9/10/25: Yearly Kickoff/Introductions/Collaborations

On call: Alexus, Jennifer, Eva, Ritwika, Marzieh, Rita, Alexa

- Introductions
- Notes:
    - Sleep and target-child-directed speech classifier: https://kachergis.shinyapps.io/classify_cds_ods/
    - Machine Learning program: https://www.nature.com/articles/s41592-022-01426-1
        - Similar, but for non-social contexts: https://www.nature.com/articles/s41592-018-0234-5
    - Upcoming work on siblings:
        - https://reporter.nih.gov/search/m0-FcVqtNUaWCdzlEqmpxQ/project-details/10988749
    - NICU work with LENA:
        - Caskey, M., Stephens, B., Tucker, R., & Vohr, B. (2014). Adult talk in the NICU with preterm infants and developmental outcomes. *Pediatrics*, *133*(3), e578-e584.
        - Hersey, A., Hoffman, L., Tucker, R., & Vohr, B. (2021). Enhancing the NICU language environment with a neonatal Cuddler program. *Journal of Perinatology*, *41*(8), 2063-2071.
- Upcoming Meetings:
    - October: Grant Q&A
    - November: Article review with Zuzanna Laudańska ("*From Data to Discovery: Technology Propels Speech-Language Research and Theory-Building in Developmental Science*")
    - December: Guest speaker (Janet Bang) on using the sleep classifier "*An automated classifier for periods of sleep and target-child-directed speech from LENA recordings*"

4/8/2025: Conference Prep

On call: Nicky, Jennifer, Lisa, Shree, Divya, Alexa, Emily, Emma, Anna

- Nicky presented a portion of her SRCD talk and received feedback
- Emma and group reviewed how to adapt DARCLE talk for shorter talk at bilingualism conference and received feedback
- Group discussed (a) best Poster practices and (b) best Conference Presentation practices - slide deck with notes created and distributed to group
- Announcements:
    - DARCLE New Investigators Symposium at SRCD on May 2nd (Sarah, Alexus + Alexa, Nicky and Jennifer): "Methodological Insights for Analyzing Children's

Diverse Language Environments and Development with Daylong Audio Recordings”
    - Will organize DARCLE New Investigators get together at SRCD
    - Next session is on International Job Market

March 2025 meeting: combined with DARCLE (Emma Verhoeven Presenting)

2/1/25: Speaker on Automatic Speech Recognition

On call: Marvin Lavechin (speaker), Nicky, Jennifer, Alexus, Elaine, Elisa, Emma, Kaijia, Lisa, Rida, Rohit, Alexa, Sarah

- **Voice Type Classifier (VTC)**
    - Lavechin, M., Bousbib, R., Bredin, H., Dupoux, E., & Cristia, A. (2020). An open-source voice type classifier for child-centered daylong recordings. *Interspeech.*
- **Automatic LInguistic Count Estimator (ALICE)**
    - Räsänen, O., Seshadri, S., Lavechin, M., Cristia, A., & Casillas, M. (2021). ALICE: An open-source tool for automatic measurement of phoneme, syllable, and word counts from child-centered daylong recordings. *Behavior Research Methods*, *53*, 818-835.
- **Infant VoCalisation Maturity classifier (VCMnet)**
    - Al Futaisi, N., Zhang, Z., Cristia, A., Warlaumont, A., & Schuller, B. (2019, October). VCMNet: Weakly supervised learning for automatic infant vocalisation maturity analysis. In *2019 International Conference on Multimodal Interaction* (pp. 205-209).

Link to presentation:
https://drive.google.com/file/d/1WOuZB1d0UL3cH6d0uIyvF_1mM16W42kj/view?usp=drive_link

Discussion notes:

- What is a missing segment?
    - Found by human annotator but not retrieved by LENA
- Looks like tests have been toddlers; anyone trying with older kids (3-5)? Predictions about how well it would work?
    - Daniel messenger used VTC + whisper on preschool kids
        - OK performance for CTC
    - Seemingly, preschool classrooms are easier for algos than at-home recordings
- What programming support is available?
    - Can reach out to Marvin directly via email
    - Open a git issue

        - Link in Marvin's github repo with extensive instructions for VTC and ALICE (tutorial for the VMCnet coming down the pipeline)
    - Or contact other researchers who have used VTC
- Clear that we need something new, since LENA not up to date. In future, will it be possible that we have a model that we can tweak? For example, have a recording of a specific child and train a model to distinguish it from other voices on the recordings?
    - People are fine-tuning models to a specific dataset with hope to improve performance
    - Requires strong programming skills and access to GPUs (barriers)
    - As future PIs, ML suggests that we train students/encourage to develop programming skills
- Models are baised. Did ML have any reason to believe that one of the groups with neurodevelopmental disorders would be biased? Was is possible that the analyses were underpowered and that's why there wasn't evidence of bias in these groups?
    - Intuition: some children with neurodev. dis. may vocalize differently
        - 4 different models say no bias, so feeling confident
        - Mixed models – probably not underpowered given how many two minutes clips were generated and analyzed

1/12/25: Journal Article

On call: Dr. Meera (speaker/author), Divya (speaker/author), Reny (author), Malavi (author), Alexus, Nicky, Jennifer, Eva, Emma, Kaikia, Betsy, Laia, and Elisa

Meera, S. S., Swaminathan, D., Venkata Murali, S. R., Raju, R., Srikar, M., Shyam Sundar, S., ... & Mysore, A. (2025). Validation of the Language ENvironment Analysis (LENA) Automated Speech Processing Algorithm Labels for Adult and Child Segments in a Sample of Families From India. *Journal of Speech, Language, and Hearing Research*, *68*(1), 40-53.

Link to presentation:
https://docs.google.com/presentation/d/1bm03zlFM_BBhT7Ryp2VXkWXsiJ10IT1V/edit?usp=sharing&ouid=106951629589385055569&rtpof=true&sd=true

GUI: https://osf.io/wkeqh/?view_only=5f975c8e0e0542d7ab90712d1318bf8a

Discussion notes:

- Who was your sample size?
    - Metropolition city in southern part of India
    - Lots of migrant families
    - Majority were from urban background
    - 4-3 families joint family composition (uncles, aunts, grandparents living in the home)
    - Several families with siblings
    - Also had other guests in the recoding day (e.g., maids) - which made the daily form especially useful
- Did you also use monolingual families?
    - Although families indicated that they were monolingual, language exposure questionnaire revealed that all children were exposure to at least two languages

- Why do you othink LENA is working less well in this population?
    - Don't agree that the multilingualism is causing the low performance
    - LENA might classify AdS as CdS due to differences in pitch/intontation
- If you increase your age range, will you predict different results?
    - Didn't analyze effect of age
- There is a code for multiple speakers- was this overlapping speech?
    - We included this code because it wasn't overlap
- Included a code about how sure they were because it could get confusing
    - Haven't looked into this data yet
- What language exposure form do you use to assess presence of multilngualism?
    - Q-BEx: Available in lots of languages
    - LEQ and MAPLE adaptation
- What kind of activities were families engaging during the high-activities
    - The daily log forms did not indicate it
    - However, there was no particular activity out there
- Why did some people not went to participate? Can you talk a little bit about the ethical part of using LENA?
    - Extended members didn't want to participate
    - Spirtual beliefs
    - Confidentiality and privacy concerns
    - None of the families asked to delete part

Closing remarks:

- LENA summer summit
- Upcoming schedule:
    - February: Marvin (VTC, Alice)
    - March: Emma with big DARCLE
    - April: Conference preparation & support Sarah's presentation with big DARCLE
    - May: Industry Q&A

11/12/24: Journal Article

On call: Jennifer (speaker), Alexus, Nicky, Anna, Kaijia, Elisa, and Rida

Ramírez, N. F., & Hippe, D. S. (2024). Estimating infants' language exposure: A comparison of random and volume sampling from daylong recordings collected in a bilingual community. *Infant Behavior and Development*, *75*, 101943.

- Questions:
    - The study examined how LENA measures change across different sampling methods with the age range of 1-24.
        - Child directed speech changes across time:
            - Bunce, J., Soderstrom, M., Bergelson, E., Rosemberg, C., Stein, A., Alam, F., ... & Casillas, M. (2024). A cross-linguistic examination of young children's everyday language experiences. *Journal of Child Language*, 1-29.
    - Language-mixing changes over time:
        - Low code-switching samples:

        - Kremin, L. V., Alves, J., Orena, A. J., Polka, L., & Byers-Heinlein, K. (2022). Code-switching in parents' everyday speech to bilingual infants. *Journal of Child Language*, *49*(4), 714-740.
        - Ruan, Y., Byers-Heinlein, K., Orena, A. J., & Polka, L. (2023). Mixed-language input and infant volubility: Friend or foe?. *Bilingualism: Language and Cognition*, *26*(5), 1051-1066.
    - Can we compare bilingual language interactions cross linguistically?
        - We need to control sample method
        - Proportion of language spoke in
        - Language practices might be different individually and community wise (due to stigma)
    - High volume vs. random sampling
        - Depends on the question you are asking
    - Calculating inter-rate reliability
        - Using ICC vs. Kappa
        - Interested of why they chose to train RAs on another data set
        - No standard way - very small differences throw off the numbers
        - ICC is a great way to assess coding accuracy
- Alex cristia is having a daylong recordings in Paris around June - more details to come!

10/8/24: Job Market Q&A

On call: Alexus, Nicky, Jennifer, Rohit, Emma, Sarah, Elaine, Elisa, Divya, Orla, Rida, Eva, Alexa, Meg Cycosz (speaker), Jessica Kosie (speaker), and Julie Schneider (speaker)

- Notes

9/10/24: Summer Round-up

5/14/24:

On Call: Sarah, Alexa, Eva, Emma, Iris-Corinna (paper author), Nairan (paper author), Lisa (paper author), Rohit, Lisa, Pumpki, Jennifer, Melanie (paper author), Elika (paper author), Alexus

Agenda: talk about *Everyday language input and production in 1,001 children from six continents* with authors (focusing on publishing process)

4/9/24:

On Call: Alexa, Lisa, Eva, Jennifer, Rohit, Emma, Divya, Maria, Nicola, Anna, Tina

Agenda: Lisa presenting on conference work, also maybe Alexa

3/12/24:

On Call: Alexa, Sarah, Ellie, Rohit, Lisa, Eva, Ekaterina, Alexus
Conferences:
IASCL in Prague
ISSBD in Portugal
CDS in Cali
AERA in Philadelphia
Meeting for Language in Autism in Durham, NC

Agenda: Ellie presenting Hatchlings project with infants and libraries

- ?s = how to analyze (reports, no audio), receptive publishing venues for small n community-based work

2/13/24

On Call: Alexa, Anna, Rohit, Lisa, Jennifer, Emma, Samira
Agenda: journal club led by Alexa

Slides:
https://docs.google.com/presentation/d/1iqNwU65e906LRSaohD_vn4DttRIhmxXdCamXI3iv_aU/edit#slide=id.p

1/9/24

On Call: Alexa, Sarah S., Anna, Emma, Rohit, Eva, Nicola, Erin
Agenda: Strategies for communicating the benefits of using daylong recordings in research (Anna Caunt will lead discussion)

Link to presentation with notes from discussion:
https://docs.google.com/presentation/d/11wmTDnrUAXS2yme2O8ekgv8xIamuZwqJVeCDQxg3kS8/edit#slide=id.p

12/12/23

On Call: Alexa, Sarah S., Eva, Erin, Emma, Nicola, Anna

Agenda: Conference round up (insights from BUCLD, ASHA, MPAL, etc)

MPAL:

-Understudied languages (African languages, Mongolian)
-Joe Coffey (sp?) - comparing LENA automated metrics across languages

- What are we really measuring?
- What do differences across languages mean?
- Vocal fry coded as noise

Debate about finding universals vs. looking at how language is learned in different parts of the world

EL1000 paper

Naja Ferjan Ramírez's poster at MPAL:

- Random vs. Volume sampling of LENA files (volume sampling means sampling from segments that are high in LENA metrics)
- Nicola will share the link to the poster (freely available from MPAL)
- Takeaway: random sampling could be more replicable, better for 1 on 1 interactions
- Emma's project pulled segments from high, medium and low LENA segments (used pilot data to determine threshold for segments to be considered as silent/exclude)

BUCLD:

- Erin attended talks on language input
- Presentation on households with two moms - difference in parent talk tied to differences in caregiving responsibilities

Shop talk:

- What to do about segments that parent requests be deleted
    - Overdub silence in Audacity
- What to do for segments when infants are crying loudly - hard on RA's ears
    - Maybe look for a setting in Audacity?
- Same question for background noise - Emma will look up the program she used for this
    - Adobe Audition!

11/14/23

On Call: Alexa, Sarah S., Emma Verhoeven, Eva, Erin, Laia Fibla, Lisa Hamrick, Samira Rostamipour, Zahraa Sahyoun

Agenda: Discussion about collecting parent-child interaction data with children who are born blind and deaf across modalities

10/10/23

On Call: Alexa, Sarah S., Jennifer Markfeld, Ellie, Taylor, Adeline Braverman, Eva Stahlberg-Forsen, Nicola Phillips, Orla Putnam, Alexus Ramirez, Gavkhar Abdurokhmonova, Lisa Hamrick, Divya Swaminathan, Erin Campbell, Samira Rostamipour, Isaiah Salgado

Agenda: Jennifer Markfeld is presenting her F31 aims for group feedback

9/12/23

On Call: Alexa, Sarah S., Eva, Divya, Anna, Nicky, Erin, Lisa, Samira, Alexus, Zahraa, Jeffrey, Genia

Agenda: Nicky Phillips will lead a discussion of this paper:
Ferjan Ramirez, N., Hippe, D. S., Braverman, A., Weiss, Y., & Kuhl, P. K. (2023). A comparison of automatic and manual measures of turn-taking in monolingual and bilingual contexts. *Behavior Research Methods*. https://doi.org/10.3758/s13428-023-02127-z

6/5/23

On call: Sarah Surrain, Alexa McDorman, Nicola Phillips, Ekaterina Novikova, Eva Stahlberg-Forsen, Divya Swaminathan, Tina Chen, Ellie Taylor, + PI panel (Janet Bang, Rachel Romeo, Adriana Weisleder)

Agenda: PI career trajectories (~10 minutes each) -- Janet Bang (San José State University), Rachel Romeo (University of Maryland), and Adriana Weisleder (Northwestern). Talks followed by a group wide Q&A/discussion.

