and suffixes (adults). This suggests that the sensitivity to concordant markers is a general skill the child brings to the task of language acquisition, but that it is shaped by the features of the target language from early on. The role of these markers for language learning and processing will be discussed.

Session B--Conference Auditorium

Semantic changes in root infinitives:
A cross-linguistic perspective

Elena Gavruseva
University of Iowa

This paper examines how the semantics of Root Infinitives (RIs) in child English, Dutch, German, and Russian change over time and aims to account for developmental changes. Recent studies (Blom 2003; Kallestinova 2004) show that RIs in child Dutch and child Russian become semantically restricted to 'future/ modal' reference. Similarly, Ingham's (1998) study suggests that RIs in child British English also undergo a semantic shift, although to 'non-progressive' reference. An analysis of RIs in a German-acquiring child (Simone 1;9-2;4) and an English-acquiring child (Nina 1;11-2;3) shows that 'ongoing' RIs become finite earlier than past or modal/future RIs. The paper asks why 'modal' (non-progressive) shift in RIs and not to 'ongoing' reference. We propose that children's difficulties with finiteness in late RI stages might be related to the fact that the acquisition of future/modal morphology is contingent on the acquisition of present/past tense features and (syntactic) aspectual specifications of verb stems.

Notes

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

Session C--Terrace Lounge

Can yu rid guat ay rout? The role of cross-linguistic factors in the development of English spelling ability

Igone Arteagoitia and Liz Howard
Center for Applied Linguistics

The present study examined the English long vowel spellings of 275 native English- and Spanish-speaking children enrolled in either bilingual or monolingual educational programs. Because English has a much more complex vowel system than Spanish, Spanish/English bilinguals have been found to rely on the more transparent system in Spanish to spell in English. However, the question still remains as to whether these cross-linguistic spellings interfere with English spelling development or whether they are part of a natural developmental progression. Findings showed that while participants in the bilingual programs exhibited a higher number of crosslinguistic spellings than those in the monolingual programs, by fourth grade there were no significant differences between them in terms of number of correct spellings. These findings suggest that for many bilingual students, reliance on the Spanish phoneme-grapheme mapping system to spell long vowels in English seems to be part of a natural developmental process.

Session A--Metcalf Large

Statistical word segmentation in a bilingual environment

Daniel Weiss and Chip Gerfen
The Pennsylvania State University

Studies using artificial language streams indicate that infants and adults can use statistics to correctly segment words (Saffran et al. 1996a,b). However, these studies have utilized only a single input language. Given the prevalence of bilingualism, how is multiple language input segmented? One particular problem may occur if learners combine input across languages: units that overlap different languages can potentially compromise correct segmentation. Our study examines this issue by employing artificial language streams to simulate the earliest stages of segmentation in adult L2-learners. In three experiments, participants tracked multiple sets of statistics for two artificial languages. Our results demonstrate that adult learners can track two sets of statistics simultaneously, suggesting they form multiple representations when confronted with bilingual input. This work, along with planned infant experiments, informs a central issue in bilingualism research, namely, determining at what point listeners can form language specific representations when exposed to multiple languages.

Session B--Conference Auditorium

Aspectual properties of root infinitive verbs in child Russian

Dina Brun and Maria Babyonyshev
Yale University

This paper investigates the use of aspectual prefixes with infinitive verbs during the Root Infinitive (RI) stage of child Russian and tests two competing proposals regarding the interpretation of RIs. According to Brun et al. (1999), grammatical aspect provides a temporal anchor. All perfective RIs are bound to the point of utterance by means of introducing the right event boundary; hence they may refer to past and future events. Under the dual-interpretation theory of Hyams (2004), perfective verbs derived with the help of lexical affixes are expected to have a past interpretation, while purely perfective verbs are expected to have a future interpretation. Our analysis of perfective RIs shows that the distribution of past and future interpretations is very similar for purely perfective verbs and lexically perfective verbs - a pattern that is problematic for the theory of Hyams (2004) but expected under the proposal of Brun et al. (1999).

Session C--Terrace Lounge

Flex those muscles: The variety of skills that developing bilingual children use when they read

S. Hélène Deacon, Dalhousie University
Lesly Wade-Woolley, Queen's University
Kathleen Kelly, Dalhousie University

The challenge facing young children learning to read in two orthographies is a remarkable one. It might be an especially difficult task for languages such as English and French that have several bases for representation: phonological, orthographic and morphological. Monolingual children bring knowledge from each of these levels to reading. The present study examines whether these factors influence the reading progress of developing bilinguals: native English-speaking children in French-Immersion. Linear regression analyses indicate that phonological awareness, orthographic knowledge, morphological awareness each contribute significantly to reading within each language. Further, each factor contributes to reading across languages, even after controlling for within-language factors. This research bolsters earlier evidence of transfer of phonological awareness and it provides the first demonstration of the cross-linguistic impacts of orthographic knowledge and morphological awareness. These findings speak to the flexibility of the young mind facing the complex task of learning to read in two orthographies.

Notes

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

Session A--Metcalf Large

The role of phonetic naturalness in phonological acquisition

Sharon Peperkamp, Katrin Skoruppa and Emmanuel Dupoux
Laboratoire de Sciences Cognitives et Psycholinguistique

Recent work has shown that both adults and infants can use statistical information during phonological acquisition. We argue that acquisition is not purely statistical and that linguistic knowledge - in the form of constraints on phonetic naturalness - is exploited as well.

Participants were exposed to short noun phrases in an artificial language containing either a natural rule (e.g. intervocalic stop voicing) or an unnatural one. All phrases were accompanied by a picture that allowed participants to infer the meaning of the nouns. After exposure, participants learned novel nouns that they had to produce in different contexts.

We found that only participants exposed to a language with a natural rule applied the rule. In a second experiment using a perception rather than a production task, however, natural and unnatural rules were learned equally well. We will discuss these results in light of theories of phonological processing and acquisition.

Session B--Conference Auditorium

Child language imperatives:
Questioning the 'Imperative as an RI-analogue' hypothesis

Dominik Rus, Georgetown University
Pritha Chandra, University of Maryland at College Park

Salustri & Hyams (2003) argue that early Italian imperatives represent an analogous form to Root Infinitives (RIs) in other child languages, particularly by lacking the TP/AgrP projection(s). The "Imperative as an RI-analogue" Hypothesis (IRIAH) thus provides a "universal" explanation of early nonfinites in child grammars. Our paper questions the validity of the IRIAH by probing into Child Slovenian (CS) imperatives.

Slovenian makes an interesting experimental case since imperatives exhibit a distinct conjugation paradigm and bear finite person and number morphology. CS shows an extremely high number of imperatives (56%) and Bare Participles (16.3%), with practically no RIs (<1%). Most important for our purposes, imperatives in CS do not lack the TP/AgrP projection(s) because they show (i) perfect [person] and [number] agreement, (ii) structures with object scrambling, and (iii) structures with post-imperative clitics, which in the present minimalist paradigm all require a full clause structure.

Notes

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

Session C--Terrace Lounge

ELL preschoolers' rare vocabulary learning:
The effect of storybook reading on word classes

Molly F. Collins
Erikson Institute

Seventy preschool-aged typically-developing speakers of Portuguese who are English language learners were pretested in L1 (Portuguese) and L2 (English) receptive vocabulary, were matched according to L2 vocabulary scores, and were assigned to experimental or control groups. Rare vocabulary words were inserted within the texts of 8 picture books. Experimental group subjects heard stories read with rich explanations of target words; controls heard stories read without explanations. Experimental subjects learned significantly more nouns (57% vs. 36%), verbs (47% vs. 36%), and adjectives (45% vs. 26%) than controls. Verbs accommodated by gesture had significantly higher learnability rates than other verbs. Children with higher initial L2 level learned more. In the absence of rich explanations, initial L2 level did not make a difference in the learning of word categories. Findings demonstrate the importance of rich explanation, nonlinguistic cues, and deliberate word selection (i.e., manipulating the input) to word category learning in ELL children.

Session A--Metcalf Large

A U-shaped pattern in infants' lexical representations?

James L. Morgan and Petra Duran, Brown University
Derek Layton, Emory University

In Stager & Werker (1997; Werker et al. 1998, 2002) 14-month-olds habituated to a novel label with a novel referent failed to recover from habituation when the label's onset was changed by a single feature; in contrast, both 8- and 17-month-olds discriminated familiar and novel labels, suggesting an interesting U-shaped developmental trend. Perhaps, however, the effect observed is non-linguistic, possibly arising from a low-level process such as sensory adaptation. To evaluate these alternatives, 14-month-olds were tested with labels and musical notes whose difference paralleled that of the labels. In a control study with a checkerboard visual stimulus, infants habituated to either a label or a note showed significant recovery on "switch" trials (p<.05). Forty-eight additional infants were habituated to a label or a note while viewing a novel object. Infants in both groups failed to recover to switch trials (p>.40). Stager & Werker's phenomenon is not confined to speech sounds.

Session B--Conference Auditorium

Testing Wexler's unique checking constraint with data from early child Spanish

Javier Aguado-Orea and Julian M. Pine
University of Liverpool

Wexler's (1998) Unique Checking Constraint makes three main predictions for Early Child Spanish: (1) Children will make very few errors with finite verb forms; (2) Children will not produce root infinitives, but will produce some bare participles; (3) Children will provide incorrect bare past and present participles at approximately the same rate. In this study we analysed two rich samples of Early Child Spanish. With respect to (1), the rate of errors in 2sg contexts was somewhat higher than expected by UCC (10.2% and 22.3%) and the rate of errors in 3pl contexts was very high indeed (31.5% and 66.7%). With respect to (2), the proportion of root infinitives was very low and the proportion of bare participles was higher. However, (3) progressive constructions (AUX + PresentParticiple) lacked the auxiliary much more often than Present Perfect constructions (AUX + PastParticiple). This difference cannot be explained in terms of the UCC.

Session C--Terrace Lounge

Is there count-mass distinction in classifier languages?

Becky Huang, University of California, Los Angeles
David Barner and Peggy Li, Harvard University

The count-mass distinction often serve as a test case for asking how syntax and semantics are related, but virtually no studies have examined the acquisition of this distinction in classifier languages which supposedly lack the distinction. However, linguists recently suggested that classifier languages encode this distinction (Cheng & Sybesma 1998, 1999; Borer, in press; Chierchia 2005). Most influentially, Cheng and Sybesma argued that Mandarin classifiers are divided into count and mass classifiers such that count-classifiers select for individuals while mass-classifiers select for masses.

Experiments 1 and 2 asked whether Mandarin-speaking children treat count and mass classifiers differently by picking out objects (individuated entities) for count nouns and substances (non-individuated entities) for mass nouns. Experiment 3 tested their sensitivity to count-mass syntax as count- and mass-classifiers occur in different syntactic environments. Results indicated that Mandarin-speaking children do not master the distinction until 6 or 7 years of age.

Notes

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

Session A--Metcalf Large

Representation and process in young one-year-olds' word recognition

Daniel Swingley
University of Pennsylvania

What do one-year-olds know about how particular words sound, and how do they use this information in word recognition? Here, children of 14 - 19 months heard canonical and deviant pronunciations of familiar words and were tested for their recognition of these words in a picture fixation task. Deviant pronunciations involved single-feature substitutions at onset or coda. Children across the tested age span showed inferior performance (less target fixation) for both onset and coda mispronunciations. The timecourse of mispronunciation effects was consistent with continuous matching models of word recognition: onset mispronunciation blocked target fixation for the first 1000 ms or so after word onset, while effects of offset (coda) mispronunciation were shown later, after children had recognized the word based on its onset consonant and vowel.

Session B--Conference Auditorium

Children's overregularizations and irregularizations of the Turkish aorist

Mine Nakipoglu-Demiralp, Bogazici University
Nihan Ketrez, Yale University

We argue that what is treated as the default during the Turkish aorist acquisition is related to children's verb vocabulary size. The rule-governed distribution of the aorist morpheme (-*Ir* with multisyllabic, -*Ar* with monosyllabic verbs) is obscured by thirteen monosyllabic-verbs, which take -*Ir*. In addition to sorting out the distribution of multisyllabic and monosyllabic verbs, a child has to tackle why some monosyllabic-verbs surface with -*Ir*. We tested 99 children (2;9-7;3) in four developmental groups. Children in all groups made both overregularization and irregularization errors. Though the high error rates in the youngest group suggest a competition between -*Ar* and -*Ir*, the -*Ar* errors with multisyllabic verbs indicate that -*Ar* is treated as the default. The decrease of -*Ar* errors with age and the high -*Ir* errors in later groups indicate a shift in the designation of default. We postulate that this shift is correlated with the size of children's verb vocabulary.

Notes

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

Session C--Terrace Lounge

Maximality and plurality in children's interpretation of definites

Alan Munn, Karen Miller and Cristina Schmitt
Michigan State University

Children often use definite determiners in contexts where adults must use an indefinite. The classic account of this behaviour is a deictic or egocentric use of the determiner. Recently, Wexler (2003) has argued instead that children's linguistic representation of the definite is different: adults have a presupposition of uniqueness (expressed in terms of maximality) on the definite; children have only a presupposition of existence. We test the Maximality hypothesis by comparing children's comprehension of singular and plural definites using an act-out task. We show, in both Spanish- and English-speaking children, that children observe maximality with plurals but not with singulars in identical contexts. If children's representation of the definite lacks maximality, we should have observed maximality errors in both conditions. We hypothesize that children do have a maximality presupposition, but have difficulty in using implicit restrictors on quantificational domains.

Session A--Metcalf Large

Phonological asymmetries in perception and production

Suzanne van der Feest and Paula Fikkert
Radboud University, Nijmegen

Studies on Dutch child language production have claimed that children's phonological representations are underspecified: Fikkert & Levelt (2004) provided evidence for the underspecified nature of coronal place of articulation and Kager et al. (2004) for the underspecification of voiceless stops. Our study sets out to test whether the asymmetries found in children's production of voice and place also show up in perception. Using the same preferential looking paradigm as Swingley (2003), we tested the perception of mispronunciations of well-known words by forty-eight 24-month-old Dutch children, keeping the factors VOICE and PLACE clearly balanced. Our results show that children are sensitive to both place and voice mispronunciations. Furthermore, the results clearly show perceptual asymmetries in the predicted directions. These results indicate that children have stored underspecified phonological representations of words. Moreover, the data suggest that there is a tight link between perception and production.

Session B--Conference Auditorium

Give = CAUSE + HAVE/GO: Evidence for early lexical decomposition of dative verbs in English child corpora

Joshua Viau
Northwestern University

Many analyses of alternating dative verbs (e.g., *give*, *send*, *throw*) posit that the frames in which their two internal arguments can appear are syntactically and semantically independent. Double-object datives (goal<theme) are lexically decomposed into "CAUSE+HAVE" and prepositional datives (theme<goal) into "CAUSE+GO." This study addresses the plausibility of the decompositional approach using CHILDES corpus data from 22 English-speaking children. The argument is based on the acquisition of verbs that have been independently argued to decompose into the syntactico-semantic primitives CAUSE, HAVE, GO, BE, and BECOME. I show that the acquisition of simple verbs containing these primitives in isolation is both necessary for and predictive of the acquisition of more complex verbs (including datives) containing specific combinations of two or more primitives. Intriguing questions remain about how children would gather positive evidence for such primitives in the input, and how these primitives might be related to conceptual primitives (e.g., Jackendoff 1983).

Session C--Terrace Lounge

Subject-object asymmetry and specificity effects:
Children's comprehension of scalar implicatures

Sharon Armon-Lotem
Bar Ilan University

This paper studies children's understanding of sentences containing *some* and *or*, showing that pragmatic constraints affect *or* and *some* differently. We suggest that these differences stem from specificity, a pragmatic condition affecting reference (Groenendijk & Stokhof, 1980). By Grice's (1975) principle of cooperation, scalar implicatures are raised in descriptions, but the implicature can be suspended in predictions. The results of a TVJ administered to Hebrew speaking children, using sentences containing *some* and *or* in the descriptive and predictive modes, showed a subject-object asymmetry in the predictive mode: when *some* was used with a direct object, the implicature was always erased, but when it was used with a subject the implicature was hardly erased. We suggest that the difference between *some* and *or* and the subject-object asymmetry stems from specificity. Specificity applies to *some* but not to *or* since *or* is not sensitive to the pragmatic properties of the nominal phrase.

Notes

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

Session A--Metcalf Large

Infants of 14 months use phonetic detail in novel words embedded in naming phrases

Christopher T. Fennell
Northwestern University

Stager and Werker (1997) showed that 14-month-olds have difficulty using phonetic detail when mapping novel words to objects (e.g., confusing *bin* and *din*), but can use the relevant detail in speech discrimination tasks (e.g., discriminating [b] versus [d]). The act of linking novel words and objects appeared to interfere with infants' ability to process phonetic detail. However, the novel words were presented in isolation, which is syntactically uninformative. Infants this age may not construe isolated words as object names (Namy & Waxman 2000), thus increasing the difficulty of mapping word to object. We therefore asked whether 14-month-olds might attend to phonetic detail if the very same words were presented within the context of naming phrases (e.g., *look at the din*). In this context, infants did indeed make use of the relevant phonetic distinction, mapping these words in full detail when they were presented in more informative sentential frames.

Session B--Conference Auditorium

First steps in the acquisition of relative clauses in German and English

Silke Brandt
Max Planck Institute for Evolutionary Anthropology

Early relative constructions produced in English are mono-propositional and most of the first relative clauses (RCs) are not subordinate (Diessel & Tomasello 2000). To see if main clause syntax is also reused in early RCs in German, which, unlike English, uses different word orders for main (verb-second) and subordinate clauses (verb-final), I examined the RC production by two German-speaking children between 1;9 and 5;0.

This study shows that most early relative constructions in German are also mono-propositional. However, unlike the English children, the German children attach most of their first RCs to isolated NPs rather than predicate nominals. The fact that most early RCs serve a main clause function and are not subordinate is also expressed by their form: approximately 70% of the German children's RCs produced before 2;5 are verb-second. Only at the age of 3;0 do the children start using multi-propositional relative constructions with subordinate and verb-final RCs on a regular basis.

Notes

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

Session C--Terrace Lounge

The role of L1 verb bias on L2 sentence parsing

Paola E. Dussias and Tracy Cramer
Penn State University

In a reading moving window experiment, we examine the contribution of L1 frequency-based verb biases to the comprehension of temporarily ambiguous sentences in the L2. The structure under investigation contains a direct-object bias verb embedded in a sentential complement structure. Forty L1 Spanish-L2 English speakers and 50 monolingual English speakers were recruited. Material consisted of 16 English sentences with verbs that were previously classified (via a norming study) as direct object-biased in English but sentential complement-biased in Spanish. Verbs were embedded in sentential complement structures (e.g., *The CIA director confirmed the rumor should have been stopped sooner*). Sixty-two fillers were included. All sentences were followed by a comprehension question that required the understanding of the sentence. Our evidence suggests that the Spanish-English speakers were employing a strategy that favored the construction of the least syntactically complex analysis (i.e., that of the direct-object complement) irrespective of verb bias in the L1.

