Laia Fibla Reixachs, PhD

Pronouns: she/her Nationality: Spanish laia.fibla.reixachs@gmail.com https://laiafibla.github.io

My research investigates infant development, particularly language acquisition. I focus on understanding how children learn language(s) from their environments, the cognitive processes involved, and how experience shapes the brain. I study diverse populations from around the globe, including monolingual, bilingual, and multilingual children from various socioeconomic backgrounds. In my research, I use behavioral methods such as eye tracking and looking-time measurements, naturalistic methods such as daylong home recordings and corpus analysis, and computational modeling techniques.

Education

May 2021—

Position: Post-Doctoral FRQSC Fellow

Concordia University, Montreal, QC, Canada

Research topics: bilingual child language development, word learning, vocabulary, language input, language mixing, bilingual cross-

community comparisons

Advisor: Krista Byers-Heinlein

October 2017— June 2021 **Degree:** PhD Developmental Psychology

University of East Anglia, Norwich, United Kingdom

Submission date 30th April 2021, defence/Viva 18th June 2021 Research topics: child language development, word learning, lan-

guage input, cross-cultural comparisons, adversity

Thesis Title: Relating language input to language processes early in development: Using the Early Language Processing Task in UK

and India. Link to thesis

Advisors: Larissa K Samuelson, John P Spencer

September 2015— July 2017 **Degree:** MSc Research Master in Cognitive Science (Cogmaster)

École Normale Supérieure ENS, Paris, France

Research topics: computational modelling, word segmentation, bilingualism, corpus analysis, word learning, socio-economic status M2 Thesis Title: How do bilingual children segment their lan-

guages? A modelling approach. Link to thesis

Advisors: Alejandrina Cristia, Núria Sebastián-Gallés

Institutions: Laboratoire de Sciences Cognitives et Psycholinguistiques, ENS, Paris France and Speech Acquisition and Perception Group, UPF, Barcelona Spain

September 2008— **Degree:** Bachelor Degree in Psychology

June 2013 Universitat Autònoma de Barcelona UAB, Cerdanyola, Spain

January— Exchange Semester at the Department of Psychology

June 2012 Norges Teknisk Naturvitenskapelig Universitet NTNU, Trondheim, Norway

Awards and Research Grants

• FRQSC Postdoctoral Fellowship 45,000 CAD/year (2023 - 2026)

- Patrice L. Engle Dissertation Grant. Awarded 5,000 USD to support PhD research (2018)
- Postgraduate Studentship University of East Anglia, Norwich, United Kingdom (2017 2021)

• European Scholarship Leonardo Da Vinci; at RWTH Aachen Germany (2014)

Research Experience

September 2016— **Project:** Lexical acquisition and socio-economic status (LEXES). A collaboration between France and Argentina

July 2017 Laboratoire de Sciences Cognitives et Psycholinguistiques, ENS

Paris France

Position: Research Assistant Advisor: Alejandrina Cristia

Contributions:

• Tested toddlers in nurseries from diverse SES households using a touch-screen vocabulary test.

Project: ELEAC: Longitudinal study to gather a large corpus from low September 2015 and middle SES households in Argentina

Laboratoire de Sciences Cognitives et Psycholinguistiques, ENS August 2016

Paris France

Position: Research Assistant Advisor: Alejandrina Cristia

Contributions:

• Corrected transcriptions from Argentinean Spanish households using the CLAN guidelines (CHILDES).

March 2015— August 2015

Project: Learning Homophones: a syntactic and semantic study

Laboratoire de Sciences Cognitives et Psycholinguistiques, ENS

Paris France

Position: Research Assistant

Advisor: Anne Christophe and Isabelle Dautriche

Contributions:

- Tested 20-months-old babies using an eye-tracker for a looking while listening task.
- Study design, created the stimuli, contributed to writing the methods of the scientific publication.

January 2014— July 2014 **Project:** Languages in Multicultural Contexts Institut für Psychologie der RWTH Aachen, Germany

Position: Research Internship as part of the Leonardo Da Vinci fellowship **Advisor:** Andrea M Philipp and Simone Schäffner

Contributions:

- Developed multimodal experiments with bilingual German-English adults on language switching.
- Study design, tested participants, performed data analysis to measure the switch cost across language modalities, contributed to writing a scientific publication.

