BUCLD The 34th Annual

Boston University Conference on Language Development

November 6-8, 2009

Commonwealth Avenue

Table of Contents

Welcome	2
Acknowledgements	
General Information.	
Schedule at a Glance.	
Conference Schedule	8-14
Friday, November 6	
Saturday, November 7	
Sunday, November 8	
Poster Session I (Friday, November 6)	
Poster Session II (Saturday, November 7)	
Friday Sessions	
9:00 AM	
9:30 AM	
10:00 AM	
11:00 AM	
11:30 AM	
12:00 PM.	
2:00 PM	
2:30 PM	
4:15 PM	
4:45 PM.	
5:15 PM	
Keynote Address.	
Poster Session I.	
Saturday Sessions.	
9:00 AM	
9:30 AM	
10:00 AM	
11:00 AM	
11:30 AM	
12:15 AM	
2:15 PM	
2:45 PM	
4:30 PM	
5:00 PM.	
Lunchtime Symposium.	
Plenary Address	
Poster Session II	
Sunday Sessions	
9:00 AM	
10:00 AM	
11:00 AM	
11:30 AM	
12:00 PM	
12:30 PM	
Alternates	
Publishers' Addresses	
Authors' Addresses	
Index	83-85

Welcome

Our 34th Year

We would like to welcome all of you to the Thirty-Fourth 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-four years.

Invited Speakers

At this year's conference, we are honored to have Anne Fernald and Virginia Valian as our featured speakers. Anne Fernald will present Friday's keynote address, titled "Developing fluency in understanding: How it matters." Saturday's program will close with Virginia Valian's plenary address, "Innate syntax - Still the best hypothesis." We are pleased to once again host a symposium during Saturday's lunch period. This year's symposium is titled "Recent advances in the study of production and comprehension: Implications for language acquisition research" with speakers John Trueswell, Mike Tanenhaus, and Kay Bock.

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 518 submissions, each of which was sent out to five reviewers for anonymous review. Of these, 81 papers and 72 posters were selected for presentation, for an acceptance rate of 30%. 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 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, which includes 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.

Enjoy

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

The 2009 Conference Committee

Jane Chandlee Katie Franich Kate Iserman Lauren Keil

Shanley Allen, Faculty Advisor Cathy O'Connor, Faculty Advisor Leher Singh, Faculty Advisor

Coordinators

Anna Belew Nick Danis Sierra Laidman Whitney Rios Hyunsuk Sung

Boston University Conference on Language Development 96 Cummington Street. Room 244 Boston, MA 02215 e-mail: langconf@bu.edu phone: (617) 353-3085

For general information about the conference, visit our website at: http://www.bu.edu/linguistics/APPLIED/BUCLD/

Acknowledgements

The Boston University Conference on Language Development is organized each year by students from the Program in Applied Linguistics. Every year, we depend upon the proceeds generated by registration and exhibition fees to cover the costs of hosting the conference, and we are very grateful to all our participants for providing this support. In addition, this year's conference is supported in part by the National Science Foundation under Grant No. BCS-0548399 and the National Institutes of Health under Grant No. R13 HD042130-08, for which we are also grateful.

We would like to thank the many graduate and undergraduate students who contributed their time and effort both throughout the past year and during this weekend. We are particularly thankful to the faculty and staff of the Program in Applied Linguistics and the School of Education for their support and encouragement.

We extend special thanks to our faculty advisors, Shanley Allen, Leher Singh, and Cathy O'Connor, for the care and guidance that have helped to ensure a successful conference. Their expertise and support have been invaluable.

We would also like to acknowledge the efforts of the Office of Conference Services and the Office of Disability Services. Our thanks to Dawn Quinlan of Conference Services, whose skill and experience has provided us with the proper equipment, facilities, and refreshments for the conference. We would also like to thank Deanna Ammon and Jeanne Dillon of Disability Services for providing sign-language interpreters, Marianne Taylor and Dan Goncalves for their support in managing the conference finances, and Carol Moy, Lisa Wong, and Igor Partola for collaborating on the maintanence of our online registration system.

Once again we were fortunate to be able to use Pasha, the abstract review software developed by Ezra Van Everbroeck at the University of California at San Diego, in our online review process. We continue to be grateful for the generosity of our colleagues in the Linguistics Department at UCSD.

Finally, we would like to thank the 184 reviewers listed below who read and rated the abstract submissions we received this year. The high quality of the abstracts makes it especially difficult to assemble a program of just 81 papers and 72 posters. We are particularly grateful for their thoughtful attention to each submission.

Nameera Akhtar Shanley Allen Richard Aslin Jessica Barlow Lilia Bartolome Edith Bavin Misha Becker Heike Behrens David Birdsong Gerard Bol Patrick Bolger Melissa Bowerman Ellen Broselow Doreen Bryant Nancy Budwig Ann Bunger Helen Cairns Catherine Caldwell-Harris Kyle Chambers Harald Clahsen Jeffry Coady Molly Collins Peter Coopmans Stephen Crain Suzanne Curtin Barbara Davis

Cecile De Cat

Kamil Deen Laurent Dekydtspotter Daniel Dinnsen Heiner Drenhaus Ken Drozd Catherine Echols Inge-Marie Eigsti Richard Elv Anne Fernald Maria Joao Freitas Karen Froud Alison Gabriele Patricia Ganea Anna Gavarro Dedre Gentner Lisa Gershkoff-Stowe Judith Gierut Heather Goad Adele Goldberg Roberta Golinkoff Helen Goodluck Peter Gordon Janet Grijzenhout John Grinstead Andrea Gualmini Maria Teresa Guasti

Ayse Gurel

Paul Hagstrom Cornelia Hamann Arild Hestvik Makiko Hirakawa Barbara Hoehle Bart Hollebrandse Aafke Hulk Felicia Hurewitz Nina Hyams **David Ingram** Tania Ionin Elizabeth Johnson Alan Juffs Rene Kager Dorit Kaufman Nina Kazanina Evan Kidd Wolfgang Klein Grzegorz Krajewski Tanja Kupisch Usha Lakshmanan Laura Lakusta Barbara Landau Donna Lardiere Thomas Lee Nonie Lesaux Claartje Levelt

Juana Liceras Elena Lieven Conxita Lleo Barbara Lust Theo Marinis Danielle Matthews Rachel Mayberry Jessica Maye Corrine McCarthy Luisa Meroni Toben Mintz Maria Mody Silvina Montrul James Morgan Alan Munn Julien Musolino Aparna Nadig Letitia Naigles Chandan Narayan Thierry Nazzi Rochelle Newman Elissa Newport Tamara Nicol Medina Cathy O'Connor Janna Oetting William O'Grady

Beth Levin

Acknowledgements

Mitsuhiko Ota Seyda Ozcaliskan Anna Papafragou Johanne Paradis Joe Pater Lisa Pearl Sharon Peperkamp Ana Perez-Leroux William Philip Colin Phillips Julian Pine Bernadette Plunkett Philippe Prevost Rachel Pulverman Clifton Pye Marnie Reed Mabel Rice Tom Roeper Jason Rothman Caroline Rowland Phaedra Royle Jenny Saffran Tetsuya Sano Lynn Santelmann Teresa Satterfield

Cristina Schmitt

Carson Schutze Bonnie D. Schwartz Nuria Sebastian Galles Amanda Seidl Ann Senghas Joan Sereno Ludovica Serratrice Valerie Shafer Rushen Shi Anna Shusterman Leher Singh Barbora Skarabela Roumyana Slabakova Jesse Snedeker William Snyder Hyun Joo Song Antonella Sorace Rex Sprouse Jeffrey Steele Daniel Swingley Kristen Syrett Kriszta Szendroi Helen Tager-Flusberg Anne-Michelle Tessier

Erik Thiessen

Margaret Thomas Rosalind Thornton Ruth Tincoff Liliana Tolchinsky John Trueswell Ianthi Maria Tsimpli Sigal Uziel-Karl Elena Valenzuela Virginia Valian Daniel Valois Angeliek van Hout Spyridoula Varlokosta Joshua Viau Marilyn Vihman **Daniel Weiss** Jurgen Weissenborn Janet Werker Lydia White Elizabeth Wonnacott Fei Xu Charles Yang Chen Yu Tania Zamuner Andrea Zukowski Kie Zuraw

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 any 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 Anne Fernald on Friday at 8:00 PM in Metcalf Large. Poster Session I (attended) with desserts will immediately follow in the Terrace Lounge.

The **Plenary Address** will be given by Virginia Valian on Saturday at 5:45 PM in Metcalf Large. Poster Session II (attended) with hors d'oeuvres will immediately follow the address in the Terrace Lounge.

A Lunchtime Symposium on "Recent advances in the study of production and comprehension: Implications for language acquisition research" with presentations from John Trueswell, Mike Tanenhaus, and Kay Bock will be held on Saturday at 12:15 PM in Metcalf Large.

Poster Sessions

Poster Session I: 35 posters will be on display in the Terrace Lounge. There will be two attended Poster Sessions on Friday: one at 3:00 PM and one at 9:15 PM. Refreshments will be available at both sessions.

Poster Session II: 34 posters will be on display in the Terrace Lounge. There will be two attended Poster Sessions on Saturday: one at 3:15 PM and one at 7:00 PM. Refreshments will be available at both sessions.

Special Sessions

The Society for Language Development will hold its sixth annual symposium, "Interactions between Early Cognitive Development and Language Acquisition" on Thursday, November 5, in Metcalf Large, with a reception following immediately in Ziskind Lounge. Speakers include Laura Schulz, Gergely Csibra, and Renee Baillargeon.

A special session entitled "What's Hot and How to Apply" will be facilitated by Peggy McCardle (NIH) and Joan Maling (NSF) on Saturday at 8:00 AM in Metcalf Large.

NSF and NIH consultation hours will be held in the Ziskind Lounge. NIH hours will be held on Friday 9:30–12:00 noon and 1:30–5:00 PM and on Saturday 10:00–12:00 noon. NSF hours will be held on Saturday 9:15–11:45 AM and 2:15–5:00 PM.

A BUCLD Special Meeting will be held on Friday, 12:30- 1:45 PM in Metcalf Small.

Additional Information

Parking is available at the Agganis Arena garage (925 Commonwealth Ave.) for \$1 per hour and at the Warren Towers Garage (700 Commonwealth Ave.) for \$12 per car per day. Please mention you are with the BUCLD, if asked. Free on-street parking in also available on Sunday. More information can be found at http://www.bu.edu/parking/.

Temporary luggage storage space 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.

General Information

A nursing room will be available for nursing mothers in GSU 310-311.

Wireless internet access is available throughout the GSU. Information for connecting is given in the box below.

Publishers' exhibits will be held in the Ziskind Lounge on Friday from 9:00 AM to 5:30 PM, Saturday from 10:00 AM to 5:30 PM and Sunday from 9:00 AM to 1:00 PM. For a list of exhibitors, see page 71.

Refreshments will be served in Ziskind Lounge before the morning sessions and during breaks, and 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, but is cash only.

The 35th Annual Boston University Conference on Language Development is tentatively scheduled to be held on November 5-7, 2010, at Boston University.

The Registration desk provides the following services:

ASL Interpreters (Please inquire when you arrive.) ~ Message Board ~ Lost and Found ~ Campus Maps ~ MBTA Maps

Internet Info

Guest ID: 505418 Account Name: bucld34

NIH/NSF Consultation Hours

Peggy McCardle (NIH) and Joan Maling (NSF)

NIH - Friday - 9:30 - 12:00am & 1:30 - 5:00pm

Saturday - 10:00 - 12:00 & 2:00 - 5:00pm

NSF - Saturday - 9:15 - 11:45am & 2:15 - 5:00pm

Schedule at-a-glance

Friday, November 6

8:00 am	Registration Begins	
9:00 am - 10:30 am	Talks	
10:30 am - 11:00 am	Morning Break with refreshments	
11:00 am - 12:30 pm	Talks	
12:30 pm - 11:45 pm	BUCLD Special Meeting	
2:00 pm - 3:00 pm	Talks	
3:00 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- 10:00 pm	Poster Session I Attended with refreshments	

Saturday, November 7

8:00 am	Registration Begins
8:00 am- 9:00 am	Funding Symposium
9:00 am - 10:30 am	Talks
10:30 am - 11:00 am	Morning Break with refreshments
11:00 am - 12:00 pm	Talks
12:15 pm -2:00 pm	Lunch Symposium
2:15 pm -3:15 pm	Talks
3:15 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 - 7:45 pm	Poster Session II Attended with refreshments

Sunday, November 8

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	

FRIDAY, NOVEMBER 6

	Sassian A (Mataclif Small)	Session D (Fast Delaam)	Session C (Conformed Auditorium)
Time 9:00	Session A (Metcalf Small) C. Lignos, E. Chan, C. Yang, M. Marcus:	Session B (East Balcony)	Session C (Conference Auditorium)
9:00	Evidence for a morphological acquisition model from development data	Y. T. HUANG, X. ZHENG, X. MENG, J. SNEDEKER: Assignment of grammatical roles in the online processing of Mandarin passive sentences	J. Berman, S. Graham, C. Chambers: Pre- schoolers' appreciation of vocal affect as a cue to a speaker's intentions
9:30	L. Pearl, S. Goldwater, M. Steyvers: How ideal are we? Incorporating human limitations into Bayesian models of word segmentation	K. ZOMBOLOU, S. VARLOKOSTA, A. ALEXIADOU, E. ANAGNOSTOPOULOU: Acquiring anticausatives vs. passives in Greek	K. Ito, N. Jincho, U. Minai, N. Yamani, R. Mazuka: Use of emphatic pitch prominence for contrast resolution: An eyetracking study with 6-year old and adult Japanese listeners
10:00	B. Pelucchi, J. Hay, J. Saffran: Learning in reverse	K. Demuth, F. Moloi, M. Machobane: Three- year-olds' comprehension, production and generalization of Sesotho passives	J. Bibyk, K. Ito, L. Wagner, S. Speer: Children can use contrastive stress in online sentence processing
10:30		BREAK (Ziskind Lounge)	
11:00	J. GERVAIN, I. BERENT, J. WERKER: The encoding of identity and sequential position in newborns: An optical imaging study	J. Paradis, T. Sorenson-Duncan: Differentiating between English L2 children with typical and impaired language development	E. TYNAN, A. STAHL, W. MA, L. SONG, L. ROCEK, J. MARSHALL, S. MARSHALL, R. GOLINKOFF, K. HIRSH PASEK: The path to language: Infants categorize paths in real-world events
11:30	C. Junge, P. Hagoort, V. Kooiman, A. Cut- Ler: Brain potentials for word segmenta- tion at 7 months predict later language development	M. Rice, L. Hoffman, K. Wexler: Longitudinal judgments of omitted BE and DO in questions by children with and without SLI to age 15 years: An on-going clinical marker	D. Skordos, A. Papafragou: Extracting paths and manners: Linguistic and concep- tual biases in the acquisition of spatial language
12:00	R. Shi, M. Cyr: Processing of morphological variations in 24-month-old infants	J. RISPENS, E. DE BREE: Past tense productivity in Dutch children with SLI: The role of phonology	M. Johanson, A. Papafragou: Universality and language-specificity in the acquisition of path vocabulary
12:30		BUCLD Special Meeting	
2:00	T. Goksun, K. Hirsh Pasek, M. Imai, H. Konishi, R. Golinkoff: The "where" of events: How do English- and Japanese-reared infants discriminate grounds in dynamic events?	B. Skarabela, S. Allen: How discourse- pragmatic features work together: Assess- ing the interaction between newness and joint attention in early argument realiza- tion	P. DE VILLIERS, J. DE VILLIERS, C-L. PICONE, A. WILKINS, E. DINKINS, F. BURNS: Dialect and narrative skills in African American preschoolers
2:30	A. Geojo, J. Snedeker: English to Greek in 10 easy lessons: Verb learning rapidly reconfigures verb lexicalization biases and their effects on visual attention	Y-Q. Yow: Bilingual children's integration of multiple cues to understand referential intent	B. Estigarribia: Genetic, cognitive, and environmental predictors of morphosyntax
3:00	POSTER	SESSION I Attended (Terrace Lounge & Ziski	
4:15	D. Yurovsky, D. Yu, L. Smith: Statistical speech segmentation and word learning in parallel	P. SPINNER: The detection and assembly of the number feature in L2 Swahili	J. Franck, S. Millotte: Early word order representation: Novel evidence for old contradictions
4:45	L. Onnis: Language-induced constraints on statistical learning	Z. Wen, M. Miyao, A. Takeda, W. Chu, Y-J. Shiung, B. Schwartz: Proficiency effects in nonnative processing of number agreement in English	G. Krajewski, E. Lieven, M. Tomasello: The role of word order and case marking in Polish children's comprehension of transitives
5:15	S. Wilson, C. Hudson Kam: Learning syntax through statistics: When do transitional probabilities need a boost?	S. BAEK: Where to reactivate? L2 processing of filler-gap dependency	P. Ibbotson, A. Theakston, E. Lieven, M. Tomasello: Acquiring the transitive construction in English: The role of pronoun frames
5:45	DINNER BREAK		
8:00	KEYNOTE ADDRESS: (Metcalf Large) Anne Fernald: Developing fluency in understanding: How it matters		
9:15	POSTER SESSION I Attended (Terrace Lounge & Ziskind Lounge)		

SATURDAY, NOVEMBER 7

8:00	SATURDAY, NOVEMBER 7 NSF/NIH FUNDING SYMPOSIUM: What's Hot and How to Apply		
Time	Session A (Metcalf Small)	(Conference Auditorium) Session B (East Balcony)	Session C (Conference Auditorium)
9:00	J. HARTSHORNE, J. SNEDEKER: Integration of discourse and semantic structure in children's resolution of ambiguous pronouns	A. Munn, K. Miller, C. Schmitt: Maximality and domain restriction: Evidence from adjectival modifiers	D. Matthews, E. Lieven, M. Tomasello: What's in a manner of speaking? Children's sensitivity to partner-specific referential precedents.
9:30	K. CLACKSON, C. FELSER, H. CLAHSEN: On- line processing of reflexives and pro- nouns by children and adults: Evidence from eye movements during listening	N. Smith, N. Katsos: Pragmatic tolerance and speaker-comprehender asymme- tries	S. Creel, M. Tumlin: That doesn't ring a Bed: When integrating cues, children's errors reflect more advanced cognitive control
10:00	J. SNEDEKER, A. WOREK, C. SHAFTO: The role of lexical bias and global plausibility in children's online parsing: A developmental shift from bottom-up to top-down cues	A. Zukowski: Focus, polarity, and tag questions: Developmental links	J. KLINGER, C. BANNARD, M. TOMASELLO: How selective are 3-year-olds in imitat- ing novel linguistic material?
10:30		BREAK (Ziskind Lounge)	
11:00	E. MATHER, K. PLUNKETT: Novel labels support 10-month-olds' attention to novel objects	M. SHERKINA-LIEBER: Comprehension of functional morphemes by Labrador Inuttitut receptive bilinguals	J. HALBERDA, J. LIDZ, J. MERICKEL, T. HUNTER, P. PIETROSKI: Approximate num- ber representations in the acquisition of most
11:30	L. Song, T. Nazzi, S. Moukawane, R. Golinkoff, A. Stahl, W. Ma, K. Hirsh-Pasek: Sleepy vs. sleeping: Preschoolers' sensitivity to morphological cues for adjectives and verbs in English and French	S. Perpinan: Optionality of Inversion in bilingual native grammars: A case of L1 attrition?	K. SYRETT, R. SCHWARZSCHILD: The representation and processing of measure phrases by four-year-olds
12:15	LUNCH SYMPOSIUM: (Metcalf Large) Recent Advances in the study of production and comprehension: Implications for language acquisition research John Trueswell, Mike Tanenhaus, Kay Bock		for language acquisition research
2:15	E. CARTMILL, S. PRUDEN, S. LEVINE, S. GOLDIN-MEADOW: The role of parent speech and gesture in children's spatial language and spatial thought	Y-C. Su: Temporal reference of bare verbs in Mandarin child language	K. Skoruppa, S. Peperkamp: The acquisition of phonological alternations: 2- to 3-year-old toddlers compensate for native but not for non-native assimilation
2:45	R. Furman, A. Ozyurek, A. Kuntay: Early language-specificity in Turkish children's caused motion event expressions in speech and gesture	M. Anderssen, M. Westergaard: Frequency and economy in the acquisition of variable word order	S. VAN DER FEEST, D. SWINGLEY: Language-specific interpretation of vowel duration in 21-month-olds' word recognition: A cross-linguistic study of phonetic attribution
3:15	POSTER SESSION II Attended (Terrace Lounge amd Ziskind Lounge)		
4:30	M. Cyr, R. Shi: Grammatical gender categorization in 17-month-old infants	T. Kupisch, C. Pierantozzi: Interpreting definite plural NPs: A cross-sectional study of German-Italian bilingual children	R. Mugitani, K. Ishizuka, T. Kondo, S. Amano: Acquisition of durational control of vocalic and consonantal intervals in speech production
5:00	G. Legendre, L. Goyet, I. Barriere, S. Kresh, T. Nazzi: Sensitivity to irregular French subject-verb agreement at 18 months: Evidence from the Head Turn Preference Procedure	T. Ionin, S. Montrul, J-H. Kim, V. Philip- pov: Singular generics in L2 English	R. Currie-Rubin, J. Thomson: Vowel perception and spelling of children with dyslexia
5:45	PLENARY ADDRESS: (Metcalf Large) Vigginia Valian: Innate syntax - Still the best hypothesis		
7:00	POSTER SESSION II Attended (Terrace Lounge & Ziskind Lounge)		

SUNDAY, NOVEMBER 8

Time	Session A (Metcalf Small)	Session B (East Balcony)	Session C (Conference Auditorium)
9:00	J. TRUESWELL, A. BUNGER, A. PAPAFRAGOU: Seeing and saying: The relation be- tween event apprehension and utter- ance formulation in children	M. Limbach, D. Adone: First language acquisition of recursive possessives in English	N. Brooks, A. Pogue, D. Barner: Piecing together numerical language: Children's use of default units in early counting and quantification
9:30	R. Scott, C. Fisher: 2.5-year-olds use cross-situational information to learn verbs under referential uncertainty	M. J. Gutierrez: Acquiring relatives in L1 Basque	M. Coppola, E. Spaepen, S. Goldin- Meadow: Communicating about number without a language model: The robust- ness of the plural
10:00	A. Smith, K. Smith, R. Blythe: When and how do humans use cross-situational learning	M. WESTERGAARD, K. BENTZEN: Word order and finiteness in English and Norwe- gian child language: Parameters vs. micro-cues	A. Shusterman, D. Gibson, B. Finder: Acquiring first number words: The developmental trajectory of children's meanings for "two"
10:30		BREAK (Ziskind Lounge)	V.
11:00	N. Mani: Phono-semantic priming in the infant lexicon	Y. Zhou, B. MacWhinney: Competing cues: A corpus-based study of the English tense-aspect acquisition	V. CHONDROGIANNI, T. MARINIS, S. EDWARDS: On-line processing of articles and clit- ics by Greek children with SLI
11:30	S. Arunachalam, S. Waxman: Specifying the role of linguistic information in verb learning	T. Grueter, M. Crago: The roles of L1 transfer and processing limitations in the L2 acquisition of French object clitic constructions: Evidence from Chinese- and Spanish-speaking learners	M. Green, A. Owen: The role of lexical frequency, telicity, and phonological factors on regular past tense production in children with SLI and their typically developing peers
12:00	C. Kidd, K. White, R. Aslin: Children's use of disfluencies for pragmatic inference in language comprehension	I. Ivanov: L2 acquisition of topicality marking in Bulgarian	N. Petrucelli, E. Bavin, L. Bretherton: Working memory in children with spe- cific language impairment and resolved late talkers
12:30	K. MacKenzie, S. Graham, S. Curtin: Do 12-month-old infants privilege words in an associative learning task?	C. Wright: The role of working memory in the process of second language acquisition	N. RAKHLIN, S. KORNILOV, J. REICH, M. BABYONYSHEV, E. GRIGORENKO: What SLI children reveal about the relationship between syntactic development and Theory of Mind

ALTERNATES

A. Austin, E. Newport	How low can you go: Low frequency inconsistent input in child and adult learners
M. Frank, N. Goodman, A. Fernald, J. Tenenbaum	Using discourse and social information to infer speakers' referential intentions
J. Grinstead, J. Thorward, L. Maynell	Vowel reduction, pitch accent and scalar implicatures in child English
D. Stringer, B. Burghardt, H-K. Seo, YT. Wang	Second language acquisition of spatial modifiers
Y. Gertner, M. Connor, C. Fisher, D. Roth	Modeling early sentence interpretation with shallow representations of syntactic structure
J. VILLA-GARCIA, W. SNYDER, J. RIQUEROS-MORANTE	Microvariation in the acquisition of Caribbean/non-Caribbean Spanish subjects: novel support for a [Spec, TP]-analysis in Caribbean dialects and for a CP-ac- count in non-Caribbean ones
T. Judy, J. Rothman	A bidirectional study of L2 pronominal subjects and why the directionality of L1/L2 pairings matters
S. KUIJPER, F. GROOTHOOF	Children's comprehension and production of marked stress
Y. Rose, J. Brittain, C. Dyck, E. Swain	The acquisition of metrical opacity: A longitudinal case study from Northern East Cree
M-J. Blais, Y. Oshima-Takane, F. Genesee, M. Hirakawa	Crosslinguistic influence on argument realization in Japanese-French bilinguals

EN ST T Z			
Friday, November 6 Session I, Room A – Terrace Lounge (3:00-4:15 pm, 9:15-10:00 pm)			
P. Amaral	Almost means 'less than': Preschoolers' comprehension of scalar adverbs		
MJ. Blais, Y. Oshima-Takane, F. Genesee, M. Hirakawa	Crosslinguistic influence on argument realization in Japanese-French bilinguals		
K. Byers-Heinlein	Characterizing bilingual input: A self-report measure of language mixing by bilingual parents		
D. CHEN PICHLER, R. QUADROS, D. LILLO-MARTIN	Effects of bimodal production on multi-cyclicity in early ASL		
N. Conrad, N. Harris, J. Williams	Individual differences in children's literacy development: The contribution of orthographic knowledge		
I. DARCY, L. DEKYDTSPOTTER, R. SPROUSE, J. SCOTT, J. GLOVER, M. McGuire, C. Kaden	The contours of lexico-phonological dissociation in English-French interlanguage		
A. Delcenserie, F. Genesee	Language acquisition of school-aged internationally adopted children from China		
B. Dillon, E. Dunbar, W. Idsardi	Seeing through the surface: A model for direct acquisition of phoneme categories		
S. Finley, E. Newport	Morpheme segmentation from distributional information		
M. Frank, N. Goodman, A. Fernald, J. Tenenbaum	Using discourse and social information to infer speakers' referential intentions		
K. Gauthier, F. Genesee	The role of maternal input and interactional strategies in the early lexical development of internationally-adopted children		
Y. GERTNER, M. CONNOR, C. FISHER, D. ROTH	Modeling early sentence interpretation with shallow representations of syntactic structure		
J. Gierut, M. Morrisette	Wisdom comes with age: Effects of age-of-word-acquisition on phonological learning		

Session I, Room B	Friday, November 6 – Ziskind Lounge (3:00-4:15 pm, 9:15-10:00 pm)
T. Judy, J. Rothman:	A bidirectional study of L2 pronominal subject and why the directionality of L1/L2 pairings matters
E. Ko, M. Soderstrom, J. Morgan:	Development of infants' perceptual sensitivity to the vowel length effect
E. KOULAGUINA, R. SHI:	The mechanism underlying the learning of rules and exceptions in 14-month-old infants
S. Lee-Ellis, W. Idsardi, C. Phillips:	Distinguishing effects of early exposure and language dominance on perceptual sensitivity in Korean heritage learners
J. Lidz, R. Baier:	Predictive parsing impedes word learning in 19-month-olds
A. Gagliardi, J. Lidz, M. Polinsky:	The acquisition of noun classes in Tsez: Computational and experimental results
M. Lieberman:	Self-correction and the acquisition of liquid contrasts in L2 English
D. McCurley, T. Pratt, J. Grinstead:	Root infinitive interpretations in child Spanish-speakers with and without SLI
R. Mierzejewski, L. Singh, J. Liederman, J. Barnes:	Consequences of early experience for language acquisition
S. Montrul:	Morphological errors in L2 learners and heritage language learners: Missing surface inflection or simply experience?
M. O'DONNELL, N. ELLIS:	'Nomi Nomi how does your network grow?' Applying methods from network science to the study language acquisition
T. O'DONNELL, N. GOODMAN, J. SNEDEKER, J. TENENBAUM:	Computation and reuse in language learning
R. REICHLE:	Working memory load and processing of contrastive focus in L2 French
L. Rissman, G. Legendre, B. Landau:	Abstract auxiliary BE representation in two-year-old children: Evidence from syntactic priming
Y. Rose, J. Brittain, C. Dyck, E. Swain:	The acquisition of metrical opacity: A longitudinal case study from Northern East Cree
S. Schmitt, M. Friend:	The home literacy environment as a predictor for toddlers' language development
M. Soderstrom, R. Bach:	Turn-taking in infancy: Are mother-infant interactions really 'conversational'?
N. Stephens, E. Clark:	Given before new: Effects of discourse status on child syntactic choices
H. Wang, T. Mintz:	From linear sequences to abstract structures: Distributional information in infant-direct speech
E. ZARETSKY, C. CORE:	Letter name knowledge and representation of sublexical units in spelling tasks at the beginning of the kindergarten year