Recommended listservs: ICIS, Info-childes, cogdevsoc, srcd,

5/1/23

On call: Eva Stahlberg-Forsén, Margarethe McDonald, Erin Campbell, Nicola Phillips, Alexa McDorman, Meg Cychosz, Sarah Surrain

Agenda: Proposals Workshop! Nicola Phillips, Meg Cychosz, and Alexa McDorman will share proposals they are working on for feedback from the group

Housekeeping: Make sure to add your name and links to this spreadsheet if you want it to appear on the DARCLE.org website:
https://docs.google.com/spreadsheets/d/1eq1vQj8FEcfVxHi1orCwYPmMC9LJ2UZbdy2jqbr7hN0/edit?usp=sharing

Past members list

4/3/23

On call: Sarah Surrain, Alexa McDorman, Eva Stahlberg-Forsen, Erin Campbell, Nicola Phillips, Lilli Righter, Elaise Smolen, Meg Cychosz, Margarethe McDonald, Kennedy Casey, Divya Swaminathan

Agenda: Erin Campbell will present her work on language input to blind infants/toddlers

3/6/23

On call: Sarah Surrain, Alexa McDorman, Eva Stahlberg-Forsén, Erin Campbell, Nicola Phillips, Margarethe McDonald, Jennifer Markfeld, Madison Clark, Orla Putnam, Alex Tilson, Divya Swaminathan, Craig Van Pay

Agenda:
Discuss paper in progress - The Use of Language ENvironment Analysis in Autism Research: A Systematic Review
Seeking: where to elaborate or add, reviewer lens
*currently under word limit, so there is space

2/6/23, **12pm ET**

On call: Sarah Surrain, Alexa McDorman, Eva Stahlberg-Forsén, Jessica Kosie, Erin Campbell, Nicola Phillips, Tina Chen, Margarethe McDonald, Zeynep Marasli, Genia Lukin, Jennifer Markfeld

Agenda: Eva Stahlberg-Forsén presents on using LENA in the NICU

Conferences people are attending in 2023:
SRCD - need to schedule a Pre-PI meet-up in Salt Lake!
ICPS
AERA (hybrid)
BUCLD (online)
ISB

1/9/23, **12pm ET**

On call: Sarah Surrain, Alexa McDorman, Meg Cychosz, Jennifer Markfeld, Eva Stahlberg-Forsén, Orla Putman, Margarethe McDonald, Rohit M A, Jessica Kosie, Erin Campbell, Anna Caunt, Divya Saminathan, Hillary Ganek

Agenda: Meg Cychosz presents

Announcement: Kim Coulter from the LENA foundation is looking for LENA researchers to share feedback on how the https://o.lena.org/ site should be redesigned. Let Sarah know if you are interested and she will pass your name and email on to Kim.

12/5/22 Meeting: Postponed

11/7/22

On call: Alexa McDorman, Sarah Surrain, Eva Stahlberg-Forsén, Shannon Dailey, Jessica Kosie, Laia Fibla, Anna Caunt, Tina Chen, Divya Swaminathan

Agenda

Introductions

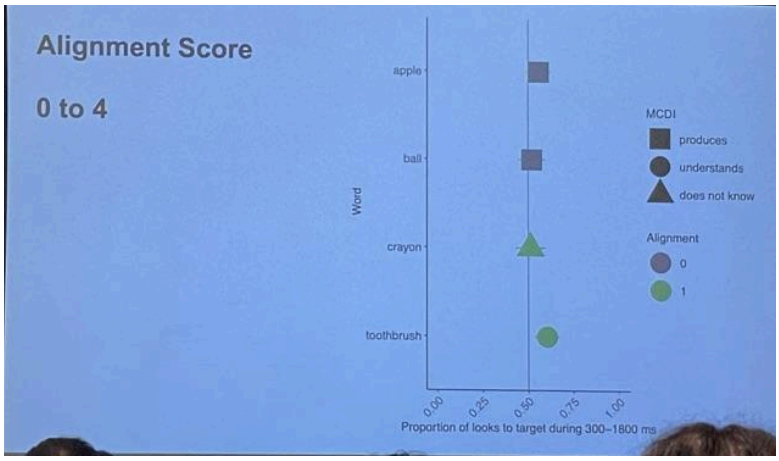
BUCLD
Monica Ellwood-Lowe:

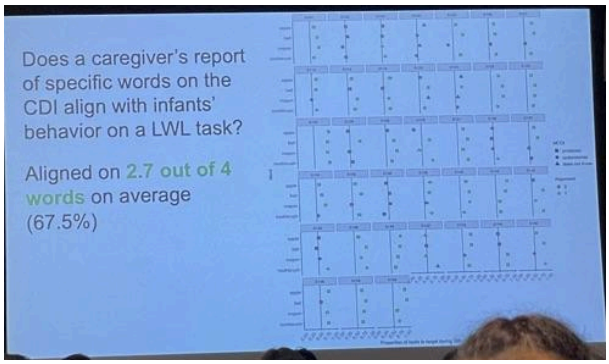
- Bathtime talk, variation within families based on parent mood, effects of external pressures and stresses.
- Data collection during summer 2020
- Found that after stimulus checks, word tokens increased.
- Transcribing all recordings.
- Chose bath time because it was consistent across all families regardless of culture.
- Naturalistic but controlled
- Eva thought that bath time routines might apply to Finnish families as well
- Collected data on lots of predictors - had parents fill out a survey with each recording they uploaded (daily covid cases, sleep
- Krista tweeted screenshots https://twitter.com/Krista_BH/status/1588531808387620865

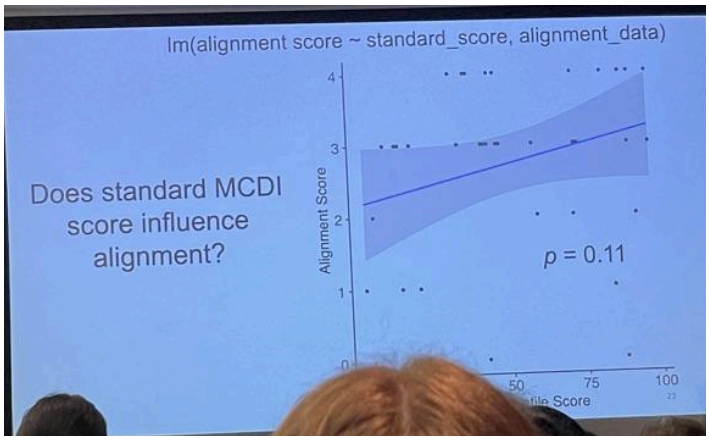
Haley Weaver & Jenny Saffran (UW Madison)

- 22 - 24 mos olds?
- Using a laughing baby in between eye tracking tasks as an attention getter (in experiments with infants)
- Disagreement between CDI and Looking while listening on same words
- Dan Swingly talked about the importance of the distractor items on the Looking while listening (e.g. if one picture is a kitten, the child will look at it no matter what)
- Used multiple trials with the same word but different exemplars, and with different yoked pairs - still showed that the way we typically do LWL doesn't match what parents report on CDI.
- Could be that the comp CDI is not as accurate as the productive CDI.
    - Shannon said her lab avoids using comp CDI.

- Laia said her lab is working on a version where parents can say how sure they are about each item
- Need to ask other caregivers and teachers to get a complete picture.

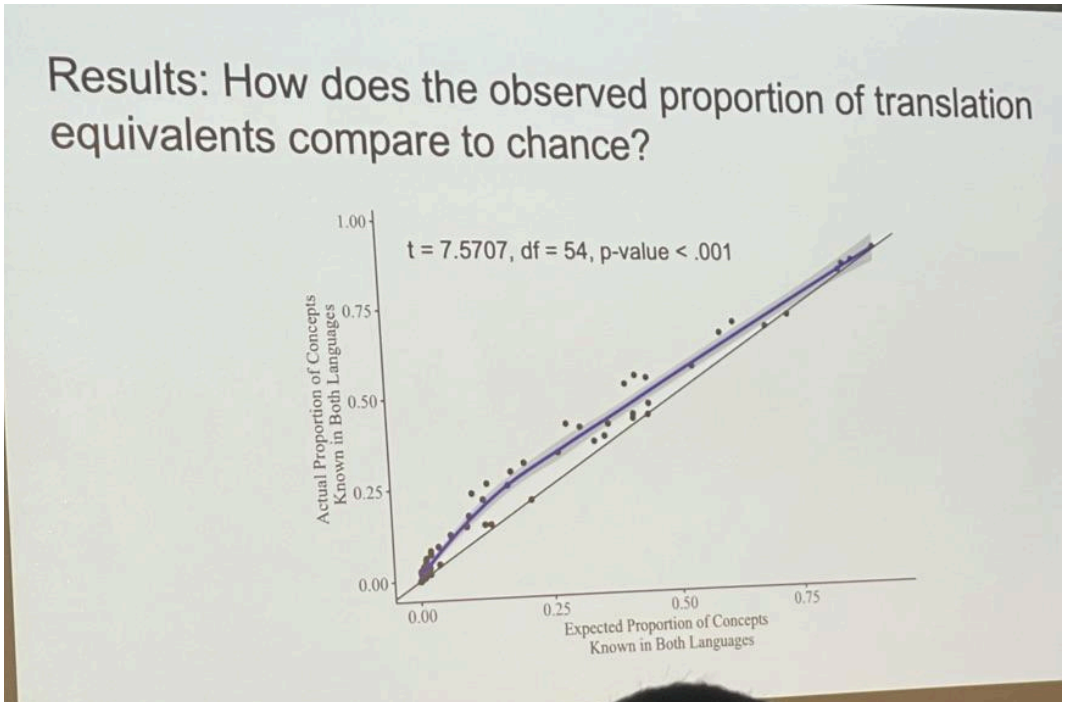






Presentation on bimodal bilingualism and translation equivalents (Elana Pontecorvo)

- Children knew more translation equivalents than non-translation equivalents
  - Shannon: I wrote down 0-94% translation equivalents, M = 29%
- Same results as a study with French-English bilinguals
  - This is the French-English study: https://www.sciencedirect.com/science/article/pii/S0010027722000725



Pro-tactile presentation

- https://twitter.com/madquam/status/1588926226596757504

Middy Casillas

- Talk on doing research with underserved/understudied groups
- Costs/benefits
- Need to prepare in advance
- Work closely with population
- Need to be sensitive to different culture and build trust
- What do they get out of it? What are their priorities?

Jessica's Poster: https://osf.io/e3zk7

Shannon's Poster (+ Erin Campbell):
https://twitter.com/bergelsonlab/status/1588625841629827072

10/3/22

On call: Alexa McDorman, Sarah Surrain, Eva Stahlberg-Forsén, Shannon Dailey, Elaine Smolen, Tina Chen, Satwik Dutta, Laia Fibla, Jeffrey May

Agenda

Introductions: name, pronouns, institution, general research focus, and favorite saying/idiom in any language

What types of activities would members like to engage in this year during our Pre-PI meetings?

- Bring in panelists to talk about job market beyond academia (and academic)
- Informal discussions
-

Journal discussion:

Bergelson, E., Soderstrom, M., Schwarz, I.-C., Rowland, C., Ramirez-Esparza, N., Hamrick, L., Marklund, E., Kalashnikova, M., Guez, A., Casillas, M., Benetti, L., Alphen, P. van, & Cristia, A. (2022). *Everyday language input and production in 1001 children from 6 continents*. PsyArXiv. https://doi.org/10.31234/osf.io/fjr5q

Next meeting: 11/7/22 12pm ET
Topic: BUCLD debrief - for those who attended, what exciting studies/findings did you learn about?

4/26/22

On call: Jessica Kosie, Meg Cychosz, Jennifer Markfeld, Sarah Surrain, Eva Stahl-Forsen, Federica Bulgarelli, Erin Campbell, Arina Shandala, Margarethe McDonald, Leonardo Piot, Lisa Hamrick, Hillary Ganek, Ran Wei, Divya Swaminathan, Anna Caunt, Rohit Ananthanarayana, Helen Long, Craig Van Pay

Guests: Marcela & Josselin (Weisleder lab), Michelle Erskine (UMD)

Recruitment Strategies:

- Community events
    - Sometimes only got a few sign-ups, despite a lot of effort
    - Have made connections with community leaders through holding events
    - Important to attend for community connections and spreading the word about your work
- Most successful recruitment is social media
    - Hosting an ad on Facebook, $25 for a week and they got 1 participant a day
- Emphasis on building community connections during pandemic
    - Fortify existing connections

    - How can you make it mutual with the community rather than just taking from the community
    - Contact those in the community and ask what you can provide
- Establishing partnerships before recruitment needs to take place, partnerships are essential to be able to even connect with some communities (Michelle Erskine, works with African American communities in DC)
    - E.g., talks about supporting language etc
    - Allows you to have a presence without an immediate request
        - Feedback from families that this was powerful for them because usually the first thing we do is request participation
        - Low-stakes way to give back without an immediate ask
        - Then, a few months later when they recruited families remembered them and were excited to participate
    - Attend any kind of historical celebration (e.g., Juneteenth) and supporting events, hosting a recruitment table, etc
    - In-person interactions tend to be more fruitful than remote, getting face in front of communities
    - Important to ensure it's a really positive experience when families participate -- they remember this and share this with others
    - Balance bi-directional partnerships where you're giving back as well as taking
    - Ask schools if there is information they want to know about
- I am recruiting young infants (9-12 months). I've contacted well baby clinics where parents visit for vaccinations

Q: What do schools/parents seem to be interested in knowing about (e.g., automated LENA reports)?