November 2012— June 2013 **Project:** Social behaviour in gorillas in captivity Research and Conservation, Primate Unit Zoo of Barcelona Spain

Position: Research Internship in Ethiology

Advisor: Mª Teresa Abelló Poveda

Contributions:

- Carried on observations of a group of primates (Western low-land gorilla) in captivity. To measure group cohesion and social interaction in relation to the birth of a new member of the group.
- Documented the development of the neonate gorilla during the first months of life.

Teaching

January 2019— January 2021 Position: Associate Tutor

School of Psychology, University of East Anglia

- Social and Developmental Psychology (Undergraduate course): marking final essays.
- Developmental Science (Masters course): organised the *Criti*cal Review seminars as well as the *Ethics and Recruitment in* Research with Children seminars.

October 2017— April 2018 Position: Associate Tutor (Online) Universitat Oberta de Catalunya • Màster Dificultats d'Aprenentatge i Trastorns del Llenguatge: tutored a group of 10 students on their Master's final project (TFM).

Publications

- Gómez Diaz, M., Fibla, L., Tsui, R. K.-Y., & Byers-Heinlein, K. (2024). Testing theories of the vocabulary spurt with monolingual and bilingual infants. *Developmental Psychology*, 60(8), 1357. https://doi.org/https://doi.org/10.1037/dev0001777
- Fibla, Laia, Forbes, S. H., McCarthy, J., Mee, K., Magnotta, V., Deoni, S., Cameron, D., & Spencer, J. P. (2023). Language exposure and brain myelination in early development. Journal of Neuroscience, 43(23), 4279–4290. https://doi.org/https://doi.org/10.1101/2022.05.31.493945Preprint
- 3. Tsui, R. K.-Y., Kosie, J. E., **Fibla, L.**, Lew-Williams, C., & Byers-Heinlein, K. (2023). Patterns of language switching and bilingual children's word learning: An experiment across two communities. *Translational Issues in Psychological Science*. https://doi.org/https://doi.org/10.1037/tps0000353.Preprint
- 4. **Fibla, L.**, Kosie, J. E., Kircher, R., Lew-Williams, C., & Byers-Heinlein, K. (2022). Bilingual language development in infancy: What can we do to support bilingual families? *Policy Insights from the Behavioral and Brain Sciences*, 9(1), 35–43. https://doi.org/10.1177/23727322211069312.Preprint..Supplemental Materials.
- 5. Scaff, C., Fibla, L., & Cristia, A. (2022). Factors structuring lexical development in toddlers: The effects of parental education, language exposure, and age. *Journal of Child Language*, 1–21. https://doi.org/https://doi.org/10.1017/S0305000922000186. .Supplemental Materials.
- 6. **Fibla, L.**, Sebastian-Galles, N., & Cristia, A. (2021). Is there a bilingual disadvantage for word segmentation? a computational modeling approach. *Journal of Child Language*, 1–28. https://doi.org/10.1017/S0305000921000568.Preprint.Supplemental Materials.
- 7. Bernard, M., Thiolliere, R., Saksida, A., Loukatou, G. R., Larsen, E., Johnson, M., **Fibla, L.**, Dupoux, E., Daland, R., Cao, X. N., et al. (2020). Wordseg: Standardizing unsupervised word form segmentation from text. *Behavior research methods*, 52(1), 264–278. https://doi.org/https://doi.org/10.3758/s13428-019-01223-3
- 8. Dautriche, I., **Fibla, L.**, Fievet, A.-C., & Christophe, A. (2018). Learning homophones in context: Easy cases are favored in the lexicon of natural languages. *Cognitive psychology*, 104, 83–105. https://doi.org/https://doi.org/10.1016/j.cogpsych.2018.04.001
- 9. Schaeffner, S., **Fibla, L.**, & Philipp, A. M. (2017). Bimodal language switching: New insights from signing and typing. *Journal of Memory and Language*, 94, 1–14. https://doi.org/https://doi.org/10.1016/j.jml.2016.11.002
- 10. **Fibla, L.**, Maniel, C., & Cristia, A. (2016a). Word comprehension and multilingualism among toddlers: A study using touch screens in daycares. *Proceedings of the joint workshop on NLP for Computer Assisted Language Learning and NLP for Language Acquisition*, 18–23. https://aclanthology.org/W16-6503