Saturday, November 7 Session II, Room A – Terrace Lounge (3:15-4:30 pm, 7:00-7:45 pm)		
C. Bannard, M. Tomasello	Word learning is not label-object mapping: Preferential looking does not pre- dict explicit knowledge of words in 2-year-olds	
C. Bergmann, M. Paulus, P. Fikkert	Gender and task effects in pronoun interpretation	
P. Brusini, G. Dehaene-Lambertz, A. Christophe	An ERP study of syntactic categorization in French-learning 2-year-olds	
M. Ellert, L. Roberts, J. Järvikivi	Exploring the influence of animacy on ambiguous pronoun resolution in the L2 visual world	
A. Endesfelder Quick, E. Lieven, M. Tomasello	Mixed NPs in German-English and German-Russian bilingual children	
R. Novogrodsky, N. Friedmann	Not all dependencies are impaired in syntactic-SLI: Binding comprehension in children with a deficit in Wh-movement	
T. Grünloh, E. Lieven, M. Tomasello	German children's use of prosodic cues in resolving participant roles in transitive constructions	
E. Healey, B. Skarabela, M. Ota	Do monolingual and bilingual children differ in their adherence to mutual exclusivity?	
N. Jincho, H. Oishi, M. Reiko	Children can access pragmatic contexts immediately during on-line sentence comprehension, but they cannot suppress interfering ones selectively	
M. Kambanaros, K. Grohmann	Patterns of object and action naming in Cypriot Greek children with SLI/WFDs	
S. KUIJPER, F. GROOTHOFF	Children's comprehension and production of marked stress	
W. Lee, H. Song	Do Korean children use case markers when learning the meaning of novel verbs?	
T. Lentz, R. Kager	L1 perceptive biases do not stop acquisition of L2 phonotactics	
C. Levelt	An experimental approach to coda omissions in early child language	
T. Marinis, V. Chondrogianni	Asymmetries between the production and processing of tense morphemes in successive bilingual children	

Saturday, November 7 Session II, Room B – Ziskind Lounge (3:15-4:30 pm, 7:00-7:45 pm)		
S.	The influence of oralism on mouth actions in Irish Sign Language (ISL)	
K. Murasugi, T. Nakatani, C. Fuji	The roots of root infinitive analogues: The surrogate verb forms common in adult and child grammars	
N. Sawada, K. Murasugi, C. Fuji	A theoretical account for the 'erroneous' genitive subjects in child Japanese and the specification of tense	
C. Name, C. Silva	Prosodic cues in Brazilian Portuguese second language learners	
T. NAZZI, J. SERRES, R. BIIELIAC-BABIC, B. HÖHLE	Early phonological acquisition: Lexical stress pattern discrimination by monolingual and bilingual French-learning 10-month-olds	
D. Ozge, T. Marinis, D. Zevrek	Production of relative clauses in monolingual Turkish children	
H. Rabagliati, H. Gelfand, G. Marcus, L. Pylkkänen	Words' shifting senses in lexical semantic development	
C. ROWLAND, C. NOBLE	Knowledge of verb argument structure in early sentence comprehension: Evidence from the dative	
Y. Sato, N. Jincho, R. Omori, T. Kondo, R. Mazuka	Brain activation for written word processing in deaf readers	
M. Schmitz, M. Friedrich, D. Marinos, A. Friederici, G. Klann-Delius	(How) does emotional prosody influence word learning and memory in children?	
T. Shirahata, M. Hisano	Developmental pattern of the interpretation of Japanese focus particle, dake (=only) by L1 children and L2 adults	
F. Smolík, J. Lukavsky	Structural priming of word order in Czech children's comprehension	
M. Srinivasan, J. Snedeker	Distinguishing polysemy and ambiguity in the child's mental lexicon	
D. Stringer, B. Burghardt, H. Seo, Y. Wang	Second language acquisition of spatial modifiers	
A. Synnestvedt, R. Newman, N. Bernstein Ratner	Infant speech processing abilities and later syntactic skills in preschool	
E. Tenebaum, D. Sobel, J. Morgan	Sensitivity to information in the face predicts vocabulary size	
L. Tieu	On children's acquisition of the NPI licensing condition in English	

Evidence for a morphological acquisition model from development data

Constantine Lignos, University of Pennsylvania Erwin Chan, University of Arizona Charles Yang, University of Pennsylvania Mitchell Marcus, University of Pennsylvania

Research in computational models of morphological acquisition has yet to produce a realistic and effective model of child learning. Chan (2008) is a first step toward a fully unsupervised algorithm that simultaneously learns morphological rules and the word pairs that they apply to. We apply the algorithm presented there to the phonemic transcriptions of child-directed speech of 6 children in the English CHILDES database. The algorithm successfully learns the most critical morphological rules of English in a relatively invariant order that is similar to the learning order of children observed by Brown (1973). This shows that a type-frequency based, bootstrapping model of morphological rules can effectively learn the most basic rules of English morphology from small corpora of child-directed speech. This supports Chan's proposal that morphological learning must take into account both morphological structures and their statistical distributions.

Notes

Session B--East Balcony

Assignment of grammatical roles in the online processing of Mandarin passive sentences

Yi Ting Huang, University of North Carolina - Chapel Hill Xiaobei Zheng, Xiangzhi Meng, Peking University Jesse Snedeker, Harvard University

Children's difficulties with passive utterances may be due in part to their overlap with active forms. This temporary ambiguity in thematic role assignment makes it unclear whether initial arguments will be agents or themes. This ambiguity is less pronounced in languages like Mandarin where morphosyntactic markers identify thematic roles early in utterances. We presented Mandarin-speaking five-year-olds with utterances like these:

- (1) Seal BA/BEI it quickly eat (The seal is quickly eating it/eaten)
- (2) It BA/BEI seal quickly eat (It is quickly eating the seal/eaten by the seal)

We measured fixations to displays with expressed nouns (SEAL), likely agents (SHARK) and themes (FISH). Children's eye-movements revealed that markers were used to incrementally assign thematic roles in all sentences. However, children's actions were often incorrect when the passive marker followed full NPs (see 1), suggesting that developmental difficulties with passives may stem from incremental thematic processing and limitations in revising initial interpretations.

Session C--Conference Auditorium

Preschoolers' appreciation of vocal affect as a cue to a speaker's intentions

Jared Berman, University of Calgary Susan Graham, University of Calgary Craig Chambers, University of Toronto - Mississauga

In two eye-tracking experiments, we investigated 3- and 4year-old children's online sensitivity to speaker affect when resolving referential ambiguity. In these experiments, 40 children were presented with pictures of three objects on a computer screen (two referents of the same kind; e.g., an intact doll, a broken doll, and one distracter item). They then heard a prerecorded ambiguous instruction (e.g., "Look at the doll...Point to the doll"). This instruction varied in terms of speaker affect: positive, negative, or neutral. Results indicated that 4-year-olds' overt pointing behavior displayed only emergent sensitivity to speaker affect. Whereas, analyses of eye-gaze patterns indicated that 4-year-olds, but not 3-year-olds, were sensitive to speaker affect. Specifically, 4-year-olds were more likely to look to the referent that matched the speaker affect. These findings suggest that children at 4 years of age, but not 3 years of age, rapidly use speaker affect to resolve referentially ambiguous utterances.

How ideal are we? Incorporating human limitations into Bayesian models of word segmentation

Lisa Pearl, University of California - Irvine Sharon Goldwater, University of Edinburgh Mark Steyvers, University of California - Irvine

Human behavior is often consistent with the predictions of Bayesian ideal learners, which aim to explain why humans behave as they do, given the task and data they encounter. However, these models typically avoid answering how the observed behavior is produced, given human limitations on memory and processing. Here, we ask how such limitations might affect the results of identifying words in continuous speech, using a corpus of English childdirected speech. Simulations with different algorithms suggest that results depend non-trivially on how the learner's limitations are implemented. Also, though these learners do not segment realistic speech as well as the most successful ideal learner, they outperform other purely statistical learning strategies, such as syllable transitional probability. More practically, if infants require a seed pool of words to identify languagedependent strategies, these online language-independent strategies may provide a pool reliable enough to do so.

Session B--East Balcony

Acquiring anticausatives vs. passives in Greek

Katerina Zombolou, La Trobe University Spyridoula Varlokosta, University of Athens Artemis Alexiadou, University of Stuttgart Elena Anagnostopoulou, University of Crete

This paper focuses on the relationship between anticausatives and passives in Greek and the problem their morphological syncretism raises for acquisition. We present results of an elicitation experiment with 46 Greek-speaking children (2;7-4;3), which aims at figuring out whether there is an overgeneralisation of one of the two forms of anticausatives (active vs. non-active) and whether the involvement of an acting agent plays a role in the choice of the forms. Results showed that the non-active form was not used for any of the verbs that disallow it or allow it when an acting agent is involved, and that there is an overgeneralisation of active over non-active forms with verbs which allow the non-active form only. We argue that (a) passives have not been fully acquired by the age of 2;7-4;3; (b) there is no agentivity effect; (c) there is no distinction between anticausatives and passives at this age.

Session C--Conference Auditorium

Use of emphatic pitch prominence for contrast resolution: An eye-tracking study with 6-year old and adult Japanese listeners

Kiwako Ito, Ohio State University Nobuyuki Jincho, RIKEN Brain Science Institute Utako Minai, RIKEN Brain Science Institute Naoto Yamane, RIKEN Brain Science Institute Reiko Mazuka, RIKEN Brain Science Institute

This study examines online responses to prosodic prominence in adult and 6-year old Japanese listeners. Participants located two animals on each display following two sequential questions (Q1: pinku-no neko-wa doko? "Where is the pink cat?" \rightarrow Q2: jaa, midori-no neko-wa doko? "Then, where is the green cat?"). The pitch range of the Q2 color adjective was either distinctly expanded or produced without emphasis. Experiment 1 confirms a facilitation effect of prominence in detecting Q2 target in both adults and children, while infelicitous prominence (pink cat → GREEN monkey) induced prosodic garden-path only in adults. Experiment 2 tests children with a longer discourse marker and a pause intervening the two questions, and this minimal change in the experimental procedure led to a slow garden-path effect. Although not as swiftly as adults, 6-year olds can process pitch prominence contrastively when time allows updating their discourse representation.

Notes
•

Learning in reverse

Bruna Pelucchi, University of Wisconsin - Madison Jessica Hay, University of Wisconsin - Madison Jenny Saffran, University of Wisconsin - Madison

A number of studies indicate that human learners, including both infants and adults, readily track sequential statistics, such as transitional probabilities, computed between adjacent elements. Transitional probability is typically calculated as the likelihood that one element will follow another. However, little is known about whether listeners are sensitive to the directionality of this computation. To address this issue, we tested 8-month-old infants in a word segmentation task, using fluent speech drawn from an unfamiliar natural language (Italian). Critically, test items were distinguished solely by their backward transitional probabilities. The results provide the first evidence that infants track backward statistics in fluent speech. A follow-up study demonstrated that stressed and unstressed versions of the same syllable are treated as distinct in infants' probability computations, illuminating an important constraint on statistical language learning.

Session B--East Balcony

Three-year-olds' comprehension, production and generalization of Sesotho passives

Katherine Demuth, Brown University Francina Moloi, and 'Malillo Machobane, The National University of Lesotho

Researchers have long been puzzled by the fact that the English passive takes time to learn. It has therefore been of interest that researchers of other languages have reported spontaneous use of the passive by the age of 3 (e.g., Demuth, 1989). To investigate this further, this study conducted a series of experiments with Sesotho-speaking 3-year-olds. The results showed that passive comprehension was good, with no effect of actional/ non-actional verb type. Elicited production of both actives and passives was excellent, with no difference between adversive and non-adversive verbs. Finally, all participants made both active and passive generalizations with novel verbs. These findings provide strong evidence that Sesotho-speaking 3-year-olds have robust, abstract knowledge of passive syntax. The paper concludes with a discussion of the factors that contribute to the earlier learning of the Sesotho passive, why it may be delayed in English, and the implications for syntax acquisition more generally.

Notes	
	-
	-
\$1	-
	-
	-
•	-
	-
	_
·	_
	_
	_
	_
	_

Session C--Conference Auditorium

Children can use contrastive stress in on-line sentence processing

Sarah Bibyk, Ohio State University Kiwako Ito, Ohio State University Laura Wagner, Ohio State University Shari Speer, Ohio State University

Prosodic emphasis provides information about the speaker's intentions above the level of the meanings of the individual words in discourse. In English the prominent pitch accent L+H* evokes contrast between some previously mentioned item and the item currently under discussion (Pierrehumbert & Hirschberg 1990). Past eyetracking studies have shown that accents have an immediate impact on referential resolution in adults (Dahan et al. 2002; Ito & Speer 2008). Children, in comparison, have been shown to have poor comprehension of contrastive accent (Cutler & Swinney, 1987; Wells et al., 2004). However a more recent eyetracking study (Ito et al. 2008) found that emphatic pitch expansion can be used predictively by Japanese-speaking 6-year-olds. This current study investigates the progression of L+H* comprehension in English-speaking 6- to 11-year olds using the Japanese methodology. These results demonstrate that English-speaking children are competent with prosodic referential cues even at the age of 6.

The encoding of identity and sequential position in newborns:

An optical imaging study

Judit Gervain, University of British Columbia Iris Berent, Northeastern University Janet Werker, University of British Columbia

Languages manifest constraints favoring the right edge of phonological domains, e.g. suffixing is more frequent than prefixing. What are the origins of such constraints on phonological and morphological structure? We conducted four functional near-infrared spectroscopy (NIRS) experiments with newborns to investigate the processing of initial and final repetitions (AAB & ABB structures). We found that newborns detect and discriminate the two patterns, thus they encode both identity and sequential position. However, the right-edge repetition is not privileged, implying that these linguistic constraints do not originate from initial perceptual biases. Further, we found that the repetition-detector is specific to linguistic stimuli, as the patterns are not extracted when implemented with piano tones.

Session B--East Balcony

Differentiating between English L2 children with typical and impaired language development

Johanne Paradis, University of Alberta Tamara Sorenson-Duncan, University of Alberta

Abilities with tense morphology and phonological working memory are reliable clinical markers of language impairment in English monolingual children. The purpose of this study was to determine how well morphological and phonological working memory abilities could differentiate between English L2 children with typical (TD) and impaired (LI) language development. 81 TD and 24 LI English L2 children (mean age = 5;11; mean exposure to English = 24 months) were given tense elicitation and phonological working memory tasks (CTOPP, Wagner et al., 1999; TEGI, Rice & Wexler, 2001), and their parents were given a questionnaire on their L1 development. Multiple regression analyses showed the TD group to have significantly higher scores for both measures than the LI group, but English use outside school contributed significantly to the scores, regardless of group. Combined with L1 information, these measures significantly discriminated between the groups, with very good-to-excellent sensitivity and specificity. Implications for assessment of English L2 children will be discussed.

Session C--Conference Auditorium

The path to language: Infants categorize paths in real-world events

Emily Tynan, Aimee Stahl, Weiyi Ma, Lulu Song, Jessica Marshall, Shannon Marshall, Roberta Golinkoff, University of Delaware Laura Rocek, Beloit University Kathy Hirsh-Pasek, Temple University

Infants can categorize path earlier than manner using animated stimuli (Pruden, 2003). However, animated stimuli are highly impoverished compared to real world events. Here, 13- to 15-month-old English-learning infants were familiarized to a human agent performing motion events containing a path and a manner in relation to a ground object. In path conditions, they viewed an invariant path across different manners. At test, they viewed 2 events: the old path and a new manner vs. a new path and the same new manner. A parallel design studied manner categorization. If infants can categorize these components, they should prefer the event in which both components change. Results indicate that infants categorize path more robustly than manner. Because mapping labels onto new exemplars of a category is a key component of language learning, infants' categorization of real-world events is a crucial prior development.

Notes	
H 277	
•	
	
	, ., .

Brain potentials for word segmentation at 7 months predict later language development

Caroline Junge, Max Planck Institute for Psycholinguistics Hagoort Peter, Max Planck Institute for Psycholinguistics Valesca Kooijman, Top Institute Food & Nutrition Anne Cutler, Max Planck Institute for Psycholinguistics

Since infants mainly hear multi-word utterances, segmenting words from continuous speech is vital for later language development. The first paradigm for studying word segmentation in infants was the headturn-preference method (Jusczyk & Aslin, 1995). Kooijman (2007) developed an ERP analogue, which provides an online measure of word segmentation. She tested Dutch 7- & 10-month-olds. The 10-month-olds showed a negative ERP effect of familiarity, but the 7-month-olds did not. To test whether this interindividual variability in the ERP responses at seven months was related to later language skills, the same infants participated in standardized language tests at three years. Infants with an ERP effect similar to the 10-month-olds had higher language quotients. Thus, ERP measures of segmentation at an age as young as seven months predict later language profiles at three years. This relationship appears at an individual level, even when no corresponding group performance similar to the 10-month-olds was observed.

Session B--East Balcony

Longitudinal judgments of omitted BE and DO in questions by children with and without SLI to age 15 years: An on-going clinical marker

Mabel Rice, University of Kansas Lesa Hoffman, University of Nebraska Ken Wexler, Massachusetts Institute of Technology

An EOI period for English-speaking children with SLI is documented to 8 years of age in simple declarative clauses. This is the first longitudinal report of grammaticality judgments of questions to adolescence. Three groups of children participated: 20 SLI, 20 age controls and 18 language-matched controls, ages 6-15 years. An experimental grammaticality judgment task was administered with BE copula/auxiliary and DO auxiliary in Wh- and Yes/No questions for 9 times of measurement. The affected group performed below the younger controls at each time of measurement, for each variable. Linear and quadratic effects appeared for both groups across variables, with the exception of BE acquisition which was flat for both groups. The control children reached ceiling levels; the affected children reached a lower asymptote. The protracted maturational lag for questions relative to declaratives brings an adjustment of the UCC account of optional infinitives and the EOI stage for children with SLI.

18	otes	
		
-		

Session C--Conference Auditorium

Extracting paths and manners: Linguistic and conceptual biases in the acquisition of spatial language

Dimitrios Skordos, University of Delaware Anna Papafragou, University of Delaware

Motion encoding differs cross-linguistically (Talmy, 1985; Slobin, 1996). English uses verbs that communicate the manner of motion (e.g., slide, skip) while Greek prefers to encode the path (e.g., approach, ascend). Lexicalization biases affect adults' and older children's conjectures about novel motion verbs (Naigles & Terrazas, 1998; Hohenstein & Naigles, 2000), but it is unclear how lexical and structural constraints are used by young children in hypothesizing meanings for motion verbs cross-linguistically, and how these constraints interact with the non-linguistic categorization of motion scenes. We report two studies with English- and Greek-speaking adults and preschoolers designed to address these questions. Both studies provide evidence that conceptual biases in the representation of motion are shared by speakers of the two languages but lexical and syntactic information can lead away from these biases during the acquisition of motion predicates.

Processing of morphological variations in 24-month-old infants

Rushen Shi, University of Quebec - Montreal Marilyn Cyr, University of Quebec - Montreal

We examined infants' knowledge of morphological variations in a split-screen procedure. French-learning 24-month-olds were familiarized with a scene of different fish moving over a bubble, and another scene showing the fish moving under the bubble. Infants heard "Il a bréché (it bréché-ed; 'bréché'-nonce verb)" during one scene, and "il a pas bréché (it didn't bréché)" during the other. Each test trial presented the two scenes side by side. In the first baseline test trial, infants heard "il a bréché". In two other test trials, they heard "il brèche (morphological variant of bréché)", and "il bréchit" (unrelated, phonological neighbor of bréché) respectively. While hearing bréchit, infants preferred the scene that was not chosen during the baseline trial, interpreting bréchit as having different meaning than bréché. While hearing brèche, infants watched both scenes equally, interpreting it as neither the same nor different from bréché. These findings demonstrate emergent knowledge of verb morpho-phonemic variations.

Session B--East Balcony

Past tense productivity in Dutch children with SLI: The role of phonology

Judith Rispens, University of Amsterdam Elise de Bree, University of Utrecht

It has repeatedly been demonstrated that children with SLI have profound difficulty with past tense production. Research with English-speaking SLI children has demonstrated that the phonological composition of verbs (Marshall & Van der Lely, 2007; Oetting & Horohov, 1997) plays a role. This study examines the influence of phonology on past tense formation in Dutch speaking SLI children in existing and novel verbs. In Dutch, verbs with stems ending in an underlyingly voiceless obstruent take the suffix -te, all other verbs -de. Overall, the children with SLI made significantly more errors than the control children and inflected -te existing verbs significantly more accurately than -de verbs. Both groups were better on novel -te verbs. Our results show that past tense production in a Dutch group of SLI children was predominantly influenced by phonology. Explanations of past tense difficulties in SLI thus need to incorporate (language-specific) phonological influences.

Session C--Conference Auditorium

Universality and language-specificity in the acquisition of path vocabulary

Megan Johanson, University of Delaware Anna Papafragou, University of Delaware

Previous research claims that children learning different languages show different patterns in the acquisition of spatial language (Choi & Bowerman, 1991). Other research argues for consistent acquisition patterns for spatial expressions crosslinguistically (Johnston & Slobin, 1979). We explored both universal and language-specific aspects of the development of spatial language by examining early path vocabularies in two typologically different languages, English and Greek. We tested a potentially universal aspect of motion language: the preferential encoding of goal information over source information (Lakusta & Landau, 2005; Regier & Zheng, 2007). Results from an elicitation task with adults and 5-year-olds confirmed this asymmetry for both languages, thus supporting the hypothesis that the goal bias emerges out of robust (probably universal) ways of processing motion linguistically. Nevertheless, the precise implications of the goal bias were shaped by languagespecific properties - specifically, the degree of semantic specificity of the prepositional systems of the two languages.

Notes
l .

The 'where' of events: How do English- and Japanese-reared infants discriminate grounds in dynamic events?

Tilbe Goksun, Temple University Kathy Hirsh-Pasek, Temple University Mutsumi Imai, Keio University Haruka Konishi, Keio University Roberta Golinkoff, University of Delaware

Infants initially make universal, language-relevant distinctions in events that are later heightened or dampened depending on their native language (e.g., Hespos & Spelke, 2004). The current study addresses how English- and Japanese-reared infants discriminate grounds (stationary setting) in nonlinguistic dynamic events. Importantly, Japanese ground-path verbs such as wataru 'go across' incorporate information about both the geometry of the ground and the direction of motion. "Crossing a road" that extends in a line is expressed differently than "crossing a field" that extends in a plane. Two experiments tested whether English- and Japanese reared 14- and 19-month-olds' were equally sensitive to the ground distinctions later represented in Japanese, but not in English. Results indicated that at 14 months all infants noticed similar aspects of grounds consistent with the Japanese categorical distinctions (e.g., across-category: road vs. grassy field). With increased exposure to the native language, only older Japanese children retain this distinction.

Notes

Session B--East Balcony

How discourse-pragmatic features work together: Assessing the interaction between newness and joint attention in early argument realization

> Barbora Skarabela, University of Edinburgh Shanley Allen, Boston University

This is a case study targeting the interaction of newness and joint attention in argument realization in the spontaneous speech of four children acquiring Inuktitut (2;0-3;6). A logistic regression with 416 arguments with newness and joint attention as predictors of argument form yielded significant results for the full model and each of the two predictors. Importantly, there was an interaction between the two features. Although the children omitted a large proportion of arguments representing new referents, they did so much less in the absence of joint attention. Further, while the children omitted arguments when they were not involved in joint attention, they did so significantly more with given rather than new referents. The findings reveal children's sensitivity to subtle interactions of multiple discourse and socio-cognitive cues and advance our understanding of the role of discourse-pragmatics in early argument realization.

Session C--Conference Auditorium

Dialect and narrative skills in African American preschoolers

Peter de Villiers, Jill de Villiers, Cora-Lee Picone, Abigail Wilkins, Smith College Erica Dinkins, University of North Texas Frances Burns, University of Massachusetts at Amherst

This longitudinal study investigates changes in African American (AA) preschoolers' dialect over time and their narrative skills. Participants were over 300 AA children in curricular interventions with preschoolers in poverty in Texas and Florida. At the beginning and end of the school year the children received the DELV Screening Test and produced two oral narratives from the DELV-NR. The DELV-ST contains 15 phonological and morphosyntactic items that assess deviation from Mainstream American English towards African American English. Narratives were scored for reference specification, temporal marking and mental state references. A total narrative score was computed across the two stories. At Time1 there was a significant positive relationship between production of distinctive AAE features and narrative scores; but at Time2 there was a significant positive relationship between MAE production and narrative scores. Ability to switch codes between AAE and MAE may contribute to better narrative and literacy skills for AA children.

English to Greek in 10 easy lessons: Verb learning rapidly reconfigures verb lexicalization biases and their effects on visual attention

Amy Geojo, Harvard University Jesse Snedeker, Harvard University

Languages systematically differ in whether they encode the manner or path of motion in the verb for some motion events. Adults internalize these patterns, forming language-specific lexicalization biases, which influence their interpretation of novel motion verbs and attention to manner and path components of events when speaking. Using a novel paradigm combining verb learning and eye-tracking, we investigated whether lexicalization biases are rigid or flexible. For each trial, we recorded participants' eye movements as they watched motion events described by novel verbs. Prior to learning verb meanings, participants' initial bias to interpret the verb as manner- or path- encoding was assessed. Learning verbs with path or manner meanings rapidly influenced participants' verb interpretation biases. Participants' attention to novel motion events also differed. Participants learning manner verbs attended more to objects signifying manner than path. We conclude that verb lexicalization biases are flexible and shaped by prior learning.

Session B--East Balcony

Bilingual children's integration of multiple cues to understand referential intent

W. Quin Yow, Stanford University

The intonation speakers use when asking where something is influences how we interpret their intention. When speakers look at an object and ask where x is in a serious tone they indicate what they are looking at is not what they want. However, if they ask in a playful, pedagogical manner, they indicate what they are looking at is really the one they mean for the child to find. Based on past research, we expected bilingual children to be better able than monolingual children to integrate the semantics of "where", eye-gaze, and the intonation of the speaker. We examined 58 monolingual and bilingual preschoolers' use of these cues. As predicted, bilingual children were better than monolingual children in identifying the object as the one the actor was looking at when asked in a playful, pedagogical way and as the one actor could not see when asked in a serious manner.

Session C--Conference Auditorium

Genetic, cognitive, and environmental predictors of morphosyntax

Bruno Estigarribia, University of North Carolina - Chapel Hill

We investigated what factors predict morphosyntactic skill in boys with and without intellectual disability (ID). Genetic predictors are the presence of fragile X syndrome, autism, Down syndrome, or typical development; cognitive factors include nonverbal mental age (MA) and auditory working memory (AWM); environmental effects are represented by primary caregiver education; and linguistic effects by expressive vocabulary and intelligibility. A hierarchical regression shows the relation between predictors and IPSyn scores is the same in all groups. ID is highly predictive of syntactic skill, and so are MA and AWM after diagnosis is controlled for. Environmental and linguistic factors do not explain any independent variance after diagnosis, MA, and AWM. Moreover, whereas half of the variation in syntactic skill across different populations may be due to genetic and cognitive factors, the remaining half is possibly specifically syntactic. This provides evidence of a complex path to morphosyntax in typical and atypical populations.

Notes

Session AMetcalf Small	Session BEast Balcony
	·
2	
Notes	Session CConference Auditorium
	·

Statistical speech segmentation and word learning in parallel

Daniel Yurovsky, Indiana University Chen Yu, Indiana University Linda Smith, Indiana University

Previous studies demonstrate statistical learning in both speech segmentation and word learning. They also show a serial link, such that children who discover words using transitional probabilities can subsequently map them onto objects. We ask whether statistical speech segmentation and word learning can instead operate in parallel - with information from each supporting the other. While parallel operation does not occur in general, we show that it is facilitated by the natural structure of child-directed speech. First, analysis of a corpus of speech from a naturalistic free play task uncovers two such potential regularities. Then these regularities are encoded into artificial languages to which adults are exposed in a cross-situational word learning paradigm. Participants learn both word boundaries and word-object mappings when languages contain either regularity, but not in a control language. We thus demonstrate a link between statistical speech segmentation, statistical word learning, and the structure of child-directed speech.