Session A--Metcalf Large

Evidence for grammatical knowledge of content words and inflection in 16-month-olds

Melanie Soderstrom, Katherine White and Erin Conwell
Brown University

In this study, we examine 16-month-olds' knowledge of the grammatical properties of nouns and verbs. In a first experiment, infants prefer grammatical sentences to sentences where the locations of nouns and verbs are interchanged (similar to the result of Shady (1996) with function words). Follow-up experiments establish that infants detect the grammaticality violation using information about the relationship between function words and the inflectional endings of the content words. Infants prefer grammatical sentences over sentences where only the inflectional endings are moved, but not where the content words alone are interchanged. However, content words do play a role in infants' ability to detect these violations – the use of nonce words disrupts their sensitivity to the violations.

Session B--Conference Auditorium

How big is big enough? Assessing the reliability of data from naturalistic samples

Caroline Rowland and Sarah Fletcher
University of Liverpool

Although naturalistic data analysis is a core research tool, little work has directly assessed the reliability of sampled data. In particular, uncertainty remains about how to calculate meaningful error rates (Marcus 1992; Maratsos 2000) and how to interpret the restricted nature of children's speech (Naigles 2002; Tomasello 2003). These issues were investigated using the wh-questions of one child (age 2;8), collected in a comprehensive caregiver diary and sampled audio-recordings. Study 1 showed that overall error rates misrepresent error in lower frequency structures, but that estimates of errors in low frequency structures alone are unreliable because they are based on small amounts of data. Study 2 showed that analyses of small samples can yield unreliable estimates of lexical specificity, and are equally likely to over- as under-estimate productivity. Methodological solutions are presented which involve calculating mean error and lexical specificity rates across a number of samples, and comparing child and adult speech.

Session C--Terrace Lounge

Subject-object ambiguities in the L2 parsing of embedded clauses

Holger Hopp
University of Groningen

Addressing a current controversy in L2 processing research (e.g. Clahsen & Felser, to appear), this paper investigates (a) whether and how L1 Russian and L1 English advanced and near-native L2ers of German employ syntactic information in parsing, and (b) whether and how L1 differences affect parsing at ultimate attainment.

In German, sentences can be locally ambiguous between subject-object and object-subject orders. Different types of syntactic disambiguation (per case vs. per verbal agreement) lead to differential processing patterns. Statistical analyses of the results from a self-paced reading and a speeded grammaticality judgement task show that near-natives of both L1s show target-like use of syntactic information on-line, while advanced speakers show flatter parsing behaviour. In addition, L1-specific differences in the processing of morphosyntactic information are found and discussed. It is argued that near-native L2 and native parsing are fundamentally identical, while residual problems owe to L1-L2 pairings.

Notes

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

Session A--Metcalf Large

Can infants map meaning to newly segmented words? Statistical segmentation and word learning

Katharine Graf Estes, Julia Evans,
Martha Alibali and Jenny Saffran
University of Wisconsin-Madison

Before infants can learn the function of a word or associate it with a meaning, the sounds corresponding to the word in question must be segmented from the speech stream. The present experiments explore how the process of segmenting words is linked to the process of mapping meanings to words. 18-month-old infants first participated in a statistical word segmentation task, followed by an object-label learning task. Only infants presented with labels that appeared as words in the segmentation task learned the labels. The findings indicate that prior segmentation opportunities (using statistical cues) facilitate infants' ability to map a word form to a meaning. This work provides some of the first evidence that the processes of word segmentation and association with meaning are tightly linked in infants. It also provides the first demonstration that exposure to word forms in a statistical segmentation task facilitates word learning.

Session B--Conference Auditorium

Item-specificity in constructions: German and Russian child directed speech

Elena Lieven, Sabine Stoll and Kirsten Abbot-Smith
Max Planck Institute for Evolutionary Anthropology

Cameron-Faulkner et al. (2003) showed a high degree of repetition of utterance-initial, lexically-based strings in English CDS. This might be language specific since English has very rigid word order. We therefore investigated German and Russian, languages with more word order variability. Utterances of six German and four Russian mothers were categorized into constructions such as copulas, wh-questions and imperatives. They were then analyzed in terms of their initial 1-3 words within and across constructions. The results suggest that: (i) More variable word order, argument and copula omission, together with agreement marking, all affect the number of lexically-specific frames, their length and the proportion of data they account for. (ii) CDS in Russian and German also shows a high degree of utterance-initial, lexical specificity; English has significantly more frames, however, than the other two languages and these frames account for more utterances.

Notes

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

Session C--Terrace Lounge

Intermodular interactions in English-French relative clause attachment disambiguation

Laurent Dekydtspotter, Bryan Donaldson,
Amanda C. Edmonds,
Audrey Liljestrand and Rebecca A. Petrush
Indiana University

We address the role of syntax, prosody and context in English-French learners' disambiguation of RC-attachment as in *Nous adorons le secrétaire du psychologne qui se promène (au centre ville)*. We gave three tasks to second and fourth semester English-French learners and French and English natives. RC-length and intonation were manipulated in Tasks 1 and 2 respectively. Task 3 measured RTs for N1-construals versus N2-construals. Second-semester learners exhibited no specific preferences, but fourth-semester learners favored N1-construal. N1-construal was associated with longer RTs on the RC-verb for both learner groups. Natives were sensitive to prosody, and N2-construals resulted in longer RTs in the RC than N1-construals on Task 3. We argue that learners' RT-differences reflected syntax-induced asymmetries early in processing, while the opposite contrast in natives reflected prosody-induced asymmetries in later stages of processing.

Session A--Metcalf Large

On domain-specificity and a possible dissociation between rule acquisition and rule generalization

Keith Fernandes, Gary Marcus and Justin Little
New York University

At the age of seven months, infants are able to rapidly extract and generalize the 'algebraic' patterns underlying sequences of syllables like *la-ta-la*, *ga-na-ga* (Marcus et al. 1999), but not from equivalent sequences of non-speech stimuli, such as tones or shapes (Marcus, Johnson, Fernandes and Slemmer 2004). Here we asked whether there might be a difference between acquiring rules and generalizing them. In a set of three 'crossover' experiments, infants were first familiarized with structured sequences of speech (e.g., *la-ta-ta*) and then tested either on sequences of tones (e.g., [C-E-E]), timbres (e.g., organ-saxophone-saxophone) or animal vocalizations (e.g., [CAT(*meow*)]-[CAT(*meow*)]-[SHEEP(*baa*)]). Strikingly, given familiarization with speech, infants were able to generalize to the non-linguistic sequences - suggesting a possible dissociation between a domain-general process of rule generalization and a domain specific process of rule extraction, with rule-extraction but not rule-generalization preferentially engaged by speech.

Session B--Conference Auditorium

Intonation patterns and foot structure in early child German

Angela Grimm
University of Potsdam

This study investigates the intonation patterns of single word utterances (e.g. *Auto 'car'*) and self-repetitions (e.g. *Apfel#Apfel 'apple#apple'*) produced by four monolingual German children between 12 and 16 months. The data show that there is evidence for the intonational phrase boundaries, e.g. boundary tones (L%, H%) or downsteps (!L, !H).

This indicates that the children have access to phrase-level prosodic constituents at the onset of word production. At this time, lexical words are restricted to a single foot in German (cf. Lleó & Demuth 1999). Therefore, the prosodic patterns of the early words indicate that the children have access to the IP and the foot level. Therefore, the data support Demuth's constraint-based approach to prosodic development (Demuth 2001a,b) stating that children can enter into the Prosodic Hierarchy at multiple levels at the same time.

Session C--Terrace Lounge

A discourse-pragmatic analysis of subject omission in child English

Mary Hughes and Shanley Allen
Boston University

Previous research has shown that discourse-pragmatic features play a role in argument omission in child language. However, these findings are based on languages which allow null subjects (Korean: Clancy 1993; Inuktitut: Allen 2000; Italian: Serratrice 2005). The present study investigates the role of discourse-pragmatics in argument omission in a non-null subject language by analyzing the utterances of a two-year-old monolingual English speaker. In this study, we tested the hypothesis that the child would omit arguments as a result of her awareness of the complexities of information flow in discourse. Following Allen (2000), discourse-pragmatic information was encoded by a set of five binary features: absence, contrast, differentiation in context, differentiation in discourse, and newness. A total of 436 third person subjects were analyzed with an omission rate of 10%. Results show that even in a non-null subject language, this child is sensitive to discourse-pragmatics in determining which arguments to omit.

Notes

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

Session A--Metcalf Large

12-month-old infants benefit from prior experience in statistical learning

Jill Lany and Rebecca Gómez
The University of Arizona

Does infants' prior experience bootstrap learning of syntactic patterns? We exposed 12-month-olds to a relatively simple adjacent dependency and asked whether prior experience enables them to track a more difficult nonadjacent one. Infants were exposed to an artificial language composed of restrictions on how words from 4 categories could be combined into two-element strings. This structure bears similarity to co-occurrence relations between determiners and nouns, and auxiliaries and verbs in English. Infants exposed to this language developed sensitivity to these same relations when presented nonadjacently. A second group of infants was given equivalent exposure to the language's vocabulary and phonetic and prosodic characteristics, but not the co-occurrence restrictions. These infants did not demonstrate sensitivity to subsequently encountered nonadjacent relations. The results suggest that infants' experience with simple syntactic structure can bootstrap learning of more complex structure. Moreover, learners, and the structure they can acquire, change as a function of experience.

Session B--Conference Auditorium

Acquisition of voicing neutralization and alternations in Dutch

Tania S. Zamuner, Radboud University Nijmegen
Annemarie Kerkhoff , Utrecht University
Paula Fikkert, Radboud University Nijmegen

It has been argued that infants acquire knowledge of phonotactics, which later aids their acquisition of morpho-phonological alternations (Hayes 2004). Yet, few studies have looked at children's acquisition of phonotactics and alternations. The first study tested Dutch children's production of /t/ and /d/ in bimorphemic and mono-morphemic words. Children produced /t/ in both words; however, /d/ was more accurate in monomorphemic words. We then investigated children's productive knowledge of voicing neutralization and alternations. Nonwords were presented as plurals (e.g. *slatten* or *sladden*) and children were asked for singulars (both singulars end in /t/, e.g. *slat*). Children produced more singulars for plural non-words with /t/. Lastly, children completed a singular-plural perception task with the same non-words. Children were more aware of the distinction with non-words that did not alternate in voicing. The combined results suggest that by 44 months, children have not fully acquired knowledge of voicing neutralization and morpho-phonological alternations.

Notes

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

Session C--Terrace Lounge

Economy considerations in bilingual acquisition

Manuela Pinto and Antje van Oosten
Utrecht University

This research examines the distribution of subjects and their pragmatic felicity in the elicited narratives of 10 Dutch-Italian bilinguals (4.3-13.4) living in Italy. Contrary to what was found with other language pairs, our Italian transcripts did not reveal any pragmatic error: when [+topic-shift] children use an overt subject, when [-topic-shift] they use a null subject. As for the Dutch transcripts, children seem to be aware of the pragmatic distinction between strong/weak pronouns.

We test these results against Serratrice, Sorace & Paoli (2004)'s hypothesis that the computation of the distinctive feature [+/- topic-shift] at the syntax-pragmatic interface might affect the structural cost of the derivation. As the Dutch-Italian pair does not show feature opposition in this respect, we expect that this pragmatic feature will not be an economy issue for bilinguals. In order to exclude interference by the dominant language, we ran the same experiment with bilingual peers living in Holland.

Session A--Metcalf Large

Computational bootstrapping of lexicon and grammar

*Damir Cavar, Joshua Herring, Toshikazu Ikuta,
Paul Rodrigues and Giancarlo Schrementi
Indiana University*

Computational and statistical models of lexical and grammar induction have been recently used to show that frequency-based information about lexical distribution potentially provides cues for lexical typing in bootstrapping approaches to language acquisition. These models are typically limited to most frequent words in the input, specific selections of data, and specifically supervised learning strategies. They are usually also restricted to studies of one particular type of cue.

We argue that for real language acquisition scenarios it is crucial to assume an incremental, dynamic, and self-adapting probabilistic language model which takes multiple cues into account. With relatively simple computational means rich information about lexical and grammatical properties can be extracted from unrestricted child-oriented speech if morphological, prosodic, and distributional properties are considered. We further demonstrate that an incremental approach, using these cues, parallels specific acquisition phases documented in the literature.

Session B--Conference Auditorium

Introducing Phon:
A software solution for the study of phonological acquisition

*Yvan Rose, Memorial University of Newfoundland
Brian MacWhinney, Carnegie Mellon University
Rodrigue Byrne, Gregory Hedlund and Keith Maddocks,
Memorial University of Newfoundland
Philip O'Brien, Dalhousie University
Todd Wareham, Memorial University of Newfoundland*

The CHILDES system has provided several tools for analyzing and sharing acquisition data. However, few of these tools can be applied to phonological development. In this presentation, we introduce Phon, a new software program aimed at filling this gap. Phon provides functionality for multimedia data linkage and segmentation, multiple-blind transcriptions and flexible analytical functions accessible through a friendly graphical interface. Phon is compatible with various computer platforms, is fully compliant with the CHILDES TalkBank format and supports Unicode fonts, thereby facilitating data exchange among researchers. Phon is freely available to the community as open-source software. It meets needs related to the study of first language phonological development (including babbling), second language acquisition, and speech disorders. As such, it provides a unified standard for improving the representations of phonological data within the CHILDES data-sharing initiative.

Session C--Terrace Lounge

Syntactic and discourse features of subjects in child Spanish:
Evidence from Spanish/English bilingual acquisition

*Eugenia Casielles, Jean Andruski, Sahyang Kim,
Geoff Nathan and Richard Work
Wayne State University*

This paper investigates subject realization in child Spanish using new, unpublished data from a bilingual Spanish/English child. We observe early production of null as well as postverbal subjects. Contra Grinstead (2004), we assume that preverbal subjects in Spanish are in a specifier position, and that children have early awareness of discourse-old vs. discourse-new elements. We suggest that if we take into account how the syntax-information structure mapping works in Spanish, we can explain the difficulties with preverbal subjects as follows. Both discourse-new and discourse-old subjects pose minimal mapping problems in Spanish: the former can be left inside the VP in a postverbal position, and the latter can simply be left unexpressed. The problem with preverbal subjects is that they involve syntactic movement, and a relatively complex element informationally: a discourse-new or contrastive topic.

Notes

KEYNOTE ADDRESS

Speech perception and language acquisition: Comparing monolingual and bilingual infants

Janet Werker
University of British Columbia

It is well known that experience with language early in life tunes infants' perceptual sensitivities to better match the phonological properties of the native language, yet the actual learning mechanisms underlying perceptual change are only beginning to be identified. Similarly, the link between emerging language specific perceptual sensitivities and subsequent acquisition of the words and structures of the native language is only beginning to be mapped out. To date, the empirical generalizations and theoretical implications being drawn are based, with a few important exceptions, on research with infants growing up in monolingual environments. Yet by some estimates over half of the world's population grows up with more than one language. What remains largely unexplored is whether perceptual tuning and mapping to language in infants growing up bilingual is simply a matter of the iterative application of the same underlying learning mechanisms as used by monolingual learning infants, or involves a unified and qualitatively different process. In this talk I will address this question, and present new research investigating when and how experience in infancy changes perceptual sensitivities to facilitate language acquisition in bilingual- in comparison to monolingual-learning infants.

Learning without subsets:
The puzzle of raising vs. control

Misha Becker
University of North Carolina

This poster concerns the question of how language learners disambiguate the sentence string NP ____ to VP, which could contain either a raising (*seem*) or a control verb (*try*) (among other things). I argue that there are both logical and empirical reasons why learners should not first assume that such a string is generated by a control structure. The logical reason comes from the existence of verbs that are ambiguous between being raising or control (e.g. *begin*). Such verbs undermine a subset theoretic approach to disambiguation, which would favor assuming a control structure for these strings. The empirical reason comes from evidence that children do not misinterpret raising verbs as control verbs, and, if anything, they may misinterpret control verbs as raising verbs. Learning simulation experiments with adults suggest a series of cues that can be used probabilistically in order to distinguish the two classes of verbs.

Nominal inflection and NP structure in child German:
An experimental study

Julia Berger-Morales
University of California, Los Angeles

We present an experimental study of the acquisition of functional structure in German NPs, which concentrates on the development of the so-called strong/weak inflectional paradigm, a complex morphological system of case, gender, and agreement. We discuss the following results, which lead us to question the hypothesis that children's early NPs have a reduced (non-adult-like) structure (Clahsen et al. 1994; Eisenbeiss 2000/2002).

* Overall, children appear to acquire adjectival agreement early on, while they do not immediately acquire case features and the gender of particular lexical items.
* Children's mistakes with respect to adjectival agreement appear to be the result of overgeneralization of the default inflection or reduce to phonological processes.
* Young children (age 2) seem to produce proper adjectival agreement even during a stage at which they optionally omit determiners.
* All children under investigation produce significant amounts of Determiner+Adjective combinations and NP-ellipsis constructions.

Learning labels in one versus two languages:
18-month-old infants' sensitivity to the word-learning context

Jui Bhagwat and Marianella Casasola
Cornell University

Two studies explored the conditions under which 17.5- to 20.5–month-old monolingual English-speaking infants were able to learn two nonsense words for a single novel object. When presented with both novel words in English, infants mapped only the first label onto the target object, and failed to map the second label onto the object. In contrast, when presented with the first novel word in English and the second, in Spanish, infants mapped both labels onto the target object. Further, when the first label was presented in Spanish and the second, in English, infants did not map either label onto the target object. These results provide evidence of infants' ability to modify their word-learning strategies under different linguistic contexts and suggest that the youngest word learners are sensitive to the word-learning context. The findings are discussed in light of the 'many-perspectives account' of word learning.

The asymmetric development of structural and discourse patterns of motion event descriptions in Mandarin as an equipollently-framed language

Liang Chen, University of Georgia
Jiansheng Guo, California State University, East Bay

Children learn the typologically distinct native verb-framed or satellite-framed patterns in describing motion events from an early age (Choi & Bowerman 1991; Berman & Slobin 1994; Özçalıskan & Slobin 2000). Motion event descriptions in Mandarin Chinese, however, exhibit both verb-framed and satellite-framed patterns (Chen 2005). This raises an interesting developmental issue. What patterns would children acquire first in Mandarin?

To answer this question, motion event descriptions in spoken narratives elicited from Mandarin speakers in six age groups (3-, 4-, 5-, 7-, 9-year-olds, and adults) using the picture storybook *Frog, Where Are You?* (Mayer 1969) are examined. Results indicate that while the structural patterns are obvious by age 3, the discourse patterns do not show up until age 9. We conclude that the language-specific features at the structural levels are acquired at an early age, but other language-specific characteristics at the discourse level are acquired only after a lengthy developmental process.

The role of semantic generality in verb acquisition

Erin Conwell
Brown University

Because semantically general verbs appear early in child speech (Clark 1978), researchers have posited that they play a critical role in acquisition. Specifically, it is hypothesized that children learn these "light" verbs before semantically concrete verbs and build their syntax from this knowledge (Goldberg, et al. 2004). This suggests that children's earliest speech should contain a large proportion of light verbs which decreases as more specific verbs are learned. However, light verbs are highly frequent, and disentangling the relative contributions of frequency and generality to their acquisition is difficult. To assess the roles of frequency and "lightness," longitudinal patterns of verb use were examined in the corpora of 7 English-learning children. Children's light verb use best correlates with parental use, not age or MLU. This indicates that the frequency of a lexical item, rather than its semantic status, drives the child's use of that word.