- Results of standardized language tests
- LENA reports and talk through it with the parents
    - Became an ethical issue at the hospital, researchers were not' allowed to provide assessment results
- Library circle times at many different libraries in many different neighborhoods
- Partnerships with science center -- every Monday morning have sensory activities for kids (give families information)
- We are beginning a book reading session at our local museum and In turn our RAs can sign up parents while the babies listen to the story!
- We offered to do a presentation on bilingual language development. We have a presentation prepared that gives some basis on bilingual language learning but we modify it for the demographic of the group/organization.

Q: Any issues at science centers / libraries during pandemic?

- Some places have allowed it with masks and others report that places have been closed
- Most pandemic-related issues related to universities not wanting folks in the community

Q: What kind of concerns come up when you share results of LENA reports with families?

- Some families became concerned that there were issues with children wearing the LENA recorders
    - Clarified with teachers and helped them spread the word that LENA was safe
    - Parents talk to each other, and if one parent gets the wrong message, all of the parents can get it
    - Make sure to be clear about what the LENA can and cannot do
    - If working with interpreters, make sure they fully understand what the device does and does not do
- If you can find someone in the community to get on board with LENA and explain its purpose then the information can spread through the community

Q: How do you promote retention in longitudinal studies

- In longitudinal studies, establish a personal relationship and tell them about the next steps in advance
- Michelle suggests to send birthday cards if they celebrate birthdays, books/pamphlets to families in the interim to build retention, minimizes attrition
- “Family of the week” on a website
- Compensate families but also be transparent that you want them to get something out of the study and they should learn about their child language development (they can answer questions or call the PI to ask)
- “Tips of the month” -- choose a language / literacy skill and provide strategies to support at home (quick things anyone can do)
- We always tell parents that they can come back in sooner than their next visit if they have developmental concerns… it’s happened a few times now and been really well-received by the families because they feel like we are truly invested in their child’s development and will refer to services if their child is behind in developmental milestones.

Q: When recruiting TD and children with language difficulties, is one group easier/harder to recruit in LENA style studies?

- Everyone is challenging, but challenging in their own ways
- A lot of families excited that their child is eligible for a study, that community is a little tighter knit

Q: What about sharing information with families when you’re not a clinician?

- If a kid is delayed, a family needs to know. If you’re not a clinician you can read the results and tell a kid is delayed. You can say that the test is a red flag and suggest they seek out an evaluation with a clinician and go to someone who can evaluate their child.
- You can know a lot about development without being a clinician, so you can share ideas even if the clinician is the one ultimately sharing the information
- Most important thing is to be sensitive and refer to someone who can answer questions

Q: What about campus tour events?

- Tour of campus

- Learn what it's like to be a language scientist
- Introduce a different kind of science to the public, especially for groups who have negative feelings about being linked to / engaged in research
- They participate in tasks, view the campus, ask questions, get a swag grab bag (campus paraphernalia, language science stuff)
- Draws in a crowd and promotes interpersonal interactions
- Invite many different people, even outside the age range you're interested in
- People told their families about the event and many people were "walk-ins" to the event
- Making sure families have fun when they do participate
- Families who were part of the tour agreed to be part of studies later and shared with their friends
- Takes a lot of forethought, work, planning
- Give families a specific time to come and less of a drop-in thing; try to make it structured
- This is a lot of work, but with good results

Q: Playdates?
- https://onlinelibrary.wiley.com/doi/full/10.1111/infa.12269
- Hosting playdates / providing coffee for parents / etc and later recruiting families

Q: In a clinic, what types of things have worked for recruitment?
- Had to get a separate consent form just to get audiological information
- Had to do ethics through many different clinics / school boards / etc to be able to collect data at these places
    - Once you've been through ethics protocol, going to the clinicians in the organization is fairly straight-forward because organization has given you the go-ahead

Q: Recruiting population in another study and asking if they might agree to LENA?
- Folks have had a lot of luck recruiting families for LENA
- Recent paper from Kaya DeBarbaro's lab has some info about parent perce

9/29/21

On call: Margarethe McDonald, Sarah Surrain, Anna Caunt, Lisa Hamrick, Hillary Ganek, Divya Swaminathan, Janet Bang, Meg Cychosz, Eva Stahl-Forsen, Jennifer Markfeld, Elaine Smolen, Nicky Phillips, Yufang Ruan, Alicja Radkowska, Glynnis

Guest: Alex Cristia, ChildProject (Python package)

GIN: archive that is compatible with github
- Good for large files, version control

DataLad: putting “recipes” of how data can be organized

- Yields reproducibility by ensuring that code works at a later date

ChildProject: a Python package for managing daylong recordings

- No knowledge of Python is required; can operate code from the command line
- Converts raw annotations into a standardized format
    - Ensures that smaller annotated clips don’t get lost in the larger context of a daylong recording
- Most painful part: turning your data into the format needed for ChildProject
    - But once that happens, you can use your data in tandem with data from other labs
-

DataLad is more flexible than git annex

- Can do a lot in DataLad in a structured way that git and git annex are too small for

Types of analyses you can do:

- Compare annotators
- Calculate reliability across annotators
- Launch annotation campaigns: draw specific segments from audio
    - Will give you eaf files for annotators to complete in elan

https://bookdown.org/alecristia/exelang-book/

Found that periodic sampling is better than random sampling
Overall recommendation: shorter sections, periodic sampling

7/27/21

On call: Meg Cychosz, Jessica Kosie, Federica Bulgarelli, Eva Stahl-Forsen, S.S. Meera, Shiee Harbick, Margarethe McDonald, Nicola Phillips, Sarah Surrain, Anna Caunt, Lisa Hamrick, Hillary Ganek, Reny Raju, Divya Swaminathan, Lilli Righter, Shannon Dailey, Glynnis

Guest: Han Sloetjes (ELAN)

Meeting Recording:
https://umd.box.com/s/y05ihy6smhgsrbrw6e2sxcs4ru545fsh

Notes from Han:
I've been looking for some documentation concerning the audio/video recognizers in ELAN.
Apart from what's in the manual:

https://www.mpi.nl/corpus/html/elan/ch01s05s11.html
and
https://www.mpi.nl/corpus/html/elan/ch02s04s03.html

I've only found some technical documentation (not attached, but available if anyone is interested). The link to the 'AVATeCH' project in the pages listed above, is not working anymore (the old TLA website has been taken offline).

If anyone is interested in trying the The Speech Recognition Virtual Kitchen or DiViMe

https://github.com/srvk
https://github.com/srvk/eesen-transcriber
https://github.com/srvk/DiViMe

Information about ACLEW, including the ELAN template, can be found here:

https://osf.io/q6dsh/

https://osf.io/b2jep/wiki/home/

6/29/21

On call: Meg Cychosz, Jessica Kosie, Sarah Surrain, Eva Stahlberg-Forsen, Nicola Phillips, Orla Putman, Federica Bulgarelli, Liudmyla Feurstein, Margarethe McDonald, Hillary Ganek, Yufang Ruan, Shannon Dailey, Lisa Hamrick, Glynnis, Anna Caunt

Announcements / Sharing:

- BabyCloud service https://www.aclweb.org/anthology/L18-1361/

Visitor: Adriana Weisleder

Postdoc wasn't typical, in a pediatric clinic working with families "in the real world" for 5 years

- Project management experience helpful for running your own lab
- Have to carve out time for pushing forward your own independent research / projects
- Very involved in grant writing (e.g., R01s to NIH)
- Led to collaboration with pediatricians

Working with diverse / lower SES families. What are the barriers to participating in research and strategies for overcoming?

- What are the barriers/challenges?
- What is in it for people to participate?
- Have to balance out so there's more in it than the challenges involved in participation.
- Barriers/Challenges: location, transportation, time
- How to increase benefits: go where families are to the extent possible (e.g., community lab), paying for transportation, for recruitment calling families on the phone isn't the

same as in person recruitment, going to families homes / pediatric clinics, having a Zoom session with families where you share the findings, help families navigate systems that they want to have access to

Question about how to find a postdoc / mentor.

- Fit is important - expertise you have is relevant to mentor's work
- How will you bring relevant expertise?
- Applying for your own grants takes care of some of the funding issues.

Funding for a postdoc and transition from T32 to researcher. What's the first grant people should apply for? ...or time frame of first grant when you get your first job?

- Start thinking about this early, useful to start getting experience even if you're not successful or you don't submit it.
    - E.g., writing dissertation proposal as an F31
- T32 is a fellowship that a PI has and you apply to work on the fellowship, but it isn't your own grant like an NSF of NIH F32.
- K grants
    - Recommend applying for this one.
    - Valuable time to focus on your research that you won't have later on.
    - Get to take the money with you from your postdoc to faculty (some types of K awards: K99-R00)
    - Other K awards are early faculty where you are transitioning to do slightly different work and need additional training and protected time.
- R grants
    - R21 - early career mechanism from NIDCD
- Some early career grants have limits (e.g., 7 years after PhD)
- Can't apply for R grants as a postdoctoral fellow but you can maybe change status and start to apply for R grants.

What courses at different career stages that are important types of training at different stages?

- Programming / stats
    - Taking stats at end of PhD is helpful because you know which problems you'll need to solve with stats (e.g., biostatistics in postdoc)
- Qualitative research courses

5/25/21

On call: Meg Cychosz, Federica Bulgarelli, Hillary Ganek, Anna Caunt, Margarethe McDonald, Orla Putnam, Lisa Hamrick, Liudmyla Feurstein, Sarah Surrain, Eva Stahlberg-Forsen, Jennifer Markfeld, Elaine Smolen, Virginia Marchman, Jessica Kosie, Shannon Dailey, Divya Swaminathan

Sarah Surrain: Home Language Practices and Bilingual Development Before and After Spanish-Speaking Dual Language Learners' Transition to Preschool

Large and growing population of Spanish-English dual language learners

Why focus on DLLs' transition to preschool?

- Becoming more connected with larger social context
- More time / attention on English (= less time with home language?)
- Still in process of acquiring home language

A lot of variability in DLLs' bilingual development, influenced by:

- Parental attitudes
- Quantity of input
- Quality of input (maybe more important than quality, but less known about bilinguals)
- Active use of each language
    - Bilingual kids can hear a language that they don't use
- Immersion in English-only schooling associated with decline in home language skill

Quantitative analysis of parent-child interactions before and after entry to preschool

- Do home language practices change after DLLs enter preschool?
- Does parent input predict DLLs' home language skills?
- Relation between home language usage and home language skills
- Which profiles appear delayed in languages

Two visits to families with children right before and 9 mo after they enter English preschool setting.

Time 1: Home visit

- 3 bags task (20m interaction, transcribed and coded for features of parent and child talk)
- Spanish & English assessments with child
- Parent questionnaire

Time 2: "Home" visit done online (Zoom)

- Same protocol

From interactions, calculated:

- Quantity
    - Relative use of each language
    - Quantity of talk (Spanish tokens / minute)
- Quality
    - Lexical diversity (Spanish types / minute)
    - Syntactic complexity (MLUw for Spanish)
- Child-initiated code switch

At time 1, parents and children are using a lot of Spanish. At time 2, especially children (and especially some children) were using more English, despite being in conversations with parents who were mostly using Spanish.

At both time points, children initiate switches to English more than parents.

If we take children's expressive Spanish vocab at time 2, and look at different features of Spanish input as predictors, only syntactic complexity in Spanish predicted vocab at time 2 even when controlling for complexity at time 1, older siblings, parent years in the US.

Does parent syntactic complexity differ by activity (book, dolls, puzzle)?

- Parents use longer utterances with the book rather than the other activities. So, some activities might elicit more complex utterances from parents.

None of the models predicted English proficiency (but unlikely that they're learning English from their parents - more from siblings / school / etc).

No relation between English and Spanish proficiency, suggests no transfer going on yet / in this skill. Also doesn't seem to be a cost

Are bilingual children "delayed" in both languages?

Children who use more English with Spanish dominant parents may appear to have "delays" on standardized assessments in both languages. Maybe, for example, because they can have more coherent conversations and get more feedback on their language skills.

4/27/21

On call: Jessica Kosie, Meg Cychosz, Jennifer Markfeld, Anna Caunt, Camila Scaff, Craig Van Pay, Divya Swaminathan, Eva Stahlberg-Forsen, Federica Bulgarelli, Jacob Feldman, Malavi Srikar, Margarethe McDonald, Nicky Phillips, Orla Putnam, Rachel Romeo, Reny Raju, S.S. Meera, Sarah Surrain, Shannon Dailey, Shiree Harbick

Jennifer Markfeld presenting her Master's Thesis
Looking for feedback with thoughts/discussion about things to do with LENA.

Infant sibling population (infants who have siblings with autism and are at increased likelihood).

Limited work on caregiver stress and language outcomes in autistic children, no literature investigating this topic in an infant population.

Two groups of infants: one with autistic siblings and one without
Investigating links between caregiver stress and language outcomes with this population

Measured:

- Caregivers experience of stress
- Language outcomes
- Caregiver linguistic input (does it mediate link between stress and language)

Parenting Stress Index, short form with subscores

- General distress as function of individual and personal characteristics
- Parenting distress - stress related to parenting role
- Rewards parent - degree to which interactions with child are rewarding, describes child characteristics that contribute to positive parent / child interactions
- Child demandingness - parents perceptions that caring for chid is difficult
- Difficult child - emotion dysregulation in daily life

Sent home 2 LENA devices

- Adult word count
- Reciprocal vocal contingency score (RVC)
    - Instead of CTC
    - Quantifies interactions between child and parent based on child, parent, child vocal exchanges.