Session B--East Balcony

The detection and assembly of the number feature in L2 Swahili

Patti Spinner, Michigan State University

Spinner & Thomas 2008 (S&T) suggest that L2 Swahili learners fail to parse gender-specific number markers in classes 1/2 and 3/4 as separate from the root. Rather, learners treat [singular marker+root] as the root itself. In this study, results from a production task corroborate and extend S&T's finding to classes 5/6 and 7/8. Additionally, results from a gender-assignment task indicate that learners do recognize prefixes as class markers but do not consistently associate classes with number; for example, learners assign nouns with the marker 'wa' to class 2 whether they refer to singular or plural. These learners thus appear to treat noun prefixes much like word class markers in Spanish: as forms that indicate gender but not number, and are generally inseparable from the root. Together, these results indicate that the learners detect the noun prefixes as class markers but have difficulty "assembling" them with the number feature (Lardiere 2009).

Session C--Conference Auditorium

Early word order representation: Novel evidence for old contradictions

Julie Franck, University of Geneva Severine Millotte, University of Geneva

One major controversy in the field of language development concerns the nature of children's early grammatical knowledge. While some studies using preferential looking suggest that children as early as 20 months represent word order abstractly, others using the Weird Word Order (WWO) paradigm suggest that it is represented as a verb-specific, lexical property until age 4. In order to shed light on these contradictions, we conducted a WWO study on two groups of French-speaking children (mean ages 2;11 and 3;11). The major findings are that both groups reproduced ungrammatical word orders at a similar low rate, corrected ungrammatical word orders at a similar rate even with pseudo-verbs, and re-used the grammatical order significantly more often than ungrammatical orders. We conclude that children at 2;11 possess an abstract representation of the word order of their language, and that the counter evidence reported in previous WWO studies is due to methodological artefacts.

Notes

Language-induced constraints on statistical learning

Luca Onnis, University of Hawaii - Manoa

Statistical learning has been indicated as a potentially powerful set of simple mechanisms for inferring language structure from distributional information in the input. Yet it is not clear how statistical learning can be constrained to avoid a combinatorial explosion of hypotheses about the input. We present evidence that statistical learning of novel stimuli can be biased by prior experience with one's native language. Korean and American speakers exhibited different expectations about the forward and backward transitional probabilities of an artificial grammar, a bias that we ascribe to prior experience with different word order patterns in the two natural languages. Furthermore, although Korean speakers were immersed in an English-speaking environment and had received extensive formal explicit training in English, they exhibited statistical learning biases congruent with their native language. Our findings help constraining theories of statistical learning and suggest new alleys of research for understanding difficulties in learning a second language.

Session B--East Balcony

Proficiency effects in nonnative processing of number agreement in English

Zhijun Wen, Mari Miyao, Aya Takeda, Wei Chu, Yi-Jiun Shiung, Bonnie D. Schwartz, University of Hawaii - Manoa

Previous studies by Jiang (2004, 2007) show that "advanced" adult Chinese L2ers of English, unlike English speaking natives, are insensitive to number agreement violations in online comprehension. How "advanced" his L2ers were, however, is unclear, since English proficiency was measured by standardized TOEFL scores and subjective self assessment. To examine whether advanced L2ers—whose L1, Chinese or Japanese, lacks number agreement in general—are in principle unable to acquire and hence use number agreement, this study (a) employs a more objective English proficiency measure, a C test, and (b) tests nominal internal number (dis)agreement in online comprehension via a self paced, word by word, non cumulative, moving window, plausibility judgment reading task. This task design maximizes the likelihood that readers concentrate on comprehension. The results show that like natives, advanced L2ers spend significantly longer reading the critical regions in disagreement conditions than agreement conditions, indicating that they have acquired knowledge of English number agreement and indeed use such knowledge in online comprehen-

Notes
·

Session C--Conference Auditorium

The role of word order and case marking in Polish children's comprehension of transitives

Grzegorz Krajewski, University of Manchester Elena Lieven, Michael Tomasello, Max Planck Institute for Evolutionary Anthropology

This study investigated the role case marking and word order play in young Polish children's comprehension of simple transitive sentences. We used Pointing Task (Dittmar et al., 2008), in which children from three age groups (2;10, 4;6, and 8;0) listened to sentences with novel verbs and had to point to appropriate animations. Case marking and word order were either in conflict or in coalition, or word order was the only cue for identifying agent and patient. The results suggest that Polish children only gradually start to rely on case marking more than on word order, even though the former is a highly reliable cue in adult Polish, with word order being relatively free.

Learning syntax through statistics: When do transitional probabilities need a boost?

Sarah Wilson, University of California - Berkeley Carla Hudson Kam, University of California - Berkeley

Recent research demonstrates that learners can acquire a phrase structure grammar exclusively from transitional probabilities between classes of words (Thompson & Newport, 2007). We investigate whether this is also possible given a larger language, or if additional cues to category identity become necessary under such circumstances. Learners were exposed to an artificial language based on one used by T&N but with a larger vocabulary, with either no additional category-membership cues, or very abstract phonological cues (syllable structure). The no-cue learners recognized exposure sentences but did not distinguish novel grammatical from ungrammatical sentences. Participants exposed to category cues, in contrast, were able to generalize to novel grammatical sentences. This was true even when the cue was only partially predictive. Cue-present participants also outperformed no-cue participants on tests of their knowledge of the phrases constitutive of the sentences. Results suggest that category cues might be necessary for the acquisition of natural languages.

Session B--East Balcony

Where to reactivate?: L2 processing of filler-gap dependency

Soondo Baek, University of Illinois - Urbana-Champaign

The present study explores how detailed syntactic structure is constructed during second language (L2) sentence processing. Previous experiments using the cross-modal priming paradigm suggest that L2 learners of English do not reactivate extracted noun phrases in their original syntactic position, contra native speakers (Felser & Roberts, 2007). The results of a new experiment using self-paced reading followed by lexical decision, on the other hand, suggest that L2 learners may also be able to construct syntactic structures detailed enough to project an empty category related to an extracted element at its original syntactic position, at least when allowed sufficient time for processing. Implications of the current results will be discussed in terms of non-native syntactic representations of verb argument structures and their role in processing.

Session C--Conference Auditorium

Acquiring the transitive construction in English: The role of pronoun frames

Paul Ibbotson, University of Manchester Anna Theakston, University of Manchester Elena Lieven, Max Planck Institute for Evolutionary Anthropology

Michael Tomasello, Max Planck Institute for Evolutionary Anthropology

The present study examined how 2 and 3 year-old English children use case-marked pronoun frames and constructional word order cues (actives versus passives) to understand agentpatient relations. In a pointing comprehension test, 2 year-olds used pronoun frames containing 2 case marked pronouns to help them interpret grammatical sentences, both actives and passives, but they were unable to assign agent-patient relationships in any consistent way with ungrammatical pronoun frames. Three year-olds also used pronoun frames to interpret grammatical active and passive sentences (with either 1 or 2 case-marked pronouns), but varied in their interpretation of ungrammatical sentences according to pronoun frame. These results suggest that the role of case-marked pronouns has been underestimated in English language acquisition, and that even very young English children use multiple cues to comprehend the transitive construction.

Notes
`

KEYNOTE ADDRESS

Developing fluency in understanding: How it matters

Anne Fernald

Real-time measures of early speech processing reveal gradual development in infants' efficiency in using linguistic knowledge to interpret spoken language. If the static notion of "acquisition" is appropriate to lexical development at all, then learning to make sense of spoken words is more like acquiring a skill than acquiring a thing, with an emphasis on gradual mastery. Over the 2nd/3rd years, children respond with increasing speed to familiar words, but they also vary substantially in processing efficiency. Longitudinal studies exploring the development of fluency in understanding from infancy through preschool show that individual differences in early processing skill predict long-term language outcomes in diverse populations. One source of variability is the quality of child-directed speech, which not only guides vocabulary growth, but also sharpens processing skills used in real-time comprehension. Early opportunities for "verbal exercise" could be crucial for developing fluent understanding, with cascading consequences for language learning.



POSTER SESSION I Notes Almost means 'less than': preschoolers' comprehension of scalar adverbs Patricia Amaral, Stanford University This study investigates the comprehension of the meaning of 'almost' by preschoolers as a test case for the acquisition of scalar adverbs that are cross-categorial modifiers. In a comprehension study with 4-5 year olds (N = 24, mean age 4;6) and an adult control group (N = 14), participants heard sentences with 'almost' used as a modifier of number words, directional PPs, and equative constructions. Contra previous studies claiming that children have difficulties in the interpretation of 'almost' across the board, this study shows that children as young as 4;6 display adult-like interpretation of 'almost' when the adverb modifies linguistic expressions which provide a clear scale for comparison (e.g. number words) and when children are provided with rich contextual information about the scale that 'almost' operates on. Departures from the adult interpretation occur when the scale cannot be retrieved easily from lexical meaning or the context. POSTER SESSION I Notes Characterizing bilingual input: A self-report measure of language mixing by bilingual parents Krista Byers-Heinlein, University of British Columbia Bilingual children often hear input that is mixed with respect to the two languages (e.g. borrowing and code switching). This study examined the impact of such input on vocabulary acquisition, through the development of a pen-and-paper measure of parental language mixing. A sample of 163 bilingual parents of 17- and 26-month-old infants completed both a 5-item language mixing scale questionnaire with respect to themselves, and a MacArthur-Bates Communicative Development Inventory (MCDI) with respect to their child. Psychometric analysis showed that the language mixing scale has good construct validity, and is highly reliable, Cronbach's α=.84. Moreover, higher reported levels of parental language mixing were related to significantly fewer words understood at 17-months, and significantly fewer words produced at 26-months, when statistically controlling for other factors. These preliminary results raise the possibility of a detrimental effect of parental language mixing on early bilingual development, perhaps by exacerbating the problem of language separation.

Notes	POSTER SESSION I
	Crosslinguistic influence on argument realization in Japanese- French bilinguals
	Mary-Jane Blais, Yuriko Oshima-Takane, Fred Genesee, McGill University Makiko Hirakawa, Bunkyo University
	A central question in bilingual acquisition research is whether a child's two languages are completely autonomous or show some degree of interdependence. It has been suggested that crosslinguistic influence may affect syntax-discourse interface phenomena such as argument realization, a speaker's choice of lexical, pronominal or null arguments. We examined this hypothesis in preschool-aged bilingual speakers of Japanese, which allows lexical, pronominal and null arguments, and French, in which argument drop is prohibited. Bilingual participants' language was compared to that of monolinguals of the same age. Crosslinguistic effects were found in both languages, with bilinguals using more pronouns than monolinguals in Japanese, but fewer pronouns than monolinguals in French. However, the children also used language-specific strategies appropriately, producing null forms only in Japanese. These results support the hypothesis that crosslinguistic influences can affect syntactically optional phenomena governed by language-specific discourse-pragmatic preferences, but do not result in true grammaticality violations.
Notes	POSTER SESSION I
Notes	Individual differences in children's literacy development: The contribution of orthographic knowledge Nicole Conrad, Saint Mary's University Nicholas Harris, Saint Mary's University
Notes	Individual differences in children's literacy development: The contribution of orthographic knowledge Nicole Conrad, Saint Mary's University Nicholas Harris, Saint Mary's University Jennifer Williams, Saint Mary's University Studies have consistently shown that phonological processing skills are key contributors to both reading and spelling skills Less clear is the role of orthographic knowledge in developing literacy skill. Orthographic knowledge includes both word
Notes	Individual differences in children's literacy development: The contribution of orthographic knowledge Nicole Conrad, Saint Mary's University Nicholas Harris, Saint Mary's University Jennifer Williams, Saint Mary's University Studies have consistently shown that phonological processing skills are key contributors to both reading and spelling skills. Less clear is the role of orthographic knowledge in developing literacy skill. Orthographic knowledge includes both word specific knowledge of spellings of words and subword units as well as knowledge of the constraints on how letters in written words are organized within a language. The present study investigated how both types of orthographic knowledge contribute to spelling and reading ability. Fifty-five children completed measures of skills related to reading and spelling
Notes	Individual differences in children's literacy development: The contribution of orthographic knowledge Nicole Conrad, Saint Mary's University Nicholas Harris, Saint Mary's University

POSTER	SESSION I
POSTER SESSION I	POSTER SESSION I
Effects of bimodal production on multi-cyclicity in early ASL	
Deborah Chen Pichler, Gallaudet University Ronice Miller de Quadros, Universidade Federal de Santa Catarina Diane Lillo-Martin, University of Connecticut - Storrs In this study, we test the proposal that bilingual children show phonological cross-language influence between their two anguages. We investigate multi-cyclicity in the sign production of hearing, bilingual children acquiring either American Sign Language (ASL) and spoken English, or Brazilian Sign Language (LSB) and Brazilian Portuguese. Previous studies have reported a strong tendency towards multi-cyclicity in	
the early production of deaf signing children. The data for the current study is drawn from a longitudinal corpus from bimodal-bilingual children in the US and Brazil. If multi-cyclicity is a general feature of early sign development, it should also characterize the production of these early bilingual signers. Unlike typical bilinguals, however, these children have the option of producing bimodal utterances (simultaneous speech and sign). We suggest that the heavily bimodal nature of these data, as well as age, may account for their divergence from the patterns reported in previous studies.	
POSTER SESSION I	Notes
The contours of lexico-phonological dissociation in English- French interlanguage	
Sabelle Darcy, Laurent Dekydtspotter, Rex Sprouse, John H. G. Scott, Justin Glover, Michael McGuire, Christiane Kaden, Indiana University	
The contrasting results of a timed lexical decision task with repetition priming and an ABX task suggest that the mechanisms underlying category discrimination and lexical encoding may be dissociated in L2 acquisition. On categorical discrimination as measured in the ABX task, both our Advanced English-French L2ers (n=20) and our Intermediate English-French L2ers (N=22) are non-target-like, making significantly errors than French native speaker controls. However, the groups differ on exical encoding. The Advanced L2ers have established a lexical contrast for the two pairs of French vowels examined ([u]~[y] and [æ]~[o]); Intermediate English-French L2ers (N=22) have not established a lexical contrast for [u]~[y] minimal pairs, experiencing ispurious homophony and a significant reduction in reaction time during the lexical decision task, comparable to the one observed on the second occurrence for true repetitions. The other contrast [æ]~[o] was successfully encoded lexically.	

Language acquisition of school-aged internationally adopted children from China

Audrey Delcenserie, McGill University Fred Genesee, McGill University

The present study is the third phase of a longitudinal study (Gauthier & Genesee, 2008) whose purpose is to investigate the language abilities of Internationally Adopted (IA) children adopted by French-speaking parents. Adoptees (n=28) were between 6;9 and 8;10 years of age and were compared to monolingual non-adopted French-speaking children (n=28). Groups were matched for non-verbal cognitive abilities, parental level of education, family income, age, and gender. Participants' were assessed using a large battery of tests.

Results showed that IA children had lower performances than matched controls on measures of expressive vocabulary, receptive grammar, and word definitions. IA children also performed below controls, and below the norms, on a test of phonological short-term memory (i.e. sentence repetition test). Similar results were shown in the previous phases of the longitudinal study, suggesting that IA children have persistent verbal memory difficulties, which might, in turn, be related to their language difficulties.

POSTER SESSION I

Seeing through the surface: A model for direct acquisition of phoneme categories

Brian Dillon, University of Maryland - College Park Ewan Dunbar, University of Maryland - College Park William Idsardi, University of Maryland - College Park

Recent attempts to model infant learning of sound categories as a process of statistical cluster identification implicitly endorse a long-standing view of phoneme category learning as a two-stage process. These models focus on an initial stage of surface phone identification, and to the extent that any learning of abstract phoneme categories is assumed at all, it is taken to be a subsequent process that groups phones into phonemes by identifying systematic relations among them. Here we argue for an alternative one-stage approach that directly learns phonemes by folding the task of identifying allophonic processes into the initial acoustic clustering process. Results from computational simulations of learning categories from a corpus of Inuktitut vowels yield the surprising result that the one-stage approach is more reliable than the traditional two-stage strategy.

Notes
·
·

POSTER SESSION I

Morpheme segmentation from distributional information

Sara Finley, University of Rochester Newport Elissa, University of Rochester

Morphological structure of languages involves systematic associations among related word forms and mappings of these forms onto meaning. While previous studies of morphological learning rely on semantic associations, a learning mechanism for morphological structure must explain the fact that forms that share meanings are likely to share the same form. We performed several artificial grammar learning experiments testing whether learners can decompose words into stems and affixes, in the absence of semantic information. These mini languages consisted of CV-CV-CV words created by concatenating stems (CVCV) with affixes (CV). In Experiment 1, learners showed knowledge of both familiarity and productivity of suffixes. In Experiment 2, learners showed knowledge of the parsing of the words into stems and affixes. These results show that learners can use distributional information to parse words into stem and affix units, suggesting learners can extract distributional regularities in morphologically related words, even if semantic information is sparse.

Using discourse and social information to infer speakers' referential intentions

Michael C. Frank, Massachusetts Institute of Technology Noah D. Goodman, Massachusetts Institute of Technology Anne Fernald, Stanford University

Joshua B. Tenenbaum, Massachusetts Institute of Technology

We measured the quantitative contribution of discourse and social information toward predicting speakers' referential intentions. We hand-annotated a corpus of videos of mothers interacting with 6-, 12-, and 24-month-olds. Both the physical presence of an object and its presence in the discourse (being referred to in the previous sentence) were powerful cues for a learner to guess the meaning of a novel word. Discourse information is only useful, however, if learners can occasionally guess what is being talked about to begin with. We measured the effectiveness of predicting what was being talked about on the basis of what mothers were looking at, pointing to, and holding. Although all three cues were relatively reliable none of them were individually sufficient to infer the correct referent in more than a minority of cases. These results suggest that even simple object noun learning may require integrating multiple sources of information.

POSTER SESSION I

The acquisition of noun classes in Tsez: Computational and experimental results

Annie Gagliardi, University of Maryland - College Park Jeffrey Lidz, University of Maryland - College Park Maria Polinsky, Harvard University

Many researchers argue that acquiring abstract morphosyntactic categories depends on the existence of correlated cues to those categories, where correlated cues are features unifying a subset of the members of those categories. Most of this research relies on the acquisition of artificial languages in the laboratory. Our work focuses on Tsez, a minority language spoken in Dagestan, and is novel in two dimensions: (1) we explicitly link laboratory findings on correlated cues with natural language acquisition and (2) this is the first language acquisition work on a Northeast Caucasian language. We investigated the correlated cue hypothesis (CCH) in noun classification in Tsez by (1) using computational models to identify relevant correlated cues to the four gender classes (2) showing that adult and preschool Tsez speakers are sensitive to these cues in classifying novel nouns (3) showing that children's behavior with noun classification mirrors a Bayesian model in-line with the CCH.

POSTER SESSION I

The role of maternal input and interactional strategies in the early lexical development of internationally-adopted children

Karine Gauthier, McGill University Fred Genesee, McGill University

This study presents findings on patterns of communication between internationally-adopted children and their mothers in order to better understand the nature of these interactions and the influence of maternal input on language learning. We examined joint attention and maternal language use in 21 mother-child pairs: 10 pairs included 15 month-old children adopted from China living in francophone families, and 11 included francophone children living with their biological families. Vocabulary development was assessed at 15 and again at 20 months of age using the MacArthur Communicative Development Inventory. The results suggest that adoptive mothers play an active role in promoting joint attention and that the interaction strategy they use the most, redirecting their child's attentional focus, contrasts with what has been shown to be effective for biological children raised in Western cultures (Baldwin, 1991; Tomasello & Farrar, 1986) but is, nevertheless positively associated with the internationally-adopted children's later lexical development.

Notes	
·	

Modeling early sentence interpretation with shallow representations of syntactic structure

Yael Gertner, University of Illinois - Urbana-Champaign Michael Connor, University of Illinois - Urbana-Champaign Cynthia Fisher, University of Illinois - Urbana-Champaign Dan Roth, University of Illinois - Urbana-Champaign

We propose that abstract but shallow representations of sentence-structure guide early sentence interpretation: Toddlers build partial structures preserving the number and order of nouns in a sentence. How useful are such shallow representations? Do they support learning about English word-order from ordinary input? We present experiments with a computational model of semantic-role labeling (SRL) that learns to identify each verb's arguments, and determine their semantic roles. We created a Baby SRL that considers each noun a candidate argument and learns based on shallow representations of sentencestructure suggested by our proposal. When trained on child-directed speech, the Baby-SRL learned that the first of two nouns tends to be an agent. It learned this even when presented only with noisy internally-generated feedback based on the animacy of a set of known nouns. Together with experiments with children, these findings suggest that such representations provide a starting point for structure-guided sentence interpretation.

POSTER SESSION I

Wisdom comes with age: Effects of age-of-word-acquisition on phonological learning

Judith A. Gierut, Indiana University Michele L. Morrisette, Indiana University

The effects of age-of-word-acquisition (AoA) on phonological acquisition were examined in 10 preschoolers (46-71 months) with functional phonological delays. AoA was of interest due to its positive correlation with word frequency (Lewis 1999), and reported benefits that accrue to the productive phonology following exposure to high frequency words (Morrisette & Gierut 2002). Using a multiple-baseline experimental design, children were assigned to treatment of an erred sound in either early or late AoA words that were further blocked by word frequency. The dependent variable was generalization accuracy of treated and untreated sounds. Results indicated that late AoA words induced greater generalization, with effect sizes 4 times those of early AoA words. Results are interpreted relative to the phonological completeness hypothesis (Brown & Watson 1987), and discussed relative to ERP evidence (Tainturier et al. 2003) that supports a phonological locus of AoA effects. [Supported by NIDCD 001694]

	Notes	
		•
-		

POSTER SESSION I

Vowel reduction, pitch accent and scalar implicatures in child English

> John Grinstead, Ohio State University Jennifer Thorward, Ohio State University Laurie A. Maynell, Ohio State University Sharon Miriam Ross, Ohio State University

In this study, we examine the role of vowel reduction and pitch accent on the interpretation of the existential quantifier "some" in both implicature-generating and implicature-cancelling (downward-entailing) contexts. Our results show that adults use both vowel reduction and pitch-accent in important ways in these constructions, but that grammatical context appears to override prosody in implicature generation and cancellation. For children, there were clear effects of vowel reduction, especially in implicature generation contexts, but the prosodic effects were less clear, especially in implicature-cancelling contexts.

A bidirectional study of L2 pronominal subject and why the directionality of L1/L2 pairings matters

Tiffany Judy, University of Iowa

This study investigates null subject parameter resetting, focusing on the application of the Overt Pronoun Constraint (OPC) in two participant groups: Spanish-speaking learners of L2 English and English-speaking learners of L2 Spanish. If the subset/superset relationship of the two grammars matters as predicted by Full Transfer approaches, we expect only L2 learners of Spanish to be successful since this requires the acquisition of new features as opposed to the unlearning of pro. In such a case, Spanish learners of L2 English should wrongly apply the OPC to restrict coreference with embedded subjects in English (since all such subjects are overt), in contrast to the preferred native interpretation. Results from a Grammaticality Judgment Correction Task and a Context-Matching Task could be interpreted to support Full Access/Full Transfer approaches, although not entirely straightforwardly. The results, as they pertain to hypotheses of L1 transfer and implications for ultimate attainment, are discussed.

POSTER SESSION I

Development of infants' perceptual sensitivity to the vowel length effect

Eon-Suk Ko, State University of New York - Buffalo Melanie Soderstrom, University of Manitoba James Morgan, Brown University

Eight- and 14-month-old infants' sensitivity to vowel duration conditioned by post-vocalic consonantal voicing was examined using the Headturn Preference Procedure. Half the infants heard CVC stimuli with short vowels; half heard stimuli with long vowels. In both groups, some stimuli had voiced final consonants, whereas others had voiceless final consonants. Older infants showed significant sensitivity to mismatching vowel duration and consonant voicing in the short condition, but not the long condition; younger infants were not sensitive to such mismatching in either condition. The results suggest that infants' sensitivity to extrinsic vowel duration begins to develop between 8 and 14 months.

POSTER SESSION I

The mechanism underlying the learning of rules and exceptions in 14-month-old infants

Elena Koulaguina, University of Quebec - Montreal Rushen Shi, University of Quebec - Montreal

We examined the distributional nature of input which determines infants' learning of linguistic rules and exceptions. Infants were trained with sentences of an unknown natural language conforming to a word-order movement rule, with different proportions of noise instances exhibiting no movement. During Test, novel (Exp1-3) and noise (Exp4-5) sentences obeyed the trained rule versus another movement rule. Infants discriminated the rules being applied to novel sentences, following training with rule instances of 100% and 80% type frequency. In the 80%-type experiment, the token frequency of noise was high (50%), which nevertheless did not disrupt rule generalization to novel instances; however, when the trained rule and the unfamiliar rule were applied to those noise sentences, infants showed no discrimination, i.e., interpreting the noise as rule exceptions. When both type and token frequencies of noise were low (20%), infants generalized these instances to the trained rule, as they did for novel instances.

Notes	
•	
	_
	·

Distinguishing effects of early exposure and language dominance on perceptual sensitivity in Korean heritage learners

Sunyoung Lee-Ellis, University of Maryland - College Park William Idsardi, University of Maryland - College Park Colin Phillips, University of Maryland - College Park

To separate the contributions of early exposure and language dominance in early bilinguals' speech perception, this study examined Korean heritage speakers who were exposed primarily to Korean before age 4 but became English-dominant later. Their perceptual sensitivity was compared with English and Korean native speakers using two different measures: the speeded sequence encoding task (Dupoux et al, 1999) and the interference paradigm (Navarra et al, 2005). The results show that heritage speakers behaved like English native speakers: They failed to distinguish Korean lax /s/ and tense /s*/ but successfully distinguished English /kasta/ and /kasuta/, which violates Korean phonotactics. Our findings show language dominance may play a more important role than early exposure in bilingual speech perception. Early bilinguals appear to be able accommodate L2 contrasts if they have a similar level of exposure to heritage speakers, but are vulnerable to L1 loss due to reduced exposure at an early age.

POSTER SESSION I

Predictive parsing impedes word learning in 19-month-olds

Jeffrey Lidz, University of Maryland - College Park Rebecca Baier, University of Maryland - College Park

We show that infants' ability to use the syntactic context of a novel noun in order to assign it a meaning differs as a function of vocabulary size and age. We show that low-vocabulary 16-month-olds are better than high-vocabulary 16-month-olds or 19-month olds. 19-month olds, however, are able to use the syntax to learn a novel noun when the verb occurs in its most frequent syntactic frame. We argue that this effect derives from changes in the weighting of bottom-up vs. top-down cues in parsing.

Notes	
•	

POSTER SESSION I

Self-correction and the acquisition of liquid contrasts in L2 English

Moti Lieberman, McGill University

L2 speakers' acquisition of the phonology of their target language tends to be relatively unsuccessful, particularly compared to their abilities to acquire the other modules of their L2. One puzzling result from previous research is that of a production/perception asymmetry: L2 speakers able to produce segments novel in their L2 without reliably being able to perceive them. Such findings are not predicted by prominent phonological acquisition models or theories of L2 phonological acquisition. In this study, I test a heretofore unexamined population of highly advanced L1 Japanese / L2 English speakers who self-correct for substitution errors involving the English liquids, [1] and [1], surprising behaviour if they cannot reliably perceive the difference. Through speech error elicitation and word identification tasks, I show this set of self-correcting speakers has acquired the correct representation of the English liquid phonemes, and argue for the possibility of native-like L2 acquisition in the phonological domain.

Root infinitive interpretations in child Spanish-speakers with and without SLI

Dan McCurley, Ohio State University Teresa Pratt, Ohio State University John Grinstead, Ohio State University

In this study, we explore the interpretations that monolingual child Spanish-speakers associate with root nonfinite forms. There is evidence that bare stem forms in child English tend to have a non-modal (past or present tense) interpretation and that the morphological infinitive forms in child Dutch tend to have an irrealis interpretation. Both of these kinds of forms occur in the spontaneous and elicited production of typicallydeveloping (TD) child Spanish-speakers as well as those with specific language impairment (SLI). In this study, we explore Hyams' (2007) Closed Event Hypothesis in these populations and ask whether their impaired tense abilities will prevent lexical aspect from having an impact on their interpretations of nonfinite forms. Our findings support Hyams' Closed Event Hypothesis in that child TD Spanish-speakers, but not the children in the SLI group, showed effects of telicity in their interpretations.

POSTER SESSION I

Consequences of early experience for language acquisition

Robyn Mierzejewski, Boston University Leher Singh, Boston University Jacqueline Liederman, Boston University Jonathan Barnes, Boston University

Infants' ability to discriminate most non-native phonemic contrasts declines during their first year as they attune to native language contrasts. Infancy may thus serve as a "critical period" during which the phonology of the birth language is assimilated. This may not apply to internationally adopted children who often experience an interrupted course of language development, learning a second language as their primary language, and therefore essentially undergoing two sequences of phonological attunement. This study examines whether such individuals retain sensitivity to the phonology of their birth language given the primacy of this experience. Adopted and non-adopted children were tested on discrimination and re-learning of sound contrasts relevant to the birth languages of adopted children. While there were no group differences in initial discrimination abilities, adopted individuals were better able to master Hindi sound contrasts after training suggesting that early exposure may confer some privileges on subsequent learning of particular contrasts.