Notes

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

The early processing of number agreement in the DP: Evidence from the acquisition of Brazilian Portuguese

Letícia M. Sicuro Correa, Marina R. A. Augusto and
José Ferrari-Neto
Pontifícia Universidade Católica do Rio de Janeiro

An experiment is reported in which children (mean-age 25 months) acquiring Brazilian Portuguese (BP) have to identify the referent of a plural DP in a variety of conditions, which present legitimate plural DPs, reflecting the two co-existing number systems of the language (plural markings in D and N; plural marking only in D) and illegitimate ones (plural marking only in N as suffix or as infix). In both legitimate systems, D presents the crucial interface information regarding number. There was a significant difference between legitimate and illegitimate plural and the performance on the latter could not distinguish between the two number systems. The results suggest that young children process number agreement in the DP and are compatible with a view in which the operations of a language independent computational system function as a language acquisition device as soon as this system is bootstrapped by information in the phonetic interface.

Does bilingual input decelerate the acquisition of grammatical schemas?

Caroline Erdos and Fred Genesee, McGill University
Martha Crago, Université de Montréal
Karen Debas, McGill University

Matthews et al.'s (2004, 2005) version of the Weird Word Order paradigm (Akhtar 1999) was used to test monolingual and bilingual English- and French-learning children's (2;0- to 4;6-year-old) productivity with word order as a function of verb familiarity. Monolingual children were tested in their native language; bilingual children were tested in both languages. Monolingual results replicate Matthews et al.'s findings: at a young age, input drives the acquisition of word order. Bilinguals performed similarly to young monolinguals in both their weak and strong language in that they tended to match the modeled weird word order more with low than with high frequency verbs. This suggests that bilinguals' more reduced input in their two languages results in less stable representations of word order knowledge as compared to monolinguals.

Is language processing identical in monolinguals and early, balanced bilinguals?

Cassandra D. Foursha, Jennifer B. Austin and
Gretchen A. Van de Walle, Rutgers University

Early bilinguals outperform late bilinguals on measures of grammatical accuracy (Johnson & Newport 1989; Birdsong 1999). Yet, despite this native-like performance, these early bilinguals experience cross-linguistic influence during syntactic parsing (Hernandez, Bates & Avila 1994) and syntactic priming tasks (Hartsuiker, Pickering & Veltkamp 2004). We present data from early, balanced Spanish/English bilinguals and English monolinguals on a grammaticality judgment test. Although bilinguals were as accurate as monolinguals, they were slower overall, signifying a global language processing difference. However, this difference was not related to sentence type. The groups were indistinguishable in their patterns of performance on conflicting sentences (correct if spoken in one language and incorrect in the other) and converging sentences (correct or incorrect in both languages). Thus, we found no evidence of syntactic interference in our bilingual subjects' grammaticality judgments for sentences presented only in English.

Patterns of syntactic development in cochlear implant users

Joy Geren
Harvard University

When compared to hearing children, deaf children with cochlear implants (CIs) show a syntactic delay relative to vocabulary ability. What is the nature of this delay? Do CI users show an atypical pattern of syntactic development? Do late exposure to language, degraded language input and intensive language therapy change the way they acquire syntax? To address these questions we examined 3-9 year old experienced CI users. Our study corroborated the syntactic delay and found it to span all areas tested. Syntactic delays were not limited to the most perceptually complex forms or those that are not addressed in language therapy. This suggests that syntactic development in CI users is slower but otherwise similar to development in hearing children. Although syntactic abilities do not progress at the same rate as vocabulary abilities in this population, the typical patterns of syntactic development appear to be intact.

Notes

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

Object movement and the acquisition of telicity

Miren Hodgson
University of Massachusetts, Amherst

Research on the acquisition of telicity has shown that adults interpret telic predicates such as '*She ate the cake*' as a complete event: when the cake is eaten, the event is completed. Children allow telic predicates to have telic and atelic interpretations. The authors have argued that children fail to distinguish between the two predicates because children do not recognize the morpho-syntactic feature of the object NP (count NP) as a marker of telicity.

I argue that children do not distinguish between the predicates because the movement of the object to check off telic features is covert, therefore interpretation at LF is optional for children but not for adults. However, when telicity is marked in subject position '*the water filled the bucket*', the overt movement of the object as it passes through AgrO is the earliest telic form acquired by a child because the movement is overt and not covert.

"The rabbit told me": young preschoolers' understanding of sources of knowledge in dealing with testimony

Tomoko Matsui, Kyoto University
Yui Miura and Peter McCagg,
International Christian University

The current study investigates how preschoolers make use of linguistic clues to assess a speaker's epistemic stance. Japanese preschoolers were confronted with a choice concerning the location of a hidden object, based upon conflicting input from speakers who varied in the degree of certainty and quality of evidence they possessed for their opinions. The children's choice of the location of the hidden objects was scrutinized by questions including an open-ended 'how'-question (e.g. *"How did you find out the location of the hidden object?"*). The result revealed that although it was only the older preschoolers who demonstrated genuinely meta-linguistic source monitoring ability by answering the 'how'-question appropriately (e.g. *"The rabbit said that he saw it"*), a prototypical example of a 3-year-old's answer (*"The rabbit told me"*) suggests that even the youngest could recall that the clue was a part of the utterance.

Notes

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

The acquisition of Japanese focus particles: *dake* (only) and *mo* (also)

Kazumi Matsuoka, Keio University
Nobuhiro Miyoshi, Asahikawa Medical College
Koji Hoshi, Keio University
Masanobu Ueda, Izumi Yabu and
Miki Hirata, Hokkaido University

Given that characterizing the nature of syntactic-semantic interface is one of the important issues in the generative-based acquisition study, focus phenomena is a reasonable topic to investigate. A total of 120 Japanese-speaking children from Sapporo and Osaka (4;7-6;10, mean: 5;10) participated (62 in the *dake* session, 58 in the *mo* session). The Truth-Value Judgment task (Crain and Thornton 1998) was conducted. 48% of the *dake* subjects (mean:5;11) gave adult-like responses. We found a larger number of subject-only responses (30%, mean:5;10), as opposed to object-only responses (2%, age 5;9). Our results matched the patterns reported in Crain et al. (1992). Children within their respective groups treated *dake* and *mo* differently; 17% of the *mo* subjects (mean:6;4) gave an adultlike response. This indicates that those two focus items actually have different syntactic-semantic properties, which provides support to Hoshi's (2004) claim that *mo* and *dake* have completely different syntactic derivations.

Cross-linguistic influences on infants' babbling: The role of input and intake factors

Karen Mattock, Susan Rvachew and Linda Polka
McGill University

The impact of the linguistic environment on speech production during infancy is relatively unexplored, despite de Boysson-Bardies et al. (1989) reporting evidence for cross-linguistic influences on the acoustic characteristics of vowels produced by 10-month-old infants. The present study attempts to replicate their results for English- and French-learning infants, and extend their findings across a broader age range. The spontaneous speech of forty-three infants aged 10 to 18 was recorded. These recordings yielded 1430 vowels with normal phonation and full resonance. Mean F1 and mean F2 was calculated for each infant's vowel space. Regression equations confirm a significant decline in mean F1 with age for French-learning but not English-learning infants, and an age by language group interaction for mean F2 showing a significant decline over age for English but not French infants' vowels. Possible ways in which input and intake factors may influence babble will be discussed.

The genitive of negation construction in Russian-English bilinguals

Nadya Modyanova
Massachusetts Institute of Technology

We examine what properties of L1 are attrited or not learned when a child primarily hears and uses L2. In the Genitive of Negation construction (GN), genitive case marks nonspecific direct objects (DO) of negated verbs, being obligatory with bleached unaccusatives (e.g. *be*) and optional but preferred with transitives. In contrast, Russian specific DO behave like English objects and receive nominative case for unaccusatives and accusative case for transitives. We investigated GN via elicited production in eleven Russian-English bilinguals (5;3-10;6 years). Comparing the results against monolingual GN data (Babyonyshev et al. 2001), we show that bilinguals use genitive case more than younger monolinguals (3;0-6;6 years) for bleached unaccusative objects (73% vs. 47%), but much less for transitive nonspecific objects (36% vs. 73%). Following Tsimpli and colleagues (2002), the Russian encoding of the interpretable nonspecificity feature in GN seems to become optionally unspecified as a result of near-fluency in English.

Preschoolers attend to a speaker's knowledge when learning words

Erika Nurmsoo and Paul Bloom
Yale University

When learning object names, children attend to the speaker's direction of gaze. In three experiments we explore the hypothesis that they do so because direction of gaze is a reliable cue to the mental state of the speaker. We first found that 4- year-olds do not simply map a new word to the target of the speaker's gaze - instead, they take into account the speaker's knowledge. We then established that 2- and 4-year-old children use speaker knowledge to learn an object name in the absence of gaze information. Finally, we explored whether children can identify which property of an object is being named (appearance or texture) based on the speaker's perceptual access to the target. The results from these studies suggest that children use eye gaze as one cue to a speaker's referential intent, and that they consider other information such as speaker knowledge when learning an object name.

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

Learning allophones from the input

Christine Shea and Suzanne Curtin
University of Calgary

Learning allophonic distributions requires familiarization with cues that identify these alternations. We exposed Spanish and English Native Speakers (ENS, SNS) to Arabic allophonic variations resulting from the spread of secondary pharyngealized articulation of an emphatic consonant giving rise to conditioned alternations between [a]/[æ]. These vowels have different distributions in the native languages of the participants: ENS two L1 phonemic categories, and SNS one phonemic L1 category. CV sequences of emphatic/nonemphatic coronal consonants with three naturally occurring Arabic vowels were presented in an ABX task. Subsequently, participants listened to one of two continua with eight CV tokens each: one varied in emphatic [d] and the second varied the F2 of the low front vowel. Results suggest: 1) sensitization to contextual cues signaling allophonic variation in a foreign language; 2) sensitization can affect L1 phonemic boundary perception; 3) differential NS group results indicate L1 phonemic status of target allophone affects training sensitivity.

The acoustic properties of vowels in child-directed read and spontaneous speech

Jae Yung Song
Brown University

This study investigated the nature of child-directed (CD) read speech and its relationship to CD spontaneous speech. Specifically, we examined formants (F1, F2) and the duration of vowels in monosyllabic words that occurred in both speeches. The subjects were three English-speaking mothers of children around 2-years-old. Analyses of formants showed that vowels in book reading were not significantly hyperarticulated compared to those in spontaneous speech. However, vowel duration was significantly longer in read speech. The effect was greater for sentence-medial words. Given previous findings of significantly slower tempo in CD spontaneous speech, an even slower tempo in read speech indicates the mothers' maximized effort to ease their children's processing. We suggest that elongation of vowels in reading facilitates acquisition by providing extremely well-specified perceptual cues for words and grammatical constructions in books.

Notes

Testing for OO-faithfulness in artificial phonological acquisition

Anne-Michelle Tessier
University of Massachusetts, Amherst

Phonological patterns often have systematic exceptions in morphologically-derived contexts. In Optimality Theory, such patterns are often captured with constraints enforcing phonological similarity throughout a morphological paradigm – e.g. Output-Output Faithfulness (Benua 2000). Hayes (2004) argues convincingly that learning an OO-faithful grammar must rely on an inherent bias for high-ranking OO-Faith.

This study tested for such a bias, asking whether learners are preferentially OO-faithful at early stages of morphological acquisition. Ten 4-year-old children learned the names of objects in an artificial language, including a novel plural suffix, and then played a "*wug*-test" game (Berko 1958). The *wug*-test compared participants' production of the same coda-onset clusters in two morphological contexts, where only one was protected by OO-Faith. A pair-wise within-subjects t-test (p < 0.01) shows that codas were produced faithfully in fewer clusters where OO-faith was not relevant (57/115; 43.5%) than in clusters where the coda was protected by OO-faith (71/96; 77.7%).

Spanish-learning children use grammatical gender in on-line referent recognition

Casey Williams and Anne Fernald
Stanford University

Studies of adult sentence processing in languages with grammatical gender have shown that gender-marked articles, such as *la* [fem.] and *el* [masc.] in Spanish, facilitate spoken-word recognition. Here we explore whether 34- to 42-month-old monolingual Spanish-learning children and monolingual Spanish-speaking adults can use gender-marked articles to rapidly identify familiar nouns in fluent speech. Participants' eye-movements were monitored as they viewed two images and listened to a sentence naming one of the images. The target and distracter images were either of the same or different gender. Both children and adults were faster to orient to the named referent when the article was informative, showing that the information carried by articles increased the speed and efficiency of word recognition. We argue that young language learners use grammatical gender in on-line processing to anticipate upcoming elements in the speech stream, attempting at each moment to construct the fullest possible interpretation of linguistic input.

Word-final consonant and cluster acquisition in Indian English(es)

Caroline Wiltshire
University of Florida

Learners of English in India speak first languages (L1s) with varied phonotactics. Variations in Indian English reveal the importance of three factors in L2 acquisition: transfer, markedness, and input frequency.

Data was recorded from speakers of 5 L1s, which allow: no word-final Cs (Angami), a single sonorant/voiceless obstruent (Mizo, Ao), or voiced obstruents/clusters (Gujarati, Hindi). Transcription of thirty types of word-final consonants and clusters shows more frequent: 1) devoicing for speakers of L1s lacking voiced codas, attributable to transfer and markedness; 2) deletion for speakers of L1s lacking clusters, particularly in clusters violating sonority sequencing markedness. However, markedness cannot explain why deletions in fricative-stop clusters outnumber deletions in stop-[s], despite being less marked. I show how input frequency overrides markedness using the Gradual Constraint Ranking Learning Algorithm, and that starting from different L1s results in different grammars.

Syntactic complexity and productivity before 2: A longitudinal study of early grammar in L1 acquisition of Mandarin Chinese

Xiaolu Yang
Tsinghua University, Beijing

The present study addresses the issue of whether early syntax is rule-based or item-based. We will look at the complexity and productivity of early syntax of Mandarin Chinese by drawing longitudinal data from two Mandarin-speaking children. The subjects' multiword combinations containing verbs in the transcripts before age 2 were analyzed, with a special focus on the structure of VP. It was found that the two children's syntax before 2 was quite productive and complex, not easily susceptible to an item-based account, as proposed in Tomasello (2000, 2003). In addition to common verb-theme structures, a productive use of various more complex VPs also emerged at this stage, including resultatives and reduplication of volitional verbs. It will be argued that findings from the present study provide evidence for very early parameter setting (Wexler 1998) and suggest Chinese-speaking children's early knowledge of basic grammar of Chinese, e.g. properties related to analyticity in J. Huang's (2004) sense.

Notes

——————————————————————

——————————————————————

——————————————————————

——————————————————————

——————————————————————

——————————————————————

——————————————————————

——————————————————————

——————————————————————

——————————————————————

——————————————————————

——————————————————————

——————————————————————

Session A--Metcalf Large

Plural morphology as a possible source of "more than one"

David Barner, Dora Thalwitz,
Justin Wood and Susan Carey
Harvard University

We explored the relationship between acquisition of the singular-plural distinction and pre-linguistic representations of objects and number. In one set of experiments, we tested 18- to 24-month-olds using the manual search paradigm. Up to 20-months, infants failed to reach more for 4 balls than for 1 (even when given plural morphological cues), suggesting that they are limited to tracking 3 objects in parallel. However, 22- and 24-month-olds reached more on 4 trials than 1 trials even without singular-plural cues. Data from parental-report indicate a significant relationship between children's success at the 4 vs. 1 manual search task and production of singular-plural morphology. This indicates an important relationship between acquiring singular-plural morpho-syntax and the ability to form plural representations. Additional results from English 15-month-olds and cross-linguistic studies of singular-plural understanding suggest that the distinction rests on pre-linguistic conceptual knowledge, which is harnessed by language upon acquisition of singular-plural morphology.

Session B--Conference Auditorium

Prosodic transfer:
L1 effects on the production of L2 determiners

Heather Goad and Lydia White
McGill University

According to the Prosodic Transfer Hypothesis, production of functional material is constrained by L1 prosodic representations. We support PTH by comparing the acquisition of English determiners by Mandarin and Turkish speakers. In English, articles link to the Phonological Phrase. Mandarin has no overt articles. Turkish has no definite article; in indefinite contexts, unstressed *bir* can be used, represented by Prosodic Word adjunction. The English structure is available only at the right edge in Mandarin. Turkish does not permit this structure at all. Predictions for Mandarin- and Turkish-speaking L2ers: high omission rates; stressing of articles or overuse of other determiners; lower suppliance of articles in DPs containing adjectives for Turkish speakers. Preliminary analyses show: the predominant error is article omission; when supplying articles, some subjects frequently stress them; the only significant substitution is the replacement of *a* by stressed *one*; for the Turkish group, there is a significant contigency between adjective suppliance and article omission.

Notes

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

Session C--Terrace Lounge

Learning to express causation across languages:
What do speech and gesture patterns reveal?

Reyhan Furman, Bogazici University
Asli Özyürek, FC Donders Center for Neuroimaging
and MPI, Nijmegen
Shanley Allen, Boston University

We examined the development of linguistic and gestural expressions of direct causation in motion events in two typologically different languages. 120 American and Turkish adults and children (aged 3, 5, 9) narrated clips of direct causation. Linguistic descriptions differed across languages. Turkish adults depicted causation as separate events in two separate clauses. However, American adults conflated cause and result in one clause. Younger American children conflated cause and result more than adults. Turkish 3-year-olds also conflated the subevents unlike their adults. Gestural representations also varied crosslinguistically. American adults encoded both cause and result in one gestural string. Turkish adults' gestures focused more on cause. American children's gestures reflected the adult patterns. However, Turkish children represented cause less and performed more result gestures. Adults' gestural and linguistic expressions of direct causation differ across languages. However, children's expressions start out similar - with a more wholistic rather than segmented representation of causation.

Session A--Metcalf Large

The effect of familiarity and semantics on early acquisition of Japanese numeral classifiers

Hiromi Sumiya and Eliana Colunga
University of Colorado

This study investigated comprehension of six "basic" classifiers that are divided into category-based (-*nin* for people, -*hiki* for small animals, -*dai* for vehicles and machineries) and shape-based (-*ko* for three-dimensional objects, -*hon* for one-dimensional objects, -*mai* for two-dimensional objects) with a special focus on young children's ability to generalize their knowledge about classifiers. Ninety monolingual Japanese children aged 3- to 5-years-old participated in the study employing a forced-choice comprehension task. The stimuli consisted of familiar or unfamiliar real objects presented in a between-participants design. The results show that even the youngest children understand some numeral classifiers (-*hiki*, -*dai*), but not others, that comprehension increases with age except comprehension of -*ko*, and that comprehension of category-based classifiers is significantly better than that of shape-based classifiers. These results suggest that certain features, such as animacy and semantic transparency between classifiers and referents, have a significant impact on the acquisition of numeral classifiers.

Session B--Conference Auditorium

Global foreign accent and the effectiveness of the prosody-oriented approach

Mamiko Akita
Waseda University

This study investigated the relationship between global foreign accent (GFA), an impressionistic judgment of global non-native English pronunciation, and changes in the perception/production abilities of adult Japanese English learners as a result of two instructional procedures: the segmental- and prosody-oriented approaches. The teaching procedures were identical for all three experimental groups (prosody, segmental, and control). However, there was one difference in the treatment of the groups: the prosody group received prosody-focused instruction, while the segmental group received training to distinguish/articulate individual sounds. For testing the GFA, informants read a dialogue aloud in a sound-treated room immediately before and after the three-month treatment. The data were evaluated by three native English speakers using a 6-point scale. The results provide new pedagogical evidence that the prosody-oriented approach is effective in improving both the perception and the production of learners. Further, it is more effective than the segmental-oriented approach with regard to production.