Nine months later - Mullen, Vineland, MCDI for child outcomes

Used aggregate language scores to increase stability and validity of language outcome measures

Results:

- SES not associated with caregiver stress or language outcomes
- Caregivers of sibs autism experienced more stress, but none were statistically significant
- Stress was not correlated with language outcomes
- Rewards parent subscore of PSI related to receptive language
- Assoc between caregiver stress (overall scores) and language (expressive and receptive) was mediated completely by adult word count. Stress linked to word count and word count linked to language.
- No models with reciprocal vocal contingency were significant.
- Asked if models were moderated by sibling group:
    - Caregiver who were more stressed had greater reduction in AWC in sibs na group than sibs autism group
- Caregiver input is a mechanism by which stress may impact infant language outcomes.

3/30/21

On call: Jessica Kosie, Eva Stahlberg_forsen, Margarethe McDonald, Meg Cychosz, Nicky Phillips, Federica Bulgarelli, Craig Van Pay, Rachel Romeo, Julia ikolaeva, Shiree Harbick, Yufang Ruan, Anna Caunt, Camille Scaff

Krista Byers-Heinlein visit

Q: Advice about preregistration?

- Can write the methods section of a paper so you're doing that work up front
- If you're uploading materials / experimental program / etc could lead to a smaller section of procedure on the prereg
- Procedure isn't where flexibility is as much of a concern in comparison to analysis plan, sample size, data collection, etc.…
- OSF has preregistration templates; this helps you not forget things; but can feel like it increases the work
    - Can use a more open format but use template as a reference

Q: What do we do about small sample sizes?

- Because we have smaller samples, we need to be chasing larger effects.
- Some things we don't have power to do at the same size we can get, we might need to wait until we can study things with larger effect sizes.
- Hesitate to run studies that are underpowered, but some analyses (e.g., paired t-test with a large effect) you can get 80% power with 16-20 babies
- More sensitive analyses can increase power too
- DeBolt et al - adding more trials boosts ability to find an effect

Q: Job market in Canada

Q: How to come up with a research question?

- Lots of open questions in bilingualism
- Get inspired by monolingual studies
- Can focus on different topics / methods

Q: How does doing different types of research (e.g., different methods / topics / etc) influence career development?

- Undergrad in psychology and computer science
- UBC Grad school with Janet Werker
    - Minor in quantitative methods
- Scale development and write up paper about bilingualism scale
- Didn't do a postdoc, applied for one job and got the job

Q: balance skill building and publication

- Both are important
- Be intentional about how you spend your time
- Being willing / able to say no to certain things, be picky (push things off your plate that don't contribute to goals)

Q: what kind of open data do you use?

- Metalab
- Wordbank
- Collect the same data from every baby in their own lab (questionnaires) and eventually you build a large dataset by collecting this same data for years <- using your own archives strategically; eventually upload data to wordbank

Q: What kind of skills do you think are central for new graduate students to be developing?

- (depends on what you study)
- Quantitative skills / statistics
- Programming skills
- Thinking about experimental design and data
- Planning and time management

Q: How have you developed a culture of open science in your lab that is sustainable?

- Have lab norms and standards, but not absolute
    - E.g., some studies don't get preregistered or have ideal preregistrations (or thesis proposal submit as prereg)
- All on same page about wanting to do open science and work together to make it happen
- Talk about issues that happen (e.g., need to update a preregistration)

Q: How do you convince the "old guard" to get on board with open science?

- What would be the easiest "open science" thing to do tomorrow?
- There's no convincing some people and it's not worth it to spend a lot of time with those people
- You can also do the work with collaborators and just ask if it's okay if you can (for example) upload a preregistration

1/26/21

On call: Meg, Jessica, Lucia, Malavi, Rachel, Julia, Margarethe, Hillary, Elaine, Orla, Eva, Camilla, Erin, Reny

Ethical considerations in international research collaboration: The Bucharest Early Intervention Project
Zeanah et al., 2006

Do we think that the benefits of this project outweigh the risks?

Background:

- Project took place in Romania in 1990s / early 2000s
- Romania was Russian satellite state
- Policies to increase number of workers in Romania, including requiring women under 40 to have at least 5 children
- Policies resulted in many unwanted children in the country
- Idea that the state could care for children as well as families could, led to heightened institutional care in the country
- Increase in foster care in last 15 years, but still a lot of children throughout the 90s who were in institutional care

The project:

- RCT to demonstrate that foster care is better than institutions
    - Q: why do we need an RCT to demonstrate this?
- Conceived of as a humanitarian undertaking
- Half of children assigned to foster care, half remained in institutions
- Collaboration with Romanian government, local NGO trying to move kids to foster care
- Goals:
    - Learn about recovery of children post-institution
    - Timing of intervention
    - Brain development in interaction with these factors
- 136 children in institutions, 5-31 months at start of study
    - Half remained in institutions, half placed in foster care
    - Gender and age matched controls who were never institutionalized or in foster care
- Many different assessments and outcomes (language, cognitive, neuro)

Issues with the project:

- Romania was considered a developing country - concerns about exploitation
    - Authors' justification:
        - Insufficient number of children in institutions elsewhere
        - Debate between foster and institutional care is still ongoing in some places (like Romania); some people suspicious of foster care; concerns about foster parents' motives; institutions seen more as clinics that children wouldn't get in foster care
- Risk / Benefit ratio - do the risks of this study outweigh the benefits?
    - Previous studies have shown benefits for placing kids in foster care / adoption
        - But authors said that in previous studies there was a selection bias
        - Justifying the fact that half of the kids were still in institutions and remained in institutions during the study
            - Otherwise they all would have stayed in the institution
        - If something came up and kids in institution could be placed in foster care or adopted, they didn't prevent this from happening

    - Benefits to children in foster care
        - But also medical exams and referrals for kids in institutions
        - Reduction in number of kids in institutions
        - Trained and paid foster parents
    - In drug trials, there's often a stop rule (e.g., if a drug is working, you stop and give everyone the treatment)
        - However, it was apparent that there were substantial benefits to placing kids in foster care
            - Kept study going, but didn't have resources to place all kids in foster care

How do we think about this? Do we think the benefits outweigh the risks?

More recent studies have focused on length of time in institutions as many of these kids were eventually adopted. The study had no restrictions on whether kids in the institutional group could be adopted.

Some argue that the benefits do outweigh the risks. If we hadn't done this study, kids wouldn't have gone into foster care. As a scientist, we can best use our efforts to demonstrate that foster care is beneficial and use this to demonstrate to government / lobbyists / etc… that foster care is important.

What is the situation currently? More foster care, some kids had a lot of behavioral issues and foster children were surrendered back to the state. Things are better, but there are long-lasting effects of the regime.

If we have money to do this research, would it be better put toward improving the environment for children in care?

This research has resulted in a tremendous change for kids in care. Fostering changed in light of this sort of evidence. Would be hard to keep kids in care given that the results started to come in about the benefits of foster care. Ultimately, though, the study has had an impact on public policy.

There is currently another version of this happening right now in Brazil.

- https://clinicaltrials.gov/ct2/history/NCT04165746?V_5=View
- Can we show this again, or was it simply a Romanian thing
- Still not convinced that institutions are bad for kids

What if you had conditions where it wasn't so clear that one was better than the other?

- E.g., subjective and culturally dependant issues
- Grey areas

Did the study come from the country itself or imposed by researchers trying to find the most convenient country to do it in?

- If the country wants to make a change, and make sure it's the correct change that seems better than an american researcher trying to find a country that fits their agenda and going in
- They did have some partners that provided culturally specific information

Always conflicts wrt culture and especially in child development issues

Would be nice to hear from the community itself and their thoughts about de-institutionalizing children in Romania

Current study in Brazil might help provide information about how cultural differences might impact these findings.

In Brazil, researchers were approached by the community. This sometimes happens when communities offer up the hard work and researchers do the analyses. Brings up some ethical quandaries.

Why not put all the money toward foster care for all? In these cases, the research and foster care system are funded differently. Research organizations in the US won't pay money for a foster care program in Romania to benefit children. They will pay money for research and hopefully that research provides understanding for other children (US children really if it's a US funding agency).

Who manages consent for these children? This seems like a major ethical issue. Foster care versus institutionalization is a major life decision. Parents of the children actually gave consent for children to participate in these studies. Parents kept legal custody but chose to put children in an institution. Cultural differences that we might not totally understand.

There was a team in Romania who helped with translation. However, way things are reported and questions asked didn't translate well to the community (e.g., different levels of mandated education, technical is more prestigious than higher levels of education, etc). So, some things didn't translate well.

Would it be an improvement if there is a PI from the country?

- Probably would have helped trying to instantiate variables and make sure they translate well.

Weber et al., 2017 article about RCT in Senegal

- Ethical concerns in this study
- NGO reached out to them
- Worked with local research teams who spoke Wolof

- Still issues with this study, despite the fact that it addresses some of the issues we've discussed.
- Imposing a western best practice on a nonwestern community, while being raised in a family is a universal good thing (or being raised in an institution is universally bad)

How can you establish that something is a universal best practice? Is this possible in child rearing practices?

When working with other cultures, sometimes ask people from those cultures what would be appropriate. Answer from people in those cultures is that whatever we're doing in america is best.

Is it always ethical to leave things the way that they are to respect people's cultures?

"Cognitive stimulation is good" vs. "you need to talk to your child more"
Local specific idea of what is good cognitive stimulation that can vary but is good.

What is your responsibility as a researcher / human being to say that you shouldn't be doing this (e.g., the Brizilian replication of the Romanian study)?

12/7/20

On call: Meg, Jessica, Craig, Shiree, Lisa, Monica, Federica, Liudmyla, Eva, Jennifer, Rachel, Erin, Divya, Camilla, Shiree, Middy (guest speaker)

Middy Casillas:
- Connections between linguistics and psychology and other fields
- Slightly different postdoc track (longer postdoc in Europe)
- Fieldwork

What advice would you give about thinking about / getting a postdoc? How to balance interest in a lab versus interest in a particular location?
- Make sure you have the right amount of intellectual agency and ability to explore / develop as a researcher to launch you to the next step.
- Demonstrate your ability to be independent.
- Talking to people in the group or who have worked with a PI is important.

Advice about balancing independence with productivity? Doing what the lab you're working in has always done versus doing your own thing.
- When applying for first big grant, need to think about what you're going to be doing in the future with your research.

- The possibility of being productive through a typical pipeline versus working toward your first independent grant-funded project. What pilot / preliminary studies do you need to do? How do you fit that in with your current activities?

How do you decide when to start writing grants / applying for jobs?

- Only apply to positions you really, really want. Only apply for a couple years if it was a dream position. Enables you to do the highest quality application.
- Advice from previous mentors about strengths and weaknesses and readiness to apply to new positions.

Negotiation process of deferring

- You should always ask, “kill them with detail” when giving your reasoning; come prepared with an argument for why it will be beneficial for you / them; give a little bit for them (e.g., agree to teach as a visiting professor for one course, but also helps you know the ins and outs of the university)
- If you can describe why it’s better for your trajectory and you can work with them to make the deferral work, it’s also helpful.
- Remember that the department is advocating for you to the dean, so it’s helpful to give them concrete argumentation to have the tools to convince others of your caes.

How do get information about a postdoc (e.g., whether you’d be happy there) before you apply / start?

- Diversity in topics on a lab website.
- Talk to others in the lab.

How do you get maximal “publication mileage” out of a dataset? Where do you draw the line and say that these are / aren’t two separate works?

- Wanting papers to be well-rounded and have enough content.
- Parallel studies between two communities: separate to make enough room in paper to respect these as two different communities and have a subsection about ethnographic details and background for these communities.
- Quality over quantity. Quantity will be taken into account, but when it comes down to serious candidates, they’ll pick out 2-4 publications that are exemplary from your set. You want things you’re proud of, well-rounded, cutting-edge. If you’re lucky, you might get 2 such publications in a year.
- You can also pull out separate things (e.g., turn taking was included in some papers and reviewers asked to take it out) - this is an opportunity to do something else (e.g., create an R package and new analyses / paper).
- Quantity matters more for the initial round of decisions, but less for final decisions.

How do you choose the publication outlet if you work in multiple fields? Narrow focus (used to writing for a certain audience)? Or are there advantages to having different publications (e.g., speech/hearing, linguistics, neuro, psychology)?

- Want people from other perspectives / training to digest work from their understanding and let you know what is the problem / what is interesting / etc…
- Interacting and having to explain to folks from different backgrounds

What are the pros / cons of applying to postdoc grants? When to apply (during grad school, beginning of postdoc)? What about independent funding?

- In Netherlands there's a similar to NSF; to fund postdoc but more in the spirit of an individual grant.
- Reach out to others to get example grants.
- K99 is a transition to independence grant, funds 2 ish years of postdoc and then starting a faculty position.
- Should you write a grant or focus on publications?
    - If you have good time management skills, you can create time for both.

How do you figure out what works for you with time management?

- For Middy: list projects and priorities for the coming year (take a critical look at state of each project and how much it matters)
    - These are all commitments - some projects might need to be tabled for a while versus other things that are clearly high priority
    - Once you have that list, make a 10, 12, 16 week plan
    - Toggle to keep track of how you're spending time on each project
    - Chart out in hourly blocks what to work on for each week
    - Writing 1 hour every day or 5 hours a week somewhere; 1 hour often turns into 2 and you'll be surprised how quickly things get done

Example for 10 week planning (From Alex Cristia who followed the training Middy mentioned):
This week's topic is called "medium-term strategic planning" or "project planning". My proposal is that you try to **make a plan for roughly the next 10 weeks**. If you are in a situation where you have a key deadline (e.g. turning in your master's or phd thesis) after this 10 week period, then you should extend the period a little longer.

First, write down what you absolutely must get done: the deadlines for turning in theses fall into this category.

Next, write down what you think you should get done and that has a fixed time frame: deadlines for grants, talks, conferences, go here.

Finally, write down what you should get done and that does NOT have a fixed time frame: papers that you'd like to finish and projects that you want to advance go here.

Now look through these goals again and ask yourself: Which ones are key to advancing my career? Write next to each a priority level: A are things that, if not done wreck your career; B are helpful if done but not hurtful if not done; C are things that won't probably change very much your outcome. If you find some "A" things among "things to get done but don't have a time frame" highlight them - it is dangerous to miss these!