POSTER SESSION I

Morphological errors in L2 learners and heritage language learners: Missing surface inflection or simply experience?

Silvina Montrul, University of Illinois - Urbana-Champaign

Morphological variability and the source of these errors have been hotly debated in L2 acquisition. A recurrent finding is that postpuberty L2 learners often omit or use the wrong affix for nominal and verbal inflections in oral production, but less so in written tasks. According to the Missing Surface Inflection Hypothesis, L2 learners have intact functional projections, but errors stem from problems during production only (a mapping or processing problem). In this paper we show that morphological variability is also characteristic of heritage speakers (early bilinguals of ethnic minority languages) who were exposed to the language naturalistically in early childhood, but failed to acquire age-appropriate linguistic competence in the family language. However, because errors in heritage speakers are more frequent in written than in oral tasks, the Missing Surface Hypothesis does not apply to them. Morphological errors in the two populations seem to be related to the type of experience.

Notes
•

'Nomi Nomi how does your network grow?' Applying methods from network science to the study language acquisition

Matthew O'Donnell, University of Michigan Nick Ellis, University of Michigan

Network science analyzes the structure and dynamics of interconnected elements in systems as diverse as yeast proteins and social networks (Newman 2003; Albert & Barabasi 2002). Language structure and usage can added to these as network properties, e.g. 'small world', scale-free (Zipfian) degree distributions and 'preferential attachment', hold for language networks (Solé et al. 2005; Ferrer i Cancho & Solé 2001). This study applies methods from network science to the study of language acquisition by building co-occurrence networks from CHILDES transcripts (including Sachs 1983) at different time periods and for specific constructions (e.g.WH-questions). Network measures, including number of nodes and edges, average path length, degree and clustering, provide additional measures of linguistic complexity which complement MLU and vocabulary diversity by quantifying their synergistic interactions in the emergence of grammar, including the shift from fixed formulas to formulaic frames to more creative language.

POSTER SESSION I

Computation and reuse in language learning

Timothy O'Donnell, Harvard University
Noah D. Goodman, Massachusetts Institute of Technology
Jesse Snedeker, Harvard University

Joshua B. Tenenbaum, Massachusetts Institute of Technology

Language productivity is the result of a division of labor between storage and computation. An inventory of stored units, the lexicon, is combined via computation into more complex representations. A central question for linguistic and psycholinguistic theories is how the lexicon is acquired: why are certain units and not others stored? We present a model which formalizes this problem as a Bayesian optimization. Rather than viewing storage as an end in itself, the model proposes that the linguistic system learns to reuse previous computational work. The system optimally balances storage against computation over time: storing less requires computing more, and computing less requires storing more. To evaluate the model we conducted simulations on the acquisition of the English past tense. Like people the model a.) learns the regular "rule" (in the form of a lexical item with variables), b.) stores irregulars and high frequency regulars, and c.) exhibits a U-shaped developmental curve.

Notes	
	_
	_
	—
	_
·	

POSTER SESSION I

Working memory load and processing of contrastive focus in L2 French

Robert Reichle, University of Texas - Austin

14-channel electroencephalograms were recorded as native and L2 French speakers were presented with instantiations of informational and contrastive focus marked by a c'est cleft (e.g. C'est une montre qu'on voit sur la table "It is a WATCH that we see on the table"). Native and high-proficiency L2 subjects showed an early anterior increase in negativity for the processing of contrastive focus compared to informational focus; low-proficiency L2 subjects did not. The observed negativity is interpreted as an index of working memory load, similar to that described by Van Berkum et al. (1999). The results for native speakers and L2 learners suggest the possibility of more nativelike processing of contrastive focus for high-proficiency L2 learners, but not for low-proficiency L2 learners; this is consistent with other recent ERP studies of L2 processing (e.g. Osterhout et al., 2006).

Abstract auxiliary BE representation in two-year-old children: Evidence from syntactic priming

> Lilia Rissman, Johns Hopkins University Geraldine Legendre, Johns Hopkins University Barbara Landau, Johns Hopkins University

Competing theories of syntactic development attribute to the child differing levels of abstract knowledge, from adult-like representations to low-scope lexically-dependent schemata. We conducted a syntactic priming study to investigate whether two-year-old children possess abstract knowledge of the English auxiliary BE category. Children sometimes omit the auxiliary in spontaneous speech, and if children produce more auxiliaries after exposure to categorical as well as lexical priming, they may possess an abstract auxiliary BE category. 30 Englishspeaking children (2;2-3;3, M=2;9) listened to an experimenter describe two videos using sentences like the girl is swinging or the dogs are running, and were then asked to describe a novel scene. Relative to baseline, production of both auxiliary is and are increased after both lexical primes (e.g. prime = is, target = is) and within-category primes (e.g. prime = is, target = are). This result suggests that children possess abstract syntactic knowledge at an earlier age than some have claimed.

POSTER SESSION I

The acquisition of metrical opacity: A longitudinal case study from Northern East Cree

Yvan Rose, Julie Brittain, Carrie Dyck, Erin Swain, Memorial University of Newfoundland

This paper focuses on the acquisition of the relatively opaque metrical system found in Northern East Cree. The NE Cree stress (pitch-accent) system generally displays quantity-sensitive, iambic (weak-strong) binary feet and full foot extrametricality. Constraints on word-minimality and phonological processes such as unstressed short vowel deletion further complicate the analysis of this language as they obscure foot extrametricality. The acquisition of this system thus requires a combination of generalizations about segmental and prosodic characteristics of the target words. We introduce longitudinal data from the acquisition of NE Cree by a first language learner code-named A1. We show, based on instrumental analyses of the child's productions, that A1 quickly masters target-appropriate pitch as her main cue to syllable stress. Moving on to metrical structure, we show that the child does not learn the overall stress system on a word-by-word basis. Rather, she displays stress errors that suggest clear grammatical conditioning.

POSTER SESSION I

The home literacy environment as a predictor for toddlers' language development

Sara Schmitt, San Diego State University Margaret Friend, San Diego State University

Previous literature has shown that using a broad definition including both literacy and social-pragmatic factors better predicts language and literacy development in preschoolers than using a narrow definition; however, there is a dearth of literature looking at this relationship in toddler-aged children. This is surprising considering that children at this age are developing language quite rapidly, and interactions in the home are a primary source of exposure to language. The present study investigates the predictive and convergent relationships between the home literacy environment (HLE) and early language development in a diverse sample of toddlers using both parent report and observational measures. Parent reports of the HLE significantly predicted subsequent parent reports of language production, however, observed HLE interactions were not related to language development. This research is an important step toward understanding the link between home environments and language.

	Notes	
	•	
-		

Turn-taking in infancy: Are mother-infant interactions really 'conversational'?

Melanie Soderstrom, University of Manitoba Rachel Bach, University of Manitoba

Snow's (1977) conversational model of mother-infant interactions predicts that infants begin to respond in a conversational manner before the onset of speech. To test this, recordings from two mothers interacting with their babies (Soderstrom et al., 2008) were examined to see whether infants interrupted maternal speech and/or vice versa. Evidence pointed to mothers responding to turn opportunities (silence periods) in infant vocalizations, but not vice versa. The length and type of maternal utterance was related to the extent of turn-taking behavior.

POSTER SESSION I

Given before new: Effects of discourse status on child syntactic choices

Nola Stephens, Stanford University Eve Clark, Stanford University

Adults tend order given information before new information, but there is little consensus about the extent to which children use word order to mark discourse status. This paper presents data from two experimental studies with English-speaking children (ages 3-5), one on locative alternation and one on dative alternation. For both studies, we systematically manipulated the discourse status of the two postverbal arguments and found that preschool children use given-before-new ordering for these arguments. Importantly, these discourse effects emerged for some verbs but not others. Verb-by-verb differences can be explained by patterns in the input. Children use given-before-new ordering, except when the input provides ample evidence that the given verb resists alternation (i.e. when the verb's argument structure is entrenched). Taken together, the results are consistent with a processing account of given-before-new ordering (that given information is more accessible, retrieved faster, processed more easily, and expressed earlier).

	Notes	
•		

POSTER SESSION I

Letter name knowledge and representation of sublexical units in spelling tasks at the beginning of the kindergarten year

Elena Zaretsky, University of Massachusetts - Amherst Cynthia Core, Florida Atlantic University

Common assumptions in early literacy development suggest the role of phonological awareness (PA) in learning to read and spell. A minority opinion follows that explicit PA knowledge may not be essential for linking print to speech sounds and point to predictive power of alphabet knowledge. This study examines early spelling attempts of kindergartners at the beginning of the year. We explored the hypothesis of possible correlation between letter-name knowledge and early spelling development, as well the onset-rime representations in early spelling and the letter-name pattern, i.e., CV (b) vs. VC (m). Our results indicate that letter-name knowledge is strongly correlated with the representation of both, the onset and rime in early spelling and letters with the CV pattern are more likely to be used to represent onsets and rimes. These results indicate that alphabet knowledge provides a link between speech sounds and print in the early stages of literacy development.

POSTER SESSION I	POSTER SESSION I
From linear sequences to abstract structures: Distributional information in infant-direct speech	
Hao Wang, University of Southern California Toben H. Mintz, University of Southern California	
Syntactic categories like noun and verb are the building blocks of grammar. Lexical categorization is thus a crucial part of language learning. In child-directed speech, distributional patterns in linear word sequences like frequent frames (FFs) have been shown to be informative categorization cues (Mintz, 2003). Why are these simple linear patterns such robust category cues when grammatical categories are abstract constructs involved in hierarchically organized syntactic structures? In two corpus analyses, we examine the grammatical relations with which FFs and other distributional environments are associated. We found that the grammatical relations selected by FFs are highly consistent and internally coherent and a target and its context in a FF are more closely related syntactically compared to other distributional environments. This tightly constrains the word category occurring in the target position, leading to robust categorization. Thus, FFs can be viewed as a proxy for structural information that can serve as a cue to lexical categories.	
N. C.	Name of the second
Notes	Notes

Integration of discourse and semantic structure in children's resolution of ambiguous pronouns

Joshua Hartshorne, Harvard University Jesse Snedeker, Harvard University

The interpretation of non-reflexive pronouns depends on a complex interplay of semantic factors and contextual constraints. Evidence has been inconsistent as to whether sensitivity to contextual constraints such as the subject-bias emerges early or late in development (Arnold, Brown-Schmidt & Trueswell, 2007; Song & Fisher, 2005). We tested whether five year-olds would be sensitive to a well-studied semantic factor, implicit causality (Garvey & Caramazza, 1974), which is particularly apparent in sentences involving psych-verbs (compare: Sally frightens/fears Mary because she is mean). Pretesting revealed 5yos but not 4yos reliably process the semantic structures of both stimulus-subject (frighten, confuse) and stimulus-object (fear, love) psych-verbs. Both 5yos and adults resolved subsequent pronouns to the subject of stimulus-subject verbs and the object of stimulus-object verbs (5yos non-significant for stimulus-object verbs). Eyetracking revealed that this effect emerges rapidly in both adults and children for stimulus-subject verbs, but considerably more slowly for stimulus-object verbs.

Session B--East Balcony

Maximality and domain restriction: Evidence from adjectival modifiers

Alan Munn, Michigan State University Karen Miller, Calvin College Cristina Schmitt, Michigan State University

Recent work re-examining children's errors in the use of the definite determiner described by Maratsos1972 and Karmiloff-Smith1979 has claimed that children lack the Maximality/ Uniqueness Presupposition associated with the definite determiner (Wexler, in press). In Munn et al. 2006, using an act-out task, we found that children obeyed maximality constraints but behaved differently from adults when the maximality requirement was satisfied by an implicit restriction. Here we present new evidence from domain restrictions that children indeed have the maximality presupposition, since they are sensitive to different types of restrictors, and use them to satisfy maximality. Children and adults distinguish between definite noun phrases with non-scalar (colour) adjectives such as the green penguin next to the igloo compared to those with scalar (size) adjectives such as the tall penguin next to the igloo. Colour adjectives were predicted correctly not to be useable to form implicit restrictions while size adjectives were.

	Notes	
•••		
		
		· · · · · · · · · · · · · · · · · · ·

Session C--Conference Auditorium

What's in a manner of speaking? Children's sensitivity to partner-specific referential precedents

Danielle Matthews, University of Manchester
Elena Lieven, Max Planck Institute for Evolutionary
Anthropology
Michael Tomasello, Max Planck Institute for Evolutionary
. Anthropology

Do young children form 'referential pacts'? If a person has referred to an object with a term (e.g., 'the horse'), will children expect her to use this term in the future but allow others a different expression (e.g., 'the pony')? 128 3-year-olds and 5-year-olds co-operated with an experimenter (E1) to move toys to new locations on a shelf. E1 established referential terms for all toys in a warm up game. Then, either the original partner, E1, or a new partner, E2, played a second game with the same toys. In this game, toys were referred to with either their original terms from the warm up or with new terms. All children were slower to react to new terms than old. This difference in reaction times was significantly greater in the original partner condition (but only the first time a new term was used). This demonstrates sensitivity to partner-specific referential precedents.

Online processing of reflexives and pronouns by children and adults: Evidence from eye movements during listening

Kaili Clackson, Claudia Felser, Harald Clahsen, University of Essex

Previous research on online child sentence processing suggests that children exhibit more difficulty than adults controlling multiple sources of information when making referential decisions, but how this affects children's real-time application of binding principles has not been specifically examined. Using the visual world paradigm and a corresponding offline task we investigate how a gender-matching but structurally inaccessible antecedent affects 6-9 year-old children's processing of reflexives and pronouns. Results show that although children's ultimate interpretation for a reflexive/pronoun is constrained by Binding Principles in the same way as adults', they are temporarily distracted when multiple cues support a discourse-prominent competitor antecedent, confirming earlier findings that discourse prominence influences children's anaphor resolution. We suggest that the observed child/adult differences stem from children's greater difficulty in deactivating a gender-matching discourse-prominent competitor antecedent during processing, indicating that even school-age children are less efficient than adults in juggling multiple sources of information during sentence comprehension.

Session B--East Balcony

Pragmatic tolerance and speaker-comprehender asymmetries

Nafsika Smith, Cambridge University Napoleon Katsos, Cambridge University

Previous research reports a speaker-comprehender asymmetry for informativeness, whereby young children provide all the information they have when asked a wh-question (speaker's perspective), but do not reject a puppet who provides only part of the information (comprehender's perspective). We propose that the reason why young children do not reject their interlocutor's under-informative responses is not because they are not sensitive to under-informativeness but because they are tolerant towards pragmatic infelicity. In experiment 1 five-year-old English-speaking children behave as under-informative comprehenders in a task where they would have to categorically reject pragmatically infelicitous utterances, but they behave as informative comprehenders in experiment 2 where they are offered a scale to rate each critical utterance on and in experiment 3, an act-out task that does not require them to pass judgement on the critical utterance (either categorically or on a scale). Evidence for pragmatic tolerance can be found in the adults' justifications for under-informative responses as well.

Session C--Conference Auditorium

That doesn't ring a bed: When integrating cues, children's errors reflect more advanced cognitive control

Sarah Creel, University of California - San Diego Melanie Tumlin, University of California - San Diego

Children's difficulties in spoken language processing have been linked to their poor cognitive control—the capacity to switch attention to a newly relevant dimension or interpretation. Particularly, children make sentence interpretation errors that suggest they cannot let go of an initial erroneous parse. We gave children a word recognition task where they helped a cartoon bear locate objects: "Teddy wants to blow out the CANDLE [or CANDY]. Can you show him where it is?" Children sometimes misrecognized "candy" as "candle" when the verb context better fit "candle." Interestingly, these errors in word recognition characterized only the children with better cognitive control task performance. Errors occurred particularly when children faced conflicting cues to sentence meaning. We argue that these apparent errors reflect more advanced linguistic cue integration, implicating cognitive control in maintaining multiple cues in memory.

	Notes	
<u> </u>		

The role of lexical bias and global plausibility in children's online parsing: A developmental shift from bottom-up to top-down cues

Jesse Snedeker, Harvard University Amanda Worek, Harvard University Carissa Shafto, University of Louisville

How do children infer the grammatical structure of an utterance as they are hearing it? To explore this question we've examined the interpretation of globally-ambiguous prepositionalphrase attachments using the visual-world paradigm ("Pinch the frog with the barrette"). Prior studies demonstrate that interpretation in both children and adults is strongly dependant on the verb in the utterance. This effect could be driven by: 1) bottom-up lexical information (e.g., argument structure or distributional statistics), or 2) differences in the plausibility of the meanings generated by each structure. In the present study, we factorially manipulated the attachment preference of the verb and the global plausibility of the VP-attachment. The actions of five-year-olds and adults (N=72 each) were affected by both variables. However, in children verb effects emerged earlier and were more robust, while in adults the effects of plausibility dominated. We conclude that bottom-up information may take priority in early language comprehension.

Session B--East Balcony

Focus, polarity, and tag questions: Developmental links

Andrea Zukowski, University of Maryland - College Park

We tested and confirmed a developmental link between two superficially unrelated language phenomena that both develop extremely late, one thought to be syntactic (choosing the correct polarity for tag questions), and one pragmatic (calculating implicatures about the speaker's beliefs in yes-no questions with contrastively focused polarity, as in 'DO you like chocolate?'). This link provides a possible explanation for how children might solve a classic learnability problem that children regularly get into: while adults consistently produce negative tags for affirmative statements and vice-versa, many children age 10 and even older obey no such restriction, and thus their grammars seem to project beyond adult grammars. Our test of this link with eighteen 8-12 year-old children involved constructing and administering multiple tests of tag question knowledge and multiple tests of comprehension of contrastive focus, including the first successful tool for assessing children's comprehension of focused polarity in yes-no questions.

Notes
 ,

Session C--Conference Auditorium

How selective are 3-year-olds in imitating novel linguistic material?

Joern Klinger, Max Planck Institute for Evolutionary Anthropology Colin Bannard, Max Planck Institute for Evolutionary

Anthropology

Michael Tomasello, Max Planck Institute for Evolutionary

Anthropology

We report on two experiments exploring imitation in language learning. We played a game with 3.5-year-olds in which they and an experimenter (E1) were required to request a series of objects from a gamemaster. E1 always went first and always preceded the familiar name of the object with a novel "adjective". In a first experiment we found that children imitated the adjective significantly more when it was essential to determine reference. In a second experiment we found that children imitated the adjective significantly less when E1 performed a gesture indicating that the adjective was unintentional. These findings suggest that children can use inference of the addressee's needs and the speaker's objectives to selectively filter out redundant and unintended material when imitating. Imitation in both the redundant and the accidental conditions was nonetheless over 50% and increased across trials, indicating that children sometimes chose the least risky strategy of rote copying.

Novel labels support 10-month-olds' attention to novel objects

Emily Mather, University of Oxford Kim Plunkett, University of Oxford

Infants aged 15 to 17 months onwards use a mutual exclusivity response to map novel labels onto novel objects, rather than familiar objects (Halberda, 2003; Markman, Wasow, & Hansen, 2003). The developmental origins of mutual exclusivity are unknown. We investigated whether young infants, with limited vocabulary resources, would display mutual exclusivity. In a preferential looking task, 10-month-olds viewed pairs of familiar and novel objects, and heard either the familiar object name, a novel object name (meb or wug), or a control phrase. The infants developed a greater preference for the novel object in the novel label condition than in the other two conditions. The infants did not appear to comprehend the familiar names, indicating that they did not explicitly rule out familiar objects as referents. The evidence suggests that 10-month-olds' behavior is driven by a general attentional constraint. Mutual exclusivity, as a linguistic constraint, might emerge from simpler learning mechanisms.

Session B--East Balcony

Comprehension of functional morphemes by Labrador Inuttitut receptive bilinguals

Marina Sherkina-Lieber, University of Toronto

Receptive bilinguals (RBs) are individuals who seem to understand but not to speak their family language. Are the semantic features of functional morphemes accessible to them?

RBs in this study are Labrador Inuit, fluent speakers of English with receptive knowledge of Inuttitut as a result of incomplete L1 acquisition (17 with high comprehension proficiency (HRBs), understanding 70-90% of the input, and 3 with low comprehension proficiency (LRBs), understanding 25% of the input). Participants listened to mini-stories in Inuttitut, and answered comprehension questions in English. The questions tested their understanding of tense, aspect, and agreement.

HRBs showed comprehension of contrasts tested, though success varied, with fluent-like comprehension of aspectual suffixes and almost fluent-like comprehension of the past/future contrast in tense suffixes, but less successful recovering of the antecedent of a null subject from agreement markers, and even less so identifying remoteness degrees in tense suffixes. LRBs showed no knowledge of these morphemes.

Session C--Conference Auditorium

Approximate number representations in the acquisition of most

Justin Halberda, Johns Hopkins University Jeffrey Lidz, University of Maryland - College Park Jennifer Merickel, University of Maryland - College Park Tim Hunter, University of Maryland - College Park Paul Pietroski, University of Maryland - College Park

We explore the acquisition of most in English, assessing the counting ability (i.e., highest exact cardinality understood) and most-comprehension of 120 children (age range: 3;0-4;11, mean = 3;7). Children judged sentences like, "are most of these animals sheep or skunks" in contexts that varied the ratio of the two sets of animals. We replicate previous findings (a) that some children acquire most prior to acquiring cardinality and (b) that some children show knowledge of cardinality without knowledge of most. New evidence from psychophysical modeling of performance reveals the hallmark ratio-dependence of children relying on the Approximate Number System to evaluate most; suggest that a significant number of children persist in evaluating most via the ANS even after attaining full-counting ability. Other children engage an exact cardinality meaning for most, providing evidence for two distinct understandings of most in children with similar cardinality knowledge.

Notes

Sleepy vs. sleeping: Preschoolers' sensitivity to morphological cues for adjectives and verbs in English and French

Lulu Song, Roberta Golinkoff, Aimee Stahl, Weiyi Ma,
University of Delaware
Thierry Nazzi, Université Paris Descartes
Sanaa Moukawane, Université Paris Descartes
Kathy Hirsh-Pasek, Temple University

As adjectives and verbs have similar distributions and are both predicated over nouns, they offer a unique opportunity to examine the role of morphology in children's identification and interpretation of these word classes. We labeled novel characters performing novel actions with novel adjectives or verbs: Mike is blicky/blicking. Children were asked to interpret the meaning of the novel words by choosing another animation that matched either in property or in action. Results showed: 1) English-learning preschoolers identified the target for both adjectives and verbs with morphological cues alone, 2) Frenchlearning children required additional syntactic cues to interpret the verbs, and 3) children in both language groups found verbs harder than adjectives. These findings indicate that any generalizations about the use of specific linguistic cues must be conditioned by the properties of the particular language. This study offers a unique comparison of and new insights into adjective and verb learning.

Notes

Session B--East Balcony

Optionality of inversion in bilingual native grammars: A case of L1 attrition?

Silvia Perpian, University of Illinois - Urbana-Champaign

Native speakers immersed in a dominant L2 setting after puberty can present crosslinguistic influence or emerging optionality in their L1 syntax (Sorace 1999, 2000, 2005; Tsimpli et al. 2003, 2004). Ultimately, this may result in attrition or loss in the native grammar.

This study analyzed the processing, comprehension and production of direct object and oblique Spanish relative clauses (RC) of two groups of Spanish native speakers, a monolingual group and a bilingual (L1 Spanish- L2 English) group. Spanish RCs typically present the inverted VS order, with the option of having marked SV order regulated by phonological and discourse-pragmatic factors. On the other hand, English RCs have a fixed SV word-order.

Results showed striking differences in inversion frequencies between the two groups. Particularly, these results indicate that the bilingual group is converging with the SVO word order of English, showing crosslinguistic influence at the domains placed at the external interfaces.

Session C--Conference Auditorium

The representation and processing of measure phrases by fouryear-olds

Kristen Syrett, Rutgers University - New Brunswick Roger Schwarzschild, Rutgers University - New Brunswick

Three complementary experiments show that four-year-olds correctly analyze Attributive Measure Phrases (MPs) (e.g., 3pound strawberries, 2-cup cards) as attributive modifiers and that they grasp the semantic consequences of that analysis, differentiating them from similar phrases with subtly different syntax: nominal compounds (e.g., 2 cup-cards), and pseudopartitives (e.g., 3 pounds of strawberries, 2 cups of cards). That children this age differentiate between attributives and pseudopartitives (as seen in subtraction scenarios) demonstrates that they are beginning to understand how these phrases track measurement - either total quantity or measurement per unit. Furthermore, when incrementally parsing these phrases, children appear to experience pressure to interpret numerals as cardinality indicators. This trend has the effect of masking children's underlying syntactic and semantic knowledge and explains a sensitivity to the mass/count nature of the modified noun (3-pound strawberries v. 3-inch ribbon). We compare this result to similar findings in the literature with other linguistic expressions.

LUNCH SYMPOSIUM

The dynamics of event perception and event description: Implications for verb learning

John C. Trueswell, University of Pennsylvania

When we inspect a picture, or almost any visual scene, our eyes rapidly dart from person to person, place to place, and object to object. Research into understanding the dynamics of scene perception indicates that these eye movements, although partially driven by lower-level visual factors, reflect goal-directed categorization processes: The entities, events and states of affairs are placed into task-relevant categories, designed to achieve immediate and longer-term goals. In this talk, I will present a series of eyetracking experiments on scene perception and description, all of which are designed to examine the relationship between nonlinguistic and linguistic encoding of events. One set of experiments focuses on the relationship between attention and the assignment of grammatical Subject in English. Another set examines how these attention and description patterns may inform children's learning of verbs. The findings as a whole provide insights into how events are encoded linguistically and nonlinguistically, and how the detailed mappings between these representations are discovered by the language learner.

LUNCH SYMPOSIUM

Common ground and perspective-taking in language processing

Michael K. Tanenhaus

Department of Brain and Cognitive Sciences

University of Rochester

Successful communication would seem to require that speakers and listeners distinguish between their own knowledge, commitments and intentions, and those of their interlocutors. A particularly important distinction is between shared knowledge (common ground) and private knowledge (privileged ground). Keeping track of what is shared and what is privileged would seem, however, to be too computationally expensive and too memory intensive to inform real-time language processing--a position supported by striking experimental evidence that speakers and listeners act egocentrically, showing strong and seemingly inappropriate intrusions from their own privileged ground. I'll review recent results from my laboratory demonstrating that (a) speaker's utterances provide evidence about whether they believe information is shared or privileged and (b) listeners are extremely sensitive to this evidence. I'll suggest an integrative framework that explains discrepancies in the literature and might be informative for researchers in the acquisition community.

LUNCH SYMPOSIUM

Kay Bock

Grammatical agreement is a prototype of what syntax does for language and language users, flagging linguistically the parts of utterances that belong together mentally. The power of agreement, like syntax more generally, is that it works whether or not the parts that belong together mentally appear together linguistically. The aim in this talk is to present new evidence for a link between simple number grammar and simple number apprehension in adult language production. The evidence points to a bridge between number sense and number syntax that could be built from native number cognition and serve to support the acquisition of number agreement systems.

LUNCH SYMPOSIUM

Why Agree? Why Move?

UNIFYING AGREEMENT-BASED AND DISCOURSE CONFIGURATIONAL LANGUAGES

Shigeru Miyagawa

"Miyagawa goes straight to the heart of the crucial questions of linguistics: how are natural human languages the same, and in what ways can they be different? To see how he compares and substantially unifies the syntax of case-marking, head-final languages like Japanese, with agreement-rich, head-initial languages, like English and Bantu informs this powerful book. It is rare to see this even attempted with such sophistication, much less achieved. Hearned a lot."

— Mark Baker, Rutgers University Linguistic Inquiry Monograph 54 • 200 pp., \$25 paper

The Locative Syntax of Experiencers

Idan Landau

"The central idea of this monograph, ties together in a theoretically simple and revealing way the range of seemingly disparate quirks of experiencer constructions that have dogged linguists for decades. A descriptively rich, thoroughly researched, commendably compact, and comprehensive pageturner." — Marcel den Dikken, CUNY Graduate Center

Linguistic Inquiry Monograph 53 • 176 pp., \$26 paper

Distributed Reduplication

John Frampton

"Presents a totally novel account of a range of classical problems in phonology. I expect that his book will have a significant impact not only on future work on reduplication, but will influence how research in phonology is conducted in the years to come."

--- Morris Halle, MIT Linguistic Inquiry Monograph 52 • 220 pp., \$32 paper

Locality in Minimalist Syntax

Thomas S. Stroik

"After a good fifteen years of intense research and theorizing on the design of the language faculty, Tom Stroik manages to take the minimalist enterprise to yet another level and offer new insights on the 'optimal' design of human language."

Kleanthes K. Grohmann, University of Cyprus

Linguistic Inquiry Monograph 51 • 168 pp., \$32 paper

Where Does Binding Theory Apply?

David Lebeaux

"This long-awaited book by Dave Lebeaux is highly recommended to those who pursue tight, albeit indirect, connections between empirical paradigms and theorizing at the most foundational level." — Hajime Hoji, University of Southern California Linguistic Inquiry Monograph 50 • 128 pp., \$25 paper

Contemporary Views on Architecture and Representations in Phonology

edited by Eric Raimy and Charles E. Cairns

Leading phonologists discuss contemporary work on the topics of metrical theory, feature theory, syllable theory, and the relation among grammatical modules.