Session C--Terrace Lounge

Constrained flexibility in the acquisition of causative verbs

Ann Bunger, Northwestern University
Jeffrey Lidz, University of Maryland

Very little work has examined the precise nature of the meanings children assign to verbs. Bunger & Lidz (2004) demonstrated that 2-year-olds represent causatives as decomposable into distinct subevents. This study shows that 2-year-olds are flexible in the specificity of the meanings they assign to the subparts of a causative, but that their hypotheses about those meanings are limited in systematic ways. In a preferential-looking experiment, 2-year-olds were presented with novel verbs while viewing causative events. Visual fixation data show that regardless of the familiarization event, when children encode a verb as causative, they are able to represent a single verb-event pairing with a specific or general result. This study provides further support for children's ability to use syntax to guide the acquisition of novel verbs. We propose, furthermore, that their flexibility in extending a verb to novel events is constrained by the mapping between transitive syntax and causal meaning.

Notes

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

Session A--Metcalf Large

Object-substance construal

Peggy Li, Yarrow Dunham and Susan Carey
Harvard University

Word learners often have to decide whether a novel label for an entity (*wooden table*) refers to the object (*table*) or the substance (*wood*). Comparing speakers of three languages, we asked how language and inherent features of the entities influence one's construal. Using a match-to-sample word-extension task, Experiment 1 replicated Imai and Gentner (1997), showing that classifier language speakers (Mandarin, Japanese) more often than English speakers preferred the substance over the object match. Experiment 1 additionally showed that the entities' shape-dependent function, but not its shape complexity, influenced construal. Experiment 2 tested the nature of the crosslinguistic difference in Experiment 1 with a non-word-extension task. Using Experiment 1 stimuli, adults rated how likely the entity is a kind of object or substance. The crosslinguistic difference then disappeared, but speakers were again influenced by shape-dependent function. These results support universality of the object-substance distinction and contribute to language acquisition and linguistic relativity debates.

Session B--Conference Auditorium

Age of acquisition effects on lexical access in ASL: Evidence for the psychological reality of phonological processing in Signed language

Rachel I. Mayberry, University of California, San Diego
and McGill University
Pamela Witcher, McGill University

One of the most robust effects of age of acquisition (AA) is on the phonological perception of speech. We investigated whether these effects exist in sign language using an ASL lexical decision task. The stimuli were three types of prime-target pairs: phonological, where the prime and target were minimal pairs; semantic, where the prime was a superordinate category and the target was an exemplar; and no relation. Sixty-three Deaf adults who were native, early or late learners of ASL participated. When response time was the dependent measure, phonological priming showed facilitative effects on lexical access for the native and early learners, but inhibitory effects for the late learners; semantic priming showed facilitative effects independent of AA. The facilitative effects of phonological priming demonstrate pre-lexical activation of sign phonology. This means that signers recognize signs via phonological structure and, moreover, that AA effects on phonological perception are cross-modal in nature.

Notes

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

Session C--Terrace Lounge

"No positive evidence", and a non-innatist account of causative alternation errors

Jean-Philippe Marcotte
University of Minnesota

The putative absence of negative evidence from children's linguistic environments has been used to argue that innate grammatical knowledge is necessary for recovery from causative alternation errors. I argue that linguistic evidence must consist minimally of accurate interpretations of adult utterances, making environmental positive evidence equally unavailable. Positive and negative evidence are best reconceptualized as different outputs of a hypothesis-testing acquisition mechanism. Innate grammatical knowledge is therefore unnecessary in principle to explain recovery from causative alternation errors. It is also not necessary in practice: individual differences and low error rates support an approach in which errors can be licensed on a verb-by-verb basis. Structural correspondences between misacquired meanings and those of alternating verbs license inchoativization errors; causativization errors are freer because of the periphrastic causative. The conclusions are supported by analysis of a new corpus of errors gathered from a search of the entire CHILDES archive.

Session A--Metcalf Large

Biological and psychosocial factors affect linguistic and cognitive development differently: A twin study

Karin Stromswold, Katie Schramm, Diane Molnar,
Scott Holodak, and Ellyn Sheffield
Rutgers University

Although twin studies clearly demonstrate that genetic factors play an important role in language acquisition, some twin studies suggest that adverse prenatal or postnatal environments can overshadow the effects of genetic factors. The current study investigates, in the same group of twins, the extent to which prenatal and postnatal environmental factors interact with genetic factors to affect linguistic and nonlinguistic development. Our results suggest that prenatal environmental factors affect linguistic development more than postnatal factors, and that postnatal factors affect cognitive development more than prenatal factors. Prenatal factors are overwhelmingly biological, whereas postnatal factors tend to be psychosocial. Furthermore, postnatal environment encompasses the linguistic input children receive. Thus, consistent with innatist/biological theories of language, our results suggest that biological factors play a crucial role in language development, whereas the input children receive plays a relatively minor role. For cognitive development, the pattern is reversed with postnatal/psychosocial factors playing the dominant role.

Session B--Conference Auditorium

Reconstruction effects in child language

Erin Leddon, Northwestern University
Jeffrey Lidz, University of Maryland

We examine interactions between wh-movement and binding through a series of experiments using the Truth Value Judgment Task (Crain & Thornton 1998) and the Questions after Stories Task (deVilliers & Roeper 1996). We find that when reconstruction is obligatory (1-3), 4-year-olds, like adults, reconstruct a wh-phrase to its base position. However, when reconstrution is optional (4), children systematically avoid reconstruction.

(1) *[How impressed with himself$]_j$ was every boy$_i$ t_j?*

(2) *[Which article about himself$_i]_j$ did every dinosaur$_i$ save t_j?*

(3) **[How proud of Mary$]_j$ was she$_i$ t_j?*

(4) ?*[Which painting of Miss Cruella$_i]_j$ did she$_i$ put up t_j?*

In (4), adults prefer to reconstruct, as evidenced by their treating the name and pronoun as disjoint, but children prefer not to, showing no disjointness effect. These results are consistent with other findings showing children's preference for isomorphism between S-structure and LF (e.g., Lidz and Musolino 2002).

Session C--Terrace Lounge

Morphosyntax vs. phonology in the acquisition of variation in a Scottish dialect

Jennifer Smith, Mercedes Durham and Liane Fortune
University of York

Recent work claims that children acquire variable rules at about the same time as they acquire categorical rules, and these are subject to complex social and linguistic constraints found in adult speech. In this paper we present a cross-sectional analysis of dialect data from eleven caregiver/child dyads. Quantitative analysis of over 3000 contexts of use of one phonological (1) and one morphosyntactic variable (2) reveal that in (1), social constraints operate in the caregiver speech and these are matched by the child. In (2), linguistic constraints in the input are matched by the child.

(1) a. Phone the bobbies so they can get me /   /...
     b. So they can get me /   /!

(2) a. Your leggies are cold...
     b. Your feeties is cold as well.

We explore the ramifications of these findings for the acquisition of variation from the earliest stages.

Notes

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

Session A--Metcalf Large

Predictors of late language emergence: Child characteristics are predominant

Mabel L. Rice, University of Kansas
Steve Zubrick and Kate Taylor, Curtin University
David Slegers, University of Kansas

Predictors of late language emergence are crucial, but empirically unresolved, issues for models of children's language acquisition and impairment. This investigation examined language emergence in an epidemiologically ascertained sample of 1,766 24-month-old children. 17% of the sample showed late emergence. Multivariate modeling of late language emergence found no significant associations for maternal characteristics (e.g., education, age, smoking, depression/anxiety); family size and positive history of late language emergence were significant (income, education and occupational status, day care use were nonsignificant); significant child characteristics were: Gender, percentage of expected birthweight, gross motor development, fine motor skills, adaptive motor behaviors, and interpersonal socialization. The results support a strong role for child-internal mechanisms of onset that are operative across a wide variation in maternal and family characteristics.

Session B--Conference Auditorium

Multiple interrogatives in child language

Lydia Grebenyova
University of Maryland

Adult English requires that only one wh-phrase is fronted in multiple interrogatives. On the other hand, fronting of all wh-phrases is required in Slavic languages (e.g., Russian). In this paper, I explore if English- and Russian-speaking children exhibit the knowledge of this syntactic parameterization. Semantically, multiple interrogatives can have a pair-list or a single-pair reading. Russian and English lack SP readings in bare multiple wh-questions (Hagstrom 1998; Bošković 2001; Grebenyova 2004). I investigate whether child knowledge of these semantic properties matches that of the adults. The results of the two experiments, eliciting multiple interrogatives in controlled pair-list and single-pair scenarios from English- and Russian-speaking children suggest that children's semantics of multiple questions is consistent with that of adults. However, certain syntactic deviations were produced by Russian-speaking children. I relate those to the acquisition of focus requirements in Russian multiple questions.

Notes

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

Session C--Terrace Lounge

The effect of variable input on comprehension: Evidence from Spanish

Karen Miller and Cristina Schmitt
Michigan State University

What effect will variable input have on the comprehension of plural morphology and how will different levels of plural omission affect comprehension of the plural morpheme? In Chilean Spanish, the plural morpheme can surface as [s]/[h] but also as (ø) (omission). The distribution of the different forms is due to allophonic variation of /s/, which is at best probabilistic (Cepeda 1995). Hence, Chilean children receive input with evidence both for ([s]/[h] forms) and against (omission) overt plural-marking. On the other hand, the plural morpheme is always pronounced as [s] in the speech of Mexican adults (Mexico City). Hence, Mexican children receive systematic input for overt plural-marking. We present a series of experiments that compared production and comprehension of the plural morpheme by Chilean vs. Mexican children. Our results support the hypothesis that variable input affects children's comprehension of morphology.

LUNCH SYMPOSIUM

Statistical learning: What's *off* the table…what's *on*

Jeff Elman
University of California, San Diego

Over the past decade, a number of results from computational modeling, machine learning, and behavioral studies with infants have suggested that statistically-based learning may be considerably more powerful than previously thought.

In this talk I shall discuss a number of the positive lessons from this work (things that can be taken off the table). These include the ability of statistical learning devices to generalize beyond their experience in important ways, and the ability to learn language regularities that reflect hierarchical and compositional relationships.

But much remains on the table: What are the limits of statistical learning? Is statistical learning enough? The fact remains that ours is the only species to possess language. In the last part of the talk, I shall discuss what are likely limits to statistical learning, and what are possible missing pieces that make language possible.

LUNCH SYMPOSIUM

Statistical Learning: What is it?

LouAnn Gerken
University of Arizona

The phrase *statistical learning* has become part of the common vocabulary of language researchers over the past 10 years. Like any term coined within a particular research program and then more generally adopted, *statistical learning* has come to be used to refer to a of variety phenomena. After briefly outlining some ways in which the term is used, I will focus on statistical learning as a psychological mechanism by which learners discover linguistically relevant patterns in their input. Types of statistical calculations hypothesized to be within the arsenal of the language-learning infant include transitional probabilities between adjacent and non-adjacent elements, frequency distributions, and Bayesian likelihood estimates. My talk, which will be partially based on observations of prominent researchers in the field, will give examples of the research that generates these hypotheses and ask which, if any, statistical computations we can confidently assign to infant learners.

LUNCH SYMPOSIUM

Bayesian learning of grammars

Mark Johnson
Brown University

While the most famous applications of statistical learning are perhaps word associations and neural networks, in the past decade we discovered how to extend these learning algorithms to grammars that generate linguistically-realistic structures. Within computational linguistics these techniques are used to learn phrase-structure grammars, but there is no principled reason why they can't learn other kinds of grammars as well. Bayesian approaches are particularly attractive because they can exploit "prior" (e.g., innate) knowledge as well as statistical generalizations from the input. Structured statistical learners have two major advantages over other approaches. First, because the generalizations they learn and the biases or priors they utilize are both expressed in terms of explicit linguistic representations, it is clearer what was learnt and what information was exploited during learning. Second, because of the "curse of dimensionality", learners that identify and exploit structural properties of their input seem to be the only ones that have a chance of "scaling up" to learn real languages.

LUNCH SYMPOSIUM

Session A--Metcalf Large

A helping hand: Gestures facilitate infants' ability to form word-object associations

Makeba Parramore Wilbourn and Marianella Casasola
Cornell University

Acredolo and Goodwyn (2002) report that accompanying spoken language with symbolic gestures facilitates infants' language development. The current project explored one possible explanation for this facilitation by examining infants' label-object associations in the presence and absence of synchronous bimodal input. We examined whether gestures and words presented simultaneously facilitates 12-month-olds' ability to form label-object associations, a precursor to word learning. In Experiment 1, infants were habituated to a novel gesture presented simultaneously with a novel word and object. In alternate trials, infants viewed a different gesture-word-object combination. In Experiment 2, infants viewed either words or gestures paired with objects. Twelve-month-olds formed label-object associations when presented with both words and gestures simultaneously, but not when either words or gestures were presented with the objects. Results suggest that multiple labels presented bimodally and synchronously may be one driving force behind the linguistic facilitation found when infants are exposed to gesture-accompanied speech.

Session B--Conference Auditorium

The influence of production on perception: Output as input

Rory DePaolis
University of Wales and James Madison University

Speech production is rich in proprioceptive feedback that could be expected to constitute important information for the infant to use in understanding speech. Such cross-modal matching of speech production to perception can act as an 'articulatory filter', increasing the salience of parts of the speech stream. To explore this, English-learning infants were audio- and video-taped at home from 9 months of age. The headturn procedure was used once the children had given evidence of stable production of one or more consonants. Each child heard three passages in which nonwords were interspersed with real words to create a passage of five sentences. The nonwords in contrasting test passages consisted of either (a) the stable consonants used by the child being tested, (b) comparable consonants used by other children, or (c) consonants which are uncommon in children's early productions. Results show an influence of stable consonant production on perception.

Notes

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

Session C--Terrace Lounge

ERP measures of syntactic and semantic processing in children with and without SLI

Stacy K. Betz, Pennsylvania State University
Mabel L. Rice, University of Kansas

English-speaking children with Specific Language Impairment (SLI) omit obligatory finiteness markers; however, the neural correlates of this deficit are unknown. Three event-related potential components were examined: N400 following semantic anomalies; P600 following finiteness omissions of auxiliary do (omit FIN); P600 following overt finiteness errors (do/does). Four child groups differing in age (older/younger) and affectedness (SLI/control) participated. All groups except the younger SLI performed near ceiling on all grammaticality judgments. Adults validated the expected N400 and P600 responses. For children, the older controls showed a significant N400 and P600-omit FIN and the older SLIs showed a P600-omit FIN with a larger amplitude and wider scalp distribution than the older controls. These results suggest a larger neural response to syntactic structures previously problematic for children with SLI.

Session A--Metcalf Large

The added value of gesture in predicting vocabulary growth

Meredith Rowe, Seyda Özçalıskan and Susan Goldin-Meadow
University of Chicago

Does gesture add value beyond speech as a predictor of child language skills? This question can be approached from two perspectives – the gestures children themselves produce, and the gestures their caregivers produce. Fifty mother-child dyads were videotaped every four months from child-age 14- to 30-months. Children varied widely in their productive vocabulary growth. We examined a variety of child gesture measures and preliminary results showed that children's early reinforcing gestures (i.e., gestures that convey the same information as the accompanying speech) were the best predictor of growth in children's word types. However, when we controlled for children's reinforcing gestures and maternal word types, there was no added value of maternal gesture on the child's vocabulary growth. In sum, looking at children's gestures increases the precision with which we can predict children's vocabulary growth, but adding maternal gestures to the mix does not.

Session B--Conference Auditorium

Follow your nose:
Non-native nasal consonant discrimination in infancy

Chandan R. Narayan
University of Michigan and
University of British Columbia

Infants' perception of native and non-native nasal-consonant contrasts at 10-12, 6-8 and 4-5 months was investigated. English-hearing infants discriminated a native nasal-consonant contrast ([na]-[ma]) at all three ages in a habituation task, but were unable to discriminate a non-native contrast ([na]-[nga]). Tagalog-hearing infants, for whom the [na]-[nga] contrast is present in the ambient language, discriminated the contrast at 10-12 months. These results are evaluated in the context of the well-known findings of non-native oral-stop and vowel perception in infancy, where discrimination proceeds from a language-general ability to one reflecting the phonetic contrasts of the infant's ambient language at 6-8 months (for vowels) and 10-12 months (for oral stops). When coupled with acoustic data, the present perceptual findings suggest that infants' ability to discriminate nasal-consonant contrasts are initially broad, representing robust acoustic differences (as in [na]-[ma]), but may become sensitive to finer acoustic contrasts (like [na]-[nga]) with increasing language experience.

Session C--Terrace Lounge

The acquisition of passives by Russian-speaking children with SLI

Maria Babyonyshev, Lesley Hart and Elena L. Grigorenko
Yale University

This paper reports new experimental data on the comprehension of reversible passive constructions of three types (action verbs, perception verbs, and psychological predicates) by monolingual Russian-speaking children with Specific Language Impairment (SLI). We demonstrate that passive structures cause significant difficulty for SLI children, whose comprehension of these structures is at chance, and that the patterns of passive structure acquisition are qualitatively different for SLI and typically developing (TD) children. The age-matched TD group has good control over all three types of passive verbs, while younger TD children still experiencing problems with passives perform at chance level on all of them. However, the SLI group demonstrates control only over action verb passives, showing only moderately successful performance on psych-predicate passives and extremely poor performance on perception verb passives – a pattern that suggests the use of an extra-syntactic strategy not utilized by TD children at any age.

Notes

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

Session A--Metcalf Large

Gesture as input in language acquisition:
Can learners use co-speech gestures to inform verb learning?

Whitney Goodrich and Carla Hudson Kam
University of California, Berkeley

In this study we examine whether learners can use co-speech gesture to inform language learning. In particular, we examine how gesture may aid the learner in assigning meaning to novel verbs. In the experimental condition, the novel verb was accompanied by a gesture that could be used to disambiguate its meaning. Crucially, the gesture was the only source of information available regarding the meaning of the verb. In the control-gesture condition, the experimenter produced a gesture that did not disambiguate the meaning of the verb. In the no-gesture control condition, the experimenter produced no gestures. Participants included adults, 3- and 4-year-old children. For all three ages, participants in the experimental condition, but not the control conditions, selected the correct item at a level significantly above chance, suggesting that learners can use co-speech gesture as a source of information in language learning.

Session B--Conference Auditorium

Does the face say what the mouth says?
A study of infants' sensitivity to visual prosody

Megan S. Blossom and James L. Morgan
Brown University

Are infants sensitive to visual prosody - facial and head movements that occur during speech? One possible role for visual prosody in language acquisition is to reinforce prosodic cues present in speech, which may help infants identify linguistic units in their input. Ten-month-olds' ability to detect audiovisual synchrony of a female face producing natural infant directed speech was tested using the Intermodal Preferential Looking Procedure. In Experiment 1, infants saw the same video on each of two monitors, with one side delayed behind the audio stimulus by up to 500 ms, while the other was synchronous. Experiment 2 was similar, except the mouth region of the speaker was blurred to isolate the infant's sensitivity to visual prosody. This study, combined with current research regarding the role of visual prosody in adult speech perception suggests that visual input might play a role in early speech perception.