Next, try to break down what you need to do to accomplish each of your goals, and roughly estimate how long each will take - we'll call these "intermediate goals". Try to use big time categories - weeks or days, not hours. For instance, "write master thesis" would break down in "read literature, define research questions, collect/annotate data, analyze data, write up". Depending on your topic, you might estimate something like this:
- read literature: 10 full days

- define research questions: 3 full days
- collect/annotate data: 26 full days
- analyze data: 3 full days
- write up: 8 full days

Next, lay these out in a 10-week plan. Think of a table, where each row is a week. If you're only doing your master thesis, then you might only have one column. If you're doing several projects, or your career has several areas (teaching, dissemination, grant finding, ...) you may find it useful to have more columns. Now put into each cell one of the intermediate goals, taking into account your time estimation.

When you do this, first put in all your intermediate goals for "A"-type goals. **If these don't have deadline, create a deadline and tell your peer mates, so that they call you out when the deadline comes closer.** If you run out of time, stop. If you still have some time in your 10 weeks, move on to your B-type goals. If you run out of time, stop. If you still have some time, you can put in your C-type goals goals.

The first time you do this, it'll probably take you between 20 mins and 1h. Do it by yourself, then send it to your group or bring it out printed. Bring both your list of goals and your table. Together, discuss about feasibility and re-prioritization.

I look forward how it went on Feb 3! Have a great week.

11/2/2020

On call: Meg, Rachel, Hillary, Lisa, Camille, Craig, Shiree, Monica, Janet,
Eva, Nikita, Prathiksha, Jessica, Margarethe, Liudmyla, Jennifer, Divya, Sarah

Discussion of review article by Meredith Rowe and Adriana Weisleder

- Strength of some relationships vary by country (e.g., link between maternal education and vocabulary size not as strong in Norway because of social safety net)
    - Different effect size in relation to SES depending on the measure you use (needs lots of data from CDI as opposed to something like a LWL task; comprehension versus expressive vocabulary). These things might also bias results.
    - Some other cultures that still have a “social safety net” do still have differences related to SES.
    - What is the influence of parental leave?
- Discussion of bilingualism - looks impressive with white/high-SES children, not so much with low SES communities
    - Lots of complicated history in some areas that are bilingual, like in Canada with French and English
    - Differences between bilingualism between European and North American countries, how race comes into play
    - How do race and language intersect?
- Influence of neighborhood/environment on dialect usage
- Overheard speech: when is it important? How is language learned from it?
    - Some children don’t receive a lot of CDS but still learn language

- Types of overheard speech:
    - Siblings
    - Adults
- How does overheard speech differ by child age, by speaker, etc? What can children learn from overheard speech?
- Media can certainly be a part of overheard speech - importance of radio/TV in bilingual households, children learning vocabulary from media - depends on the age of the child
- Lots of nuance to learning by overhearing

10/5/20

On call: Meg, Rachel, Jessica, Camilla, Divya, Sarah, Margarethe, Prathishka, Eva, Lisa, Hillary, Lyudmyla

Article discussion: Accuracy of the Language Environment Analyses (LENATM) system for estimating child and adult speech in laboratory settings - Marchman et al., 2020

Using LENA in the lab for shorter visits vs. daylong audio recordings

Seems to be one previous study: Oetting et al., 2009 tried this, but played their audio to a LENA rather than having kids wear the LENA during the study

Reliability of LENA goes up markedly over recording length (up to ~5 hours, then doesn't increase much after that)

In this study, comparing LENA algorithm to transcriber - LENA tagged child voc and AWC

20min sessions in the lab, 104 children, 2 time points (1;7 and 2;2)

Their analyses: Correlations between manual and algorithm and estimates of adult words (or child vocalizations) across the two systems.

Relevant to mention - LENA algorithm was trained on in-home data, trained on English data (and these are Spanish recordings)

Manual annotation of play session - made distinction between intelligible and unintelligible child words (may want to discuss this further)

Their equation (word count error) penalizes both over and under-estimation of absolute counts.

High correlations between manual and algorithm for adult-word count and lower for child word count (but higher for younger infants).

Word count error higher for child vocalizations than adult words.

Conclusion: LENA seems okay for AWC, but less for CVC; LENA better to capture variation between participants (caregivers who talk a lot vs. a little) rather than a number of adult words per session. Unclear how this applies to English speaking children.

They argue that lab is quieter at home, but LENA is trained on at-home data.

How did they define words as “intelligible”? Not clear, maybe if transcribers can code them.

- What might be impacting CVC estimate from LENA
- Is crying counted in CVC?

Are some discrepancies in CVC due to mistaking adult female speech as children?
What would your dream study / feature be?

- Variation in measures based on language structure
- Automated MLU measurement
- Automated detection of language spoken
- How does background noise (and different types of background noise) influence accuracy?

Would you use LENA in 20-minute interactions?

- Depends on what you are asking, for differences across caregivers in AWC, seems okay
- Trade off might be good if you have a large amount of data

Any evidence of validation in tonal languages? Vietnamese, Mandarin

Next Meetings:

- November 2, 2020 (article discussion)
- December 7, 2020 (Middy Casillas visiting)

9/2/20

On call: Jessica, Anele, Divya, Nikita, Elaine, Margarethe, Prathishka, Divya, (I think I missed others), Melanie Soderstrom (guest)

DARCLE offshoot - ACLEW
A few different labs that got together with LENA recordings, more powerful if we brought things together to do a comparative analysis

Wasn’t an annotation system well designed for what they wanted to do

CHAT not designed for language experiences for a long period of time - more focused on word level, phonology, etc.

Cross-culturally neutral schema

Secondary objective: create a larger dataset for people developing LENA style tools

ELAN-based
Speaker tiers to demarcate overlapping speech separately
From there - who's being talked to, gender, addressee
Differentiate between adult male, female, etc
Who they're talking to
Minchat style transcriptions
For child's own vocalizations: vocal maturity type annotation

Training:

- Read through tutorials
- Practice on their own on lab-internal files
- When they're ready, go through 5min chunks, 1min at a time, SHINY app that compares against the gold standard file. Gives feedback about how well it matches the gold standard. You get a score and take that back to the trainer to identify what's different and what can be fixed. Reach threshold after coding all 5 minutes.
- They have English and Spanish and all RAs do both English and Spanish coding

What do we mean by cross-culturally neutral? How successful?

- Rural Argentinean Sample - have TV or radio on the entire time, so hard to segment electronic speech manually - segmenting TV/radio doesn't work
- Naptime - more about sampling, whether to exclude when counting speech, some communities don't have a time period when babies are put down (e.g., "naptime" isn't a thing in some communities)
- Do you label child-directed speech directed to anyone or the target child - lots of kids around, so have to differentiate child-directed and target directed

Were differences in how people apply the ACLEW scheme.

DAS - barebones structure and then the ACLEW system based on the DAS

In terms of speaker classification - what about adolescents? Based on whether it sounds like a kid (if it sounds like a kid, it's a kid. Otherwise, an adult)

How much implementation should be exact vs. slight variations to the corpus to suit your needs?

- ELAN with broad speaker classifications will be useful
- They care about segmenting speech in the stream for tool development

- In terms of more subtle distinctions, they're less important

Most success with tool development - speaker classifications and AWC measure, so transcription is helpful. Other measures are less necessary to comply with the ACLEW scheme.

If you have questions about ACLEW, feel free to contact Melanie/Middy/etc...

7/1/20

On call: Shiree, Eva, Sarah, Rachel, Lisa, Janet, Meg, Camila, Monica, Margarethe, visitors from Rachel's lab
Links to articles and podcasts mentioned:

Podcasts:
https://www.npr.org/2018/07/11/627767654/word-up
https://radiopublic.com/the-vocal-fries-GOoXdO/s1!ce6cf

Articles:
https://www.sciencedirect.com/science/article/abs/pii/S1090513820300751
Kuchirko, Y., & Nayfeld, I. (2020). Language Gap: Cultural Assumptions and Ideologies. In International Approaches to Bridging the Language Gap (pp. 32-53). IGI Global.

6/3/20

On call: Jessica Kosie, Eva Stahlberg-Forsen, Erin Campbell, Sarah Surrain, Hillary Ganek, Mark Van Dam (guest), Lisa Hamrick, Janet Bang, Elaine Smolen, Rachel Romeo, Camila Scaff

Video of Meeting:
https://drive.google.com/file/d/1SB6b4tPd7_d2fKolwjg-wTA038B6oc4B/view?usp=sharing

What are Mark's thoughts about non-traditional contributions vs. first-author publications?

- Consider your goals
    - Small, teaching institutions care less about empirical, quantitative publications; more teaching so less concern about research
    - Tough to go from teaching focused to R1 type institutions, though
    - Deeper into R1 the more they'll understand more diverse types of publications, more likely to understand what research is like
    - Mark has patents, businesses, etc… and has consulted with the department chair / dean about this (some more open to this than others); sometimes have to "sell" this sort of contribution
    - Thinking about getting the first job - what are they looking for?
        - They get ~50 apps
        - ~35 not serious

                - E.g., did PhD 15 years ago and then left to do other things (makes them less likely to get tenure); a bunch are not in the field (e.g., irrelevant MD)
            - ~12 serious candidates
            - Looking for two main things:
                - Is this person likely to get tenure?
                    - Independent
                    - Can do things on their own
                - Can I collaborate with them? Are they nice to work with?
            - Postdocs are helpful, but they've hired people without
                - Hire without had first-author imaging papers, modeling, empirical questions
                - Shows you know how to run a lab, run experiments, collect and analyze data
                - Less likely to hire someone if there are no papers (e.g., dissertation was a meta-analysis)
    - Relatively low liability for corpus, database, etc.
        - Homebank gives citable URL, doi
            - Gives a citable reference to put on CV
    - Different places have different demands for what a contribution looks like
        - E.g., computer science looks for proceedings papers; English looks for solo authored papers
- Book chapters less important than more "serious" stuff (e.g., empirical papers)
- At least one paper where you really did everything (e.g., just you and a senior advisor) - demonstrates you have the chops to run a lab, be a PI, etc…

What do you do when recruitment is slow (e.g., kids, special populations, etc.)? How do you sell this sort of work when others are able to collect studies with adults on MTurk very quickly?

- Have a "side job" collaborating with others, get that out there.
- "Bite" off pieces of projects to publish along the way
- Mark's example: tie in LENA to other projects, get yourself out there (go to talks, see if your research links to theirs - e.g., recording LENA for a sleep researcher), developing "side gigs",
- be the person who does a particular thing - what's the three word thing of what you do?

How to prepare for the job market? Funding, grants, postdocs?

- Applying for a grant is helpful, don't necessarily have to win one
    - Everyone who has won a grant has been rejected
- First goal is to weed through and get rid of bad fit applications
- Recommend that you finish your PhD before you apply for jobs
- Looking for
    - Empirical work
    - Careful stuff
    - Not huge gaps (between papers?)

    - Ticking boxes that suggest you're likely to get tenure:
        - Grants
            - Money coming in
        - Publications
            - Research going out with their name on it
    - Shape your daily activities to click those boxes
        - Mark's goal: keep door closed to avoid distractions, take time to be writing, working on projects, etc…

Where do you think the field is moving in terms of open science? How might we get training in these things? What kind of skills would you recommend developing?

- Way the field is moving
- Universities are worried about intellectual property
    - At Mark's university, they have to disclose anything commercializable
    - Can run counter to open science goals
- Take training available
- Hard to know if it will wane or get more or less serious

Of the applicants you get for new faculty, how many people are involved in open science? What does it look like? Do people try to highlight that?

- Hasn't seen that. Not saying it's not there. Probably stronger in Psychology than Speech and Hearing Science.

As a reviewer, is it appropriate to request someone's code, data, etc.?

- Not really at the reviewer level, but there are journals that have policies about sharing (or saying why you're not sharing)

NIH Loan Repayment Program (how to apply, what is it?)

- NIH supports scientists to develop science
- If you're going into nonprofit or higher ed
- Loan repayment program - put together a small proposal, less about project and more about person doing the project (likelihood the person is using it as a stepping stone to get an academic job and stay in public service), you get a quarterly distribution of a proportion of your remaining debt.
- 3 years duration
- Can knock student debt down by ~80%
- Helpful if you have substantial amount of student debt you need to pay back
- About person, training, environment, and trajectory
- Helpful to work with folks in your department who handle grants.

What challenges did you face as a first year PI? Any advice you wish you'd known before you started?

- Bureaucracy you have to get through, have to persevere
- "The perfect is the enemy of the good" - have to be a finisher
    - Doesn't mean to do bad science or cut corners, but have to get things out there

    - You'll never write the perfect paper, grant, etc. you just have to move forward
- Have to think about the optics of selling your ideas
    - Don't misspell names, names of universities
- As a professor you have multiple part-time jobs pasted together (teaching, papers, grants, etc…)

Mark also recommended checking out CAPCSD ← "center for academic programs communication sciences and disorders": an area psychologists, linguists, SLPs can look for jobs

5/20/20

On call: Jenny, Jessica, Eva, Anele, Shiree, Lisa, Sarah, Jennifer, Hillary, Janet, Camila, Margarethe, Rachel

Questions for Mark VanDam: PLEASE ADD ANY QUESTIONS BELOW

- It's becoming increasingly common for early career researchers to create or contribute to non-traditional research projects (e.g., corpora, annotation code, large-scale collaborative projects, etc…). However, it seems like traditional contributions (i.e., first-authored publications) are still much more highly valued in postdoc / job searches / etc. I'm curious to know Mark's thoughts about this - is this still the case? If so, does he think it is likely to change in the future? How should we balance methodological advances and software development with more traditional experimental studies?
    - Follow up: Many of us are working with hard-to-recruit populations and studies are slow to complete. Might end up with fewer pubs on CV. How to still be competitive?
- How to prepare for the job market - how to be strategic in thinking about postdocs, individual funding (grants), etc.
- Would be helpful to hear his thoughts on where our field is moving in terms of open science, any suggestions he has for best ways to pursue training and keep up with best practices in open science, and what might be particularly important skills to develop when heading into the job market (i.e., what level of skill is expected or desired from applicants?)
- Could you discuss the NIH Loan Repayment Program a bit? What is it, how to apply, how to have a competitive application, etc.
- What challenges did you face as a first-year PI and is there anything you wish you knew before you started?