Current Studies in Linguistics 48 • 424 pp., \$45 paper

Biological Foundations and Origin of Syntax edited by Derek Bickerton

and Eörs Szathmáry

"This book continues the debate between those who see the core rules of syntax as the result of biological evolution and those who stress cultural evolution atop more general brain functions. To this reader, the chapters enriched by consideration of brain and computation swing the weight of evidence to the latter camp."

— Michael Arbib, University of Southern California

Strüngmann Forum Reports • 430 pp., 20 color illus., 40 b&w illus., \$45 cloth

Computation, Cognition, and Pylyshyn

edited by Don Dedrick and Lana Trick

"Classical cognitive science has found itself in something of a pickle; a pickle that's so deep (if I may mix a metaphor) that most of its practitioners haven't so much as noticed that they are in it. What's so good about Pylyshyn—in particular what's so good about Pylyshyn's recent work—is that maybe, just possibly maybe, it shows us the way out of the pickle we're in." — from the introduction by Jerry Fodor 360 pp., 44 Illus., \$36 paper

Streetlights and Shadows

SEARCHING FOR THE KEYS TO ADAPTIVE DECISION MAKING

Gary Klein

"I know of no one who combines theory and observation—intellectual rigor and painstaking observation of the real world—so brilliantly and gracefully as Gary Klein."

— Malcolm Gladwell, author of Outliers and Blink

A Bradford Book • 336 pp., 30 illus., \$25.95 cloth

Radical Embodied Cognitive Science

Anthony Chemero

"The book provides an excellent summary of the central conceptual issues in cognitive science, focusing on the role of the ecological approach to perception and action in the development of embodied cognitive science. It is rambunctious, opinionated, and heterodox. It is also fun to read."

— Thomas A. Stoffregen, University of

A Bradford Book • 272 pp., 19 illus., \$30 cloth

Minnesota

What We Know about Emotional Intelligence

HOW IT AFFECTS LEARNING, WORK, RELATIONSHIPS, AND OUR MENTAL HEALTH

Moshe Zeidner, Gerald Matthews, and Richard D. Roberts

"The idea of emotional intelligence has been both useful and popular. Amid all the attention it has received, [the authors] have been essential in helping us to distinguish what is known scientifically about it from what is hoped for and what is hyped."

— Keith Oatley, University of Toronto, author of Emotions: A Brief History 456 pp., 44 illus., \$29.95-doth

Predicative Minds

THE SOCIAL ONTOGENY OF PROPOSITIONAL THINKING

Radu J. Bogdan

"Bogdan presents a highly original synthesis that draws on recent work in the philosophy of language, developmental psychology, evolutionary biology, and the philosophy of mind. This deserves to be an influential book." — Robert M Gordon, University of Missouri, St. Louis 184 pp., 3 illus., 525 doth

The Social Neuroscience of Empathy

edited by Jean Decety and William Ickes

"I anticipate this book to be one that I will frequently consult, as well as one to which I will refer many current and future students." — Sara D. Hodges, University of Oregon
Social Neuroscience series • 264 pp., 7 illus., \$40 doth

The Time of Our Lives

A CRITICAL HISTORY OF TEMPORALITY

David Couzens Hoy

"Drawing on years of immersion in the major traditions of continental philosophy, Hoy has produced a remarkable meditation on the implications of each for the perennially vexed question of temporality." — Martin Jay, University of California, Berkeley 328 pp., \$34 doth

Why We Cooperate

Michael Tomasello

with Carol Dweck, Joan Silk, Brian Skyrms, and Elizabeth Spelke Understanding cooperation as a distinctly human combination of innate and learned behavior. A Boston Review Book • 208 pp., \$14.95 doth

Wednesday Is Indigo Blue

DISCOVERING THE BRAIN OF SYNESTHESIA

Richard E. Cytowic, M.D., and David M. Eagleman, Ph.D.

afterword by Dmitri Nabokov "A unique and indispensable guide for anyone interested in how we perceive the world." — Oliver Sacks 320 pp., 83 illus., \$29.95 doth

On the Origins of Cognitive Science

THE MECHANIZATION OF MIND

Jean-Pierre Dupuy

with a new preface for this edition An examination of the fundamental role cybernetics played in the birth of cognitive science and the light this sheds on current controversies. 224 pp., \$25 paper

> Visit our BOOTH for a 30% DISCOUNT

To order call 800-405-1619 • http://mitpress.mit.edu • Visit our e-books store: http://mitpress-ebooks.mit.edu

The role of parent speech and gesture in children's spatial language and spatial thought

Erica Cartmill, University of Chicago Shannon Pruden, University of Chicago Susan Levine, University of Chicago Susan Goldin-Meadow, University of Chicago

How do children learn to think and talk about space? Spatial activities like puzzle play can improve children's spatial understanding. Our work investigates how parents talk and gesture about space during puzzle play and aims to determine whether parental gesture during spatial activities aids the development of children's spatial cognition. We examined spontaneous puzzle play between parents and children in their homes at several time points between 14 and 46 months and analyzed the number of spatial words parents produced during utterances with and without gesture. We compared these spatial language measures to children's mental rotation scores and number of spatial language tokens at 4 years. Our findings suggest that the spatial input children receive from their parents is most effective at predicting children's spatial language and spatial cognition when it incorporates gesture. We discuss the possible effects of child age and proficiency and effects of gesture during nonpuzzle activities.

Session B--East Balcony

Temporal reference of bare verbs in Mandarin child language

Yi-ching Su, National Tsing Hua University

Without overt tense or agreement marking, it has been controversial whether Mandarin has the distinction of finite vs. non-finite clauses or any corresponding stage of RI in child Mandarin. Therefore, this study aims to examine whether bare sentences in the spontaneous speech of Mandarin-acquiring children at the age between 2 and 3 exhibit the properties found in languages with or without an RI stage.

We examined the spontaneous speech of one child between the ages of 1;11 and 2;4, with MLU from 1 to 2.4. This study demonstrates the following findings:

- (1) There appears to be an analogue stage of RI in child Mandarin in which children produce non-adult bare sentences with modal interpretations.
- (2) Unlike null subject languages with rich morphology, imperatives do not prevail in child Mandarin.
- (3) There is also a correlation between temporal reference and the (a)telicity of predicates in child Mandarin.

Session C--Conference Auditorium

The acquisition of phonological alternations: 2- to 3-yearold toddlers compensate for native but not for non-native assimilation

> Katrin Skoruppa, LSCP Paris Sharon Peperkamp, LSCP Paris

This study examines how French toddlers perceive assimilations, that is, phonological alternations by which some phonological feature of a sound spreads to an adjacent sound. During word recognition, adults take into account assimilations that occur in their native language, but not non-native ones. In two experiments using a picture pointing task we show that 29- to 36-month-old French toddlers likewise compensate for the voicing assimilation that applies in their native language, but not for non-native place assimilation. No differences were found between the performances of the younger and the older toddlers. Thus, perception of assimilation by French children is already language-specific before the age of three years. We discuss the consequences for possible learning mechanisms.

Notes

Early language-specificity in Turkish children's caused motion event expressions in speech and gesture

Reyhan Furman, Radboud University Nijmegen Asli Ozyurek, Radboud University Nijmegen Aylin Kuntay, Koc University

Caused motion (e.g. the girl pushed the basket into the room) is one of the basic events children talk about early on. Languages differ in the way these events are expressed (Talmy, 2000). We studied how Turkish-speaking children start to describe caused motion events and examined children's co-speech gestures. Children started talking about these events around 14 months using verb-only constructions and after the age of 17 months moved on to verb-plus-argument constructions. They used both semantically general and specific verbs, showing languagespecificity from the outset since Turkish is a verb-framed language in which both verb types are used frequently. Representational co-speech gestures appeared around 15 months. Gestures frequently encoded caused motion elements not conveyed in speech until 36 months, showing that children represent elements of a caused motion event before this information appears in speech. Our results also show that language-specificity is evident in children's gestures about caused motion.

Session B--East Balcony

Frequency and economy in the acquisition of variable word order

Merete Anderssen, University of Tromso Marit Westergaard, University of Tromso

This talk aims to make a contribution to the ongoing discussion of the role of frequency in language development by considering the acquisition of two constructions in Norwegian involving variable word order, the subject position in relation to negation and possessor-possessee order inside the DP. We investigate the production of three children and the corresponding child-directed speech and show that, in both cases, Norwegian children start out with the order which is the least frequent one in the input, more specifically the negation-subject and the possessorpossessee orders. Consequently, frequency cannot account for the order of acquisition observed in these structures. Instead, we argue that the difference between the two word orders is that the most frequent ones involve syntactic movement. This suggests that the order of acquisition can be attributed to an economy principle causing children to avoid syntactic movement at the earliest stage of development.

Notes

Session C--Conference Auditorium

Language-specific interpretation of vowel duration in 21month-olds' word recognition: A cross-linguistic study of phonetic attribution

Suzanne V.H. van der Feest, University of Texas - Austin Daniel Swingley, University of Pennsylvania

Children must learn to interpret phonetic variation they readily perceive, assigning language-specific interpretations to features that play different roles in different languages. Four experiments addressed this issue using vowel duration, a strong cue to vowel identity in Dutch, but only a minor cue in English, argued to cue coda-consonant voicing. 21-month-old English and Dutch learners heard familiar words with original or altered vowel duration. Dutch toddlers' word recognition was impaired by vowel shortening, but not lengthening. Dutch adults showed an analogous asymmetry in a word transcription task. We suggest this asymmetry arises because vowel quality information is less available in shortened vowels, leading to reliance on duration. English toddlers' word recognition was unaffected by vowel changes: a follow-up experiment showed that recognition is impaired by full-cue coda-voicing substitutions. English adults' transcription results revealed very few duration-induced misperceptions. We argue that 21-month-olds learning similar languages show language-specific interpretation of vowel duration.

Session AMetcalf Small	Session BEast Balcony
	·
Session C. Conference Auditorium	Notes
Session CConference Auditorium	Notes
Session CConference Auditorium	
	Notes

Grammatical gender categorization in 17-month-old infants

Marilyn Cyr, University of Quebec - Montreal Rushen Shi, University of Quebec - Montreal

We examined whether infants can categorize abstract gender classes on purely distributional grounds. Stimuli were pseudonouns with all possible phonological and acoustical cues to gender removed. In a preferential procedure, French-learning infants were each familiarized with the pseudo-nouns following gender-marking determiners in French: two following 'un' (masculine), un mouveil, un ravol, and two other following 'une' (feminine), une cagère, une gombal. Determiner-noun pairing was counter-balanced across infants. Infants were then tested with grammatical and ungrammatical trials (Grammatical: one noun of each gender from familiarization occurring with unfamiliarized articles of the correct gender, le mouveil, la gombal; Ungrammatical: unfamiliarized articles of the incorrect gender preceding the other two familiarized nouns, le cagère, la ravol). Infants looked longer during grammatical trials than during ungrammatical trials, showing that they have abstract knowledge of gender classes for determiners and use them to perform formal categorization of novel nouns without needing any phonological/acoustic/semantic cues.

Session B--East Balcony

Interpreting definite plural NPs: A cross-sectional study of German-Italian bilingual children

Tanja Kupisch, University of Hamburg Cristina Pierantozzi, University of Hamburg

This study looks at the interpretation of definite marked plural NPs by German-Italian school children aged between 6 and 10 to investigate whether there is cross-linguistic influence from one language to the other. German and Italian show partial overlap in the interpretation of definite articles: both languages use them for specific reference. However, Italian uses definite articles also for generic reference, where German requires bare nouns. Modelled after Pérez-Leroux et al. (2004), we designed a truth-value judgment task to specifically address the question of cross-linguistic influence. As expected, children correctly associated definite marked NPs in Italian with both specific and generic readings. However, they also attributed generic readings to definite marked plural NPs in German, albeit to a lesser extent. Interestingly, some children explicitly commented on the ambiguities they perceived. We discuss whether the results can be attributed to cross-linguistic influence or to a general preference for generic interpretations.

		indies		
_				
		 	-	
	 	 -		
ı				

Session C--Conference Auditorium

Acquisition of durational control of vocalic and consonantal intervals in speech production

Ryoko Mugitani, Kentaro Ishizuka, Tadahisa Kondo, Shigeaki Amano, NTT Communication Science Laboratories

Phonemic quantity information such as vocalic/consonantal intervals cues linguistically significant phonetic structures (e.g. phonemic contrasts, vowel reduction/devoicing, and language rhythm). Thus, an infant must ultimately gain the ability to control phonemic intervals according to the durational features of the native language. In this study, we compared durational variability of vocalic/consonantal intervals (nPVI, Grabe & Low, 2002) of the children's and mothers' longitudinal speech data and explored the development of durational controls in speech production. The results revealed that the consonantal intervals remained extremely varied through the first 2 years, then suddenly converged with the range of the mothers' scores. In contrast, the variety of vocalic intervals decreased rapidly with age and converged with the mothers' level at around 18 months. The findings indicated that attempts at vocalic interval control are already being made long before infants start to speak, whereas consonant interval control is not obtained during the prelinguistic period.

Sensitivity to irregular French subject-verb agreement at 18 months: Evidence from the Head Turn Preference Procedure

Geraldine Legendre, Johns Hopkins University Louise Goyet, Thierry Nazzi, CNRS Isabelle Barriere, CUNY - Brooklyn College Sarah Kresh, City University of New York - Graduate Center

We report on novel results pertaining to the acquisition of French subject-verb number agreement with irregular verbs displaying high phonological variability, including vowel change, addition of a final consonant, or both, plus lengthening/shortening of the vowel. Using the Head Turn Preference Procedure (Kemler Nelson et al., 1995), groups of 24-, 18-, and 14-month-old French-learning children were exposed to grammatical and ungrammatical subject DP - V dependencies. Significant differences were obtained, with children having longer orientation times to the grammatical combinations than to the ungrammatical ones at 24 and 18 months of age. In addition, the grammaticality effect was present both for grammatical le (singular) and grammatical les (plural) compared to ungrammatical le/les dependencies for both age groups. On the basis of a study of large samples of child-directed speech we propose that our results attest to a process of generalization, whose exact nature (phonologically-based or category-based) is under further investigation.

Session B--East Balcony

Singular generics in L2-English

Tania Ionin, University of Illinois - Urbana-Champaign Silvina Montrul, University of Illinois - Urbana-Champaign Ji-Hye Kim, SungKyunKwan University Vadim Philippov, Orel State University

This paper examines L2-acquisition of articles in generic contexts. English makes a distinction between contexts of kindreference, where definite singular but not indefinite singular generics are allowed (The/#a dodo bird is extinct); and characterizing sentences in which indefinite but not definite singular generics are allowed (A/#the green lamp is very relaxing). In contrast, both Russian and Korean, which lack articles, use bare singular NPs in both contexts. An acceptability judgment task was used to examine whether L1-Russian/Korean L2-English learners are sensitive to the contrast between English singular generics. Both groups were fully target-like on indefinite singular generics, indicating that L2-acquisition of subtle semantic contrasts is possible. But unlike the native controls, the learners rejected definite singular generics with kind-reference. It is shown that these results are consistent with standard semantic analyses of genericity (Krifka et al. 1995, Chierchia 1998): L2-English errors with generics are non-random, but rather semantically constrained.

Session C--Conference Auditorium

Vowel perception and spelling of children with dyslexia

Rachel Currie-Rubin, Harvard University Jennifer Thomson, Harvard University

In this study, we collected vowel perception and spelling data from 22 children with and 20 children without dyslexia. Using a continuum of vowel sounds, /I/-/ɛ/, we examined whether perception and spelling were impacted by four preceding consonant sounds, /p, b, s, z/. Both groups were most likely to perceive the sound as /I/ when it was preceded by /s/, but the context in which they were most likely to perceive the sound as /ɛ/ differed. Both groups spelled the vowel as "i" most often when it was preceded by /s/, and as "e" when it was preceded by /b, p/ and /z/. Children with dyslexia varied more in their perception across consonant contexts and were less likely to categorize and spell prototypical vowels correctly. Results suggest that expectation based on the preceding consonant may impact perception and spelling, particularly for those with dyslexia.

Not	es
	·

PLENARY ADDRESS

Innate syntax - Still the best hypothesis

Virginia Valian

To evaluate the hypothesis that (at least some) syntax is innate, I will address four questions. 1) Which position is easier to argue for, nativism or empiricism? 2) Is there a middle ground between nativism and empiricism? 3) Can any empirical data be used to argue for innateness of syntax? 4) What different types of entities or processes are candidates for innateness? My answers are 1) nativism; 2) no; 3) yes; 4) features, categories, and principles.



Word learning is not label-object mapping: Preferential looking does not predict explicit knowledge of words in 2-year-olds

Colin Bannard, Max Planck Institute for Evolutionary
Anthropology
Michael Tomasello, Max Planck Institute for Evolutionary
Anthropology

We examine what an explicit pointing test and an implicit preferential looking test indicate about children's learning of words under the same pair of conditions. Our experiment is based in part upon Baldwin et al, 1996. 32 2-year-olds heard novel labels while investigating novel objects. In a "coupled" condition, the label was uttered by a visible experimenter displaying concurrent attention to the object. In a "decoupled" condition, the label was uttered by a second out-of-view experimenter. In a pointing test children were able to choose the correct referents for words encountered under coupled but not under decoupled conditions. In the looking time test, however, they looked to target objects for labels encountered under both conditions. This indicates a dissociation between the knowledge being tested by the two methods. Label-object mapping may form a part of the word learning process but it does not appear to be the full picture.

POSTER SESSION II

Gender and task effects in pronoun interpretation

Christina Bergmann, Radboud University Nijmegen Markus Paulus, Radboud University Nijmegen Paula Fikkert, Radboud University Nijmegen

While investigating pronoun acquisition, research usually relies on methods requiring a verbal or action response. To assess the effect of these additional demands on a child's memory and attention, we confronted an off-line picture selection task as example of a classical task with eye-tracking, using identical stimuli. Our eye-tracking results indicate on-line comprehension starting at the age of 4. At the same time, children until the age of 5 perform on chance level in the response-based task. A closer inspection of the data revealed an additional effect of grammatical gender: On-line, the marked feminine is processed earlier than the unmarked counterpart at the age of 5. Off-line, the accuracy for masculine items is significantly higher than for the feminine from age 4 onwards. In summary, both the general task effect and the effect of linguistic gender underline an inherent difference in the tasks and consequently in what is being measured.

POSTER SESSION II

An ERP study of syntactic categorization in French-learning 2-year-olds

Perrine Brusini, CNRS Ghislaine Dehaene-Lambertz, CNRS Anne Christophe, CNRS

It has been argued that syntax may help infants to figure out what a new word refers to (Gleitman). But can infants use syntax sufficiently early?

We recorded the EEG of French 2 year-olds while they watched stories in which they heard newly-learnt nouns and verbs in grammatical and ungrammatical contexts. In the teaching phase, toddlers heard the new nouns and verbs in many good contexts but never preceded by the function-words used in test sentences. The transition probability between the critical words and the function-word is equal to zero, both in ungrammatical and in grammatical sentences, so that transition probabilities do not distinguish between these two conditions. Adults tested with these stories displayed a P600-like response to ungrammatical contexts. We are currently testing toddlers. If they are able to assign new words to the appropriate syntactic category, then they should show a specific response to ungrammatical sentences.

No	tes

Exploring the influence of animacy on ambiguous pronoun resolution in the L2 visual world

Miriam Ellert, Max Planck Institute for Psycholinguistics Leah Roberts, Max Planck Institute for Psycholinguistics Juhani Järvikivi, Max Planck Institute for Psycholinguistics

As we know from the L1 Visual Worlds of Finnish, Dutch and German native listeners (Kaiser & Trueswell, 2004; 2008; Wilson, Keller & Sorace, 2007), the resolution of subject pronouns, such as personal and demonstrative pronouns, is influenced by positional factors (first vs. second mentioned), syntactic factors, such as grammatical role (subject vs. object), and discourse factors, such as topicality (topic vs. non-topic). Yet, only little is known about the visual world of L2 learners disambiguating pronouns. We therefore tested the resolution preferences of 32 Dutch learners of German and found that, contrary to L1 transfer predictions, they resolved both pronouns towards the topic. Additionally, research has mainly focused on resolution preferences for pronouns following animate antecedents. We therefore also constructed inanimate items. Our results show that inanimacy modulated the timing of the effects.

POSTER SESSION II

Mixed NPs in German-English and German-Russian bilingual children

Antje Endesfelder Quick, Elena Lieven, Michael Tomasello, Max Planck Institute for Evolutionary Anthropology

This study used a priming paradigm to experimentally elicit mixed NPs from English/German and Russian/German bilingual children aged 3;6-5;6. Results showed that children primed on English (n=12) mixed significantly more often a German determiner with an English noun than German-Russian bilinguals primed on Russian (22% vs. 2%). Further, it seems that children who mix at home are more likely to respond in English/Russian or in a mixed answer to the German interlocutor while children who do not mix at home are more likely to refuse to answer. A possible explanation is that the more similar the two languages are the more mixing seems to occur. English and German NPs overlap in form (determiner plus noun), and function (referential). However, between Russian and German NPs only function overlaps, since Russian has no determiners and gender is marked on the noun.

Notes

POSTER SESSION II

Not all dependencies are impaired in syntactic-SLI: Binding comprehension in children with a deficit in Wh-movement

Naama Friedmann, Tel Aviv University Rama Novogrodsky, Tel Aviv University

Are all syntactic dependencies impaired in SLI? It is widely agreed that children with (syntactic-)SLI have difficulties in the comprehension of noncanonical sentences derived by syntactic movement, but it is not clear whether they master binding, and specifically, the interpretation of pronouns. This study tested pronoun comprehension using a sentence-picture-matching task, in 12 Hebrew-speakers with Syntactic-SLI aged 9;3-13;10. Whereas the participants with syntactic-SLI were very impaired in the comprehension and production of Wh-movement sentences, they showed intact performance in the interpretation of pronouns (and reflexives). No significant difference was found between groups (control and SLI) or pronominal elements. The results suggest that the difficulty in syntactic-SLI is specific to a certain type of dependency, Wh-movement. The results further indicate that SLI is not a general syntactic delay, as Hebrewspeaking 5-year-olds have difficulties in the comprehension of both Wh-movement and pronouns, whereas older SLI children only encounter difficulties in Wh-movement.

German childrens use of prosodic cues in resolving participant roles in transitive constructions

Thomas Grünloh, Elena Lieven, Michael Tomasello, Max Planck Institute for Evolutionary Anthropology

Most studies examining children's understanding of transitive sentences focus on the morpho-syntactic properties of the construction and ignore prosody. But adults use prosody in many different ways to interpret ambiguous sentences. In the current two studies we asked whether 5-year-old German children use prosody to determine participant roles in object-first (OVS) sentences with novel verbs (i.e., whether they use prosodic marking to overrule word order as a cue). Results showed that children identify participant roles better in this atypically ordered construction when sentences are realized with the normal, marked intonational pattern, especially in combination with case marking (Study 1) but in appropriate discourse contexts even in the absence of any case marking (Study 2). These findings demonstrate that young children can use intonation to help identify participant roles in transitive sentences, at least in marked constructions such as the German object-first (OVS) construction.

POSTER SESSION II

Do monolingual and bilingual children differ in their adherence to mutual exclusivity?

Emma Healey, University of Edinburgh Barbora Skarabela, University of Edinburgh Mitsuhiko Ota, University of Edinburgh

Previous research has shown that within a language 5- to 6-yearold bilingual children assign novel labels to as-yet-unlabelled objects less frequently than monolingual children. Results from studies testing younger children, however, are mixed. In particular, the difference is found for 17- to 18-month-olds, but not 2- to 4-year-olds. In this study, we used a new method to compare 2- to 4-year-old bilingual and monolingual children. Participants were taught 3 novel labels (e.g. 'booba') for familiar objects (e.g. a sock). They were then shown familiar and unfamiliar objects and asked to 'find the booba'. As predicted, bilinguals reassigned novel labels to unfamiliar objects significantly less than monolinguals (36% and 60% of trials respectively, t(28) = 2.13, p < .05). Contrary to previous findings for this age group, our results therefore show that 2- to 4-year-old monolingual and bilingual children differ in their tendency to map novel labels to as-yet-unlabelled objects.

POSTER SESSION II

Patterns of object and action naming in Cypriot Greek children with SLI/WFDs

Maria Kambanaros, Technological Educational Institute of
Patras
Kleanthes K. Grohmann, University of Cyprus

	Notes
<u> </u>	

Children can access pragmatic contexts immediately during on-line sentence comprehension, but they cannot suppress interfering ones selectively

Nobuyuki Jincho, RIKEN Brain Science Institute Hiroaki Oishi, The Japanese Society for the Promotion of Science

Reiko Mazuka, RIKEN Brain Science Institute

This study investigated the effect of visual contexts in the interpretation of color adjectives with 5- and 6-year-old Japanese children and adults. The results of a visual world experiment showed that all age groups had immediate access to the pragmatic information provided by the visual contrasts. Children and adults differed, however, in how the facilitating and interfering contexts influenced their eye gaze. Adults were able to take advantage of the facilitating contexts, while successfully ignoring the interfering contexts. For children, in contrast, visual contexts had the effect of increasing their gaze to the competitor, which is a hindering effect for the purpose of correctly identifying the target. The results suggest that children's immature cognitive control may contribute significantly to their on-line sentence comprehension.

POSTER SESSION II

Do Korean children use case markers when learning the meaning of novel verbs?

Woo-yeol Lee, Yonsei University Hyun-joo Song, Yonsei University

The current research investigated whether Korean-learning children use case markers to figure out novel verbs' meaning. Two-year-old Korean children heard sentences including one noun phrase and a verb as they watched a pair of videos. They were asked to find a video that matched the sentence they heard. In one video, two characters acted independently of each other. The other video showed a caused-action event (e.g., an agent raising the patient's arm with two hands). When the noun phrase was marked by a nominative case marker, the children interpreted the verb as referring to an independent action. However, when the noun phrase was marked by an accusative case marker, only old group (M = 33.4 months) but not young group (M = 27.9 months) could interpret the verb as referring to a caused-action. The results are discussed in terms of the development of morphosyntactic bootstrapping mechanism in Korean children.

		TYOICS			
	 			 	-
		 		 -	
	 	 -	 		

POSTER SESSION II

Children's comprehension and production of marked stress

Sanne J.M. Kuijper, University of Groningen Frederike F.C. Groothoff, University of Groningen

Previous studies have shown that children make errors with the interpretation of marked stress (e.g. Szendröi, 2003). For children sentences with marked stress are ambiguous and can have both a wide focus and a narrow focus interpretation. Adults only allow a narrow focus interpretation. While having problems with interpretation, children do not seem to have problems with the production of marked stress (e.g. Hornby & Hass, 1970). However, production and comprehension of marked stress have never been investigated within the same experiment, using the same materials. In our experiment, we used sentences such as "The clown only bought the YELLOW hat" to investigate both children's comprehension and production of marked stress. Children's comprehension differed from adult's comprehension; however adults also showed some difficulties with the interpretation of marked stress. In production we found similar stress patterns for children and adults.

L1 perceptive biases do not stop acquisition of L2 phonotactics

Tom Lentz, University of Tromso Rene Kager, University of Tromso

Second language (L2) listeners perceive speech unfaithfully (Polivanov, 1931; Dupoux et al., 1999; Hallé et al., 1998). Although L2 constraints can be acquired, L1 constraints are retained (Weber, 2001). Four cross-modal priming experiments examining constraints on /s/-consonant (sC) clusters in perception of L2 Dutch by L1 speakers of Spanish and Japanese showed phonotactic well-formedness in structures violating L1 constraints can be acquired. Both L1's repair sC cluster, as / EsC/ and /suC/, respectively. Auditory primes were either the visual target, that same word manipulated towards the L1, or unrelated. L1 and L2 listeners are more sensitive to faithfulness in well-formed Dutch clusters, but L2 learners more so, suggesting frequency effects. However, Spanish L2 listeners are primed equally by manipulated and faithful items, showing that they can acquire sublexical representations of L2 phonotactics, while they still have an L1 perceptive bias, cancelling the L2 lexical contrast.

POSTER SESSION II

An experimental approach to coda omissions in early child language

Clara Levelt, Leiden University

A typical characteristic of the earliest word productions in child language is the absence of coda consonants, as in [kæ] for cat. What is the source of this omission? In this study we investigated whether target coda consonants form part of early lexical representations; If codas of target words are not (fully) stored in the child's lexical representation, then they cannot be produced.

Using two types of methods, Switch and Preferential Looking, we tested the coda-storing capacities of Dutch 14 and 18 month-olds. The series of experiments showed that (1) an incomplete lexical representation could be the source for coda omissions in early productions (2) between 14 and 18 months codas are stored more reliably and (3) coda storage depends on how well-known a word is. These results require a rethinking of the role of grammatical complexity.