Notes

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

Session C--Terrace Lounge

New data on passives in Williams syndrome:
Evidence for a grammatical delay

Alexandra Perovic and Ken Wexler
Massachusetts Institute of Technology

Passives are generally reported to be intact in Williams Syndrome (WS). However, usually only the passives of actional, but not of psychological verbs, are studied. To establish the mastery of verbal passive in WS, we tested comprehension of passives of both actional and psychological verbs in 14 children with WS, aged 8-16 (mean 12;8). Our participants showed an excellent performance on all actives, as well as short and long passives of actional verbs. On passives of psychological verbs, short and long, they performed no better than chance. This performance parallels that of younger controls matched on non-verbal MA, but is significantly worse than that of verbal MA-matched controls. These results indicate an incomplete mastery of verbal passives in children with WS, confirming the hypothesis that syntactic structures that develop late in typical development appear even later in WS, suggesting a grammatical delay in the presence of a more advanced verbal MA.

Session A--Metcalf Large

The seeds of spatial grammar in the manual modality

Marie Coppola, Wing Chee So and Susan Goldin-Meadow
University of Chicago

All languages have grammatical devices allowing them to "refer back" to entities and thus maintain co-reference. Conventional sign languages achieve co-reference by modulating the production of signs in a signing space. Participants described a series of vignettes using only their hands (without speech): 4 deaf Nicaraguan homesigners (ages 17-26) who had not acquired conventional sign language, and 18 hearing English speakers (ages 18-22).

Both groups produced similar numbers of object and action gestures, as well as high proportions of spatially coreferential gestures. Thus, space is likely to be used meaningfully and coherently in an invented gesture system, even one created on-the-spot. Homesigners' productions also reflected constraints on the placement of object gestures not observed in hearing adults, who were more likely to construct an imagistic "picture" of the scene. Accordingly, long-term use may be necessary for invented gesture systems to begin to assume the arbitrary grammatical devices found in natural sign languages.

Session B--Conference Auditorium

Phonological specificity of early lexical representations in German19-month-olds at risk for SLI

Barbara Höhle, Ruben van de Vijver and
Sonja Bartels, University of Potsdam
Jürgen Weissenborn, Humboldt University

We will present results of a retrospective analysis of data from a longitudinal study of language acquisition in German children showing that children with low productive vocabulary scores at 24 months differ in their sensitivity to phonological features from children with higher vocabulary scores already at the age of 19 months. We tested the childrens' reactions to a correct name for a picture vs. a phonologically deviant form (e.g. *tisch 'table' – kisch*) at 19 months using the intermodal preferential looking paradigm. Children with higher vocabulary scores showed longer fixations for the target picture only when presented with the correct name while children with lower vocabulary scores showed an increase in fixation time for the correct and the deviant word form. This supports the hypothesis that difficulties in the encoding of phonological information contribute to the delay in lexical development seen in many children with Specific Language Impairment.

Session C--Terrace Lounge

Participle agreement in Catalan and Spanish and some of its implications

Anna Gavarró, Universitat Autònoma de Barcelona
Vicenç Torrens,
Universidad Nacional de Educación a Distancia

Wexler et al. (2004) observe that object clitic omission is not common to all child grammars, but rather seems to be limited to those which involve participle agreement, e.g. Catalan, and not Spanish. They argue that the source of this variation lies in the interaction of the Unique Checking Constraint with the properties of the languages acquired. This account rests on a hitherto unexplored issue: the acquisition of participle agreement. We study its development through a grammaticality judgement task conducted with 33 Catalan- and 25 Spanish-speaking children. The results indicate that adult-like performance is achieved at 4 for Spanish and at 5 for Catalan. Before that, the two languages display different developmental patterns: early rejection of participle agreement in Spanish, overacceptance of mismatched agreement in Catalan. This gives empirical support to a formerly unverified assumption in Wexler et al.: the availability of partiple agreement in child grammar from early records.

Notes

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

Session A--Metcalf Large

Cross-linguistic transfer in adjective-noun strings by French-English bilingual children

Elena Nicoladis
University of Alberta

Bilingual children occasionally produce constructions that are influenced by their other language, in other words they manifest cross-linguistic transfer. One explanation of cross-linguistic transfer is in terms of structural ambiguity between a bilingual's two languages (Döpke 1998; Hulk & Müller 2000). This study tested if ambiguity predicts transfer of adjective-noun strings in English and French. In English, there is only one order (adjective-noun) while in French both adjective-noun and noun-adjective orders are allowed. Adjective-noun strings were elicited from 35 French-English bilingual children (and 35 English and 10 French monolinguals). Unidirectional transfer from English to French was predicted. In fact, the bilinguals reversed more adjective-noun constructions in both languages than monolinguals. The results suggest that structural ambiguity might make transfer more likely but it is not a complete explanation of transfer. I propose that cross-linguistic transfer might best be understood as an epiphenomenon of speech production (e.g., Dell et al. 1999).

Session B--Conference Auditorium

Statistical learning in children with Specific Language Impairment

Julia L. Evans and Jenny Saffran
University of Wisconsin - Madison

Statistical word segmentation was investigated in 20 children with ER-SLI and 20 IQ/age-matched controls (ages 7;0-9;0). Children were exposed to a 21-minute continuous speech stream where the only cues to word boundaries were transitional probabilities between syllables. The SLI group was not able to use the statistical cues inherent in the speech stream, with their performance at chance as compared to the TD group. After 42 minutes of exposure to the same speech stream, the SLI group's performance was comparable to the TD group's, indicating that children with SLI can "catch up" with additional exposure. Children also were exposed to a 42-minute continuous tone sequence having the same statistical regularities as the speech task. The SLI group's performance again was poor compared to the TD group's, indicating that deficits in children with SLI, for statistical learning, are evident for non-linguistic statistical learning tasks as well.

Notes

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

Session C--Terrace Lounge

Reflexive clitics and the Universal Phase Requirement

Nina Hyams, University of California, Los Angeles
William Snyder, University of Connecticut

Wexler (2004) proposes the Universal Phase Requirement (UPR), designed to replace his earlier A-Chain Deficit Hypothesis (ACDH) (Borer & Wexler 1987; Babyonyshev et al. 2001). For the adult, passive and unaccusative vP's are "defective" phases that do not block raising. The child, however, (at least until 5;0) treats every vP as a strong phase, and can only approximate the adult versions of these constructions.

Yet, the UPR still fails to account for very young children's nearly perfect performance on Romance reflexive-clitic constructions, as reported by Snyder et al. (1995), which require the object to raise out of a vP. This talk first presents a replication of the earlier findings with corpus data from four new children (two Italian, two French). Then a modification of UPR is proposed, in which children's difficulties are limited to passive vP's. We argue against the claim that children have a more general problem with A-movement.

PLENARY ADDRESS

Grammatical processing in first and second language learners

Harald Clahsen
University of Essex

The ability to process the linguistic input in real time is crucial for successfully acquiring a language, and yet little is known about how language learners comprehend or produce language in real time. Against this background, a research team at the University of Essex has conducted a detailed study of grammatical processing in language learners using experimental psycholinguistic techniques and comparing different populations (mature native speakers, child first language and adult second language learners) as well as different domains of language (morphology and syntax). In this talk, I will present some recent findings from this project, and an account of how grammatical processing in language learners differs from that of mature native speakers. It will be argued that child L1 processing is basically the same as that of mature native speakers, whereas the grammatical representations adult L2 learners compute during on-line processing are shallower and less detailed than those of native speakers.

Structure-dependence: An innate constraint?

Ben Ambridge, Caroline Rowland and Julian Pine
University of Liverpool

According to Chomsky (1975) and Crain & Nakayama (1987), when forming complex questions, children do not make errors such as (1) because they have innate knowledge of "structure-dependence" and so will not extract the auxiliary from the relative clause. Another possibility is that children have sufficient evidence from the input that a complementizer must be followed by an agreeing auxiliary/main-verb and not a participle (Lewis & Elman BUCLD 26; Reali & Christianssen, in press). In support of this latter view, an elicitation experiment found that children do make "structure-dependence" errors (7/21 children, at rates between 13% and 38%), especially if the sentences are constructed such that an (apparently) agreeing verb-form follows the complementizer (2). In further support of this view, Experiment 2 found that auxiliary-doubling errors were more frequent when these generated legal (3) than illegal (4) clusters.

(1) *Is the boy who smoking is crazy?*
(2) *Can boys who run fast can jump high?*
(3) *Are the boys who are washing the elephants are happy*
(4) *Are the boys who are washing the elephant are happy*

Processing subject and object relatives in Italian

Fabrizio Arosio, Flavia Adani and Maria Teresa Guasti
Università di Milano-Bicocca

In this study we investigated how Italian children process relative clauses and how developmental data shed light on processing theories. We tested 79 Italian monolingual children aged 5, 7 and 9 and a control group of 24 adults in a picture selection task with 18 unambiguous SUBJECT relatives (SR), 18 unambiguous NUMBER marked OBJECT relatives (OR), and 18 unambiguous POSITION marked OBJECT relatives. Our results show that ORs are harder than SRs. On Position marked ORs all groups are above chance. On Number marked ORs: 5-year-olds are below chance, 7- and 9-year-olds are at chance, adults are above chance. We considered the predictions of a number of processing theories and concluded that The Minimal Chain Principle (De Vincenzi 1991) is the only theory that accounts for our results. In addition, we proposed that different performances at different ages can be best explained by the development of the working memory system.

Notes

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

The omission of D and T in Dutch-speaking children

Sergio Baauw, Sergey Avrutin and Joke de Lange
Utrecht University

Young Dutch children's speech is characterized by its frequent omission of Determiners and Tense, leading to the production of bare singular NPs and root infinitives. On the basis of spontaneous speech data of 3 Dutch children we will show that D-omission is more frequent in sentence initial position than in sentence internal position, and more frequent in complements than in subjects. Furthermore, we show that children omit more Ds in non-finite than finite utterances. We will argue that children's omissions of tense and determiners are interrelated and constrained by syntax-discourse interface conditions, and that these children's omissions of tense and determiners do not reflect an immature syntactic system, but instead reflect children's difficulties with the use of syntax to structure information (Avrutin 1999, 2005). Finally we argue that incomplete lexical acquisition is an additional source of omission of determiners, as argued before by Shoenenberg et al. (1997).

The effect of priming on preschoolers' extensions of novel words: How far can 'dumb' processes go?

Eliana Colunga
University of Colorado

There is an ongoing debate on the nature of the processes and knowledge involved in learning words. On one side of the debate, people argue that children learn words through deliberative processes that use propositional conceptual knowledge; on the opposing side, people argue that children learn words through automatic processes and knowledge based on learned associations among perceptual features. In this paper we concentrate on the Animate/Inanimate distinction as evidenced in children's novel noun generalizations. The results of two experiments with 3-year-olds suggest that 1) automatic processing guides children's generalizations of novel nouns and 2) "conceptual" knowledge may be formed as a web of learned correlations. The implications for the nature of knowledge and the processes of word learning are discussed.

Do 9-month-old infants expect distinct words to refer to kinds?

Kathryn M. Dewar and Fei Xu
The University of British Columbia

During familiarization, a box was opened to reveal two objects inside: either two identical objects or two different objects. Test trials followed the same procedure except that before being opened, the experimenter looked into the top of the box and described its contents with either two labels (*"I see a wug! I see a dak!"*) or the same label twice. Infants who heard two different labels, looked longer when two identical objects were revealed versus two different objects. This pattern was reversed when infants heard a single label repeated twice. A second experiment, in which the objects were either identical or differed only in shape, replicated these results. However, a third experiment, in which objects were either identical or differed only in color, produced a different looking pattern. These results suggest that infants at the beginning of word learning may expect distinct labels to refer to distinct kinds of objects.

Acquiring the German transitive:
Pointing and looking measures

Miriam Dittmar, Kirsten Abbot-Smith and Michael Tomasello
Max Planck Institute for Evolutionary Anthropology

Verb-specific behavior has often been found in the production of transitive sentences by English-speaking children. However, this may be limited to production and it may be an appropriate strategy only for acquiring a strict word order language such as English. Therefore, we tested comprehension of the transitive in a case-marking language, German, using both familiar and novel verbs. 2;1-year-olds were skilful in pointing at the correct picture only with the familiar verb, and in preferential-looking they looked longer to the target in the familiar than in the novel verb condition. In contrast, 2;6-year-olds were skilful in pointing in both verb conditions, and in preferential-looking did not show any difference between the two verb conditions. Thus, initial verb-specific behavior is also found in the acquisition of the German transitive construction, even in comprehension, though German children may outgrow this phase earlier than English children.

Notes

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

Object naming and categorization:
Evidence for a specific linkage in 6- and 12-month-olds

Anne L. Fulkerson, The University of Toledo
Sandra R. Waxman, Northwestern University
Jennifer M. Seymour, The University of Toledo

Recent studies have revealed a precise link between object naming and categorization in infancy. In the present study, we pursued the genesis of this early link, examining the influence of either words or tones on object categorization at 6 and 12 months. We find that for infants at both ages, words -- but not tones -- facilitate object categorization. Infants hearing a novel noun for a set of distinct objects successfully formed object categories. Infants hearing a sequence of pure tones for the same set of objects did not. These results reveal that word-learning and conceptual organization are linked from the start. This link, which specifically supports word-learning and conceptual organization, is an important building block in early language acquisition. Results are interpreted within a developmental theory of lexical acquisition.

Beauty before age?
Developing tense and aspect in L2 French

Julia Herschensohn
University of Washington

Maturational effects linked to Age of Acquisition-onset (AoA) indicate that early AoA is more successful than late for L2A, given two views of a Critical Period (CP), the threshold (delineated CP terminus, Johnson & Newport 1989) and the maturational (continuous through adulthood, Birdsong & Molis 2001). The Failed Functional Features Hypothesis (FFFH, Hawkins & Chan 1997; Franceschina 2001) attributes AoA effects to biological deterioration of the ability to acquire uninterpretable FFs (hence morphosyntactic competence) to a post-CP-threshold deficit, proposing that post-CP learners with different L1 values of parametrized features fail to gain L2 settings. To test FFFH and the question of a CP-threshold, I examine accuracy of verb morphology and syntax of young/mature post-CP anglophone learners of L2 French.

Notes

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

Early use of *uh* and *um* in native English-speaking children:
Not quite right, but not quite wrong

Carla L. Hudson Kam
University of California, Berkeley

Recent research suggests that the fillers *uh* and *um* are not simply reflexes of production trouble but instead are words, each with their own meaning; *uh* indicates a short upcoming speech disruption and *um* a long one. On this view, children must learn fillers like any other word. In this study we examined speech samples from 19 native English-speaking children aged 3;8-4;9, focusing on their use of *uh* and *um*. We found no evidence that the children were aware of the appropriate use of individual fillers; *um* was not used before longer pauses than *uh*. However, we did find evidence that the children were aware of the functions of fillers more generally. The average length of utterance internal pauses preceded by either filler was significantly longer than those not preceded by a filler. Thus, the children were using fillers to indicate only the more extreme upcoming disruptions.

Adjectives in early developmental Cantonese: Time-stability and the use of property concept terms

Siu-Chun Cecilia Kwan,
The Chinese University of Hong Kong
Yasuhiro Shirai, Cornell University

This study investigates how different semantic types of adjectives (Dixon 1977) are acquired in Cantonese. Samples of spontaneous speech between eight children and their caretakers (CHILDES, Lee et al. 1994; Fletcher et al. 1999) were analyzed. The results revealed that, although Cantonese adjectives share many commonalities with verbs, they still demonstrated a relatively noun-like or verb-like usage pattern in terms of their semantic notion of time-stability (Givon 1979, 2001). While the time-stable Colour and Dimension terms were more frequently treated noun-like (e.g. as noun-modifiers or NP substitutes), the time-unstable Physical Property, Human Propensity and Value terms were used mainly in a verb-like fashion (e.g. as predicate, expressing resultative meaning, carrying aspect marker or verb particle), both by the children and their caretakers. These findings conformed to those in Saylor's (2000) research on the acquisition of English adjectives, except that Value terms demonstrated no particular usage pattern in Saylor's.

Development of phonotactic constraints on phonetic discrimination in infancy

Jessica Maye
Northwestern University

This study examines infants' development of phonotactically induced discrimination difficulty. Japanese- and English-learning infants' discrimination was tested on a Japanese contrast that is difficult for English speakers only when it occurs in a particular sequential context. English speakers poorly discriminate Japanese syllables *do* vs. *ro* when they are the second syllable of a word, but not in initial position (Maye, in prep). This asymmetry in discrimination arises from the English alternation between [d] and [flap] in non-initial position. The current study tested 7- and 9-month-old infants' discrimination of Japanese nonwords *gudo* vs. *guro* in a habituation paradigm. At 7 months both language groups significantly dishabituated, but at 9 months only Japanese infants discriminated the contrast. These results indicate that the development of phonotactic constraints on discrimination follows a similar time course to that of other declines in nonnative contrast sensitivity (e.g. Werker & Tees 1984).

No ambiguity about it: Korean learners of Japanese have a clear attachment preference

Mari Miyao, University of Hawaii
Akira Omaki, University of Maryland

This study reports Korean-Japanese learners' L2 relative clause attachment preferences that challenge Papadopoulou & Clahsen (2003). We used a questionnaire that contains ambiguous sentences (1) that elicit either high/low attachment (HA/LA) interpretation.

(1) *Dareka-ga* [RC *barukonii-ni ita] joyuu-no mesitukai-o utta.*

Someone-Nom *balcony*-Loc *was actress*-Gen *servant*-Acc *shot*
"someone shot the servant of the actress who was on the balcony."
Interpretation: HA"the servant was on the balcony" / LA"the actress was on the balcony."

Our L2ers showed a clear HA-preference (84.44%) like native-Japanese controls (93.94%), which supports either transfer of their L1-based preference or learning of the target-like preference, contrary to P&C's findings.

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

Language-specific properties influence children's acquisition of argument structure

Letitia Naigles, University of Connecticut
Aylin Küntay, Koç University
Tilbe Göksun, Koç University and Temple University
Joanne Lee, University of Connecticut

Children's acquisition of verb argument structure involves learning the number and placement of the arguments associated with verbs, plus, in some languages, the grammatical morphemes that mark each argument's role. We compared Turkish- and Mandarin-learning children (2- to 5-years old) with English learners, using an act-out task involving sentences with too many or too few arguments (e.g., 2-NP: *the zebra goes the lion*; 1-NP: *the zebra brings*). Both Turkish and Mandarin learners acted out the sentences in compliance with the verb meaning (rather than sentence frame) more frequently than English learners. Across all three languages, the 1-NP sentences were acted out in compliance with verb meaning earlier; however, different developmental trajectories were observed in each language for the 2-NP sentences. The presence of ellipsis in both Mandarin and Turkish, and possibly also grammatical morphology in Turkish, may have enabled learners of these languages to demonstrate earlier acquisition than English learners.