Discussed Mendoza & Fausey preprint on Everyday Music in Infancy

4/15/20

- Meg's amazing data annotation scheme: https://github.com/megseekosh/Categorize_app_v2

3-18

On call: Jessica, Sarah, Rachel, Janet, Meg, Nikita, Prathiksha, Meera, Hillary, Elaine, Margarethe

Ferjan Ramírez et al., 2020

Participants:
2 intervention groups were collapsed across
Followed from 6-18 months
Took LENA recordings at 6, 10, 14, 18 months
2 weekend days when both parents were home

Look at how the intervention affected the input that parents gave their infants
And how it affects infant language development at the timepoints
And how it predicted outcomes at 18 months

Distribution of SES across intervention and control

Intervention Program:

1) Recorded LENA at 6, 10, 14, 18 and gave parents feedback on the input that they were providing
2) Played audio samples that exhibited some of the behaviors
3) Brain-building moments: things that parents could be doing to support their children's language growth
4) Kids' next language milestones and how parents could be supporting their kids at their next milestone

Measurements:
turn-taking
Parentese
CVC
At 18mo - MCDI

Some automated analyses and some manual

- Baseline measurements to compare between intervention and control groups
- Used AWC to extract 50 30-second intervals from each day (x2 days x4 timepoints)
    - Y/N: parentese?
    - ADS?
    - Babbling?
    - Words?

- Could have any of these characteristics

% of *intervals* that contain these categories

- Used CTC as well

Three ways that intervention affects parent behavior and vocalizations: CTC, parentese, CVC
At 18 months, higher % of 30-second clips contained word-like forms and higher scores on MCDI

Questions/Discussion:
How difficult was it to distinguish between babbles and words at 18mo?
What about some kids who just talk more?
Long-term effects - did parents actually continue with this behavior?
Not mutually-exclusive coding scheme: you could pick parentese, words, ADS, etc.
Stronger relationship between CTC and outcomes versus parentese and outcomes

Parentese would change over time - but is this true? CTC change over time - makes sense as it's interactive.

In the LENA norming study, no difference in AWC by child age - CTC might change, and CDS might change, but total AWC probably doesn't

Longitudinal design: best to do regression?

This is one of the most "light-touch" interventions, instead of the usual 10-week affair.

What would happen after 18mos? Would advice to parents need to change (less emphasis on parentese and more emphasis on rich vocabulary or turns?)

Using the Hollingshead: tries to get at multiple indices of SES: education, financial, social occupational status (how socially-prestigious is your occupation - pretty outdated)

- These are all folded into one which could be problematic
- Education and income are not always the same - though they can be correlated
- Parental education is much more related to cognitive development than just income
- Best to look at different *components* of SES (education, income, etc.)
- Also did they have a decent distribution of SES? What percentage of kids came from low-SES households versus higher?

Subjective measure of SES: the Macarthur Ladder where participants have to place themselves into SES categories

Think of yourself within your community

- Where on this ladder would you place yourself in terms of social capital and resources?
    - But how do people configure themselves within their community

- Now think about the US, where would you put yourself?
- But perhaps a subjective ranking of SES is best - and it does seem to correlated strongly with mental health (if you're higher within your community, elss prone to depression, anxiety, etc.)
- Unclear how it relates to cognitive development though
- Recommendation seems to be to ask about resource scarcity, particularly for low-SES households

2/19/20

- Daylong Recording Summary:
    - https://docs.google.com/presentation/d/137vpJsToVP6mgVS_-E37p5g9Wh6Z90D41xQhP6HCETA/edit#slide=id.p

1/21/20

- On call: Sarah, Camila, Meg, Lisa, Margarethe, Elaine, Hillary, Shiree, Janet, Monica, Eva, Jessica

- Topic: review of "Rethinking automatic estimates of language: Effects of speech style and talker gender on error rates for the Language ENvironment Analysis (LENA) system in quantifying adult language input"
    - Objective: Quantify accuracy of LENA word count measurement; especially related to false positives and false negatives
    - N = 23; 4 months - 34 months; varying hearing status (e.g., some had hearing aid or cochlear implants)
    - How accurate was it across adult-directed speech and infant-directed speech?
    - How was the classifier when determining if the speaker was male or female?
    - Audio recording samples = 100 ms segments; sampled from the beginning of the day or the end of the day because most likely the child was at home
    - False negative rates averaged ~ 26%
        - FN rate of adult speech attribution averaged 33%
    - LENA is better at classifying adult speech for adult males vs. adult females (adult female speech was confused with the child).
    - When females were correctly attributed to an adult vs. a child, then the gender was assigned correctly; however, for males when it was attributed as an adult then it was attributed more often to females
    -

- Next meeting: 2/19/20

10/3/19

- On call: Elaine, Eva, Joseph, Lisa, Monica, Kyle, Rachel, Shiree, Janet

- Topic: *Longform recordings of everyday life: Ethics for best practices* (led by Rachel)
    - How to write the initial consent forms to communicate possibility of (and allow for) secondary analysis?
    - With the increase in opportunity for secondary data analysis, should we be thinking about continuing consent or checking in with participants?
        - Look to genomics research for a model of how to do this?

- Next meeting: 11/7/19

9/5/19

- On Call: Hilary, Kyle, Shiree, Margaret, Anele, Lisa, Meera, Eva

- Topic: Cristia et al. (preprint): *A thorough evaluation of the Language Environment Analysis (LENATM) system*

- Summary of the article: (see this google doc)

- Discussion:
    - What is the min length of audio that lena needs to generate a tag?
    - For AWC, handling of counts that straddled a clip boundary → how to handle?
        - Goal was not to do exactly the way LENA does it. To take out any of the possibile LENA bias. Allows you to make a stronger statement about alignment between humans and machine labels.
    - What was the motivation for choosing 1 or 2 minute clips? Higher sampling rate provides more information about time course.

- Next meeting is: Thursday, October 3

7/10/19

- On Call: Meg, Kyle, Janet, Jason, Shiree, Eva, Margarethe, Monica, Rachel

- Lee et al (2018): Babbling development as seen in canonical babbling ratios: A naturalistic evaluation of all-day recordings
    - Canonical babbling (CB): at least one consonant and one vowel
    - Important because many words are composed of them
    - CB ratio (CBR) = canonical syllables / total syllables (.15 threshold is typical designation for CB stage)
    - Goal: move away from short, lab-based to daylong recordings to measure CBR and compare cross-linguistically (Chinese-learning vs. English-learning)
    - Hypotheses:
        - Age: older children should have higher CBR
        - Language: higher in Chinese-learning infants because easier to produce
        - Circumstance: CBR with caregivers > overhearing > alone

    - Method:
        - Select high volubility 5-min segments
    - Results:
        - Highest CBR with ADS

- Discussion
    - Janet: how hard to train people to code CB?
        - Meg: Currently trying citizen science approach with 10 minute training video → aggregate over many (possibly noisier) labels to get a better estimate.
    - Meg: How difficult to code CDS vs. ADS?
        - Monica: if you're just trying to get CDS vs. ADS, then not so hard, but maybe Likert scale is more challenging?
        - Janet: 70% threshold for CDS label within 10-min segment, but things get harder at the utterance level
    - Meg: why randomly sample and then throw out silence? Why not re-sample? What to do about sleep in recordings?
        - Janet: we remove silences before sampling
        - Meg: seems like they could have resampled
    - Margarethe: what are the implications of randomly vs. high volubility sampling?
        - Janet: sampling based on high volubility → strong correlations between AWC in high volubility section and overall AWC in the daylong recording.
        - Kyle: would be nice to have a study directly comparing sampling methods
    - Meg: how much should we be worried about the particular day/context when we record? What about differences from day to day within kid?
        - Shiree: Ramirez article that we read before sampled only weekend days. This should matter for outcome metrics.
        - Janet: Sophie Von Stumm (sp?) paper looks at this. Intraclass correlation is relatively low, but we've been finding between subjects consistency
        - Kyle: Caitlin Fausey and Heather Anderson have been working on this. Will try to find the paper and send it around.

- DARCLE Project
    - Six corpora looking at the development of CB
    - Short clips on citizen science platform
    - Coded for canonical vs. non-canonical babbling
    - Found that CBR increases with age

- Next meeting is August 7th

6/5/19

- On Call: Monica, Hilary, Anele, Rahul, Meera, Lisa, Rachel, Kyle

- Meera's project update
    - Canonical babbling (CB) important dev milstone
    - But, most research usd short home videos and not much looking at infants with risk for autism (ASD)
    - Infant Brain Imaging Study (IBIS): longitudinal sample of infants at high and low risk for ASD
        - Low risk = no older sibling with ASD; High risk = older sibling with ASD
    - Measures: LENA, Mullen scales, Diagnostic outcome for ASD
    - Sampling CB segments from daylong data:
        - 5 min clip goal
        - Sample top 60 contiguous regions, rank ordered by amount of child vocal activity
    - Annotating/coding CB
        - Naturalistic listening with two experienced undergrad RAs. Took about 3 months or one summer to train.
    - Metrics
        - Canonical Babbling Ratio (CBR)
        - CBR > 0.15 is CB stage
    - Results
        - No significant difference between groups in overall CBR
        - Infants at high risk for ASD are more likely to have CBR < 0.15 threshold, meaning they are less likely to reach dev milestone
    - Discussion
        - How does sampling scheme interact with CBR metric? Use most voluble child segments vs. random sampling?
        - Type of canonical babbling might be interesting to code to get a diversity metric

- Next meeting is Wednesday, July 10. Any volunteers to lead the discussion?

    - Save the date: final summer meeting is Wednesday, August 7

5/1/19

On Call: Jennifer, Janet, Monica, Meg, AJ, Shiree, Lucia, Lisa

Kyle is new pre-PI co-organizer! kemacdonald@ucla.edu

Ramírez et al. (2018)
Coaching parents on how to talk to their kids: Randomized control study
-similar to much of Suskind's work

Condition I - Parent coaching + group support
Condition II - Parent coaching only
Control - given information about child development in children; no feedback on language input or social interaction

Effects of intervention seen
Use of parentese increases
Effects on child language outcomes

6, 10, 14 mos
6 - intervention
10 - outcomes measured, another intervention
14 - outcomes measured

Details on intervention:

- Only done at 6 and 10 months - just one visit
- Two 45 minute interventions!
- Using audio clips from the parents themselves. The parent then verbalizes what they did - so more of a personal approach.
- Vroom cards - concrete todo list items
- Pre-teach - keep parents informed about what to be looking for in the next language development stage

No increase in one-on-one interactions which is bizarre given that the intervention is focused on social interaction (just talk and response increased)

Why did the PC+ group not show a difference?

- Some families got coaching and some coaching+group meetings
- Hypothesis: The PC+ families should see even more improvement
- Result: no difference between PC and PC+

But what about the SES differences?

- Low SES include plumbers, drivers
- But in most communities these professions are by no means the lowest SES (or even low SES, for example many have employer-provided health insurance)
- All the Ramírez families were English-speaking

Dependent measures

- 50 different 30s intervals using ADEX (~25 minutes/day)
- Why not use AWC and CTC?

Differences between Ramírez (2018) and Suskind (2016)

- Suskind (2016) was very focused on teaching; had very limited changes in outcomes
- Ramírez (2018) focused on parentese and "what are you already doing? Do more."; perhaps more tangible things for the parents?
- Ramírez got the full range of SES but Suskind only studies low SES

Where to go next?

- Replicability? Teasing apart the intervention to see what was most effective?
- If effects go away after a few months, what do we do then?
- What is the foundation of communication… important to consider the mechanism that we are trying to address?

4/3/19

On Call: Elaine, Meg, Meera, Jennifer, Heather, Janet, Monica

Update from SRCD

Elinor Ochs' talk

- How do we collaborate with researchers who have very different opinions and perspectives?
- Is it our responsibility to help people who live with less resources socialize with their children?
- Intervention studies even in the US really haven't been *that* successful.
    - We don't understand the mechanisms; difficult to establish causal relationships
- Big distinction between helping children in the US and helping children in other countries
- How appropriate is it to go in and do an intervention when you have little experience in that culture?
- Jennifer & Shiree are starting to recruit low-SES participants to participate in an intervention study
    - Didn't have to explain the "why" - why is this needed?
    - People understand the *need* for talking with your kids
    - They just don't have the resources and time to do so?
- Intervention success?
    - Day-to-day speech exposure variation is ~30%!
    - Could small-scale intervention effects really just be a day-to-day effect
    - This is a really good point to make!

Round robin

Elaine

- Looking at language elicitation strategies for children with hearing loss during mealtimes in LENA recordings
- Meg: Use Box Sync/Box Drive to sync all files to RAs' local machines without worrying about uploading and downloading
- Heather: Box is also one of the most secure places to store data
    - Shared university server that you can remote into so that RAs can access the files from wherever they are

Meera

- LENA data that they have collected on kids who are high-risk for autism
- 2 students annotated timepoint 1; Lost one annotator for timepoint 2
- Should get another person to annotate at timepoint 2?
    - Meg: maybe just get a new person to check 10% of the timepoint 2?