POSTER SESSION II

Asymmetries between the production and processing of tense morphemes in successive bilingual children

Theodoros Marinis, University of Reading Vasiliki Chondrogianni, University of Reading

Typically developing successive bilingual (L2) children have been shown to have difficulties in the production of tense morphemes (e.g., Paradis, 2005). The present paper compares production with processing of tense morphemes to ascertain whether L2 children's errors of production are caused by underlying non-target-like representations or reflect output difficulties. 20 6-to-9 year-old Turkish-English children and 33 monolingual age-matched controls completed the Test of Early Grammatical Impairment TEGI) (Rice & Wexler, 2001), and a word-monitoring task involving grammatical and ungrammatical sentences with omitted tense and nontense morphemes. In TEGI, L2 children were less accurate than controls in the production of 3rd person singular -s, but not in past tense, and they showed more overregularisations than controls. In contrast, in the word-monitoring task, both groups were sensitive to the omission of tense and non-tense morphemes. This suggests that production errors are not caused by an underlying non-target-like representation, but reflect output difficulties.

		Notes	
_			
-			
_			
_			
_			
-			
_			
_			
_			
_			
_	11 11 11 11		

The influence of oralism on mouth actions in Irish Sign Language (ISL)

Susanne Militzer, University of Cologne

Research on non-manuals in sign languages (e.g. Pfau & Quer 2007) has shown that not only manual components are linguistically important for sign languages. Non-manuals such as mouth actions seem to fulfil (not yet clearly determined) linguistic functions.

My project is the first to research mouth actions in ISL and investigated the influence of school education (influenced by oralism), age and gender on signers' mouth actions. This was tested for personal stories from the Signs of Ireland Corpus where older female signers show less mouthing than younger ones educated by the oralist method and more subjected to spoken English. Separate boys and girls schools to which oralism was introduced in different years (Matthews 1996), caused large differences between male and female ISL. Older male signers, educated before the introduction of oralism, show less mouth actions in general than female signers of the same age group.

POSTER SESSION II

The roots of root infinitives: The surrogate verb forms common in adult and child grammars

Keiko Murasugi, Nanzan University Tomomi Nakatani, Nanzan University Chisato Fuji, Nanzan University

Murasugi, Fuji, and Hashimoto (2007) argue that the very young children speaking [-stem] languages, whose verbs cannot surface as bare stems, go through the stage of Root Infinitive Analogues (RIAs) instead of Root Infinitives (RIs) when Tense is underspecified (see also Hyams 2008), and that Japanese RIA is the non-finite Verb Stem+ta (past-tense verb) form, often used in modal contexts like European RIs. Our research provides support for their proposal based on the analysis of our longitudinal studies and CHILDES. We bridge the child RIAs and Cinque (2004) and Kawai's (2006) analysis in which particle + stem agreement is treated as a surrogate form of infinitive in adult Salentino/ Serbo-Croatian and Japanese, respectively. The morphologically finite form, e.g., Verb Stem+-ta form in Japanese, which is homophonous with the surrogate form of infinitives, is chosen as the child RIAs and also as the infinitives in the adult grammar of [-stem] languages.

Notes

POSTER SESSION II

Prosodic cues in Brazilian Portuguese second language learners

Cristina Name, Federal University of Juiz de Fora Carolina Silva, Federal University of Juiz de Fora

This study investigates the influence of phonological phrase boundary cues on syntactic parsing by BP L2 learners. Brazilian native speakers produced different prosodic patterns when reading ambiguous words (adjective or verb) in different syntactic structures. When asked to complete the auditory sentences that were just cut after the ambiguous words, they gave more verb responses in the V-condition and more adjective responses in the Adj-condition. These results suggest that BP native listeners use phonological phrase boundary cues to decide the lexical category of the ambiguous word. Nevertheless, BP L2 learners presented different results. They considered the ambiguous word as a verb in almost all the sentences in both V- and Adj-conditions. A lack of BP prosodic cues perception could difficult foreign speakers to parse ambiguous sentences even if they are proficient language speakers. Then prosodic knowledge seems to be as crucial as lexicon and syntactic knowledge in second language learning.

Early phonological acquisition: Lexical stress pattern discrimination by monolingual and bilingual French-learning 10-month-olds

Thierry Nazzi, CNRS Josette Serres, CNRS Ranka Bijeljac-Babic, Universite Paris Descartes Barbara Höhle, University of Potsdam

Infants start learning the prosodic properties of their native language around 6 to 9 months of age. The first aim of this study was to explore the decline in non-native prosodic properties sensitivity by looking at French-learning infants' sensitivity to stress pattern, French being a language in which stress is not used lexically. Our second aim was to evaluate the impact of bilingual acquisition on this decline. Overall, our results show stress pattern discrimination in both monolingual and bilingual French-learning 10-month-olds. More importantly, on the basis on the Hunter and Ames (1988) model, they suggest that monolingual infants need more time than bilingual infants in order to extract a stable representation of stress pattern. This further suggests that discrimination of non-native prosodic dimensions declines over development (in monolinguals) but can be maintained in a bilingual population provided that this dimension is used in one of the two languages in acquisition.

POSTER SESSION II

Production of relative clauses in monolingual Turkish children

Duygu Ozge, University of Reading Theodoros Marinis, University of Reading Deniz Zeyrek, Middle East Technical University

We report data from a novel elicitation task testing the production of relative clauses in monolingual Turkish children and adults. A repeated measures ANOVA with the factors Group (children, adults) and RC-Type (Subject, Object) showed children used fewer RCs than adults (F(1,58)=7.54,p<.01), and both groups used fewer object than subject RCs (F(1,58)=22.46,p<.001), but there was no Group by RC-Type interaction. A similar ANO-VA on the rate of grammatical RCs indicated children made more errors than adults in object RCs (F(1,58)=87.01,p<.001), and they made more errors in object compared to subject RCs (F(1,36)=106.35,p<.001). The response analysis revealed they systematically avoided the genitive case and object-relativizing morpheme, both of which have multiple form-function mappings. To compensate this, they used both grammatical (e.g., conjoined clauses) and ungrammatical structures (e.g., resumptive pronouns). We argue multiple constraints in object RCs, pertaining to morphosyntax and conceptual structure, seem to explain the subject-object asymmetry in Turkish RCs.

POSTER SESSION II

Words' shifting senses in lexical semantic development

Hugh Rabagliati, New York University Hanna Gelfand, New York University Gary Marcus, New York University Liina Pylkkänen, New York University

Ordinary language understanding frequently requires listeners to shift the basic meaning of a constituent. We can say that 'the DVD is round', or 'the DVD is an hour long', and in each case DVD means something different. But a word cannot take just any meaning: we can say that 'the movie is an hour long', but not 'the movie is round'.

How do children figure out which possible senses of a word are licensed, and which are not? Two experiments, using judgments and elicited explanations, suggest that children follow a productive learning strategy, initially assuming that words take more senses than they actually do. However, this strategy did not carry over into production, where children were unwilling to produce unlicensed forms. These results open an intriguing question: if children are initially willing to assign unlicensed senses, how do they ultimately come to accept a restricted, adult-like set of shifts?

Notes	
,	
 	·

Knowledge of verb argument structure in early sentence comprehension: Evidence from the dative

Caroline Rowland, University of Liverpool Claire Noble, University of Liverpool

Much of the evidence that very young children can use syntactic information to deduce the meaning of sentences comes from work on high frequency, structurally simple, constructions such as the English transitive (e.g. Gertner, Fisher & Eisengart, 2006; Naigles, 1990). There is less work on children's ability to interpret more complex structures. The present work used a forced-choice pointing paradigm to assess when children can use the syntactic structure of datives to interpret novel verbs. In study 1, 3-4 year-old children successfully interpreted prepositional but not double object datives. In studies 2 & 3, the surface structure of the datives was modified; the datives were either canonically marked, with a proper noun recipient (I'm glorping Frog the duck, study 2), or were reversed marked, with a proper noun theme (I'm glorping the frog Duck, study 3). This time, even 3-year-olds correctly interpreted both datives, though performance was best with canonical marking. The results demonstrate that English 3-year-olds have verb-general knowledge of how dative syntax encodes meaning, but successful comprehension may require the presence of additional surface cues.

POSTER SESSION II

Brain activation for written word processing in deaf readers

Yutaka Sato, RIKEN Brain Science Institute Nobuyuki Jincho, RIKEN Brain Science Institute Risako Omori, RIKEN Brain Science Institute Tadahisa Kondo, NTT Communication Science Laboratories Reiko Mazuka, RIKEN Brain Science Institute

Because deaf people have little exposure to auditory speech input, their phonological representations of written words are likely to differ significantly from those of hearing people. In the present study, we studied the brain responses of deaf and hearing Japanese adults in tasks requiring the manipulation of phonological representations (the lexical decision task and the rhyming judgment task) using Near Infrared Spectroscopy (NIRS). We focused on the Oxygenated-Hb (Oxy-Hb) responses in left and right inferior frontal regions. The brain responses demonstrated that while the hearing adults showed left-dominant responses in the lexical decision task compared with the control, the deaf adults showed right-dominant responses. In the rhyming task, hearing adults again showed left-dominant activation patterns, while deaf adults showed bilateral activation pattern. We found that the hemispheric specializations for lexical and rhyming processing for visually-presented words were different between hearing and deaf Japanese adults.

Notes	
	· ·
	
	· · · · · · · · · · · · · · · · · · ·

POSTER SESSION II

A theoretical account for the 'erroneous' genitive subjects in child Japanese and the specification of tense

Naoko Sawada, Nanzan University Keiko Murasugi, Nanzan University Chisato Fuji, Nanzan University

Children's erroneous subjects are widely observed cross-linguistically. Murasugi and Watanabe (2008) discuss Japanesespeaking children's erroneous dative subjects and propose that the optional dative Case errors correspond to the Optional Infinitives in European languages, and the correspondence are analyzed as the children's deficits of AgrS or Tense. In this paper, based on the analyses of Japanese-speaking children's longitudinal data and CHILDES corpora, we argue that not only dative Case, but also genitive Case is erroneously marked on subjects at around the age of 2, and the two types of errors are in complementary distribution with respect to the properties of predicates. The properties of children's genitive subjects are parallel with those found with genitive subjects within the sentential modifiers (relative clauses) in Adult Japanese NPs (i.e., Ga/No conversion). We argue that both types of erroneous subjects stem from the same property, i.e., the underspecification of features in Tense (or Agreement).

(How) does emotional prosody influence word learning and memory in children?

Michaela Schmitz, Manuela Friedrich, Gisela Klann-Delius, Free University of Berlin Dana Marinos, Angela D. Friederici, Max Planck Institute for Human Cognitive and Brain Sciences

By combining electrophysiological and behavioural methods the present study investigated the role of emotional prosody (positive vs. neutral) on word learning and memory in 14-, 20and 26-month-olds. In the ERP training phase, children were shown pictures of novel objects in combination with novel nouns. For the neutral prosody condition we found ERP effects that have been associated with word learning and lexical-semantic processing in children. In the positive prosody condition these effects were missing. Thus, positive prosody affects lexical-semantic processing stages of newly acquired words. In a subsequent object-selection task, children identified the previously learned objects by name. 14-month-olds' performance was at random while the older age groups correctly identified more targets presented with positive prosody during training. On the second day, retention was better for targets previously presented in neutral prosody. Thus, positive affective prosody seems to enhance initial lexical memory formation but not the consolidation of words.

POSTER SESSION II

Developmental pattern of the interpretation of Japanese focus particle, *dake* (=only) by L1 children and L2 adults

Tomohiko Shirahata, Shizuoka University Mitsuko Hisano, Shizuoka University

We examined the developmental pattern of the interpretation of the Japanese focus particle dake (=only) by both L1 children and L2 adults (Chinese and Portuguese). There are two objectives: One is to argue against Matsuoka's (2007b) assumption that Japanese children interpret sentences with dake differently depending upon whether it is followed by a case particle (ga or o) or not. The other is to show that there are some grammatical items which follow a "L1 = L2 development pattern" and explain the mechanism. The results of the experiments show that the participants interpreted sentences with dake differently when dake was attached to the subject and to the object, while they did not interpret sentences differently according to whether case particle was attached or not. We try to explain these results by assuming that dake has three semantic features: (i) factual meaning, (ii) contrastive meaning and (iii) restricted meaning.

POSTER SESSION II

Structural priming of word order in Czech children's comprehension

Filip Smolík, Academy of Sciences of the Czech Republic Jiøi Lukavský, Academy of Sciences of the Czech Republic

Two groups of Czech-speaking children, 3-year-olds (N=22) and 5-year-olds (N=15), participated in a preferential looking experiment testing their comprehension of simple transitive sentences and their susceptibility to structural priming of word order. Four temporarily ambiguous target sentences were presented, two with the canonical SVO word order, two with OVS word order, which is possible but marked in Czech. Each target sentence was preceded by an unambiguous prime sentence with SVO or OVS word order. In 3-year-olds, the presence of OVS primes reduced the garden-path effect observed in the OVS sentences. In 5-year olds, there were no significant effects of structural priming. The results suggest that 3-year-olds represent the agent-patient roles in a relatively abstract manner. However, the overall performance in the task was relatively low, suggesting that children have problems to interpret sentences purely on the basis of their grammatical structure.

Notes
•

Distinguishing polysemy and ambiguity in the child's mental lexicon

Mahesh Srinivasan, Harvard University Jesse Snedeker, Harvard University

While homophones are thought to be represented separately, polysemous words are thought to overlap. We present evidence that children make this distinction. Experiment 1 tested fouryear-olds' sensitivity to one relation: that words can refer both to physical objects (red book) and their abstract content (interesting book). Children were taught a novel word corresponding to only one of the senses of the polysemous word and watched stories that provided a context for either an abstract or physical interpretation of an ambiguous phrase ('long blicket'). If children represent the senses separately, they should stick to the trained meanings of the novel words. But instead, children accepted extensions to the other meanings. In contrast, in Experiment 2, novel words were trained on one meaning of a homophone, but children did not accept extensions to the homophonous meaning. We conclude that four-year-olds have overlapping representations of some polysemous words, but represent homophones separately.

POSTER SESSION II

Second language acquisition of spatial modifiers

David Stringer, Indiana University Beatrix Burghardt, Indiana University HyunKyoung Seo, Indiana University Yi-Ting Wang, Indiana University

There has been considerable progress in L2 research at the syntax-semantics interface addressing how syntax can inform semantics (Slabakova, 2008). This paper provides evidence that semantics can also reliably inform syntax. In the domain of spatial adpositions, there is a functional hierarchy of modifiers which appears to be the same across languages; however, not all languages lexicalize all types. Modifiers were taught individually, but never in combination, to L2 learners of English from various L1 backgrounds. A computer-animated narrative was designed in order to create felicitous contexts for combinations of modifiers, and preference and grammaticality judgment tasks were administered. Accuracy scores were remarkably targetlike on binary combinations of modifiers (i) across proficiency levels, (ii) across L1s, and (iii) across the two tasks, revealing that the flow of information is also from semantics to syntax: with the semantics of modifiers in place, the syntactic hierarchy is naturally manifested.

	Notes	
•		

POSTER SESSION II

Infant speech processing abilities and later syntactic skills in preschool

Anna Synnestvedt, University of Maryland - College Park Rochelle Newman, University of Maryland - College Park Nan Bernstein Ratner, University of Maryland - College Park

Studies suggest that certain infant speech processing skills predict variability in later language development. One such skill is segmentation of the fluent speech signal. We investigated the relationship between infant performance on segmentation tasks and later syntactic skill by analyzing spontaneous narratives produced by children who participated in speech segmentation tasks as infants at 4-6 years using Developmental Sentence Scoring (DSS; Lee, 1972). Grammatical complexity of narratives produced by children who were successful in segmentation tasks as infants was significantly higher than complexity of narratives obtained from those who were not successful in segmentation tasks as infants (DSS value 6.59 vs. 5.45, p < .0057). Post-hoc analysis showed significant differences between groups in use of primary verbs, Wh- questions, and interrogative reversals. Results extend earlier findings that the ability to segment words from fluent conversational speech in infancy may predict certain later language abilities, particularly development of certain syntactic skills.

Sensitivity to information in the face predicts vocabulary size

Elena Tenenbaum, Brown University David Sobel, Brown University James Morgan, Brown University

Using eye tracking we examined fixation patterns of 18-montholds in conversational interactions, and asked whether sensitivity to information in the face predicts vocabulary size. Infants watched videos of a woman speaking and/or gazing toward a target object. Information in the speaker's face was systematically manipulated: trials were counterbalanced for presence or absence of information in the mouth (speaking vs. smiling) and eyes (gaze toward object vs. straight ahead). Vocabulary size was measured at 18 and 24 months. Across trial types, infants looked more at the mouth than the eyes. Further, selective attention to the eyes on speaking trials was predictive of vocabulary size. Thus, although infants at this age tend to focus on the mouth, sensitivity to information in the eyes may facilitate vocabulary growth. We hypothesize that this benefit might come from the ability to decipher the speaker's intention, particularly during object labeling.

POSTER SESSION II

On children's acquisition of the NPI licensing condition in English

Lyn Shan Tieu, University of Connecticut - Storrs

This paper argues that children take a conservative approach to the acquisition of negative polarity items (NPIs) in declarative sentences and yes/no questions. Assuming the NPI 'any' in declaratives and interrogatives is a single lexical item, the conservative child should not produce 'any' in either environment until she has clear evidence of its disjunctive licensing condition. The spontaneous speech production of three children acquiring English shows that: (i) the productive use of NPI 'any' surfaces around the same time in questions and declaratives; (ii) productive use of sentential negation precedes that of NPI 'any'; (iii) NPI 'any' in declaratives initially involves licensing by 'not'; (iv) few commission errors are made. The results suggest a conservative learning strategy; given the disjunctive licensing condition, the child acquires productive use of questions and sentential negation, establishes the disjunctive condition on NPI licensing, and only then begins to use NPI 'any' in both environments.

POSTER SESSION II

Mother-child autobiographical memory narratives: Influence on children's story comprehension skills

Virginia Tompkins, University of Florida

This study examined the relationship between mother-child autobiographical memory (AM) narratives and preschoolers' story comprehension. Few have examined the role of AM narratives in promoting children's literacy skills. However, AM conversations may be important for children's story comprehension skills because during AM talk parents help children to comprehend the event by identifying relevant elements and integrating information. Thirty-seven mother-child dyads were observed discussing AM events. These narratives were coded for style (i.e., elaborativeness, repetitiveness). Children's story comprehension was assessed by an experimenter who read a children's storybook, and asked 10 predetermined questions. Control variables included SES, children's language and contribution to AM narratives, mothers' affective quality during AM narratives, and home literacy environment. After controlling for these variables, mothers' elaborative statements and elaborative tag questions were significant predictors of children's story comprehension. These findings suggest that mothers' AM narratives with children play an important role in children's story comprehension skills.

POSTER SESSION II

Microvariation in the acquisition of Caribbean/non-Caribbean Spanish subjects: Novel support for a [Spec, TP]-analysis in Caribbean dialects and for a CP-account in non- Caribbean ones

Julio Villa-Garcia, William Snyder, Jose Riqueros-Morante, University of Connecticut - Storrs

This paper presents results of a longitudinal case study of a monolingual child learning Puerto Rican Spanish (PRS), a Caribbean dialect displaying a higher incidence of overt preverbal subjects at present than fully pro-drop varieties such as Peninsular Spanish (PS) (Navarro Tomás 1948). According to Toribio (1994, 2000) and Ticio (2004), in no-longer-nullsubject dialects like PRS, subjects sit in [Spec, TP], in opposition to subjects in PS, which are assumed to be discourse-sensitive constituents in the CP (cf. Contreras 1991, Ordóñez 1997, a.o.). In stark contrast to non-Caribbean-Spanish-acquiring children (cf. Grinstead 1998, 2004), we report a significant discrepancy by Binomial Test (Snyder, 2007: Ch. 5) between the emergence of subjects and that of topics in child PRS, which substantiates Toribio's and Ticio's [Spec, TP]-analysis of PRS subjects. Further, our data cast doubt on Ticio's (2002) claim that children learning PRS do not pass through a 'no-overt-subject' stage (cf. Grinstead 1998).

Seeing and saying: The relation between event apprehension and utterance formulation in children

John C. Trueswell, University of Pennsylvania Ann Bunger, University of Delaware Anna Papafragou, University of Delaware

This study investigates the processes that support event apprehension and utterance formulation in children. Specifically, it asks whether omissions in children's linguistic output reflect an impoverished conceptual system or processing constraints. English-speaking adults and 5-year-olds viewed and described motion events in an eyetracking study. Participants also completed a memory task in which they identified changes to event Manners and Paths. Preschoolers produced shorter event descriptions and were less likely than adults to mention Paths. However, eye movements revealed striking similarities across age groups. When participants planned event descriptions, looks to Manners surpassed looks to Paths for both ages, as viewers allocated more attention to components they planned to speak about. Results of the memory task indicated that children encoded Paths despite not mentioning them. We conclude that children's tendency to omit Path information in event descriptions is due to performance limitations rather than to inadequacies in event encoding.

Session B--East Balcony

First language acquisition of recursive possessives in English

Maxi Limbach, University of Cologne Dany Adone, University of Cologne

Assuming that recursion is an underlying universal property of the human language (Hauser et al. 2002), it should be available during language acquisition. However, studies indicate that children (L1-English) have difficulties in the comprehension of recursive possessive structures (Cookie monster's sister's picture (Roeper 2007) compared to adult native speakers. The hypothesis is that children go from a stage of non-recursive structures (John's car) to direct recursion, meaning that they prefer a conjunctive reading ([John and brother]'s car). Later they recognize phase boundaries and become able to integrate recursive embeddings (John's brother's car). An experiment was conducted with three groups of children (age 3 to 5), as well as with a control group of adults. Short stories with several related people and objects were created. Thereby we were able to track the comprehension not only of the correct answers, but also to what extent mistakes show a pattern in the development.

110105	
-	

Session C--Conference Auditorium

Piecing together numerical language: Children's use of default units in early counting and quantification

Neon Brooks, University of California - San Diego Amanda Pogue, University of Toronto David Barner, University of California - San Diego

To interpret the sentence, "give me three forks", adults use noun-specific criteria of individuation to determine what counts as a single fork. When children hear numbers and quantifiers used with unfamiliar nouns, these criteria are not available. By age 2, children have begun using quantificational language, despite knowing a small number of nouns. How then, do children interpret these early quantifiers and number words? We suggest that quantifiers specify default units of individuation, and that children rely on these as they learn quantificational language. Using the methodology of Shipley and Shepperson (1990) as a starting point, we tested this hypothesis in three studies.

2.5-year-olds use cross-situational information to learn verbs under referential uncertainty

Rose Scott, University of Illinois - Urbana-Champaign Cynthia Fisher, University of Illinois - Urbana-Champaign

Recent research suggests that when 2.5- to 5-year-olds see a series of training exemplars labeled unambiguously with the same novel verb, they can use cross-situational comparison to determine which aspects of the event are central to the verb's meaning. Here we asked whether children could also use crosssituational comparison to guide verb interpretation when faced with multiple potential event-referents. On each trial, 31-montholds saw two actors, each performing a different action on an object, while hearing 2 novel transitive verbs. The only cue to the verb's intended referent was the consistency with which it accompanied the same action across trials. Across trials, children looked longer at the target action than expected by chance, demonstrating that 2.5-year-olds can use cross-situational comparison to guide verb interpretation without receiving a single clear labeling trial. This result adds to recent evidence that even under referential ambiguity, toddlers gather information about how verbs are used.

Session B--East Balcony

Acquiring relatives in L1 Basque

M. J. Gutierrez, University Of The Basque Country

The investigation of the comprehension of relative clauses across languages has concluded that subject relatives (SRs) (e.g. the girl who is painting the lady) are easier and more accurately acquired than object relatives (ORs) (e.g. the girl who the lady is painting). Most of this work has been based on SVO nominative-absolutive languages. Here we present data from L1 Basque, a highly inflected, ergative-absolutive, SOV language with pre-nominal relatives. We tested two groups of children aged 4 (N=14) and 6 (N=14) and a group of young adults. The results from a binary picture-sentence matching task show that the overall performance on object relatives was significantly higher than in subject relatives. That is, in L1 Basque ORs are comprehended with more accuracy than SRs. These results are discussed in the light of different processing accounts which make use of the notion of relative distance between filler-gap dependencies.

Session C--Conference Auditorium

Communicating about number without a language model: The robustness of the plural

Marie Coppola, University of Chicago Elizabet Spaepen, University of Chicago Susan Goldin-Meadow, University of Chicago

The ability to distinguish sets of one object from many objects is found in infants and monkeys. However, only children, exposed to conventional language, acquire linguistic devices to mark this distinction. Is language exposure necessary to develop this grammatical marking? We examined four deaf adults in Nicaragua who had no access to conventional language but who had developed gesture systems to communicate (homesigners). Each adult used three number devices, two of which mapped the number of fingers/movements in a gesture onto the approximate number of target objects (Individuators). In the third device, the number of movements in the gesture was constant across targets greater than one, and thus, like plurals in natural languages, conveyed "many" rather than a particular number (Plurals). The plural is so central to language that it is reinvented even in the absence of conventional language.

	Notes

When and how do humans use cross-situational learning

Andrew D M Smith, University of Edinburgh Kenny Smith, Northumbria University Richard A Blythe, University of Edinburgh

Cross-situational learning is a mechanism for word learning despite referential uncertainty. We asked 48 adults to learn six nonsense words which varied in the degree of referential uncertainty with which they were presented and the extent to which exposures to multiple words were interleaved. We found clear evidence of cross-situational learning in all conditions, and little effect of interleaving. However, learning was less successful and slower under higher referential uncertainty.

Additionally, we used trial-by-trial response data and model fitting techniques to categorise participants' learning behaviour. This analysis indicates that participants use an eliminative cross-situational learning strategy under low referential uncertainty, but shift to a frequentist approach when referential uncertainty is high or exposures are interleaved. Our results suggest that, although humans are effective cross-situational learners, the rigour with which they exploit cross-situational information is modulated by the difficulty of the learning task, specifically degree of referential uncertainty and interleaving.

Session B--East Balcony

Word order and finiteness in English and Norwegian child language: Parameters vs. micro-cues

Marit Westergaard, University of Tromso Kristine Bentzen, University of Tromso

This paper discusses the acquisition of word order in wh-questions in English and a Norwegian dialect. Previous studies have found that non-finite wh-questions are more frequent in child English than in traditional Germanic V2 child languages, including Norwegian. This difference has been linked to the V2 parameter, specifying that only finite verbs move. However, both English and the dialect of Norwegian have partial V2 in wh-questions, restricted to auxiliaries and be (English) and to some wh-elements and new/focused subjects (Norwegian). We argue that there is no V2 parameter and explain variation in verb movement across languages by a number of micro-cues. We also provide evidence against the claimed syntax-morphology correlation, and argue that the difference between English and Norwegian child language is not due to a parameter, but to a difference in the subcategory of verbs that V2 applies to (auxiliaries vs. lexical verbs).

_			
	· · · · · · · · · · · · · · · · · · ·	 	
		-	

Session C--Conference Auditorium

Acquiring first number words: The developmental trajectory of children's meanings for 'two'

Anna Shusterman, Wesleyan University Dominic Gibson, Wesleyan University Barry Finder, Wesleyan University

Researchers differ in their characterizations of children's early number meanings, with some positing that the children first map the word "two" onto a preverbal 'object-file' system for tracking objects, and represent "two" as object-object (Carey, 2004; Mix, 2009) or as a dual marker, as though they were learning a language with singular-dual-plural morphology (Sarnecka et al, 2007), and others arguing that children initially map "two" to a different preverbal system for representing magnitudes (Wynn, 1992). In study 1, we used the CHILDES corpus and found that 18-24 month-old children's first uses of "two" are exact and refer to pairs. In studies 2 and 3, we demonstrate a rich and numerical semantics for "two" in slightly older children who have attained the two-knower stage. These studies suggest that children's interpretation of the word two starts as exact, then become overgeneralized as a plural, and finally recovers an exact and numerical interpretation.

Phono-semantic priming in the infant lexicon

Nivedita Mani, University College London

24-month-olds are slower to recognise words preceded by phonologically related primes compared to unrelated primes (Mani & Plunkett, 2008), suggesting that hearing a word leads to the activation of phonologically related words in word recognition. The current study tests this further by presenting infants with prime-target pairs where the prime word is semantically related to a cohort member of the target word (dog-cup). Since dog and cup do not share any sounds, any priming effect must derive from priming of words semantically related to dog (cat), and subsequent priming of words phonologically related to the cat (cup). The results extend and strengthen earlier suggestions that word recognition is influenced by related words early in infancy. The absence of explicit phonological similarities between prime and target labels implies that the results were driven by the underlying phonological organisation of the 24month-old lexicon through the activation of related words in word recognition.