The role of age in the L2-acquisition of English double object constructions

Eunjeong Oh and Maria Luisa Zubizarreta
University of Southern California

This paper investigates age effects in the acquisition of English Goal and Benefactive Double Object (DO) constructions by adult and child L1-Korean and L1-Japanese learners of L2-English. We found that adult L2 learners tended to reject benefactive DOs, while child L2 learners overgeneralized with goal DOs but not with benefactive DOs. We propose that the difference between the two populations is due to the fact child L2 learners, but not adult L2 learners, are sensitive to the Possessor Constraint, formalizable as a Have projection (HvP), that introduces a Poss argument (e.g. den Dikken 1995). Adult L2 learners are sensitive to the fact that goal verbs are inherently ditransitives, while benefactive verbs are transitives. Given the absence of HvP in the adult L2 learners' grammar, ditransitive benefactive DOs fail to be correctly processed.

Notes

—————————————————————

—————————————————————

—————————————————————

—————————————————————

—————————————————————

—————————————————————

—————————————————————

—————————————————————

—————————————————————

—————————————————————

—————————————————————

—————————————————————

Caregiver input and young children's use of unaccusative intransitives in novel verb experiments

Kaya Ono and Nancy Budwig
Clark University

This study investigates differences in the rate of novel verb learning using procedures that simulate everyday verb learning when children's use of constructions is taken into account. Thirteen 30- to 42-month-olds and their caretakers participated in two 45 minutes long session within a 1 week span. Four novel verbs were modeled in transitive constructions while participants engaged in the novel verb actions. Most of the children produced novel verbs, and almost half of them were able to produce an unaccusative intransitive construction though it was not modeled. On average, children needed 27 models by adults before their first use of a novel verb in any construction. However, children needed an average of 13 models before their first use when they produced an unaccusative intransitive. The findings indicate that children learn a new verb more quickly when they could go beyond input. Discussion focuses on implications for Tomasello's verb island hypothesis.

Past tense formation in Greek children with Williams Syndrome

Stavroula Stavrakaki, Aristotle University of Thessaloniki
Harald Clahsen, University of Essex

This study examines regular/irregular contrasts in Greek children with Williams Syndrome (WS) in comparison with normal adults and mental age (MA) controls. An elicited judgment task supported by pictures was performed with all participants. The test included existing verbs, novel rhymes, and novel non-rhymes. The results indicated that the WS subjects performed similarly to the MA controls on the existing verbs, whereas they showed a clear preference for the regular (= sigmatic) past tense forms of novel verbs (non-rhymes and non-sigmatic verbs) performing at the same level as the adult group and significantly above the MA controls. We argue that the linguistic performance of subjects with WS reflects the architecture of the normal system, but with a strong reliance on the computational rule-based system of language.

Developmental dyslexia: The phonological deficit under the magnifying glass

Gayaneh Szenkovits and Franck Ramus
Laboratoire de Sciences Cognitives et Psycholinguistique (EHESS/CNRS/ENS)

It is widely accepted that dyslexic individuals present with a phonological deficit: specifically, a difficulty to mentally represent, store and manipulate the speech sounds of their native language. We report a series of experiments designed to systematically explore some aspects of the phonological deficit.

In a first series of experiments we attempt to tease apart different possible loci of the deficit within the speech recognition/production system (input vs. output, lexical vs. sub-lexical). Results suggest that dyslexics are impaired at all levels of representation, but more specifically at the input sub-lexical level.

In a second series of experiments, we aimed to further explore the input sub-lexical level, by disentangling the respective contributions of the quality of the phonological representation from that of verbal short-term memory processes. On the basis of these experiments, we conclude that dyslexics present a deficit in the fine-grained resolution of their input sub-lexical level of phonological representations.

Perfect and imperfect comprehension of Dutch past tenses

Angeliek van Hout
University of Groningen

An aspectual comprehension experiment with 32 Dutch learners reveals a surprising asymmetry in their understanding of telic predicates in the Present Perfect (*mickey heeft een kasteel gebouwd* 'mickey has built a castle') versus the Simple Past (*mickey bouwde een kasteel* 'mickey built/was building a castle') and Periphrastic Past Progressive (*mickey was een kasteel aan het bouwen* 'mickey was building a castle'). 2- and 3-year-olds are aware of the fact that the three past tenses have different aspectual implications: they have acquired the completion entailment of the Perfect, but do not show target-like understanding of the Simple Past and Periphrastic Progressive, which both imply a progressive interpretation. I explore two potential explanations: one postulates a lack of discourse integration for temporal variables; another ascribes children's problems with imperfective tenses to difficulties with aspect shift.

Notes

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

Session A--Metcalf Large

The development of children's ability to interpret adjectives that modify nouns

Kirsten Thorpe, Heidi Baumgartner and Anne Fernald
Stanford University

Adjectives are notoriously difficult for young children to interpret because they depend on the nouns they modify for their meaning. In two experiments using offline and online comprehension measures, we investigated whether children have difficulty interpreting adjectives and nouns in combination. Experiment-1 tested children at 20-, 30-, and 48-months on adjective-noun combinations in a picture-pointing task. Younger children made errors indicating they had difficulty not with the adjectives alone, but with integrating adjectives with nouns. Experiment-2 tested 30- and 36-month-olds in a more sensitive online procedure, in which children heard familiar color words that could potentially be used in advance of a noun to distinguish two pictures. While 36-month-olds responded rapidly and reliably on the basis of the prenominal adjective alone, performance at 30-months was mixed: some children identified the correct referent after hearing only the prenominal adjective, while others delayed adjective-noun integration until after hearing the entire noun phrase.

Session B--Conference Auditorium

Learning the passive in natural(istic) settings

K. J. Alcock, Lancaster University
K. Rimba, Centre for Geographic Medicine-Coast,
Kenya Medical Research Institute
M. Tellaie, City University
C. R. J. C. Newton, Centre for Geographic Medicine-Coast,
Kenya Medical Research Institute

The passive construction is acquired relatively late by children learning to speak many languages, age 6 for English; children learning other languages, such as Sesotho, learn this much earlier, around age 3.

Use of passive construction in young children was examined in two Eastern Bantu languages (Kiswahili and Kigiriama, both with frequent use of passive) and in English. In spontaneous speech data passive is used early (1;10) in these languages and quantitative analysis shows the proportion of passives in production is significantly related to the proportion of passives in the input. An experimental study in English shows that children (mean 2;8) produce passives following exposure for one week to picture books containing passives; passives are also produced with non-exposed verbs. It is concluded that input is crucial in learning the passive construction.

Notes

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

Session C--Terrace Lounge

Nonword repetition assesses phonological development and predicts vocabulary size in one-year-olds

Erika Hoff and Cynthia Core
Florida Atlantic University

Two studies of children between 20 and 24 months of age tested the hypotheses (1) that nonword repetition accuracy is related to vocabulary size in the second year of life and (2) that nonword repetition accuracy at this age depends on phonological representations--not just articulation skill. In both studies, children's accuracy of nonword repetition was significantly related to their vocabulary size, suggesting that phonological memory skills may contribute to individual differences in the rate of vocabulary growth. Study 2 also found that accuracy of real word repetition was greater than accuracy of nonword repetition, suggesting that this phonological memory task taps underlying representations. And finally, Study 2 found that the variance in nonword repetition, removing real word repetition accuracy, uniquely predicted vocabulary size. These findings provide support for the hypothesis that the development of phonological representations in the second year of life provides a foundation for lexical development.

Session A--Metcalf Large

Syntactic priming during sentence comprehension in 4-year-olds

Malathi Thothathiri and Jesse Snedeker
Harvard University

In adults, syntactic priming is taken as evidence for abstract representations. With 4-year-olds, previous production-priming studies have found contradictory results. We examined priming during comprehension instead, using eye-tracking and an act-out task. Primes were either double-object (*Give the lion the ball*) or prepositional-object (*Give the ball to the lion*) datives. The target was either the same or a different kind of dative as the primes (*Give the bird the dog bone*; *Give the birdhouse to the sheep*). We calculated the proportion of looks to the potential theme (*birdhouse*) in the ambiguous period after noun-onset (*bird...*). In two experiments, we found comparable priming both within and across-verbs. Children primed with prepositional-object datives looked at the potential theme more than those primed with double-object datives, irrespective of the target-type. This priming unfolds predictively as children comprehend sentences. The across-verb priming indicates that 4-year-olds have abstract representations of verbs that are independent of lexical form.

Session B--Conference Auditorium

By the way, children don't know *by*

Christopher Hirsch and Ken Wexler
Massachusetts Institute of Technology

Fox & Grodzinsky (FG 1998) claim children's only problem comprehending passives is their inability to transfer the thematic-role to the *by*-phrase. Children are hypothesized to comprehend full actional passives because they know *by* may independently assign an "affector" theta-role, as in nominals.

We examined every *by*-phrase in child-directed and child-produced speech for 1051 English-speaking children. While FG predict children should incorrectly use *by*-phrases outside of passives, every child-produced *by*-phrase corresponded to a grammatical use for adults. Our searches also failed to find any nominal *by*-phrases.

We administered a truth-value judgment task to 30 children (3-5 years) investigating knowledge of *by*-phrases and about-phrases in nominals. Whereas children performed brilliantly on *about* trials, they were terrible on *by* trials.

These data demonstrate that children's problems with passives are not due to problems with thematic transmission and are compatible with findings that children in fact do not comprehend truncated non-actional passives.

Session C--Terrace Lounge

Whole-word versus part-word Phonotactic Probability/ Neighborhood Density in word learning by children

Holly L. Storkel and Jill R. Hoover
University of Kansas

Past studies demonstrate that word learning is influenced by the overall phonotactic probability (i.e., the likelihood of occurrence of a sound sequence) and neighborhood density (i.e., the number of phonologically similar words) of the word to be learned. The purpose of the current study was to pit the probability/density of the whole-word versus the probability/density of the parts of the word, namely the initial consonant + vowel (CV) and the vowel + final consonant (VC). Data were collected from 20 3-year-old and 23 4-/5-year-old children in a word learning task. Results indicated a significant interaction between CV probability/density, VC probability/density, and age. Analysis of each age showed that 3-year-olds were more affected by whole-word probability/density, whereas 4-/5-year-olds were influenced more by VC probability/density. This finding supports the hypothesis that processing changes from holistic to fine-grained in development and further highlights the importance of the rhyme for English speakers.

Notes

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

Session A--Metcalf Large

Do Korean children hop frogs like English children?

Youngon Choi and John C. Trueswell
University of Pennsylvania

We report the results of a world-situated eye-tracking study with five-year-old children and adult speakers of Korean, in which the distribution of morphological/lexical information is the opposite of English. Our goal was to examine whether 5-year-old English-speaking children's strong sensitivity to lexical constraints but not to reference-to-scene constraints in structural ambiguity resolution (Trueswell et al. 1999) is attributable to early availability of verb constraints in English. The participants heard the instructions such as "*basket-ey napkin-ey frog put* (Put the frog on the napkin in the basket)" with scenes containing a frog on a napkin, a frog in a bowl, an empty basket, and an empty napkin. Overall, Korean children's parsing patterns resembled those of the English children, suggesting that children are sensitive to verb constraints somewhat independent of how early they become available. We will discuss the findings in relation to the potential role of case marker in incremental parsing.

Session B--Conference Auditorium

Non-actional passives are understood by young children

Karen O'Brien, Elaine Grolla and Diane Lillo-Martin
University of Connecticut

We present evidence supporting early acquisition of actional and non-actional verbal passives, whether long (with a *by*-phrase) or short (without a *by*-phrase). Previous research has indicated that long non-actional passives like (1) are acquired late (7-9yrs).

(1) *Smurf was seen by Superman*

We hypothesized that the *by*-phrase creates the expectation of a comparison class of alternative potential agents/experiencers. Although (1) could be true even if Smurf were seen by Superman and others, a short passive would express this more economically. Hamburger and Crain (1982) observed that children have difficulty accommodating pragmatic presuppositions and conversational maxims. We satisfied felicity conditions on the use of the *by*-phrase by introducing into each long passive story an extra potential agent/experiencer who could have engaged in the relevant action/experience, but didn't. 4yr-olds correctly understood long non-actional passives 82% of the time, evidence that making an experiment pragmatically felicitous can help reveal early knowledge.

Notes

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

Session C--Terrace Lounge

Kernel vocabulary and Zipf's Law in maternal input to syntactic development

Anat Ninio
The Hebrew University of Jerusalem

Large speech corpora obey Zipf's Law, possessing a power-law distribution of usage frequencies. Recently it was shown that the very-frequent items in a corpus follow a different power-law register than less-frequent ones, and they belong to a basic vocabulary, while the less-frequent items are specific words (Ferrer & Sole 2001). This analysis was applied to a syntactically homogenous sub-class of maternal vocabulary. A very large corpus of utterances produced by 48 Hebrew-speaking mothers was searched for sentences in which there was a verb or adjective followed by an indirect object introduced by the *le-* ('to') preposition. A Zipf analysis revealed that the 10 most frequent items -- all verbs -- in the indirect-object construction in the input form a separate register. These verbs apparently form the generic core of the category (Dixon 1982) and might fill a special constitutive role in the acquisition process.

Session A--Metcalf Large

Foundations of verb learning:
Labels promote action category formation

Shannon M. Pruden and Kathy Hirsh-Pasek
Temple University

To learn motion verbs children must discover actions within events, detect components of actions labeled in the world's languages, and form categories of action components. Research has explored infants' ability to find the invariant path or manner in a non-linguistic task using motion events (Pruden et al. 2004). Infants younger than 10 months were unable to abstract the invariant path; infants under 13 months were unable to abstract the invariant manner. Object categorization research shows that linguistic labels increase infants' attention to objects and facilitate object categorization. The studies presented here continue the exploration of infants' abilities to categorize motion events by asking whether labels facilitate the abstraction of path (Study 1) and manner (Study 2). These studies suggest that labels help infants' abstract invariant actions from events, possibly by highlighting their similarities. The results affirm and extend the research with object labels.

Session B--Conference Auditorium

Evidence for wh-scope-marking in advanced Japanese-English interlanguage grammars

Barbara Schulz
University of Hawaii and University of Maryland

"What does this study find why ESL learners make strange errors?" Although questions of this type (called wh-scope-marking questions) are ungrammatical in English, they can readily be observed in English interlanguages (e.g., Yamane 2003; Gutierrez 2004). This presentation extends earlier investigations of wh-scope-marking to advanced adult native Japanese speakers employing an improved methodology (using a variety of matrix verbs and controlling for the possibility that such questions are merely 2 sequential questions), as well as three different measures, namely (i) an on-line stop-making-sense task, (ii) an off-line acceptability judgment task and (iii) Thornton's (1990) elicited-production task. Results based on 25 L2ers show that wh-scope-marking is a robust phenomenon in Japanese-English interlanguage and not limited to language comprehension but also occurring in production; and in on-line as well as off-line acceptability judgments. However, it is argued that the emergence of this construction results from processing limitations rather than being a competence-induced error.

Session C--Terrace Lounge

Longitudinal development of mora-timed rhythmic structure in Japanese

Ryoko Mugitani, Kentaro Ishizuka and Shigeaki Amano
NTT Communication Science Laboratories, NTT Corp.

Spoken languages are classified by their rhythmic properties in terms of stress (e.g., English), syllable (e.g., French) and mora (e.g., Japanese) timing. Although previous studies have revealed that infants are perceptually sensitive to language rhythm structure, few studies have shed light on the development of this rhythm structure in speech production. This study aims to reveal the emergence and development of the mora-timed rhythm structure in speech production. We adopted the proportion of vocalic intervals (%V) and the standard deviation of consonantal intervals (deltaC) as indicators of this structure (Ramus 1999). These variables were employed in a longitudinal analysis of the recordings of a Japanese female infant-mother dyad. The results indicated that the infant's rhythmic utterances steadily approached her mother's rhythmic template and finally converged with it by 25 months of age. These findings suggest the possibility that tuning toward native rhythmic properties occurs even during the early prelinguistic period.

Notes

Session A--Metcalf Large

One-for-one and two-for-two:
Anticipating parallel structures between events and language

Amanda Brandone, Dede A. Addy, Rachel Pulverman and Roberta M. Golinkoff, University of Delaware
Kathy Hirsh-Pasek, Temple University

According to syntactic bootstrapping theory, children operate on the implicit assumption that there is a structural correspondence between language and events. Research suggests that children map novel verbs onto events based on their accompanying syntactic frames. But does this process work in reverse? Can children predict the syntactic frame for a novel verb based on the structure of the event it labels? To test this hypothesis, in a 'violation of expectations' design, toddlers were habituated to either a one- or two-participant event accompanied by a bare, novel verb. In test, children viewed the same scene and heard the same verb presented in each of 3 syntactic frames: bare, intransitive, and transitive. Results suggest that toddlers form expectations about the transitivity of novel verbs based on the events being labeled: Verbs labeling one-participant events should be intransitive while verbs labeling two-participant events can be either intransitive or transitive.

Session B--Conference Auditorium

Something different (in English and Japanese)

Kate Dempsey, Nigel Duffield, Ayumi Matsuo and Gary Wood
University of Sheffield

This project investigates the acquisition of *different* in English and Japanese. In English, *different* is ambiguous between what Carlson (1987) terms INTERNAL vs. EXTERNAL readings (paraphraseable as *different from each other* vs. *different from the contrast set*). Japanese, by contrast, has two words corresponding to *different*: *tigau*, which is also ambiguous, and *betubetu* (no), which only admits internal readings.

This contrast raises learnability questions, especially, how children come to acquire the narrower meaning of *betsubetsu* without over-extension. One solution is in terms of a version of the Semantic Subset Principle (SSP) (Crain et al 1994), which predicts that learners should first restrict their interpretations to internal readings, only extending to external readings on the basis of positive evidence.

We investigate the predictions that follow from assuming that learning is guided by the SSP, reporting the results of a Truth-Value Judgement Task and a Picture-Matching Task, with parallel materials in both languages.

Notes

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

Session C--Terrace Lounge

Variable input and the discovery of lexical tones in infants:
A connectionist approach

Bruno Gauthier and Rushen Shi,
University of Quebec in Montreal
Yi Xu, University College London

This study explored how infants learn Mandarin tones from variable input. Production work predicts that velocity profiles (D1) represent more directly (than F0) articulatory movements towards underlying tonal targets. Using multi-speaker utterances containing all tonal contexts, we trained self-organising neural networks with raw D1 versus F0 data to determine whether learners can categorise speakers' intended tonal targets. In Simulation 1 (with no pre-assumptions about the number of categories being learned), D1 network formed cluster regions highly correlated to input tonal categories, better than F0. At a higher level of simulation, these regions were successfully mapped with D1 onto a four-unit network corresponding to abstract tonemes. Additional simulations confirmed that earlier clustering formation (Simulation 1) was essential for developing prototypes. Our findings demonstrate that naïve learners can derive tones from variable input based on perceived articulatory movements, which are achieved by processing acoustic patterns directly, without the mediation of feature abstraction.

Session A--Metcalf Large

Two-year-olds learn distributional facts about verbs in the absence of a referential context

Sylvia Yuan and Cynthia Fisher
University of Illinois

The syntactic bootstrapping hypothesis proposes that children use syntax to learn verbs. Prior studies involved giving children simultaneous access to a verb's syntactic and referential context. This paper asks what children learn about a novel verb simply through overhearing its use in sentences. 28-month-olds watched dialogues in which interlocutors used a novel verb in transitive ("*Jim blicked the cat! ...*") or intransitive sentences ("*Jim blicked! ...*"). Children then saw two test events: a one-person action and a two-person action. Nouns in the dialogue were not relevant to the test scenes. Upon hearing the verb in isolation ("*Find blicking!*"), children who had heard transitive sentences looked longer at the two-person action than those who heard intransitive sentences. These and control results suggest that 28-month-olds gather distributional facts about novel verbs, in the absence of a referential scene, and later retrieve them to guide attention to relevant aspects of a referential scene.