Monica

- Just starting a new project
- How to select what time of day to get CDS?Peak time of the day for each child?
- Jennifer & Shiree: annotate an hour after naptime; there is lots of CDS
- Heather: Peak hour makes up about 22% of the whole day; so definitely not representative
- Janet: looking at peak hour; rank all of the talk from highest AWC to lowest (but then have to determine that the highest AWC is actually CDS)
    - Combine CTC and AWC information?
    - Low CTC but high AWC seems to be mostly ADS, not CDS

Janet

- CHAT/CLAN Discovered a couple of functions that give automated numbers for repetitions and responses to caregiver speech
- CHIP function - repetitions and expansions of the child's speech
    - who's the speaker who's responding to the child
    - how many morphemes overlap
    - also responses to child's speech

Next call: Wednesday, May 1

3/6/19

On Call: Elaine, Hillary, Jennifer, Monica, Janet, John, Lucia, Lisa, Meg

- Janet is organizing meet-up at SRCD so make sure you contact her if you are interested in attending: jbang@stanford.edu

Janet: coding scheme used in Fernald Lab (Stanford)

Background on data collection: Wide range in SES backgrounds to answer questions about the long-term consequences of SES on language development
Another dataset on Spanish-speaking families
“Language nutrition” - quality of language environment; what contributes to language health

Coding scheme
- Sort the day into 10 minute chunks
- Select 6 most dense 10 minute chunks (based on AWC)
- Annotate each 10 minute chunk into various CDS contexts (eating, book reading, etc.) in ELAN

Naturalistic setting means that there are an infinite number of things could occur in the environment!

Best practices for establishing coding practices:
- Be open to criticism and change
- Importance of having native Spanish speakers
- Document the choices you make!
    - And put it in a central place where everyone can access it
    - Keep an FAQ page, tutorials in powerpoint
- Important to have very clear research questions and prioritize those; put others to the side
- Have regular check-ins to calibrate, make decisions about new events in the child’s day, etc.

How to know when to stop an annotation?
- Have clear, consistent ideas

How do you know when coders are ready?
- Include a training set/test set
- Make sure these are consistent for any new coder
- Especially important because people are coming and going from project
- Have regular checks of within-rater reliability (every month, quarter)
- Have regular lab-wide check-ins (random file that everyone does and then the lab talks through the annotation)

How do you recruit undergraduates? How do you compensate?
- Work-study program at Stanford
- Summer research honors project (20-30 hours/week)
- Volunteers (much slower)
- Regular paid workers (much slower)

Long-term storage plans
- Not sharing audio files themselves
- Hoping to follow-up with the Spanish-speaking families with the transcripts

- Then hopefully provide transcripts at least through CHAT

2/6/19

On Call: Elaine, Hillary, Jennifer, Monica, AJ, Meg, Janet

- Reminder about PI Mentorship: PI's would like to pair up and come up with a tangible goal to work towards (eg. organizing a symposium); geared towards postdocs/late graduate students
    - Contact Meg if you're interested in getting involved
    - Take a look at the PI group on the website to see if there are any members who stand out to you
- JB to organize meet up at SRCD

Sosa Article:

- What types of toys best facilitate language?
- Used LENA recorders, but not software
    - Looked at LENA type annotations (eg. CTC)
- 26 parent-child dyads (age range: 10-16 mo)
- Data were collected in the homes without the presence of a researcher
- 2 15-minute play sessions per toy set
- Semantic content for the toys were controlled
- There's more parental communication in the book category for all response variables (followed by traditional toy, the electronic)

- Wide age range: how applicable is this research to other age groups?
- Reminder that this study only looked at language outcomes
- Important to look at multiple response variables in order to determine outcomes
- The type of electronic/purpose of the media can affect how it's used/outcomes
- Where do SES differences in CDS come from?
    - This study had mainly college educated parents, sample was very homogeneous
    - Are there SES differences in book readings?

- Having more outcome measures is important to show engagement, development, etc.
- Would be interesting to look at the developmental impact over time
- Interesting that the conclusions/recommendations in the article were so strong based on a single study of 25 (nondiverse) people

Next workshop topic (ideas):

- Show and tell of everyone's work
    - Focus on methods/nitty gritty
    - 3 people present for 5-7 mins, discuss each person's for ~15 mins total

12/12/18

On Call: Elaine, John, Janet, Hillary, Meera, Jennifer, Lucia, Lisa, Meg

Thanks so much to John and Janet for presenting their annotation schemes to the group - we learned a ton!

- Welcome new members Meera, Lisa, and Lucia!
    - Reminder that new members should email Mark VanDam (mark.vandam@wsu.edu) if they want a little bio added to our DARCLE site
- Meg will send when2meet to find a time for regular meetings for spring semester in the next couple of weeks (still waiting on people's spring schedules to get set)
- Once the schedule has been set, will make announcement for next meeting. It will be the week of January 14-18
- Announcements?

Today: Transcription!

- Transcription is important because we want to be able to analyze certain things that require human annotation but also for dataset perpetuity. But how much is enough?
- What level are you transcribing to in your own data/your lab's data?
- How do we calculate/ensure inter-transcriber reliability?
- What happens if our conclusions on a topic change as we transcribe more and more data from these lengthy recordings? (A very real possibility given the amount of data.)
- What are the different platforms and techniques available to keep transcription organized when working with this challenging and space-consuming data format?

Janet: ELAN

- Other child-centered activities in the home in addition to reading and playing: reading, playing, meals, routines (e.g., dressing, potty training, diaper changing), conversation (no other obvious activity occurring other than talking to child)
- Conversation with children also happening during adult-centered activities in the home
- English- and Spanish-speaking families
    - English-speaking families n = 42, from diverse SES backgrounds
    - Spanish-speaking families n = 43, mostly lower-SES backgrounds
- Goal is to have our protocol up on OSF once we're done (probably by summer 2019). In the meantime if anyone has any questions they can email Janet: jbang@stanford.edu

Research questions focused on caregiver talk to children:

- Duration: what activities are they spending the most time on?
- Quantity of talk (word tokens)
- Diversity of talk (word types, MLU)

- MLT (mean length of turn), repetitions, expansions

Method:

- When caregivers talk a lot, it's important for child's language development
- Focus on the densest hour of talk for each family
- Choose densest 10 minute segments (non-contiguous) from day that is child-directed speech
    - Listen to 10 minute segments - someone decides if majority is child-directed

Parsing platform: ELAN (free!)

- Original idea was to use LENA's ADEX to get count of adult word counts, but we decided to transcribe so that we can get more information about the caregiver talk
- Listen to 10-minute segment
- Parse into child- and adult-centered activities based on duration
- Categories of activities during child-directed speech: see above
- Coders are undergraduates that each went through the same training protocol

Data can be exported to excel which is then how they analyze it

Transcription platform: CLAN

- Would recommend using CLAN first and then moving to ELAN, or only using CLAN since you can link media to CLAN files as well
- Can link to duration-based coding with GEMs in CHAT (e.g. 'play')
- Difficulty: how to capture language development of 24-month-old children - we decided to refer to our child language measures as an index of children's talkativeness because it's not always clear what children are saying, or how to transcribe when children are trying to imitate caregiver language
- Strict coding guide to help transcribers deal with tricky situations like child repetition

Inter-rater reliability

- Each family has 6 recordings
- Each coder gets one family at a time
- One ten-minute file at random from each family is double coded by a second coder
    - These files are chosen so that in the end files are coded that represent recordings with the most → least talk
- Comparing coders' total duration of an activity within a 10-minute recording
- Aiming for 43 total files to be double coded (approximately 20% of the all files), but we may reduce this to 23 files (approximately 10% of all files)
- Stats:
    - Cohen's kappa on category agreement and intra-class correlations on duration: as of checking on 12 families, they find correlations above .60 on most categories. The reliability of categories may determine how some categories are combined.

Background of coders

- Datasets with English- and Spanish-speaking families
- Native Spanish speakers coded the Spanish-speaking families
- Undergrads do this
- This is problematic because they work a limited # of hours/week and they were many issues to iron out which took up time

Advantage for CLAN over ELAN for actual transcription:
- Both can be used for orthographic transcription
- They didn't quite realize that ELAN had that option so they probably would have just transcribed orthographically in ELAN from the beginning

John: ACLEW annotation scheme

- 9 countries (6 labs) around the world that are implementing this standardized annotation scheme
- The end goal is to automate this so they are working with developers

Annotation platform: ELAN
- Utterance boundaries
- Individual speaker tiers
- This annotation scheme can be used across a number of platforms, not just ELAN
- ELAN output can easily be exported to work in PRAAT
- ELAN can also be outputted to CLAN (but note that with new OSx updates CLAN functionality is going to be limited in Macs)

Annotation scheme (DAS)

- Based on DARCLE annotation scheme
- Hierarchical, dependent tier structure (usually starting with target child and adult female)
- Give preceding and following (few minutes) of the chunk to be annotated (e.g. 2 minutes before and after a 5 minute chunk) to give coders come context to work with
- Very specific rules for capturing utterance boundaries

Vocalization categories:
- Vocal maturity (laughing, crying, non-canon syllables, canon syllables, unsure)
- Word (single or more than one)

Addressee categories:
- Child-directed
- Adult-directed
- All speech that is not the target child is orthographically transcribed
- Originally it was just CDS, but now they are doing ADS and CDS because this is necessary for tool development

Subtiers are based on child age

- 0-7 months, 8-18 months, 19+
- Because some tiers are irrelevant for certain ages e.g. Lexical

Other speaker tiers

- Tier named with Gender, age, speakerID *in that order*

Electronic noise tier

- Radio, TV, toys
- Remember that machines have a really hard time distinguishing between electronic noise and human speech!
- Unsure if they should capture electronic noise that is child-directed versus not CD

Special tiers

- Code tier to demarcate if the tier is complete (because then you could infer that everything outside of that tier is silence, if not the annotation is incomplete)

Sampling techniques

- Exploring several different sampling techniques
- Which chunks to use from your giant recording?!
- Methods tried: random sampling, high volubility samples
- They are comparing the sampling techniques right now to see which perform best

Dissemination:

- All of these annotation techniques are available on OSF! (English & Spanish)
- Tutorials will lead you through working with ELAN, even if it's for the very first time so you can use the ACLEW annotation scheme

Testing procedure:

- To ensure reliability between labs, they built a training program
- After coders complete tutorials, they complete testing procedure
- Coders annotate a series of test files to see if they pass
    - Spanish: segmentation, vocal maturity, addressee
    - English: segmentation, vocal maturity, lexical, addressee
- Gives you % overlap with gold-standard annotation, tier match-up, etc.
- Gives individual scores for individual tiers
- To code any ACLEW data, you have to pass each of the tests
- There is an app online where coders can complete these tests

Currently under development:

- Reliability across ACLEW corpora
- Randomly select one minute from each child which will be blindly coded by another lab
- Then a comparison between those transcribed minutes

11/14/18

On Call: Meg, Janet, Elaine, Hillary, Rachel, Camila, Jennifer

Next meeting: 12/12, 8/11AM EST

- Meg will send when2meet to find a time for regular meetings for spring semester

Welcome new member Jennifer!
New members should email Mark VanDam (mark.vandam@wsu.edu) if they want a brief bio to be added to the DARCLE site

Recap of the 30 million word gap symposium at BUCLD
Meredith Rowe's talk

-3-year NIH-funded an infant-based home intervention program

-parents are educated about the benefits of gesture for language growth and development

-a randomized control study (or at least as much as possible)

-measured multiple time points, starting at 10 months old, with follow-up visits every 2 months until 18 months

-results show that parents in experimental condition gesture more than those in control initially, but this tends to level off

-(someone from the audience in the talk suggested this may have to do with infants using more language (and less gesture?) by this point)

-however, it does result in the infants gesturing more as well

-reminds us that LENA can only tell us so much

-at younger ages, the value of pre-linguistic skills may be important to consider regarding their language development

Robert Gilinkoff and Kathy Hirsh-Pasek's talk

-brought up the recent alleged debunking of Hart & Risley: http://www.danielwillingham.com/daniel-willingham-science-and-education-blog/the-debunking-of-hart-risley-and-how-we-use-science

-we all discussed our struggle with this

-how can we avoid deficit narratives here?

-what other skills do you think that low SES children might bring, in the absence of larger vocabularies

-how do we communicate this families without making them feel like they are being judged?

-for families in extreme poverty, their child's language development may not be a priority

-important to listen to families and what they are communicating as their needs/what they want to learn

Rachel Romeo's talk
- 9 weeks, 2 generation
- meet once per week where parents are in a 2 hour small group session - English or Spanish depending on the family
- goal was for the meeting to be less didactic, more of a discussion where parents discussed topics around child development (e.g., meaningful language, routines, sleep, behavior management)
- while parents were meeting, kids did 30 minutes of EF training and the rest of the time was child chare
- saw that the magnitude of change in CTC was related to change in CELF scores - very preliminary, small sample size
- focus of intervention was on EF because that is what the schools wanted

Notes taken by Janet Bang and Meg Cychosz

10/10/2018

On Call: AJ, Elaine, Federica, Hillary, Meg, Monica, Janet

- Welcome new members! Please contact Mark Van Dam (mark.vandam@wsu.edu) if you would like your short bio added to the DARCLE site

- "May 2019 Workshop: Deadline October 7th: Tools + Data (head organizer: Middy Casillas, but ask Alex with questions alecristia@gmail.com)" - from PI DARCLE group

- Expect summary email from PI DARCLE meeting in your inboxes on Thursday/Friday *next* week (I was mistaken - it's 10/18, not 10/11)

- Next meeting: Wednesday, November 14th 8AM PST/11AM EST
    - Contact Meg if you have a paper in mind that you would like to present

- Discussed Bergelson et al. 2018
    - Large-scale standardized study of 61 families, 3 months - 1.5 years
    - Looked at three demographic factors: maternal education, male and female speakers (also looked at child gender), and amount of CDS and ADS (absolute and proportion)
    - Four corpora: Bergelson, Warlaumont, VanDam, McDivitt
    - Everyone used the same speaker annotation system
    - For each child, randomly sampled 20 conversational blocks that had either the MAN or FAN tag. Human coder tagged whether it was a man or a woman, and if it was CDS or ADS
    - Conversation block duration: M = .69 min, SD = .67 min
    - Sampling

        - How you sample depends on the question
        - One benefit of common sampling method is that then across studies this can be comparable
        - Important to justify sampling for the question
    - Coding
        - How many coders is enough?
        - I hear you play - outsourcing coding for specific speech (e.g., canonical babbling, vegetative sound)
        - Were the same standards used to code CDS in men and women?
    - Results
        - For CDS quantity, maternal education was the best predictor
        - For ADS quantity, older children hear less ADS than younger children
        - For the proportion of CDS to ADS: older children heard more CDS vs. ADS than younger children
            - The authors discuss that this could be from child moving away as they get more mobile, but they didn't find that LENA tags of electronic noise, silence increased. The LENA tag that did increase was child's own vocalizations, so children are talking to themselves more as they get older.