Session B--East Balcony

Competing cues: A corpus-based study of the English tenseaspect acquisition

Yun Zhao, Carnegie Mellon University Brian MacWhinney, Carnegie Mellon University

Using the Spoken and Written English Corpus of Chinese Learners (2005) including the oral narratives of 1142 advanced Chinese EFL students, this paper proposes an approach of examining the L2 English tense-aspect acquisition under the framework of the Unified Model of language acquisition (Mac-Whinney, 2008) and finds that the learning process of English tense-aspect involves competition between the cues of grammatical aspect, lexical aspect, inflectional morphology, temporal adverbial and phonological representation. It is found that the perfective aspect is predominantly associated with achievements and the progressive aspect with activities. This is more applicable to the regular verbs than the irregulars. Temporal adverbials encoded habitual meaning (e.g., always) impose a strong local effect on the learners' choice and push them to the use of present tense. Phonological saliency of verb ending in regulars is found to be another strong cue with the acquisition sequence of id/ > id/ > /t/.

Session C--Conference Auditorium

On-line processing of articles and clitics by Greek children with SLI

Vasiliki Chondrogianni, University of Reading Theodoros Marinis, University of Reading Susan Edwards, University of Reading

Articles and pronouns have been shown to be problematic in production for children with SLI (Tsimpli & Stavrakaki, 1999) but little is known regarding their on-line processing. In this paper 15 Greek children with SLI and 27 typically-developing (TD) age-matched controls participated in a self-paced listening task involving grammatical and ungrammatical sentences with omission of definite articles in subject and object position, indefinite articles in object position, and direct object clitic pronouns. Results showed that whereas TD children were sensitive to article and pronoun omission, children with SLI exhibited asymmetrical patterns. They were sensitive to definite article omission only in subject position, and differentiated between the definite and the indefinite article in object position, detecting the ungrammaticality only in the latter context. Furthermore, children with SLI were not sensitive to the ungrammaticality induced by clitic pronoun omission. These results are discussed within current grammatical theories and theoretical accounts on SLI.

Notes

Specifying the role of linguistic information in verb learning

Sudha Arunachalam, Northwestern University Sandra Waxman, Northwestern University

What kinds of linguistic information do 2-year-olds require to learn the meaning of a novel verb? Previous work has documented that adults use at least two kinds of linguistic features—grammatical cues (e.g., the frame in which the verb appears) and semantic content (e.g., the nouns labeling the verb's arguments)—to establish verb meaning. To discover whether 2-year-olds also use these linguistic features, we introduced them to novel verbs, but varied the richness of the accompanying linguistic information. Toddlers either heard the novel verb with just a list of the nouns labeling the verb's arguments, or heard those same nouns integrated as arguments of the novel verb in a transitive sentence. Our results demonstrate that, like adults, 2-year-olds use both of these contextual features, and that they are most successful when grammatical cues and semantic content are integrated in a single sentence.

Session B--East Balcony

The roles of L1 transfer and processing limitations in the L2 acquisition of French object clitic constructions: Evidence from Chinese- and Spanish-speaking learners

Theres Grueter, Stanford University Martha Crago, Dalhousie University

Object clitics are notoriously difficult to acquire for L2 learners of French whose L1 has a strong pronoun system (e.g., English). This paper investigates whether L2 learners whose L1 also has object clitics (Spanish) or allows object-drop (Chinese) face the same difficulties. A transfer-based account predicts Spanishspeaking learners to encounter fewer difficulties than Chinesespeaking learners (prediction 1), and Chinese-speaking learners to not only produce, but also accept null objects in a receptive task (prediction 2). Moreover, if clitic-drop in child SLA is due to processing demands resulting from computational complexity (Prévost 2006), frequency of clitic-drop should be related to an independent measure of processing capacity (prediction 3). Elicited production and truth-value judgment data from schoolaged L1-Spanish (n=11) and L1-Chinese (n=15) learners of French support prediction 1, but not 2. Prediction 3 receives support from a significant relation between frequency of cliticdrop and backward digit recall span in the Chinese group.

	Notes
2 78	

Session C--Conference Auditorium

The role of lexical frequency, telicity, and phonological factors on regular past tense production in children with SLI and their typically developing peers

Melanie Green, University of Iowa Amanda Owen, University of Iowa

Limited data is available about how aspectual and phonological verb properties interact with past tense production by children. Relative frequency of the inflected form and phonotactic probability might serve as input-driven alternatives to previouslystudied factors such as lexical aspect and coda composition. Archival elicited production data from 4-9 year old children with typical language (N = 24) and specific language impairment (N=14) using 108 two-clause complex sentence/61 different verbs were analyzed for past tense use, coda composition, telicity, phonotactic probability (Vitevitch & Luce, 2004), and lexical frequency (CHILDES; MacWhinney, 2000). Three regression models were considered: one with only categorical factors (e.g. obstruent/continuant ending), one with only continuous factors (e.g. average biphone probability), and a mixed model. The model that incorporated both continuous and categorical variables accounted was the best fit; however, diagnostic status accounted for the majority of the variance.

Children's use of disfluencies for pragmatic inference in language comprehension

Celeste Kidd, University of Rochester Katherine S. White, University of Rochester Richard N. Aslin, University of Rochester

Determining how spoken words map onto referents in the world is crucial for successful lexical learning and online language comprehension. Solving this problem requires inferring a speaker's intended referent. Previous work has explored various cues available to learners that aid in determining speaker intention (e.g., world context, joint visual attention, pointing). Here we investigate whether children can make use of speech disfluencies to infer a speaker's intention. Disfluencies (e.g., "uh" and "um") often occur before unfamiliar, infrequent, and discourse-new words. Thus, disfluencies provide information about a speaker's intended referent. We use eye-tracking to assess whether toddlers (M = 2;6) can use the information provided by disfluencies during comprehension. Our results demonstrate that the presence of a disfluency before an object label biases children to anticipate a novel, discourse-new referent. Further work with younger children suggests that this bias emerges around 2 years of age.

Session B--East Balcony

L2 acquisition of topicality marking in Bulgarian

Ivan Ivanov, University of Iowa

The purpose of this study was to expand the testing ground of the Interface Hypothesis (Sorace, 2006) by investigating the degree to which L2 learners of Bulgarian, with English as their L1, had acquired the pragmatic function of clitic doubling as a topicality marker.

Ten advanced and 14 intermediate L2 speakers of Bulgarian, as well as a control group of Bulgarian native speakers, participated in the experiment. The experimental materials included a proficiency test, a grammaticality judgment task to check syntactic knowledge of clitics, and a pragmatic felicity task. The results show that 8 of the advanced and 2 of the intermediate L2 learners of Bulgarian have successfully acquired the syntax of clitics as well as the pragmatic meaning of clitic doubling. Our study highlights the fact that successful learning at the syntax-pragmatics interface cannot be excluded and the assignment of inherent unlearnability to external interfaces might be inappropriate.

Session C--Conference Auditorium

Working memory in children with specific language impairment and resolved late talkers

Nadia Petruccelli, La Trobe University Edith Bavin, La Trobe University Lesley Bretherton, The Royal Children's Hospital Melbourne

Late talking is a risk factor for SLI, but a proportion of late talkers resolve by age 4 years, although difficulties with higher order language have been reported. Children with SLI have deficits in working memory. The research compared working memory and narrative skills in 5-year-old resolved late talkers (RLT), children with SLI and children with typical language development (TLD). The analyses to date indicate similar performance for the RLT and TLD groups. The SLI group had significantly lower scores than the other two groups on the production and comprehension of narratives, and significantly lower scores than the RLT group on narrative recall. The SLI also had significantly lower scores than the other two groups on measures of the phonological loop and significantly lower visuospatial memory scores than the RLT group. The results for the total sample of 102 participants will be presented, and the implications of the findings discussed.

Notes	
•	
•	

Session A--Metcalf Small

Do 12-month-old infants privilege words in an associative learning task?

Heather MacKenzie, University of Calgary Susan Graham, University of Calgary Suzanne Curtin, University of Calgary

This study examined whether 12-month-old infants privilege words over other linguistic stimuli in an associative learning task. In three experiments, 90 infants were presented with either two sets of word-object (i.e., bisyllabic and monosyllabic English words, or Japanese words), communicative sound-object, or phoneme-object pairings until they habituated and then were tested on a "switch" in the label to determine whether they were able to associate the word and/or sound with the novel objects. Infants were able to link words but not communicative sounds or phonemes to objects in an associative learning task. These findings demonstrate that when contextual support is absent from the word learning task, infants exhibit a preference for words over other linguistic stimuli when attaching them to objects.

Session B--East Balcony

The role of working memory in the process of second language acquisition

Clare Wright, Newcastle University

I present research investigating correlations between working memory (WM) and development of wh-movement in adult L2 English. Three wh-constructions were targetted: short-distance wh-questions, long-distance wh-questions and subjacency violations. A battery of WM tests were used to correlate with improved scores on an oral task and a timed grammaticality judgement task by instructed Chinese learners of English resident in the UK for one year's postgraduate study. Significant positive correlations were found between WM scores and and some (but not all) measures of L2 improvement, especially for a novel WM test (Story Recall in L1). The research hypothesis that greater WM may aid grammatical processing was thus supported. However, t-test analysis on linguistic scores before and after immersion showed few significant differences, suggesting restructuring of underlying grammatical representations can be resistant to increased exposure, even for those with greater WM.

5 UNISCON	
 · ·	

Session C--Conference Auditorium

What SLI children reveal about the relationship between syntactic development and theory of mind

Natalia Rakhlin, Yale University Sergei Kornilov, University of Connecticut - Storrs Jodi Reich, Maria Babyonyshev, Elena Grigorenko, Yale University

We investigated whether false-belief understanding is related to language ability by looking at Russian-speaking children enrolled in a genetic study of SLI in a geographically isolated population characterized by high prevalence of language impaiments. We asked whether IQ or language development predicts success on false-belief. Children between the ages of 6 and 12 were tested on the Assessment of the Development of Russian Language, non-verbal IQ, the narrative and change-of-location tasks. A three-step binary logistic regression showed that language test scores were highly predictive of false-belief success, while IQ scores were not a significant predictor of the false-belief group status. Also, the group successful on false-belief had significantly higher syntactic complexity scores for narratives than those who failed. References to mental states did not correlate with better false-belief performance. This supports the hypothesis that developed representation of false-belief is tied to syntactic development, not general cognitive functioning or acquisition of mental-state verbs.

ALTERNATES				
Alternates	Alternates			
How low can you go: Low frequency inconsistent input in child and adult learners				
Alison C. Austin, University of Rochester Elissa L. Newport, University of Rochester				
When linguistic input provides inconsistent evidence for gram- natical structures, children tend to regularize. This study in- estigates how age and input probabilities affect regularization. Adults and children were exposed for 5 days to one of four rtificial languages. Languages differed in the probability with which determiners were used, from 20%-67%. After exposure, subjects produced novel sentences; determiner use was scored. Children but not adults regularized, using the most frequent eterminer more often than occurred during exposure. Older hildren regularized less than younger children, but more than dults. Most surprising, productions were regularized even when the most frequent input determiner was used < 50%. Chil- ren regularized only the most frequent determiner (a 40%-det was regularized when it was most frequent); determiners of the ame frequency (40%) were eliminated when another occurred more often. It is thus the relationships between alternating forms – and not simple frequency – that affects child learners.				
	·			
Alternates	Notes			
Alternates Using discourse and social information to infer speakers' referential intentions	Notes			
Using discourse and social information to infer speakers'	Notes			
Using discourse and social information to infer speakers' referential intentions Michael C. Frank, Massachusetts Institute of Technology Noah D. Goodman, Massachusetts Institute of Technology Anne Fernald, Stanford University Joshua B. Tenenbaum, Massachusetts Institute of Technology We measured the quantitative contribution of discourse and social information toward predicting speakers' referential inentions. We hand-annotated a corpus of videos of mothers ineracting with 6-, 12-, and 24-month-olds. Both the physical	Notes			
Using discourse and social information to infer speakers' referential intentions Michael C. Frank, Massachusetts Institute of Technology Noah D. Goodman, Massachusetts Institute of Technology Anne Fernald, Stanford University Joshua B. Tenenbaum, Massachusetts Institute of Technology We measured the quantitative contribution of discourse and social information toward predicting speakers' referential intentions. We hand-annotated a corpus of videos of mothers interacting with 6-, 12-, and 24-month-olds. Both the physical presence of an object and its presence in the discourse (being referred to in the previous sentence) were powerful cues for a gearner to guess the meaning of a novel word. Discourse information is only useful, however, if learners can occasionally guess what is being talked about to begin with. We measured	Notes			
Using discourse and social information to infer speakers' referential intentions Michael C. Frank, Massachusetts Institute of Technology Noah D. Goodman, Massachusetts Institute of Technology Anne Fernald, Stanford University Joshua B. Tenenbaum, Massachusetts Institute of Technology We measured the quantitative contribution of discourse and social information toward predicting speakers' referential inentions. We hand-annotated a corpus of videos of mothers ineracting with 6-, 12-, and 24-month-olds. Both the physical presence of an object and its presence in the discourse (being referred to in the previous sentence) were powerful cues for a earner to guess the meaning of a novel word. Discourse information is only useful, however, if learners can occasionally	Notes			

Alternates

Vowel reduction, pitch accent and scalar implicatures in child English

> John Grinstead, Ohio State University Jennifer Thorward, Ohio State University Laurie A. Maynell, Ohio State University Sharon Miriam Ross, Ohio State University

In this study, we examine the role of vowel reduction and pitch accent on the interpretation of the existential quantifier "some" in both implicature-generating and implicature-cancelling (downward-entailing) contexts. Our results show that adults use both vowel reduction and pitch-accent in important ways in these constructions, but that grammatical context appears to override prosody in implicature generation and cancellation. For children, there were clear effects of vowel reduction, especially in implicature generation contexts, but the prosodic effects were less clear, especially in implicature-cancelling contexts.

Alternates

Second language acquisition of spatial modifiers

David Stringer, Indiana University Beatrix Burghardt, Indiana University HyunKyoung Seo, Indiana University Yi-Ting Wang, Indiana University

There has been considerable progress in L2 research at the syntax-semantics interface addressing how syntax can inform semantics (Slabakova, 2008). This paper provides evidence that semantics can also reliably inform syntax. In the domain of spatial adpositions, there is a functional hierarchy of modifiers which appears to be the same across languages; however, not all languages lexicalize all types. Modifiers were taught individually, but never in combination, to L2 learners of English from various L1 backgrounds. A computer-animated narrative was designed in order to create felicitous contexts for combinations of modifiers, and preference and grammaticality judgment tasks were administered. Accuracy scores were remarkably targetlike on binary combinations of modifiers (i) across proficiency levels, (ii) across L1s, and (iii) across the two tasks, revealing that the flow of information is also from semantics to syntax: with the semantics of modifiers in place, the syntactic hierarchy is naturally manifested.

Notes	

Alternates

Microvariation in the acquisition of Caribbean/non-Caribbean Spanish subjects: Novel support for a [Spec, TP]-analysis in Caribbean dialects and for a CP-account in non- Caribbean ones

Julio Villa-Garcia, University of Connecticut - Storrs William Snyder, University of Connecticut - Storrs Jose Riqueros-Morante, University of Connecticut - Storrs

This paper presents results of a longitudinal case study of a monolingual child learning Puerto Rican Spanish (PRS), a Caribbean dialect displaying a higher incidence of overt preverbal subjects at present than fully pro-drop varieties such as Peninsular Spanish (PS) (Navarro Tomás 1948). According to Toribio (1994, 2000) and Ticio (2004), in no-longer-null-subject dialects like PRS, subjects sit in [Spec, TP], in opposition to subjects in PS, which are assumed to be discourse-sensitive constituents in the CP (cf. Contreras 1991, Ordóñez 1997, a.o.). In stark contrast to non-Caribbean-Spanish-acquiring children (cf. Grinstead 1998, 2004), we report a significant discrepancy by Binomial Test (Snyder, 2007: Ch. 5) between the emergence of subjects and that of topics in child PRS, which substantiates Toribio's and Ticio's [Spec, TP]-analysis of PRS subjects. Further, our data cast doubt on Ticio's (2002) claim that children learning PRS do not pass through a 'no-overt-subject' stage (cf. Grinstead 1998).

Alternates

A bidirectional study of L2 pronominal subject and why the directionality of L1/L2 pairings matters

Tiffany Judy, University of Iowa

This study investigates null subject parameter resetting, focusing on the application of the Overt Pronoun Constraint (OPC) in two participant groups: Spanish-speaking learners of L2 English and English-speaking learners of L2 Spanish. If the subset/superset relationship of the two grammars matters as predicted by Full Transfer approaches, we expect only L2 learners of Spanish to be successful since this requires the acquisition of new features as opposed to the unlearning of pro. In such a case, Spanish learners of L2 English should wrongly apply the OPC to restrict coreference with embedded subjects in English (since all such subjects are overt), in contrast to the preferred native interpretation. Results from a Grammaticality Judgment Correction Task and a Context-Matching Task could be interpreted to support Full Access/Full Transfer approaches, although not entirely straightforwardly. The results, as they pertain to hypotheses of L1 transfer and implications for ultimate attainment, are discussed.

Alternates

Children's comprehension and production of marked stress

Sanne J.M. Kuijper, University of Groningen Frederike F.C. Groothoff, University of Groningen

Previous studies have shown that children make errors with the interpretation of marked stress (e.g. Szendröi, 2003). For children sentences with marked stress are ambiguous and can have both a wide focus and a narrow focus interpretation. Adults only allow a narrow focus interpretation. While having problems with interpretation, children do not seem to have problems with the production of marked stress (e.g. Hornby & Hass, 1970). However, production and comprehension of marked stress have never been investigated within the same experiment, using the same materials. In our experiment, we used sentences such as "The clown only bought the YELLOW hat" to investigate both children's comprehension and production of marked stress. Children's comprehension differed from adult's comprehension; however adults also showed some difficulties with the interpretation of marked stress. In production we found similar stress patterns for children and adults.

Alternates

The Acquisition of Metrical Opacity: A Longitudinal Case Study from Northern East Cree

Yvan Rose, Julie Brittain, Carrie Dyck, Erin Swain Memorial University of Newfoundland

This paper focuses on the acquisition of the relatively opaque metrical system found in Northern East Cree. The NE Cree stress (pitch-accent) system generally displays quantity-sensitive, iambic (weak-strong) binary feet and full foot extrametricality. Constraints on word-minimality and phonological processes such as unstressed short vowel deletion further complicate the analysis of this language as they obscure foot extrametricality. The acquisition of this system thus requires a combination of generalizations about segmental and prosodic characteristics of the target words. We introduce longitudinal data from the acquisition of NE Cree by a first language learner code-named A1. We show, based on instrumental analyses of the child's productions, that A1 quickly masters target-appropriate pitch as her main cue to syllable stress. Moving on to metrical structure, we show that the child does not learn the overall stress system on a word-by-word basis. Rather, she displays stress errors that suggest clear grammatical conditioning.

110103
•

Alternates

Crosslinguistic influence on argument realization in Japanese-French bilinguals

Mary-Jane Blais, Yuriko Oshima-Takane, Fred Genesee, McGill University Makiko Hirakawa, Bunkyo University

A central question in bilingual acquisition research is whether a child's two languages are completely autonomous or show some degree of interdependence. It has been suggested that crosslinguistic influence may affect syntax-discourse interface phenomena such as argument realization, a speaker's choice of lexical, pronominal or null arguments. We examined this hypothesis in preschool-aged bilingual speakers of Japanese, which allows lexical, pronominal and null arguments, and French, in which argument drop is prohibited. Bilingual participants' language was compared to that of monolinguals of the same age. Crosslinguistic effects were found in both languages, with bilinguals using more pronouns than monolinguals in Japanese, but fewer pronouns than monolinguals in French. However, the children also used language-specific strategies appropriately, producing null forms only in Japanese. These results support the hypothesis that crosslinguistic influences can affect syntactically optional phenomena governed by language-specific discourse-pragmatic preferences, but do not result in true grammaticality violations.

Alternates

Modeling early sentence interpretation with shallow representations of syntactic structure

Yael Gertner, University of Illinois - Urbana-Champaign Michael Connor, University of Illinois - Urbana-Champaign Cynthia Fisher, University of Illinois - Urbana-Champaign Dan Roth, University of Illinois - Urbana-Champaign

We propose that abstract but shallow representations of sentence-structure guide early sentence interpretation: Toddlers build partial structures preserving the number and order of nouns in a sentence. How useful are such shallow representations? Do they support learning about English word-order from ordinary input? We present experiments with a computational model of semantic-role labeling (SRL) that learns to identify each verb's arguments, and determine their semantic roles. We created a Baby SRL that considers each noun a candidate argument and learns based on shallow representations of sentencestructure suggested by our proposal. When trained on child-directed speech, the Baby-SRL learned that the first of two nouns tends to be an agent. It learned this even when presented only with noisy internally-generated feedback based on the animacy of a set of known nouns. Together with experiments with children, these findings suggest that such representations provide a starting point for structure-guided sentence interpretation.

Notes	Alternates
3	
	-

Exhibitors' Addresses

Wiley-Blackwell 350 Main St. Malden, MA02148 www.wiley.com

Mouton de Gruyter 545 Eighth Avenue, Suite 2410 New York, NY 10018 www.degruyter.com

John Benjamins Publishing 763 N 24th St. Philadelphia, PA 19130 www.benjamins.com Maney Publishing Suit 1C, Josephs Well Leeds, LS3 1AB, UK www.maney.co.uk

The MIT Press 55 Hayward Street Cambridge, MA 02142 www.mitpress.mit.edu Cambridge University Press 32 Avenue of the Americas New York, NY 10013 www.cambridge.org

Cascadilla Press PO Box 440355 Somerville, MA 02144 www.cascadilla.com Psychology Press/Routledge 325 Chestnut Street, Suite 800 Philadelphia, PA 19106 www.psypress.com

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

Authors' Addresses

Dany Adone University of Cologne d.adone@uni-koeln.de

Artemis Alexiadou University of Stuttgart artemis@ifla.uni-stuttgart.de

Shanley Allen Boston University shanley@bu.edu

Shigeaki Amano NTT Communication Science Laboratories

Patricia Amaral Stanford University pamaral@stanford.edu

Elena Anagnostopoulou University of Crete elena@phl.uoc.gr

Merete Anderssen University of Tromso merete.anderssen@uit.no

Sudha Arunachalam Northwestern University s-arunachalam@northwestern. edu Richard N. Aslin University of Rochester aslin@cvs.rochester.edu

Alison C. Austin University of Rochester aaustin@bcs.rochester.edu

Maria Babyonyshev Yale University maria.babyonyshev@yale.edu

Rachel Bach University of Manitoba silver sunset86@hotmail.com

Soondo Baek University of Illinois - Urbana-Champaign baek5@illinois.edu

Rebecca Baier University of Maryland - College Park rbaier@umd.edu

Colin Bannard Max Planck Institute for Evolutionary Anthropology bannard@eva.mpg.de David Barner University of California - San Diego barner@ucsd.edu

Jonathan Barnes Boston University jabarnes@bu.edu

Isabelle Barriere City University of New York - Brooklyn College isabelle.barriere@gmail.com

Edith Bavin La Trobe University e.bavin@latrobe.edu.au

Kristine Bentzen University of Tromso kristine.bentzen@uit.no

Iris Berent Northeastern University i.berent@neu.edu

Christina Bergmann Radboud University Nijmegen ChBergmann@student.ru.nl Jared Berman University of Calgary jberman@ucalgary.ca

Nan Bernstein Ratner University of Maryland - College Park nratner@hesp.umd.edu

Sarah Bibyk Ohio State University bibyk.2@osu.edu

Ranka Bijeljac-Babic Universite Paris Descartes Ranka.Bijeljac-Babic@parisdescartes.fr

Mary-Jane Blais McGill University mary-jane.blais@mail.mcgill. ca

Richard A Blythe University of Edinburgh R.A.Blythe@ed.ac.uk

Lesley Bretherton The Royal Children's Hospital Melbourne Lesley.bretherton@rch.org.au Julie Brittain Memorial University of Newfoundland brittain@mun.ca

Neon Brooks University of California - San Diego neonbluebrooks@gmail.com

Perrine Brusini CNRS pbrusini@gmail.com

Ann Bunger University of Delaware annbunger@gmail.com

Beatrix Burghardt Indiana University bburghar@indiana.edu

Frances Burns University of Massachusetts at Amherst fburns@comdis.umass.edu

Krista Byers-Heinlein University of British Columbia kbyers@psych.ubc.ca

Erica Cartmill University of Chicago cartmill@uchicago.edu

Craig Chambers University of Toronto - Mississauga craig.chambers@utoronto.ca

Erwin Chan University of Arizona echan3@u.arizona.edu

Nancy Chang International Computer Science Institute nchang@icsi.berkeley.edu

Deborah Chen Pichler Gallaudet University deborah.pichler@gallaudet.edu

Vasiliki Chondrogianni University of Reading v.chondrogianni@reading. ac.uk Anne Christophe CNRS anne.christophe@ens.fr

Wei Chu University of Hawaii - Manoa weic@hawaii.edu

Kaili Clackson University of Essex hkscla@essex.ac.uk

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

Eve Clark Stanford University eclark@psych.stanford.edu

Michael Connor University of Illinois - Urbana-Champaign

Nicole Conrad Saint Mary's University nicole.conrad@smu.ca

Marie Coppola University of Chicago mariec@uchicago.edu

Cynthia Core Florida Atlantic University ccore@fau.edu

Martha Crago Dalhousie University martha.crago@dal.ca

Sarah Creel University of California - San Diego creel@cogsci.ucsd.edu

Rachel Currie-Rubin Harvard University rjc288@mail.harvard.edu

Suzanne Curtin
University of Calgary

Anne Cutler Max Planck Institute for Psycholinguistics anne.cutler@mpi.nl Marilyn Cyr University of Quebec - Montreal cyr.marilyn@gmail.com

Isabelle Darcy Indiana University idarcy@indiana.edu

Elise de Bree University of Utrecht Elise.deBree@let.uu.nl

Jill de Villiers Smith College jdevil@smith.edu

Peter de Villiers Smith College pdevilli@smith.edu

Ghislaine Dehaene-Lambertz CNRS ghislaine.dehaenelambertz@cea.fr

Laurent Dekydtspotter Indiana University ldekydts@indiana.edu

Audrey Delcenserie McGill University Audrey.Delcenserie@mail. mcgill.ca

Katherine Demuth Brown University Katherine_Demuth@brown. edu

Brian Dillon University of Maryland - College Park brianwdillon@gmail.com

Erica Dinkins
University of North Texas
erica.dinkins@unt.edu

Ewan Dunbar University of Maryland - College Park emd@umd.edu

Carrie Dyck Memorial University of Newfoundland cdyck@mun.ca Susan Edwards University of Reading s.i.edwards@reading.ac.uk

Newport Elissa University of Rochester newport@bcs.rochester.edu

Miriam Ellert Max Planck Institute for Psycholinguistics miriam.ellert@mpi.nl

Nick Ellis University of Michigan ncellis@umich.edu

Antje Endesfelder Quick Max Planck Institute for Evolutionary Anthropology antje.quick@eva.mpg.de

Bruno Estigarribia University of North Carolina - Chapel Hill estigarr@email.unc.edu

Claudia Felser University of Essex felsec@essex.ac.uk

Anne Fernald Stanford University afernald@stanford.edu

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

Barry Finder Wesleyan University bfinder@wesleyan.edu

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

Julie Franck University of Geneva julie.franck@unige.ch

Michael C. Frank Massachusetts Institute of Technology mcfrank@mit.edu

Fred H. Genesee McGill University Fred.Genesee@mcgill.ca Angela D. Friederici Max Planck Institute for Human Cognitive and Brain Sciences angelafr@cbs.mpg.de

Naama Friedmann Tel Aviv University naamafr@post.tau.ac.il

Manuela Friedrich Free University of Berlin friedri@cbs.mpg.de

Margaret Friend San Diego State University mfriend@sunstroke.sdsu.edu

Chisato Fuji Nanzan University d06hl002@nanzan-u.ac.jp

Reyhan Furman Radboud University Nijmegen rturanli@ku.edu.tr

Annie Gagliardi University of Maryland - College Park acg39@umd.edu

Karine Gauthier McGill University karine.gauthier@mail.mcgill. ca

Hanna Gelfand New York University hmg242@nyu.edu

Fred Genesee McGill University fred.genesee@mcgill.ca

Amy Geojo Harvard University ageojo@fas.harvard.edu

Yael Gertner University of Illinois - Urbana-Champaign ygertner@uiuc.edu

Judit Gervain University of British Columbia gervain@psych.ubc.ca

Dominic Gibson Wesleyan University djgibson@wesleyan.edu Judith A. Gierut Indiana University gierut@indiana.edu

Justin Glover Indiana University jdglover@indiana.edu

Tilbe Goksun Temple University tgoksun@temple.edu

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

Sharon Goldwater University of Edinburgh sgwater@inf.ed.ac.uk

Roberta Golinkoff University of Delaware roberta@udel.edu

Noah Goodman Massachusetts Institute of Technology ndg@mit.edu

Louise Goyet CNRS louise.goyet@gmail.com

Thomas Gruenloh Max Planck Institute for Evolutionary Anthropology Thomas_Gruenloh@eva.mpg. de