Session B--Conference Auditorium

Age effects on the L2 acquisition of the lexicon-syntax interface

Tihana Kras
University of Cambridge

By assuming greater developmental instability of interfaces between syntax and other cognitive systems than narrow syntax (Sorace 2004), this paper investigates how such instability interacts with the age of first exposure to the L2. It focuses on the lexicon-syntax interface and, particularly, on auxiliary selection with intransitive verbs in Italian, which has been shown to be a gradient phenomenon, sensitive to a hierarchy of thematic/aspectual verb classes (Sorace 2000). This phenomenon was tested in an acceptability-judgement task on two groups of Croatian near-native speakers, differing with respect to the age of first exposure to Italian. Judgments were elicited by means of the Magnitude Estimation Technique (Bard et al. 1996). The results show that judgments of pre-puberty learners exhibit greater gradience than those of post-puberty learners, indicating a higher sensitivity to lexical-semantic factors underlying auxiliary selection, and thus approach native speakers' judgments more closely.

Session C--Terrace Lounge

Word stress acquisition: A comparison of Brazilian Portuguese and Dutch

Raquel S. Santos
University of São Paulo

Research on acquisition of word prosodic structure has detected a strong trochaic bias in early word production by children acquiring Germanic languages and some claim that this bias is universal (Fikkert 1994; Demuth 1995; Pater 1997). However, Santos (2001) and Bonilha (2005) claim that Brazilian Portuguese (BP) children have an iambic bias at early stages. If so, the trochaic bias reported for Germanic languages is language-specific.

This paper shows that BP children produce disyllabic nouns with an iambic pattern correctly, while those with a trochaic pattern are either produced correctly or reduced to monosyllables (SW-->S). WSW targets are produced as WS. In Dutch, on the other hand, trochaic words are produced correctly, but iambic words are reduced (WS-->S). WSW targets are produced as SW. I argue that the iambic bias in BP is due to the fact that stress is variable and seems to interact with morphology.

Notes

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

Session A--Metcalf Large

Combining cross-situational and structural cues to verb meaning

Carissa Kemp and Jesse Snedeker
Harvard University

Many lines of evidence show that verb-learning is more difficult than noun-learning. Unlike early nouns, verbs encode cross-cutting dimensions of semantic fields (Jackendoff 1990). Thus motion verbs can encode cause of motion (*shove*), manner (*roll*) or path (*enter*). In this study, English-speaking children (5-6yrs) and adults learned verbs by watching video-taped events in which persons caused objects to move. Situational and Syntactic Cues were manipulated in a fully-crossed, between subjects design. In Experiment 1, adults used both Syntactic and Situational Cues but children relied solely on syntax. In Experiment 2, when children were in neutral situations they were influenced by syntax. When syntax was neutral they were influenced by Situational Cues and when these cues were in conflict or redundant, syntax had little effect, resulting in a main effect for Situation only. We conclude that linguistically-proficient verb-learners, from five on, can use both Cross-Situational Comparison and Structural Cues to disambiguate verb meaning.

Session B--Conference Auditorium

Differentiating "interfaces": L2 performance in syntax/semantics and syntax/discourse phenomena

Ianthi Maria Tsimpli, Aristotle University of Thessaloniki
Antonella Sorace, University of Edinburgh

Recent studies in L2 acquisition and L1 attrition focus on interface representations as domains of increased vulnerability. This paper aims to provide theoretical and empirical arguments in favor of a distinction between discourse-related phenomena some of which are also relevant to LF- and some only to the syntax-discourse interface. We aim to account for the discrepancy noted in the native-like performance of advanced L2 speakers with respect to wh- and focus-movement structures, LF-related representations, as compared to their more variable performance on overt subject pronouns in null subject languages, a discourse-related phenomenon. It is argued that the differences observed are due to the discourse level being outside grammar proper whereas the LF-interface is determined by modular computations with the language system (Chomsky 1995, 2001). Even when L2 grammars attain native-like properties for LF representations, language interference remains possible at the discourse level where pragmatic and processing constraints affect L2 use.

Notes

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

Session C--Terrace Lounge

Segmentation and representation of function words in preverbal French-learning infants

Rushen Shi, Alexandra Marquis and Bruno Gauthier
University of Quebec in Montreal

Our study examines French-learning infants' segmentation of function words in continuous speech. In Experiment 1, 6-month-olds were familiarised with a functor, either *des* or *la*, and then tested with phrases containing *des* versus phrases containing *la*. Results showed that infants looked significantly longer while listening to phrases containing the familiarised target. In Experiments 2 and 3, 6 and 8-month-olds were familiarized with *la* or a phonetically similar functor *ta*. During test, 8-month-olds listened to phrases containing the target significantly longer, whereas 6-month-olds showed no difference. However, 6-month-olds discriminated *la* and *ta* in a separate dishabituation task, suggesting that their non-differential response in Experiment 2 was at the word-form encoding level. These findings demonstrate that 6-month-olds begin to segment functors, although their phonetic representations are underspecified. The representations become well specified by 8 months. Being highly frequent in input, function words may be among the earliest word forms stored in memory.

The omission of D and T in Dutch-speaking children

Sergio Baauw, Sergey Avrutin and Joke de Lange
Utrecht University

Young Dutch children's speech is characterized by its frequent omission of Determiners and Tense, leading to the production of bare singular NPs and root infinitives. On the basis of spontaneous speech data of 3 Dutch children we will show that D-omission is more frequent in sentence initial position than in sentence internal position, and more frequent in complements than in subjects. Furthermore, we show that children omit more Ds in non-finite than finite utterances. We will argue that children's omissions of tense and determiners are interrelated and constrained by syntax-discourse interface conditions, and that these children's omissions of tense and determiners do not reflect an immature syntactic system, but instead reflect children's difficulties with the use of syntax to structure information (Avrutin 1999, 2005). Finally we argue that incomplete lexical acquisition is an additional source of omission of determiners, as argued before by Shoenenberg et al. (1997).

The effect of priming on preschooler's extensions of novel words - how far can 'dumb' processes go?

Eliana Colunga
University of Colorado

There is an ongoing debate on the nature of the processes and knowledge involved in learning words. On one side of the debate, people argue that children learn words through deliberative processes that use propositional conceptual knowledge; on the opposing side, people argue that children learn words through automatic processes and knowledge based on learned associations among perceptual features. In this paper we concentrate on the Animate/Inanimate distinction as evidenced in children's novel noun generalizations. The results of two experiments with 3-year-olds suggest that 1) automatic processing guides children's generalizations of novel nouns and 2) "conceptual" knowledge may be formed as a web of learned correlations. The implications for the nature of knowledge and the processes of word learning are discussed.

The role of semantic generality in verb acquisition

Erin Conwell
Brown University

Because semantically general verbs appear early in child speech (Clark 1978), researchers have posited that they play a critical role in acquisition. Specifically, it is hypothesized that children learn these "light" verbs before semantically concrete verbs and build their syntax from this knowledge (Goldberg et al. 2004). This suggests that children's earliest speech should contain a large proportion of light verbs which decreases as more specific verbs are learned. However, light verbs are highly frequent, and disentangling the relative contributions of frequency and generality to their acquisition is difficult. To assess the roles of frequency and "lightness," longitudinal patterns of verb use were examined in the corpora of 7 English-learning children. Children's light verb use best correlates with parental use, not age or MLU. This indicates that the frequency of a lexical item, rather than its semantic status, drives the child's use of that word.

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

Alternates

Patterns of syntactic development in cochlear implant users

Joy Geren
Harvard University

When compared to hearing children, deaf children with cochlear implants (CIs) show a syntactic delay relative to vocabulary ability. What is the nature of this delay? Do CI users show an atypical pattern of syntactic development? Do late exposure to language, degraded language input and intensive language therapy change the way they acquire syntax? To address these questions we examined 3- to 9-year-old experienced CI users. Our study corroborated the syntactic delay and found it to span all areas tested. Syntactic delays were not limited to the most perceptually complex forms or those that are not addressed in language therapy. This suggests that syntactic development in CI users is slower but otherwise similar to development in hearing children. Although syntactic abilities do not progress at the same rate as vocabulary abilities in this population, the typical patterns of syntactic development appear to be intact.

Alternates

On the logophoric long-distance binding interpretation of the Korean local anaphor *caki-casin* by early bilinguals

Ji-Hye Kim, Silvina Montrul and James H-S Yoon
University of Illinois at Urbana-Champaign

This study investigated how Korean-English adult early bilinguals interpret Korean sentences where the local anaphor *caki-casin* is forced to be LD-bound under logophoric conditions. 30 Korean monolinguals and 10 Korean-English bilinguals participated in this experiment. Participants completed a Grammaticality Judgment Task (to determine whether bilinguals regard sentences with exempt binding as grammatical) and a Truth Value Judgment Task (to determine whether the subjects consider *caki-casin* as an exempt anaphor), composed of 80 sentences representing 12 different sentence types - 30 sentences violating both TSC & SSC exemplifying exempt binding of *caki-casin*, 30 sentences with only TSC violation (considered core binding in Korean), and 20 fillers containing LD-binding with multiple potential antecedents and distractors. Overall results showed that bilinguals regard sentences with exempt *caki-casin* as significantly less grammatical than Korean monolinguals. In addition, bilinguals showed more individual variability than Korean monolinguals regarding different factors tested in the experiment.

Notes

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

Alternates

Language-specific properties influence children's acquisition of argument structure

Letitia Naigles, University of Connecticut
Aylin Küntay, Koç University
Tilbe Göksun, Koç University and Temple University
Joanne Lee, University of Connecticut

Children's acquisition of verb argument structure involves learning the number and placement of the arguments associated with verbs, plus, in some languages, the grammatical morphemes that mark each argument's role. We compared Turkish- and Mandarin-learning children (2- to 5-years old) with English learners, using an act-out task involving sentences with too many or too few arguments (e.g., 2-NP: *the zebra goes the lion*; 1-NP: *the zebra brings*). Both Turkish and Mandarin learners acted out the sentences in compliance with the verb meaning (rather than sentence frame) more frequently than English learners. Across all three languages, the 1-NP sentences were acted out in compliance with verb meaning earlier; however, different developmental trajectories were observed in each language for the 2-NP sentences. The presence of ellipsis in both Mandarin and Turkish, and possibly also grammatical morphology in Turkish, may have enabled learners of these languages to demonstrate earlier acquisition than English learners.

Preschoolers attend to a speaker's knowledge when learning words

Erika Nurmsoo and Paul Bloom
Yale University

When learning object names, children attend to the speaker's direction of gaze. In three experiments we explore the hypothesis that they do so because direction of gaze is a reliable cue to the mental state of the speaker. We first found that 4-year-olds do not simply map a new word to the target of the speaker's gaze - instead, they take into account the speaker's knowledge. We then established that 2- and 4-year-old children use speaker knowledge to learn an object name in the absence of gaze information. Finally, we explored whether children can identify which property of an object is being named (appearance or texture) based on the speaker's perceptual access to the target. The results from these studies suggest that children use eye gaze as one cue to a speaker's referential intent, and that they consider other information such as speaker knowledge when learning an object name.

The role of age in the L2-acquisition of English double object constructions

Eunjeong Oh and Maria Luisa Zubizarreta
University of Southern California

This paper investigates age effects in the acquisition of English Goal and Benefactive Double Object (DO) constructions by adult and child L1-Korean and L1-Japanese learners of L2-English. We found that adult L2 learners tended to reject benefactive DOs, while child L2 learners overgeneralized with goal DOs but not with benefactive DOs. We propose that the difference between the two populations is due to the fact child L2 learners, but not adult L2 learners, are sensitive to the Possessor Constraint, formalizable as a Have projection (HvP), that introduces a Poss argument (e.g., den Dikken 1995). Adult L2 learners are sensitive to the fact that goal verbs are inherently ditransitives, while benefactive verbs are transitives. Given the absence of HvP in the adult L2 learners' grammar, ditranstive benefactive DOs fail to be correctly processed.

Lexical and prelexical factors in infant word recognition

Leher Singh and Sarah Nestor, Boston University
Heather Bortfeld, Texas A & M University

To develop a vocabulary, infants must establish exactly what constitutes a word. This involves recognizing which sources of variation contribute to the lexical identity of a word and which do not, commonly termed the 'variability problem'. By 7.5 months infants track and encode words in fluent speech, but still fail to equate instances of a word that contrast in talker gender, vocal affect and fundamental frequency. By 10.5 months, they succeed at generalizing across variability, marking a clear transition period during which infants' word recognition skills become qualitatively more mature. In the current set of studies, we further investigate this transition by exploring the role of semantic and phonological factors in infant word recognition at these ages. Findings demonstrate that both semantic knowledge of word meaning and phonological knowledge of native sound-meaning correspondences contribute to this transition, preparing infants to develop a vocabulary during their second year of life.

Notes

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

Testing for OO-faithfulness in artificial phonological acquisition

Anne-Michelle Tessier
University of Massachusetts, Amherst

Phonological patterns often have systematic exceptions in morphologically-derived contexts. In Optimality Theory, such patterns are often captured with constraints enforcing phonological similarity throughout a morphological paradigm – e.g. Output-Output Faithfulness (Benua 2000). Hayes (2004) argues convincingly that learning an OO-faithful grammar must rely on an inherent bias for high-ranking OO-Faith.

This study tested for such a bias, asking whether learners are preferentially OO-faithful at early stages of morphological acquisition. Ten 4-year-old children learned the names of objects in an artificial language, including a novel plural suffix, and then played a "*wug*-test" game (Berko 1958). The *wug*-test compared participants' production of the same coda-onset clusters in two morphological contexts, where only one was protected by OO-Faith. A pair-wise within-subjects t-test (p < 0.01) shows that codas were produced faithfully in fewer clusters where OO-faith was not relevant (57/115; 43.5%) than in clusters where the coda was protected by OO-faith (71/96; 77.7%).

Competing grammars and parametric shifts in second language acquisition and the history of English and Spanish

Helmut Zobl, Carleton University
Juana M. Liceras, University of Ottawa

The Competing Grammars Hypothesis is presented as a theoretical framework for common aspects of parametric change in L2A and diachrony. Formulated originally for diachrony, it proposes that ambiguity of input data is resolved by speakers projecting more than one grammar (Kroch 1994 2001). The proposal accounts for the incremental nature of parametric change in diachrony and the optionality of parametric values in historical texts. It offers an alternative paradigm to representational impairment for explaining the very same characteristics of parameter shifting in adult L2A.

This paper considers parameter shifts in the history of English (loss of V2, verb-raising) and the history of Spanish (change in pronouns from XP to X) and compares these to L2A data from extant L2 studies and our own. We demonstrate significant parallels in the staged nature of the shifts and attempt to show that the optionality witnessed may represent competition between two, possibly three grammars.

Notes

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

Notes

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

Exhibitors' Addresses

Blackwell Publishing
350 Main St.
Malden, MA 02148
www.blackwellpublishing.com

Cambridge University Press
40 West 20th Street
New York, NY 10011
www.cambridge.org/us

Cascadilla Press
P.O. Box 440355
Somerville, MA 02144
www.cascadilla.com

Georgetown University Press
3240 Prospect Street, NW
Washington, DC 20007
www.press.georgetown.edu

Harvard University Press
79 Garden Street
Cambridge, MA 02138
www.hup.harvard.edu

John Benjamins Publishing
Company
763 N 24th Street
Philadelphia, PA 19130
www.benjamins.com

Lawrence Erlbaum Associates
10 Industrial Ave.
Mahwah, NJ 07430
www.erlbaum.com

MIT Working Papers in
Linguistics
77 Massachusetts Avenue;
36-D829
Cambridge, MA 02139
http://web.mit.edu/mitwpl

Oxford University Press
198 Madison Avenue
New York, NY 10016
www.oup.com/us

Palgrave Macmillan
Houndmills, Basingstoke
Hampshire RG21 6XS
United Kingdom
www.palgrave.com

The MIT Press
55 Hayward Street
Cambridge, MA 02142
http://mitpress.mit.edu

Authors' Addresses

Kirsten Abbot-Smith
Max Planck Institute for
Evolutionary Anthropology
smith@eva.mpg.de

Flavia Adani
University of Milano-Bicocca
flavia.adani@unimib.it

Dede A. Addy
Emory University
daddy@emory.edu

Javier Aguado-Orea
University of Liverpool
J.Aguado-Orea@liverpool.
ac.uk

Mamiko Akita
Waseda University
akita@waseda.jp

Katie Alcock
Lancaster University
k.j.alcock@lancaster.ac.uk

Martha Alibali
University of Wisconsin-
Madison
mwalibali@wisc.edu

Shanley Allen
Boston University
shanley@bu.edu

Shigeaki Amano
NTT Communication Science
Laboratories, NTT Corp
amano@cslab.kecl.ntt.co.jp

Ben Ambridge
University of Liverpool
Ben.Ambridge@Liverpool.
ac.uk

Jean Andruski
Wayne State University
ag0611@wayne.edu

Sharon Armon-Lotem
Bar Ilan University
armonls@mail.biu.ac.il

Fabrizio Arosio
University of Milano-Bicocca
fabrizio.arosio@unimib.it

Igone Arteagoitia
Center for Applied Linguistics
igone@cal.org

Marina Augusto
Pontifícia Universidade
Católica do Rio de Janeiro
(PUC-Rio)
marina@let.puc-rio.br

Jennifer Austin
Rutgers University
jbaustin@andromeda.rutgers.
edu

Sergey Avrutin
Utrecht University
sergey.avrutin@let.uu.nl

Sergio Baauw
Utrecht University
sergio.baauw@let.uu.nl

Maria Babyonyshev
Yale University
maria.babyonyshev@yale.edu

David Barner
Harvard University
barner@fas.harvard.edu

Sonja Bartels
University of Potsdam
sbartels@ling.uni-potsdam.de

Heidi Baumgartner
Stanford University
heidib@stanford.edu

Misha Becker
University of North Carolina
mbecker@email.unc.edu

Julia Berger-Morales
University of California,
Los Angeles
jbergerm@ucla.edu

Stacy Betz
University of Kansas
skbetz@ku.edu

Jui Bhagwat
Cornell University
jb339@cornell.edu

Paul Bloom
Yale University
paul.bloom@yale.edu

Megan Blossom
Brown University
Megan_Blossom@brown.edu

Heather Bortfeld
Texas A & M University
bortfeld@psyc.tamu.edu

Amanda Brandone
University of Delaware
brandona@udel.edu

Silke Brandt
Max Planck Institute for
Evolutionary Anthropology
brandt@eva.mpg.de