9/12/2018

On Call: Federica, AJ, Meghan, Meg

- Welcome Federica to our group
    - Federica completed her grad work at Penn State and is now a postdoc with Elika at Duke working on talker variability in daylong recordings
- Discussed Swanson et al. (2017) - Meghan's paper - congrats!
    - Presenting new, updated data today as well
    - Study design: high familial risk design
        - Families with one child with autism are at higher risk for having another
        - Genetic risk for developmental issues when autism is present in a family
    - *Child Dev* study
        - No diagnostic data available (only later in the longitudinal analyses)
        - LENA data collected at 9 and 15 months
        - Seen every 6 months; at 24 months determined if meet criterion for having autism
        - Low-risk families are all local to universities where clinical pops are collected
            - Not a large amount of diversity, high educational levels
        - Are there differences between high and low risk wrt the three main LENA metrics?
            - More infant vocalizations in the high risk group than low

        - Current collaborative work colleagues at Georgia tech to get child speech detector algorithm
- Next meeting: Wednesday, October 10th 8AM PST/11AM EST

5/9/2018

On Call: Gina, Hannah, Elaine, John, (Meg in Bolivia for fieldwork)

- Discussed Lee et al. (2018)
    - Investigated the effects of language and culture on Canonical Babble Ratios
        - Predicted CBR as a function of age, language (English or Chinese), and Social Circumstance (IDS vs ADS)
        - Hypotheses:
            - CBR at 11 mos > 6 mos
            - Chinese-learning infants will have higher CBR than English-learning infants at both 6 & 11 months due to the relative simplicity of syllable structure
            - Higher CBR with IDS than ADS at both ages
            - Higher CBR with ADS than alone at both ages
        - Results
            - CBR was higher at 11 mos than 6 mos
            - CBR was higher with IDS than ADS ***only*** with Chinese-learning 11 mos - all others had higher CBR with ADS than IDS
    - Really nice description of how they trained coders
        - How do we train our coders?
- Next meeting: June 13th
    - Meg will lead call - Gina will be in England for Stats Summer School

4/11/2018

On Call: Meg, Gina, Sarah, AJ, Hillary, Heather

- Discussed Weber et al. (2017)
- Methods
    - Taught how to read and write, but did not validate the LENA
    - Provided specific toys (e.g., plastic bucket, shovel) - are these toys that these kids would've used anyway?
    - Taking LENA in and doing video recordings is great, but the question may not have been the best choice
- Premises
    - Argument that applying the idea of talking more to your child in a culture where that is not something that you do will help the culture join a huge world economy.

        - Those countries are poor bc of low cognitive abilities
    - These children are not language delayed - they are getting language for someone in the community
- Issues
    - Not a lot of ethnography or looking at how language was used in these families - how did they employ interventions, use in daily activities
        - Were the families just performing for the camera?
        - Clinicians are taught to take the family's culture into account in any intervention
            - Even the word "intervention" sets a bad tone
    - Saying there couldn't be observer effects because the children are talking more - children talk more when adults are talking more
    - Conclude that they "improved" traditions.
- Conclusions
    - If the kids aren't language delayed and are not succeeding in school based on Western norms, then these intervention studies are not really appropriate
    - Need to do more ethnographic work before starting a study - why do the parents interact with the children in the way they do
        - Can support cognitive and language increase within the context of their daily life
- "Language ecology"
- Jamaica study
    - WHO supports interventionists going into home teaching families how to interact with their children; followed kids for 20 years; kids w/ intervention had better jobs as adults
- Meg will be in Bolivia next month collecting data!
- Next meeting: May 9th

3/14/2018

On Call: Meg, Gina, Rachel, AJ, Hillary, Heather, Elaine, John, Meghan, Sarah

- Discussed Pretzer et al. in prep manuscript
- Disclosing recording to others?
    - Have parents tell others that they are being recorded
    - Offer to pause or excise audio for those times

2/14/2018

On Call: Meg, Gina, Rachel, AJ, Hillary, Heather

- Discussed cloud-based LENA

    - Privacy concerns with cloud?
- Welcome, Heather!
- Romeo et al., 2017:
    - MRI, Behavioral assessments, LENA
        - MRI during forwards and backwards speech
    - Children's language environment is directly related to neural processing
    - Conversational experience impacts neural language processing
    - Behavioral and neural mechanism by which SES and language exposure contribute to the language gap
    - Discussion: Quality vs. quantity
        - Qualitative aspects of language: turn taking, lexical diversity, grammatical complexity, turn-taking, eye gaze, gestures, cultural implications?
    - What would MRI results look like in the kids from Senegal?
        - General language network in the brain
    - Context of conversational turns
        - Dinner hours, mealtime talk
        - Conversational turns as a proxy for Child-directed speech? Is it overheard speech?
- Anne Fernald's recent article - intervention program, data collected in Senegal
    - Cultural implications - different methods of language input
        - Less adult -> children; more peer to peer
    - Weber, A., Fernald, A., & Diop, Y. (2017). When cultural norms discourage talking to babies: effectiveness of a parenting program in rural Senegal. Child development, 88(5), 1513-1526.
- Transcriber tools
    - ELAN
    - Transcriber
    - CHAT/CLAN
    -

December call - cancelled

11/15/17

On Call: Meg, Gina, Rachel, AJ, John, Hillary

- ASHA - Gordon Ramsey at Emory & Kim Oller at U Memphis looking at pitch, subharmonics, etc. in LENA recordings
- BU - Elika Bergelson's work, rustling sounds in recordings
- John will attend Big DARCLE call and update the group next meeting
- Gina - question about multi-domain milestones and LENA labels

- Meg - update on IRB for study in Bolivia - Very Complicated!
- Hillary - looking at meaningful speech, children with cochlear implants
- Journal Article: Irvin et al., 2017. Exploring Classroom Behavioral Imaging: Moving Closer to Effective and Data-Based Early Childhood Inclusion Planning
    - Using a movement tracker in addition to LENA
    - Least amount of time with books and most in arts area
    - See notes page

10/11/17

On Call: Meg, Gina, Meghan, AJ

- No Journal Article today
- Review Big DARCLE call
    - DAS: https://osf.io/4532e/
    - Collaborations: https://docs.google.com/spreadsheets/d/1JwTL960uvlHaPEROojdUlSKcyHo2tkqroz1j7S5h6gI/edit?usp=sharing
- Best practices in selecting samples/coding
    - Meg: Dissertation comparing lang socialization in twins (https://tampub.uta.fi/bitstream/handle/10024/100187/978-952-03-0296-2.pdf?sequence=1)
        - Tables that reporting validity of LENA measurements
        - One person hand corrected recording; 2 others for reliability
    - Gina: hand codes 3 5-min LENA segments
        - Interrater reliability with one segment from 30% of participants
        - Mark Van Dam looked at fidelity of LENA labels in older infants - pretty good reliability (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4986949/)
    - Meghan: Collab with Georgia Tech
        - 9 month infants, some 15 month olds
        - Felt that LENA did not do a very good job for younger infants
- Meg's project (grant from Berkeley)
    - Daylong recordings of children in Bolivia - limited internet and electricity
    - Using different recording device - it would be difficult to get recordings off LENA off recorders
- Next Meeting: TBD

9-13-17

On Call:

Journal article: Ramirez-Esparza et al. 2017

Gina and Meg will take over leadership roles
- Gina will liaise with Mark and Big Darcle
- Meg will coordinate the call and new members

Article review
Influence of culture
Other children in the home
ADEX uses
Defining bilingualism
LENA Student

8-9-17

On Call: Hillary AJ
Journal article: Richards et al 2017

Applying for post-docs
Article Reivew

7-12-17

On Call Meghan, Catherine, Hillary, Meg, AJ
Journal article: Rankine et al 2017

Article review
Reviewed PMS
Using lena with kids out of age range
Interrater reliability of transcribers
Vocalizations didn't correlate with standard language scores
Transcription/validation protocols, questioning LENA validity in all populations
Using ranks to ID segments to analyze
Vocalization rate as a measure

6-7-17

On Call Meghan, AJ, Rachel, Hillary
Journal article: Weisleder & Fernald (2013)

Introductions and review of what everyone is using the LENA for

Article Review
Low SES Spanish speaking infants
2 points of measurement 19 and 24 months recorded 1-6 days, chose longest recording bc it was consistent with all the recordings
Removed nap time
Controlled for length of recording in stats
RAs transcribed 1 hour of each sample to confirm word class and noted CDS and overheard speech in five minute segments which was predominant
Spanish MacArthur Bates CDI
Looking-while-Listening task
Results:
Big range of overheard speech & CDS within AWC
Discussion of scaling recordings to control for length
    12 hour projected reading in software
CDS correlates with vocab but not overheard speech even controlled for infant vocalizations
CDS and processing efficiency and vocab correlates
Mediation model: processing efficiency as the mediator in a model with CDS and vocab so processing efficiency explains 47% of the variance in child's vocab as related to CDS; feedforward model
Discussion:
Low SES sample here exemplifies variance within one SES group
LENA prevents Hawthorne effect, it's unobtrusive and comprehensive

Most PIs see LENA as a powerful tool but interpretation requires caution; especially around CDS and overheard speech

Using far versus near segments for CDS vs. overheard
CTC might be more predictive of CDS
Ramirez et al. (Kuhl) paper about the one-to-one conversation that really matters
Most studies appear to hand code & some are creating their own algorithms
Coding where there's high AWC may have higher over heard segments

Sometimes when the software says there's a lot of speech, there's nothing there when you listen to it.

Better to code most of the day to be more representative.

5-3-17

On call: Hillary, AJ
Journal article: Tamis-LeMonda et al (2017)

Article Review
Structured vs. naturalistic recordings
Length of structured recordings

Infant MRI methods

Participating more in Big DARCLE

4-5-17

On call: Catherine, AJ, Hillary
Journal article: Chin et al. (2017)

Article Reviewed

Speechome vs. LENA
- Might be nice to have the visual info
- Parents chose when to record with speechome so the recordings were shorter and only at certain points
- Costs and logistics of installing speechome and how that impacts recruitment

“I’ma” construction discussed in paper
- Related to input?
- Dialect?
- VP length?

Length of article
- Perhaps could have talked less about SLI given that the kid didn’t end up having it.

Blitzscribe
- Coming to market?

- Three transcribed

ACLEW
- Analyzing Child Language Experiences around the World
- https://sites.google.com/view/aclewdid/home?authuser=0

Student Role in DARCLE
- Authorship
- Mentorship
- Interspeech opportunity

3-8-17

On call: Hillary, AJ, Sarah
Journal article: Beckman et al. (2017) Methods for eliciting, annotating, and analyzing databases for child speech development

Speech being picked up as TV sounds
- People have heard the opposite happening
- Always the same DLP; wear and tear problem?
- Start using new recorders?
- AJ will keep us updated

Looking for mentorship
- Supervisors haven't used LENA before
- Conferences; literature; LENA Foundation; DARCLE; com sci departments
- Possibly inviting a big DARCLE person to ask questions in this group
    - Length of projects in the context of a PhD program

Coding bilingual data
- AJ says that coding only 40 30-sec segments with highest AWC was not representative of full day, because this usually captured adults talking to each other, not child-directed speech
- He is now coding 50% of each day's recording

Notes on the Journal Article:
- What methods are being used to support large-scale databases of child speech?
    - Orthographically transcribed recordings
    - Importance of SLPs for gathering and coding language samples
- How do they fail for children?
    - Errors are 2x as likely with child speech, the younger the child the worse.

    - Limitations of IPA (covert contrasts)
- Future directions
    - Need to find ways to annotate child speech
- Relevance to our work
    - Accuracy issues - could this affect whether something is counted as a child vocalization or not?
    - Role of SLPs, Teachers, Community members

2-8-17

On call: Hillary, Catherine, AJ, Sarah
Journal article: Ramirez-Esparza, 2016: The Impact of Early Social Interactions on Later Language Development in Spanish–English Bilingual Infants

Other agenda items:

Name of the group

- Mark was concerned that tab on DARCLE website says “students” when it includes postdocs.
- Could reframe as “early career” or “new investigators”
- “Early career” tends to mean post-phd but before tenure
- “New investigators” seems broader - let’s do this.
- Does this replace “Pre-PI”? -> New Investigators DARCLE
- Hillary will email Mark

Journal Discussion

- Purpose:
    - Tested whether 1-1 parentese speech predicts growth in bilingual infant vocab
- Methods:
    - 4 days of recordings, 8 hrs per day (at 11 and 14 months, no diff between these time points)
    - 40 30-sec segments from each day, coded for
        - Language spoken
        - 1-1 or group
        - Parentese or standard
    - MCDI in English and Spanish (24 months)
- Results
    - Monolinguals had more parentese 1-1 than bilinguals
    - Otherwise comparable
    - Parentese and 1-1 were correlated with productive vocab in both language (within and cross language)
    - Cultural diff: In Spanish, more likely to talk as a group
- Questions:

- Differences between languages in child-directed speech - why didn't they explain this more fully? No cultural measure in the study
- AJ is using similar methods
    - Got lots of adult-adult talk, not CDS in top 40 seg
    - Hillary suggested high CTC, or possibly sampling from low, mid and high
    - In parent questionnaire, ask if LENA recording is typical

Using ADEX to segment LENA data
Next meeting: Wed, March 8th, 10am, Hillary can lead a journal article discussion