Theres Gruter Stanford University tgruter@stanford.edu

Susan Graham University of Calgary grahams@ucalgary.ca

Melanie Green University of Iowa melanie-green@uiowa.edu

Elena Grigorenko Yale University elena.grigorenko@yale.edu

John Grinstead Ohio State University grinstead.11@osu.edu Kleanthes K. Grohmann University of Cyprus kleanthi@ucy.ac.cy

Frederike F.C. Groothoff University of Groningen frederike.groothoff@gmail. com

M. Jal Gutierrez University of the Basque Country junkal.gutierrez@ehu.es

Barbara Hoehle University of Potsdam hoehle@uni-potsdam.de

Justin Halberda Johns Hopkins University halberda@jhu.edu

Nicholas Harris Saint Mary's University nharris@lakeheadu.ca

Joshua Hartshorne Harvard University jkhartshorne@gmail.com

Jessica Hay University of Wisconsin - Madison hay@Waisman.Wisc.Edu

Emma Healey University of Edinburgh emma@ling.ed.ac.uk

Makiko Hirakawa Bunkyo University hirakawa@koshigaya.bunkyo. ac.jp

Kathy Hirsh-Pasek Temple University khirshpa@temple.edu

Mitsuko Hisano Shizuoka University mitsuko-h@beach.ocn.ne.jp

Lesa Hoffman University of Nebraska lhoffman2@unlnotes.unl.edu

Yi Ting Huang University of North Carolina - Chapel Hill ythuang@email.unc.edu Carla Hudson Kam University of California -Berkeley clhudson@berkeley.edu

Tim Hunter University of Maryland - College Park timh@umd.edu

Paul Ibbotson University of Manchester Paul.Ibbotson@postgrad.manchester.ac.uk

William Idsardi University of Maryland - College Park idsardi@umd.edu

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

Tania Ionin University of Illinois - Urbana-Champaign tionin@illinois.edu

Kentaro Ishizuka NTT Communication Science Laboratories

Kiwako Ito Ohio State University ito@ling.ohio-state.edu

Ivan Ivanov University of Iowa ivan-ivanov@uiowa.edu

Juhani Jarvikivi Max Planck Institute for Psycholinguistics juhani.jarvikivi@mpi.nl

Nobuyuki Jincho RIKEN Brain Science Institute njincho@brain.riken.jp

Megan Johanson University of Delaware majohanson@psych.udel.edu

Tiffany Judy University of Iowa Tiffany-Judy@uiowa.edu Caroline Junge
Max Planck Institute for Psycholinguistics
Caroline.Junge@mpi.nl

Christiane Kaden Indiana University ckaden@indiana.edu

Rene Kager University of Tromso R.W.J.Kager@uu.nl

Maria Kambanaros Technological Educational Institute of Patras kambanaros@gmail.com

Napoleon Katsos Cambridge University nk248@cam.ac.uk

Celeste Kidd University of Rochester ckidd@bcs.rochester.edu

Ji-Hye Kim SungKyunKwan University jkim38ster@gmail.com

Gisela Klann-Delius Free University of Berlin gisela.klann-delius@fu-berlin. de

Joern Klinger Max Planck Institute for Evolutionary Anthropology joern klinger@eva.mpg.de

Eon-Suk Ko State University of New York - Buffalo eonsukko@buffalo.edu

Tadahisa Kondo NTT Communication Science Laboratories tkondo@brl.ntt.co.jp

Haruka Konishi Keio University konishi@temple.edu

Valesca Kooijman Top Institute Food & Nutrition Kooijman@TIFN.nl Sergei Kornilov University of Connecticut - Storrs sa.kornilov@gmail.com

Elena Koulaguina University of Quebec - Montreal gioialezza@yahoo.com

Grzegorz Krajewski University of Manchester krajewski@manchester.ac.uk

Sarah Kresh City University of New York - Graduate Center sarahkresh@yahoo.ca

Sanne J.M. Kuijper University of Groningen s.j.m.kuijper@rug.nl

Aylin Kuntay Koc University akuntay@ku.edu.tr

Tanja Kupisch University of Hamburg tanja.kupisch@uni-hamburg.de

Barbara Landau Johns Hopkins University landau@jhu.edu

Woo-yeol Lee Yonsei University wlee@yonsei.ac.kr

Sunyoung Lee-Ellis University of Maryland - College Park sunyoung@umd.edu

Geraldine Legendre Johns Hopkins University legendre@jhu.edu

Tom Lentz University of Tromso T.O.Lentz@uu.nl

Clara Levelt Leiden University c.c.levelt@hum.leidenuniv.nl

Susan Levine University of Chicago s-levine@uchicago.edu Jeffrey Lidz University of Maryland - College Park jlidz@umd.edu

Moti Lieberman McGill University mordecai.lieberman@mail. mcgill.ca

Jacqueline Liederman Boston University

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

Constantine Lignos University of Pennsylvania lignos@seas.upenn.edu

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

Maxi Limbach University of Cologne limbachm@uni-koeln.de

Jiøí Lukavský Academy of Sciences of the Czech Republic lukavsky@praha.psu.cas.cz

Weiyi Ma University of Delaware weiyima@udel.edu

'Malillo Machobane National University of Lesotho em.machobane@nul.ls

Heather MacKenzie University of Calgary hkmacken@ucalgary.ca

Brian MacWhinney Carnegie Mellon University macw@cmu.edu

Nivedita Mani University College London n.mani@ucl.ac.uk

Gary Marcus New York University gary.marcus@nyu.edu Mitchell Marcus University of Pennsylvania mitch@cis.upenn.edu

Theodoros Marinis University of Reading t.marinis@reading.ac.uk

Dana Marinos Max Planck Institute for Human Cognitive and Brain Sciences marinos@cbs.mpg.de

Jessica Marshall University of Delaware jessicamarshall11@gmail.com

Shannon Marshall University of Delaware ssmarsh@udel.edu

Emily Mather University of Oxford emily.mather@psy.ox.ac.uk

Danielle Matthews University of Manchester danielle. matthews@manchester.ac.uk

Laurie A. Maynell Ohio State University Laurie A. Maynell maynell@ling.ohio-state.edu

Reiko Mazuka RIKEN Brain Science Institute mazuka@brain.riken.jp

Dan McCurley Ohio State University mccurley.3@osu.edu

Michael McGuire Indiana University mpmcguir@indiana.edu

Xiangzhi Meng Peking University mengxzh@pku.edu.cn

Jennifer Merickel University of Maryland - College Park jennifer@merickel.ort

Robyn Mierzejewski Boston University rmierze1@gmail.com

The 34th Annual Boston University Conference on Language Development Page 79 Susanne Militzer University of Cologne susanne@militzer.net

Karen Miller Calvin College klm26@calvin.edu

Severine Millotte University of Geneva Severine.Millotte@unige.ch

Utako Minai RIKEN Brain Science Institute u minai@brain.riken.jp

Toben H. Mintz
University of Southern California
tmintz@usc.edu

Mari Miyao University of Hawaii - Manoa mmiyao@hawaii.edu

Francina Moloi National University of Lesotho fl.moloi@nul.ls

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

James Morgan Brown University James Morgan@brown.edu

Michele L. Morrisette Indiana University mmorrise@indiana.edu

Sanaa Moukawane Universite Paris Descartes sanaa.moukawane@etu.univparis5.fr

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

Alan Munn Michigan State University amunn@msu.edu

Keiko Murasugi Nanzan University murasugi@nanzan-u.ac.jp Tomomi Nakatani Nanzan University nakatanit2008@yahoo.co.jp

Cristina Name Federal University of Juiz de Fora cristina.name@ufjf.edu.br

Thierry Nazzi Universite Paris Descartes thierry.nazzi@univ-paris5.fr

Rochelle Newman University of Maryland - College Park rnewman@hesp.umd.edu

Elissa L. Newport University of Rochester newport@bcs.rochester.edu

Claire Noble University of Liverpool c.noble@liverpool.ac.uk

Rama Novogrodsky Tel Aviv University

Matthew O'Donnell University of Michigan mbod@umich.edu

Timothy O'Donnell Harvard University timo@wjh.harvard.edu

Hiroaki Oishi The Japanese Society for the Promotion of Science oishih@brain.riken.jp

Risako Omori RIKEN Brain Science Institute romori@brain.riken.jp

Luca Onnis University of Hawaii - Manoa lucao@hawaii.edu

Yuriko Oshima-Takane McGill University yuriko@ego.psych.mcgill.ca

Mitsuhiko Ota University of Edinburgh mits@ling.ed.ac.uk Amanda Owen University of Iowa amanda-owen@uiowa.edu

Duygu Ozge University of Reading duyguozge@gmail.com

Asli Ozyurek Radboud University Nijmegen asli.ozyurek@mpi.nl

Anna Papafragou University of Delaware papafragou@psych.udel.edu

Johanne Paradis University of Alberta johanne.paradis@ualberta.ca

Markus Paulus Radboud University Nijmegen m.paulus@donders.ru.nl

Lisa Pearl University of California - Irvine lpearl@uci.edu

Bruna Pelucchi University of Wisconsin - Madison pelucchi@wisc.edu

Sharon Peperkamp LSCP Paris sharon.peperkamp@ens.fr

Silvia Perpian University of Illinois - Urbana-Champaign perpinan@illinois.edu

Hagoort Peter Max Planck Institute for Psycholinguistics peter.hagoort@mpi.nl

Nadia Petruccelli La Trobe University npetruccelli@students.latrobe. edu.au

Vadim Philippov Orel State University ph131174@yandex.ru Colin Phillips University of Maryland - College Park colin@umd.edu

Cora-Lee Picone Smith College cpicone@smith.edu

Cristina Pierantozzi University of Hamburg cripierantozzi@yahoo.it

Paul Pietroski University of Maryland - College Park pietro@umd.edu

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

Amanda Pogue University of Toronto amanda.pogue@gmail.com

Maria Polinsky Harvard University polinsky@fas.harvard.edu

Nausicaa Pouscoulous University College London n.pouscoulous@ucl.ac.uk

Teresa Pratt Ohio State University pratt.120@osu.edu

Shannon Pruden University of Chicago spruden@uchicago.edu

Liina Pylkkanen New York University liina.pylkkanen@nyu.edu

Ronice Miller de Quadros Universidade Federal de Santa Catarina ronice@cce.ufsc.br

Hugh Rabagliati New York University hugh@nyu.edu

Natalia Rakhlin Yale University natalia.rakhlin@yale.edu Jodi Reich Yale University jodi.reich@yale.edu

Robert Reichle University of Texas - Austin rreichle@gmail.com

Mabel Rice University of Kansas mabel@ku.edu

Jose Riqueros-Morante University of Connecticut - Storrs jose.riqueros_morante@uconn. edu

Judith Rispens University of Amsterdam J.E.Rispens@uva.nl

Lilia Rissman Johns Hopkins University rissman@cogsci.jhu.edu

Leah Roberts
Max Planck Institute for Psycholinguistics
leah.roberts@mpi.nl

Laura Rocek Beloit University laurocek@gmail.com

Yvan Rose Memorial University of Newfoundland yrose@mun.ca

Sharon Miriam Ross Ohio State University Sharon Ross smr@ling.osu.edu

Dan Roth University of Illinois - Urbana-Champaign

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

Jenny Saffran University of Wisconsin - Madison jsaffran@wisc.edu Sara Finley University of Rochester sfinley@bcs.rochester.edu

Yutaka Sato RIKEN Brain Science Institute satoyu@brain.riken.jp

Naoko Sawada Nanzan University sawada_naoko2009@yahoo. co.jp

Cristina Schmitt Michigan State University schmit12@msu.edu

Sara Schmitt San Diego State University saschmitt@gmail.com

Michaela Schmitz Free University of Berlin michaela.schmitz@fu-berlin.de

Bonnie D. Schwartz University of Hawaii at Manoa bds@hawaii.edu

Roger Schwarzschild Rutgers University - New Brunswick sroger@ruccs.rutgers.edu

John H. G. Scott Indiana University scottjh@indiana.edu

Rose Scott University of Illinois - Urbana-Champaign rmscott2@uiuc.edu

HyunKyoung Seo Indiana University hyuseo@indiana.edu

Josette Serres CNRS josette.serres@parisdescartes. fr

Carissa Shafto University of Louisville carissa.shafto.louisville.edu

Marina Sherkina-Lieber University of Toronto marina.lieber@gmail.com Rushen Shi University of Quebec - Montreal rushen_shi@yahoo.ca shi. rushen@uqam.ca

Tomohiko Shirahata Shizuoka University shirahata-kyt@cy.tnc.ne.jp

Yi-Jiun Shiung University of Hawaii - Manoa yijiun@hawaii.edu

Anna Shusterman Wesleyan University anna.shusterman@gmail.com

Carolina Silva Federal University of Juiz de Fora carolgcs@bol.com.br

Leher Singh Boston University leher@bu.edu

Barbora Skarabela University of Edinburgh barbora@ling.ed.ac.uk

Dimitrios Skordos University of Delaware dskordos@UDel.Edu

Katrin Skoruppa LSCP Paris skoruppa@ens.fr

Andrew D M Smith University of Edinburgh andrew@ling.ed.ac.uk

Kenny Smith Northumbria University kenny.smith@northumbria. ac.uk

Linda Smith Indiana University smith4@indiana.edu

Nafsika Smith Cambridge University ns437@cam.ac.uk

Filip Smolik Academy of Sciences of the Czech Republic smolik@praha.psu.cas.cz Jesse Snedeker Harvard University snedeker@wjh.harvard.edu

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

David Sobel Brown University dave_sobel@brown.edu

Melanie Soderstrom University of Manitoba M Soderstrom@umanitoba.ca

Hyun-joo Song Yonsei University hsong@yonsei.ac.kr

Lulu Song University of Delaware lulusong@gmail.com

Tamara Sorenson-Duncan University of Alberta tgs@ualberta.ca

Elizabet Spaepen University of Chicago liesje@uchicago.edu

Shari Speer Ohio State University speer@ling.ohio-state.edu

Patti Spinner Michigan State University spinnerp@msu.edu

Rex Sprouse Indiana University rsprouse@indiana.edu

Mahesh Srinivasan Harvard University mahesh@wjh.harvard.edu

Aimee Stahl University of Delaware aimees@udel.edu

Nola Stephens Stanford University nola@stanford.edu Mark Steyvers University of California - Irvine msteyver@uci.edu

David Stringer Indiana University ds6@indiana.edu

Yi-ching Su National Tsing Hua University ycsu@mx.nthu.edu.tw

Erin Swain Memorial University of Newfoundland s06ees@mun.ca

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

Anna Synnestvedt University of Maryland - College Park asynnestvedt@hesp.umd.edu

Kristen Syrett Rutgers University - New Brunswick k-syrett@ruccs.rutgers.edu

Aya Takeda University of Hawaii - Manoa ayataked@hawaii.edu

Elena Tenenbaum Brown University elena_tenenbaum@brown.edu

Joshua B. Tenenbaum Massachusetts Institute of Technology jbt@mit.edu

Anna Theakston University of Manchester anna.theakston@manchester. ac.uk

Jennifer Thomson Harvard University thomsoje@gse.harvard.edu

Jennifer Thorward Ohio State University Jennifer Thorward jnthorward@gmail.com Lyn Shan Tieu University of Connecticut - Storrs lyn.tieu@gmail.com

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

Virginia Tompkins University of Florida aurora16@ufl.edu

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

Melanie Tumlin University of California - San Diego mtumlin@cogsci.ucsd.edu

Emily Tynan University of Delaware etynan@udel.edu

Suzanne V.H. van der Feest University of Texas - Austin feest@mail.utexas.edu

Spyridoula Varlokosta University of Athens svarlokosta@phil.uoa.gr

Julio Villa-Garcia University of Connecticut - Storrs juliovillagarcia@gmail.com

Laura Wagner Ohio State University wagner.602@osu.edu

Hao Wang University of Southern California haowang@usc.edu

Yi-Ting Wang Indiana University yw7@indiana.edu

Sandra Waxman Northwestern University s-waxman@northwestern.edu

Zhijun Wen University of Hawaii - Manoa zhijun@hawaii.edu Janet Werker University of British Columbia jwerker@psych.ubc.ca

Marit Westergaard University of Tromso marit.westergaard@uit.no

Ken Wexler Massachusetts Institute of Technology wexler@mit.edu

Katherine S. White University of Rochester kwhite@bcs.rochester.edu

Abigail Wilkins Smith College

Jennifer Williams
Saint Mary's University
jennifer_lynn_
williams@hotmail.com

Sarah Wilson University of California - Berkeley sarahwilson@berkeley.edu

Amanda Worek Harvard University aworek@wjh.harvard.edu

Clare Wright
Newcastle University
clare.wright1@ncl.ac.uk

Naoto Yamane RIKEN Brain Science Institute yamanen@brain.riken.jp

Charles Yang University of Pennsylvania charles.yang@ling.upenn.edu

W. Quin Yow Stanford University quin@stanford.edu

Chen Yu Indiana University chenyu@indiana.edu

Daniel Yurovsky Indiana University dyurovsk@indiana.edu Elena Zaretsky University of Massachusetts - Amherst ezaretsky@comdis.umass.edu

Deniz Zeyrek Middle East Technical University dezeyrek@metu.edu.tr

Yun Zhao Carnegie Mellon University yunzhao@andrew.cmu.edu

Xiaobei Zheng Peking University borage@163.com

Katerina Zombolou La Trobe University k.zombolou@latrobe.edu.au

Andrea Zukowski University of Maryland - College Park zukowski@umd.edu

The 34th Annual Boston University Conference on Language Development Page 82

Index

A

Acknowledgements 4
Adone, Dany 65
Alexiadou, Artemis 16
Allen, Shanley 21
Amano, Shigeaki 51
Amaral, Patricia 28
Anagnostopoulou, Elena 16
Anderssen, Merete 49
Arunachalam, Sudha 69
Aslin, Richard N. 70
Austin, Alison C. 72

B

Bach, Rachel 39 Baek, Soondo 26 Baier, Rebecca 35 Bannard, Colin 43, 54 Barner, David 65 Barnes, Jonathan 36 Barriere, Isabelle 52 Bavin, Edith 70 Bentzen, Kristine 67 Berent, Iris 18 Bergmann, Christina 54 Berman, Jared 15 Bibvk, Sarah 17 Bijeljac-Babic, Ranka 60 Blais, Mary-Jane 29, 75 Blythe, Richard A 67 Bock, Kay 46 Bree, Elise de 20 Bretherton, Lesley 70 Brittain, Julie 38, 74 Brooks, Neon 65 Brusini, Perrine 54 Bunger, Ann 65 Burghardt, Beatrix 63, 73 Burns, Frances 21 Byers-Heinlein, Krista 28

C

Cartmill, Erica 48
Chambers, Craig 15
Chan, Erwin 15
Chondrogianni, Vasiliki 58, 68
Christophe, Anne 54
Chu, Wei 25
Clackson, Kaili 42
Clark, Eve 39
Connor, Michael 33, 75
Conrad, Nicole 29
Coppola, Marie 66
Core, Cynthia 39

Crago, Martha 69 Creel, Sarah 42 Currie-Rubin, Rachel 52 Curtin, Suzanne 71 Cutler, Anne 19 Cyr, Marilyn 20, 51

D

Darcy, Isabelle 30
Dehaene-Lambertz, Ghislaine 54
Dekydtspotter, Laurent 30
Delcenserie, Audrey 31
Demuth, Katherine 17
Dillon, Brian 31
Dinkins, Erica 21
Dunbar, Ewan 31
Dyck, Carrie 38, 74

\mathbf{E}

Edwards, Susan 68 Elissa, Newport 31 Ellert, Miriam 55 Ellis, Nick 37 Estigarribia, Bruno 22

F

Feest, Suzanne V.H. van der 49
Fernald, Anne 27, 32, 72
Fikkert, Paula 54
Finder, Barry 67
Finley, Sara 31
Fisher, Cynthia 33, 66, 75
Franck, Julie 24
Frank, Michael C. 32, 72
Friederici, Angela D. 62
Friedmann, Naama 55
Friedrich, Manuela 62
Friend, Margaret 38
Fuji, Chisato 59, 61
Furman, Reyhan 49

G

Gagliardi, Annie 32 Gauthier, Karine 32 Gelfand, Hanna 60 Genesee, Fred 29, 31, 32, 75 Geojo, Amy 22 Gertner, Yael 33, 75 Gervain, Judit 18 Gibson, Dominic 67 Gierut, Judith A. 33 Glover, Justin 30 Goksun, Tilbe 21 Goldin-Meadow, Susan 48, 66 Goldwater, Sharon 16 Golinkoff, Roberta 18, 21, 45 Goodman, Noah D. 32, 37, 72 Goyet, Louise 52

Graham, Susan 15, 71 Green, Melanie 69 Grinstead, John 33, 36, 73 Grohmann, Kleanthes K. 56 Groothoff, Frederike F.C. 57, 74 Grueter, Theres 69 Grünloh, Thomas 56 Gutierrez, M. J. 66

H

Halberda, Justin 44
Harris, Nicholas 29
Hartshorne, Joshua 41
Hay, Jessica 17
Healey, Emma 56
Hirakawa, Makiko 29, 75
Hirsh-Pasek, Kathy 18, 21, 45
Hisano, Mitsuko 62
Hoffman, Lesa 19
Höhle, Barbara 60
Huang, Yi Ting 15
Hunter, Tim 44

I

Ibbotson, Paul 26 Idsardi, William 31, 35 Imai, Mutsumi 21 Ionin, Tania 52 Ishizuka, Kentaro 51 Ito, Kiwako 16, 17 Ivanov, Ivan 70

J

Järvikivi, Juhani 55 Jincho, Nobuyuki 16, 57, 61 Johanson, Megan 20 Judy, Tiffany 34, 74 Junge, Caroline 19

K

Kaden, Christiane 30 Kager, Rene 58 Kam, Carla Hudson 26 Kambanaros, Maria 56 Katsos, Napoleon 42 Kidd, Celeste 70 Kim, Ji-Hye 52 Klann-Delius, Gisela 62 Klinger, Joern 43 Ko, Eon-Suk 34 Kondo, Tadahisa 51, 61 Konishi, Haruka 21 Kooijman, Valesca 19 Kornilov, Sergei 71 Koulaguina, Elena 34 Krajewski, Grzegorz 25 Kresh, Sarah 52 Kuijper, Sanne J.M. 57, 74 Kuntay, Aylin 49 Kupisch, Tanja 51

L

Landau, Barbara 38
Lee, Woo-yeol 57
Lee-Ellis, Sunyoung 35
Legendre, Geraldine 38, 52
Lentz, Tom 58
Levelt, Clara 58
Levine, Susan 48
Lidz, Jeffrey 32, 35, 44
Lieberman, Moti 35
Liederman, Jacqueline 36
Lieven, Elena 25, 26, 41, 55, 56
Lignos, Constantine 15
Lillo-Martin, Diane 30
Limbach, Maxi 65
Lukavský, Jiøí 62

M

Ma, Weiyi 18, 45 Machobane, 'Malillo 17 MacKenzie, Heather 71 MacWhinney, Brian 68 Mani, Nivedita 68 Marcus, Gary 60 Marcus, Mitchell 15 Marinis, Theodoros 58, 60, 68 Marinos, Dana 62 Marshall, Jessica 18 Marshall, Shannon 18 Mather, Emily 44 Matthews, Danielle 41 Maynell, Laurie A. 33, 73 Mazuka, Reiko 16, 57, 61 McCurley, Dan 36 McGuire, Michael 30 Merickel, Jennifer 44 Mierzejewski, Robyn 36 Militzer, Susanne 59 Miller, Karen 41 Millotte, Severine 24 Minai, Utako 16 Mintz, Toben H. 40 Miyao, Mari 25 Moloi, Francina 17 Montrul, Silvina 36, 52 Morgan, James 34, 64 Morrisette, Michele L. 33 Moukawane, Sanaa 45 Mugitani, Ryoko 51 Munn, Alan 41 Murasugi, Keiko 59, 61

N

Nakatani, Tomomi 59 Name, Cristina 59 Nazzi, Thierry 45, 60 Newman, Rochelle 63 Newport, Elissa L. 72 Noble, Claire 61 Novogrodsky, Rama 55

0

O'Donnell, Matthew 37
O'Donnell, Timothy 37
Oishi, Hiroaki 57
Omori, Risako 61
Onnis, Luca 25
Oshima-Takane, Yuriko 29, 75
Ota, Mitsuhiko 56
Owen, Amanda 69
Ozge, Duygu 60
Ozyurek, Asli 49

P

Papafragou, Anna 19, 20, 65 Paradis, Johanne 18 Paulus, Markus 54 Pearl, Lisa 16 Pelucchi, Bruna 17 Peperkamp, Sharon 48 Perpian, Silvia 45 Peter, Hagoort 19 Petruccelli, Nadia 70 Philippov, Vadim 52 Phillips, Colin 35 Pichler, Deborah Chen 30 Picone, Cora-Lee 21 Pierantozzi, Cristina 51 Pietroski, Paul 44 Plunkett, Kim 44 Pogue, Amanda 65 Polinsky, Maria 32 Pratt, Teresa 36 Pruden, Shannon 48 Pylkkänen, Liina 60

Q

Quadros, Ronice Miller de 30 Quick, Antje Endesfelder 55

R

Rabagliati, Hugh 60
Rakhlin, Natalia 71
Ratner, Nan Bernstein 63
Reich, Jodi 71
Reichle, Robert 37
Rice, Mabel 19
Riqueros-Morante, Jose 64, 73
Rispens, Judith 20
Rissman, Lilia 38
Roberts, Leah 55
Rocek, Laura 18
Rose, Yvan 38, 74
Ross, Sharon Miriam 33, 73

Roth, Dan 33, 75 Rowland, Caroline 61

S

Saffran, Jenny 17 Sato, Yutaka 61 Sawada, Naoko 61 Schedules 8, 9, 10, 11, 12, 13, 14 Schedule at-a-glance 7 Schmitt, Cristina 41 Schmitt, Sara 38 Schmitz, Michaela 62 Schwartz, Bonnie D. 25 Schwarzschild, Roger 45 Scott, John H. G. 30 Scott, Rose 66 Seo, HyunKyoung 63, 73 Serres, Josette 60 Shafto, Carissa 43 Sherkina-Lieber, Marina 44 Shi, Rushen 20, 34, 51 Shirahata, Tomohiko 62 Shiung, Yi-Jiun 25 Shusterman, Anna 67 Silva, Carolina 59 Singh, Leher 36 Skarabela, Barbora 21, 56 Skordos, Dimitrios 19 Skoruppa, Katrin 48 Smith, Andrew D M 67 Smith, Kenny 67 Smith, Linda 24 Smith, Nafsika 42 Smolík, Filip 62 Snedeker, Jesse 15, 22, 37, 41, 43, 63 Snyder, William 64, 73 Sobel, David 64 Soderstrom, Melanie 34, 39 Song, Hyun-joo 57 Song, Lulu 18, 45 Sorenson-Duncan, Tamara 18 Spaepen, Elizabet 66 Speer, Shari 17 Spelke, Elizabeth 27 Spinner, Patti 24 Sprouse, Rex 30 Srinivasan, Mahesh 63 Stahl, Aimee 18, 45 Stephens, Nola 39 Stevvers, Mark 16 Stringer, David 63, 73 Su, Yi-ching 48 Swain, Erin 38, 74 Swingley, Daniel 49 Synnestvedt, Anna 63 Syrett, Kristen 45

T

Table of Contents 1

Takeda, Aya 25
Tanenhaus, Michael K. 46
Tenenbaum, Elena 64
Tenenbaum, Joshua B. 32, 37, 72
Theakston, Anna 26
Thomson, Jennifer 52
Thorward, Jennifer 33, 73
Tieu, Lyn Shan 64
Tomasello, Michael 25, 26, 41, 43, 54, 55, 56
Tompkins, Virginia 64
Trueswell, John C. 46, 65
Tumlin, Melanie 42
Tynan, Emily 18

\mathbf{V}

Valian, Virginia 53 Varlokosta, Spyridoula 16 Villa-Garcia, Julio 64, 73 Villiers, Jill de 21 Villiers, Peter de 21

W

Wagner, Laura 17
Wang, Hao 40
Wang, Yi-Ting 63, 73
Waxman, Sandra 69
Wen, Zhijun 25
Werker, Janet 18
Westergaard, Marit 49, 67
Wexler, Ken 19, 53
White, Katherine S. 70
Wilkins, Abigail 21
Williams, Jennifer 29
Wilson, Sarah 26
Worek, Amanda 43
Wright, Clare 71

\mathbf{Y}

Yamane, Naoto 16 Yang, Charles 15 Yow, W. Quin 22 Yu, Chen 24 Yurovsky, Daniel 24

Z

Zaretsky, Elena 39 Zeyrek, Deniz 60 Zhao, Yun 68 Zheng, Xiaobei 15 Zombolou, Katerina 16 Zukowski, Andrea 43