Dina Brun
Yale University
dina.brun@aya.yale.edu

Nancy Budwig
Clark University
nbudwig@clarku.edu

Ann Bunger
Northwestern University
abunger@northwestern.edu

Rodrigue Byrne
Memorial University of
Newfoundland
rod@cs.mun.ca

Susan Carey
Harvard University
scarey@wjh.harvard.edu

Marianella Casasola
Cornell University
mc272@cornell.edu

Eugenia Casielles
Wayne State University
e.casielles@wayne.edu

Damir Cavar
Indiana University
dcavar@indiana.edu

Pritha Chandra
University of Maryland at
College Park
pritha@wam.umd.edu

Liang Chen
University of Georgia
brighterchen@yahoo.com

Youngon Choi
University of Pennsylvania
youngonc@sas.upenn.edu

Harald Clahsen
University of Essex
harald@essex.ac.uk

Molly Collins
Erikson Institute
mcollins@erikson.edu

Eliana Colunga
University of Colorado
colunga@psych.colorado.edu

Erin Conwell
Brown University
econwell@brown.edu

Marie Coppola
University of Chicago
mariec@uchicago.edu

Cynthia Core
Florida Atlantic University
ccore@fau.edu

Leticia Correa
Pontifícia Universidade
Catolica do Rio de Janeiro
(PUC-Rio)
lscorrea@let.puc-rio.br

Martha Crago
McGill University
martha.crago@mcgill.ca

Tracy Cramer
Penn State University
tracyc@psu.edu

Suzanne Curtin
University of Calgary
scurtin@pitt.edu

Joke de Lange
Utrecht University
joke.delange@let.uu.nl

Hélène Deacon
Dalhousie University
sdeacon@dal.ca

Karen Debas
McGill University
karen.debas@mail.mcgill.ca

Laurent Dekydtspotter
Indiana University
ldekydts@indiana.edu

Kate Dempsey
University of Sheffield
n.g.duffield@sheffield.ac.uk

Rory DePaolis
University of Wales, Bangor &
James Madison University
depaolra@jmu.edu

Kathryn Dewar
University of British Columbia
kathrynd@psych.ubc.ca

Miriam Dittmar
Max Planck Institute for
Evolutionary Anthropology
mdittmar@eva.mpg.de

Bryan Donaldson
Indiana University
brdonald@indiana.edu

Nigel Duffield
University of Sheffield
n.g.duffield@sheffield.ac.uk

Yarrow Dunham
Harvard University
dunhamya@qse.harvard.edu

Emmanuel Dupoux
Laboratoire de
Sciences Cognitives et
Psycholinguistique
dupoux@lscp.ehess.fr

Petra Duran
Brown University
PDuran@partners.org

Mercedes Durham
University of York
md503@york.ac.uk

Paola E. Dussias
Penn State University
ped10@psu.edy

Amanda C. Edmonds
Indiana University
amaedmon@indiana.edu

Jeff Elman
University of California at San
Diego
jelman@ucsd.edu

Caroline Erdos
McGill University
caroline.erdos@mail.mcgill.ca

Julia Evans
University of Wisconsin-
Madison
jevans2@wisc.edu

Christopher Fennell
Northwestern University
c-fennell@northwestern.edu

Anne Fernald
Stanford University
fernald@psych.stanford.edu

Keith Fernandes
New York University
keithf@nyu.edu

José Ferrari-Neto
Pontifícia Universidade
Católica do Rio de Janeiro
(PUC-Rio)
joseferrarim@bol.com.br

Paula Fikkert
Radboud University Nijmegen
p.fikkert@let.ru.nl

Cynthia Fisher
University of Illinois at
Urbana-Champaign
cfisher@cyrus.psych.uiuc.edu

Sarah Fletcher
University of Liverpool
s.l.fletcher@liv.ac.uk

Liane Fortune
University of York
lf505@york.ac.uk

Cassandra Foursha
Rutgers University
cass@psychology.rutgers.edu

Anne Fulkerson
The University of Toledo
Anne.Fulkerson@utoledo.edu

Reyhan Furman
Bogazici University
rturanli@ku.edu.tr

Bruno Gauthier
University of Quebec in
Montreal
gauthier.bruno@courrier.uqam.
ca

Anna Gavarró
Universitat Autònoma de
Barcelona
anna.gavarro@uab.es

Elena Gavruseva
University of Iowa
elena-gavruseva@uiowa.edu

Fred Genesee
McGill University
genesee@ego.psych.mcgill.ca

Joy Geren
Harvard University
geren@fas.harvard.edu

Henry Gerfen
Penn State University
gerfen@psu.edu

LouAnn Gerken
University of Arizona
gerken@u.arizona.edu

Heather Goad
McGill University
heather.goad@mcgill.ca

Tilbe Göksun
Koç University and
Temple University
tgoksun@ku.edu.tr

Susan Goldin-Meadow
University of Chicago
sgm@uchicago.edu

Roberta M. Golinkoff
University of Delaware
roberta@udel.edu

Rebecca Gómez
The University of Arizona
rgomez@u.arizona.edu

Whitney Goodrich
University of California,
Berkeley
wgoodrich@berkeley.edu

Katharine Graf Estes
University of Wisconsin-
Madison
kmgraf@wisc.edu

Lydia Grebenyova
University of Maryland
lgrebeny@umd.edu

Elena Grigorenko
Yale University
elena.grigorenko@yale.edu

Angela Grimm
University of Potsdam
grimm@ling.uni-potsdam.de

Elaine Grolla
University of Connecticut
ELAINE.B.GROLLA@
huskymail.uconn.edu

Maria Teresa Guasti
University of Milano-Bicocca
mariateresa.guasti@unimib.it

Jiansheng Guo
California State University,
East Bay
jshguo@csuhayward.edu

Lesley Hart
Yale University
lesley.hart@yale.edu

Etsuko Haryu
University of Tokyo
haryu@p.u-tokyo.ac.jp

Gregory Hedlund
Memorial University of
Newfoundland
ghedlund@cs.mun.ca

Joshua Herring
Indiana University
jwherrin@indiana.edu

Julia Herschensohn
University of Washington
herschen@u.washington.edu

Christopher Hirsch
Massachusetts Institute of
Technology
ckh@mit.edu

Kathy Hirsh-Pasek
Temple University
khirshpa@temple.edu

Miren Hodgson
University of Massachusetts,
Amherst
mhodgson@spanport.umass.
edu

Erika Hoff
Florida Atlantic University
ehoff@fau.edu

Barbara Höhle
University of Potsdam
hoehle@rz.uni-potsdam.de

Scott Holodak
Rutgers University
sholodak@rci.rutgers.edu

Jill Hoover
University of Kansas
jrhoover@ku.edu

Holger Hopp
University of Groningen
hopp@let.rug.nl

Koji Hoshi
Keio University
kyoko-m@fa2.so-net.ne.jp

Liz Howard
Center for Applied Linguistics
liz@cal.org

Becky Huang
University of California,
Los Angeles
beckyhua@ucla.edu

Carla Hudson Kam
University of California,
Berkeley
clhudson@berkeley.edu

Mary E. Hughes
Boston University
mhughs@bu.edu

Nina Hyams
University of California,
Los Angeles
hyams@humnet.ucla.edu

Toshikazu Ikuta
Indiana University
tikuta@indiana.edu

Mutsumi Imai
Keio University
imai@sfc.keio.ac.jp

Kentaro Ishizuka
NTT Communication Science
Laboratories, NTT Corp.
ishizuka@cslab.kecl.ntt.co.jp

Mark Johnson
Brown University
Mark_Johnson@Brown.edu

Helen Jolly
Oxford University
helen.jolly@psy.ox.ac.uk

Sachiyo Kajikawa
Tamagawa University
kajikawa@lab.tamagawa.ac.jp

Kiyoe Kanechiku
Tamagawa University
kiyoe@lit.tamagawa.ac.jp

Kathleen Kelly
Dalhousie University
kjmkelly@dal.ca

Carissa Kemp
Harvard University
ckemp@wjh.harvard.edu

Annemarie Kerkhoff
University of Utrecht
Annamarie.Kerkhoff@let.uu.nl

Nihan Ketrez
Yale University
nihan.ketrez@yale.edu

Ji-Hye Kim
University of Illinois at
Urbana-Champaign
jkim38@uiuc.edu

Sahyang Kim
Wayne State University
av6272@wayne.edu

Tihana Kras
University of Cambridge
tk302@cam.ac.uk

Aylin Küntay
Koç University
akuntay@ku.edu.tr

Siu-Chun Cecilia Kwan
The Chinese University of
Hong Kong
ceciliakwan@alumni.cuhk.net

Jill Lany
The University of Arizona
lany@u.arizona.edu

Derek Layton
Emory University
dlayton@emory.edu

Erin Leddon
Northwestern University
e-mcmahon@northwestern.edu

Joanne Lee
University of Connecticut
jlee_terry@hotmail.com

Peggy Li
Harvard University
pegs@wjh.harvard.edu

Juana Liceras
University of Ottawa
jliceras@uottawa.ca

Jeffrey Lidz
Northwestern University
jlidz@northwestern.edu

Elena Lieven
Max Planck Institute for
Evolutionary Anthropology
lieven@eva.mpg.de

Audrey Liljestrand
Indiana University
aliljest@indiana.edu

Diane Lillo-Martin
University of Connecticut
lillo.martin@uconn.edu

Justin Little
New York University
justin.little@nyu.edu

Brian MacWhinney
Carnegie Mellon University
macw@mac.com

Keith Maddocks
Memorial University of
Newfoundland
kmaddocks@nl.rogers.com

Jean-Philippe Marcotte
University of Minnesota
marcotte@csli.stanford.edu

Gary Marcus
New York University
gary.marcus@nyu.edu

Alexandra Marquis
University of Quebec in
Montreal
alexandramarquis@yahoo.fr

Tomoko Matsui
Kyoto University
matsui@pri.kyoto-u.ac.jp

Ayumi Matsuo
University of Sheffield
a.matsuo@sheffield.ac.uk

Kazumi Matsuoka
Keio University
matsuoka@hc.cc.keio.ac.jp

Karen Mattock
McGill University
karen.mattock@mail.mcgill.ca

Rachel Mayberry
McGill University and
University of California,
San Diego
rachel.mayberry@mcgill.ca

Jessica Maye
Northwestern University
j-maye@northwestern.edu

Peter McCagg
International Christian
University
mccagg@icu.ac.jp

Miki Hirata
Hokkaido University
asandtem@yahoo.co.jp

Karen Miller
Michigan State University
mille735@msu.edu

Yui Miura
International Christian
University
MiuraYui@aol.com

Mari Miyao
University of Hawaii
mmiyao@hawaii.edu

Nobuhiro Miyoshi
Asahikawa Medical College
miyoshi2@asahikawa-med.
ac.jp

Nadya Modyanova
Massachusetts Institute of
Technology
nnm@mit.edu

Diane Molnar
Rutgers University
dmolnar@ruccs.rutgers.edu

Silvina Montrul
University of Illinois at
Urbana-Champaign
montrul@uiuc.edu

James Morgan
Brown University
James_Morgan@brown.edu

Ryoko Mugitani
NTT Communication Science
Laboratories, NTT Corp.
mugitani@cslab.kecl.ntt.co.jp

Alan Munn
Michigan State University
amunn@msu.edu

Letitia Naigles
University of Connecticut
letitia.naigles@uconn.edu

Mine Nakipoglu-Demiralp
Bogazici University
nakipogl@boun.edu.tr

Chandan Narayan
University of Michigan and
University of British Columbia
cnarayan@umich.edu

Geoff Nathan
Wayne State University
geoffnathan@wayne.edu

Sarah Nestor
Boston University
ssnestor@bu.edu

Charles Newton
Center for Geographic
Medicine-Coast, Kenya
Medical Research Institute
cnewton@kilifi.mimcom.net

Elena Nicoladis
University of Alberta
elenan@ualberta.ca

Anat Ninio
Hebrew University of
Jerusalem
msninio@mscc.huji.ac.il

Karen O'Brien
University of Connecticut
KObri8@aol.com

Philip O'Brien
Dalhousie University
pobrien@cs.mun.ca

Eunjeong Oh
University of Southern
California
eoh@usc.edu

Akira Omaki
University of Hawaii
omaki@hawaii.edu

Kaya Ono
Clark University
kono@clarku.edu

Seyda Özçaliskan
University of Chicago
Seyda@uchicago.edu

Asli Özyürek
Max Planck Institute of
Psycholinguistics
asli.ozyurek@mpi.nl

Lydia Pelzer
University of Potsdam
lydiablenn@web.de

Sharon Peperkamp
Laboratoire de
Sciences Cognitives et
Psycholinguistique and
Université de Paris 8
Sharon.Peperkamp@ens.fr

Alexandra Perovic
Massachusetts Institute of
Technology
perovic@mit.edu

Rebecca A. Petrush
Indiana University
rpetrush@indiana.edu

Julian M. Pine
University of Liverpool
Julian.Pine@Liverpool.ac.uk

Manuela Pinto
Utrecht University
pinto@let.uu.nl

Kim Plunkett
Oxford University
kim.plunkett@psy.ox.ac.uk

Linda Polka
McGill University
linda.polka@mcgill.ca

Shannon Pruden
Temple University
spruden@temple.edu

Rachel Pulverman
University of Delaware
rpulverm@udel.edu

Franck Ramus
Laboratoire de
Sciences Cognitives et
Psycholinguistique,
EHESS-ENS-CNRS
franck.ramus@ens.fr

Mabel Rice
University of Kansas
mabel@ku.edu

Ken Rimba
Center for Geographic
Medicine-Coast, Kenya
Medical Research Institute
krimba@kilifi.mimcom.net

Paul Rodrigues
Indiana University
prrodrig@indiana.edu

Yvan Rose
Memorial University of
Newfoundland
yrose@mun.ca

Meredith Rowe
University of Chicago
rowemer@uchicago.edu

Caroline Rowland
University of Liverpool
crowland@liv.ac.uk

Dominik Rus
Georgetown University
dr59@georgetown.edu

Susan Rvachew
McGill University
susan.rvachew@mcgill.ca

Jenny Saffran
University of Wisconsin-
Madison
jsaffran@wisc.edu

Sabah Safi
Oxford University
sabah.safi@psy.ox.ac.uk

Raquel Santos
Universidade de São Paulo
raquelss@usp.br

Kumiko Sato
Tamagawa University
kumi@lit.tamagawa.ac.jp

Cristina Schmitt
Michigan State University
schmit12@msu.edu

Katie Schramm
Rutgers University
katiemagatie17@aol.com

Giancarlo Schrementi
Indiana University
gischrem@indiana.edu

Barbara Schulz
University of Hawaii
bschulz@hawaii.edu

Jennifer Seymour
The University of Toledo
Jennifer.Seymour@utoledo.
edu

Christine Shea
University of Pittsburgh
cesshea@yahoo.com

Ellyn Sheffield
Salisbury University
egsheffield@salisbury.edu

Rushen Shi
University of Quebec in
Montreal
shi.rushen@uqam.ca

Yasuhiro Shirai
The Chinese University of
Hong Kong
shirai@cuhk.edu.hk

Leher Singh
Boston University
leher@bu.edu

Katrin Skoruppa
University of Potsdam
kskoruppa@web.de

David Slegers
university of Kansas
dslegers@ku.edu

Jennifer Smith
University of York
js40@york.ac.uk

Jesse Snedeker
Harvard University
snedeker@wjh.harvard.edu

William Snyder
University of Connecticut
william.snyder@uconn.edu

Wing Chee So
University of Chicago
cwcso@uchicago.edu

Melanie Soderstrom
Brown University
melsod@brown.edu

Jae Yung Song
Brown University
Jae_Yung_Song@brown.edu

Antonella Sorace
University of Edinburgh
antonella@ling.ed.ac.uk

Stavroula Stavrakaki
Aristotle University of
Thessaloniki
svoula@enl.auth.gr

Sabine Stoll
Max Planck Institute for
Evolutionary Anthropology
stoll@eva.mpg.de

Holly Storkel
University of Kansas
hstorkel@ku.edu

Karin Stromswold
Rutgers University
karin@ruccs.rutgers.edu

Hiromi Sumiya
University of Colorado
hiromi.sumiya@colorado.edu

Daniel Swingley
University of Pennsylvania
swingley@psych.upenn.edu

Gayaneh Szenkovits
Laboratoire de
Sciences Cognitives et
Psycholinguistique,
EHESS-ENS-CNRS
gayaneh.szenkovits@ens.fr

Kate Taylor
Curtin University
katet@ichr.uwa.edu.au

Manizha Tellaie
City University, London
mtellaie@hotmail.com

Anne-Michelle Tessier
UMass Amherst
tessier@linguist.umass.edu

Dora Thalwitz
Harvard University
dthalwitz@wjh.harvard.edu

Kirsten Thorpe
Stanford University
thorpe@psych.stanford.edu

Malathi Thothathiri
Harvard University
malathi@wjh.harvard.edu

Michael Tomasello
Max Planck Institute for
Evolutionary Anthropology
tomasello@eva.mpg.de

Vicenç Torrens
Universidad Nacional de
Educación a Distancia
vtorrens@psi.uned.es

John Trueswell
University of Pennsylvania
trueswel@psych.upenn.edu

Ianthi Maria Tsimpli
Aristotle University of
Thessaloniki
imt@enl.auth.gr

Masanobu Ueda
Hokkaido University
ueda@ilcs.hokudai.ac.jp

Ruben van de Vijver
University of Potsdam
ruben@ling.uni.potsdam.de

Gretchen Van de Walle
Rutgers University
gretchen@psychology.rutgers.
edu

Suzanne van der Feest
Radboud University Nijmegen
s.v.d.feest@let.ru.nl

Angeliek van Hout
University of Groningen
angeliek.vanhout@let.rug.nl

Antje Van Oosten
Utrecht University
frauantje69@hotmail.com

Joshua Viau
Northwestern University
j-viau@northwestern.edu

Lesly Wade-Woolley
Queen's University
wadewool@educ.queensu.ca

Todd Wareham
Memorial University of
Newfoundland
harold@cs.mun.ca

Sandra Waxman
Northwestern University
s-waxman@northwestern.edu

Daniel Weiss
Penn State University
djw21@psu.edu

Jürgen Weissenborn
Humboldt University Berlin
weissenb@rz.hu-berlin.de

Janet F. Werker
University of British Columbia
jwlab@psych.ubc.ca

Ken Wexler
Massachusetts Institute of
Technology
wexler@mit.edu

Katherine White
Brown University
Katherin_S_White@brown.
edu

Lydia White
McGill University
lydia.white@mcgill.ca

Makeba Parramore Wilbourn
Cornell University
mmp26@cornell.edu

Casey Williams
Stanford University
casey@psych.stanford.edu

Caroline Wiltshire
University of Florida
wiltshir@ufl.edu

Pamela Witcher
McGill University
pamela.witcher@staff.mcgill.
ca

Gary Wood
University of Sheffield
ega02gcw@sheffield.ac.uk

Justin Wood
Harvard University
jnwood@fas.harvard.edu

Richard Work
Wayne State University
paracho50@hotmail.com

Fei Xu
University of British Columbia
fei@psych.ubc.ca

Yi Xu
University College London
yi@phon.ucl.ac.uk

Izumi Yabu
Hokkaido University
pdhtm371@yahoo.co.jp

Xiaolu Yang
Dept. of Foreign Languages of
Tsinghua University, Beijing
xlyang@tsinghua.edu.cn

James Yoon
University of Illinois at
Urbana-Champaign
jyoon@uiuc.edu

Sylvia Yuan
University of Illinois at
Urbana-Champaign
shyuan@cyrus.psych.uiuc.edu

Tania Zamuner
University of Nijmegen
zamtan@mpi.nl

Helmut Zobl
Carleton University
hzobl@ccs.carleton.ca

Maria Luisa Zubizarreta
University of Southern
California
zubizarr@usc.edu

Stephen Zubrick
Curtin University
s.zubrick@curtin.edu.au

Index

X

Y

Z