Publications in Prep

- 1. **Fibla, L.**, Spencer, J. P., & Samuelson, L. K. (Under Review). Strengths and weaknesses: Early word learning skills and profiles of vocabulary development. *Cognition*
- 2. Fibla, L., Samuelson, L. K., Sing, V., Kumar, A., & Spencer, J. P. (In Prep). Measuring language input and early language processes in rural India
- 3. Fibla, L., & Byers-Heinlein, K. (In Prep). Words and seasons in early bilingualism
- 4. Forbes, S., **Fibla, L.**, & Spencer, J. P. (In Prep). How early language shapes brain development? a longitudinal studyPreregistration
- 5. **Fibla, L.**, Sing, J., Sing, V., Kumar, A., Samuelson, L. K., & Spencer, J. P. (In Prep). The LENA system applied to the Awadhi dialect

Conference Presentations

All presented by me unless specified otherwise.

- 1. **Fibla, L.**, Spencer, J. P., & Samuelson, L. K. (2024). Early word learning profiles and vocabulary development: A k-mean clustering approach. *International Congress of Infant Studies (ICIS), Glasgow (UK)*[Poster]
- 2. **Fibla, L.**, Kosie, J., Sander-Montant, A., Tsui, R. K.-Y., Potter, C., Lew-Williams, C., & Byers-Heinlein, K. (2024). Bilingual primary caregivers and their children match their language choices during interactions. *International Congress of Infant Studies (ICIS)*, Glasgow (UK)[Poster]
- 3. Forbes, S., **Fibla, L.**, & Spencer, J. (2024). How are language exposure and brain myelination related in early development? a preregistered longitudinal study. *International Congress of Infant Studies (ICIS), Glasgow (UK)*[Preregistered Poster presented by S. Forbes]
- 4. Sander-Montant, A., Byers-Heinlein, K., & **Fibla**, **L.** (2024). All eyes on word comprehension: A comparative analysis of infant looking-while-listening measures. *International Congress of Infant Studies (ICIS)*, Glasgow (UK)[Poster presented by A. Sander-Montant]
- 5. Gómez Díaz, M., **Fibla, L.**, Tsui, R. K.-Y., & Byers-Heinlein, K. (2024). Spurters vs. non-spurters: Comparing vocabulary size and language exposure in infants who do and do not show a vocabulary spurt. *International Congress of Infant Studies (ICIS), Glasgow (UK)*[Poster presented by M. Gómez Díaz]
- 6. **Fibla, L.**, Kosie, J. E., Tsui, R. K., Martinez, T., Sander, A., Lew-Williams, C., & Byers-Heinlein, K. (2023). Caregiver-child language synchrony across two bilingual communities. *The Biennial meeting of the Society for Research in Child Development (SRCD)*, Salt Lake City, Utah (USA)[Poster]
- 7. Kosie, J. E., **Fibla, L.**, Tsui, R. K., Martinez, T., Sander, A., Byers-Heinlein, K., & Lew-Williams, C. (2022). Infants' exposure to language switching in bilingual homes across two communities. *The International Congress of Infant Studies (ICIS), Ottawa, ON (Canada)* Part of the Symposium entitled "The dynamics of language switching across communities: What do bilingual infants actually hear?" chaired and organised by Laia Fibla

- 8. **Fibla, L.**, Kosie, J. E., Tsui, R. K., Martinez, T., Sander, A., Potter, C., Byers-Heinlein, K., & Lew-Williams, C. (2022). Children's exposure to language switching in bilingual homes across two communities. the Bi-Ennial Conference of the Cognitive Development Society (CDS). Madison, WI (USA)[Poster Presented by JE. Kosie]
- 9. Kosie, J. E., Tsui, R. K., Martinez, T., Sander, A., **Fibla, L.**, Byers-Heinlein, K., & Lew-Williams, C. (2023). Cross-community differences in bilingual infants' experience with language switching. The 46th Annual Boston University Conference on Language Development (SRCD), Boston, Massachusetts (USA)[Poster Presented by JE. Kosie]
- 10. **Fibla, L.**, Spencer, J. P., & Samuelson, L. K. (2021). Relating language input to language processes early in development. *The 2021 Virtual Biennial meeting of the Society for Research in Child Development (SRCD)* [Symposium talk] Part of the Symposium entitled "The ins and outs of language development: integrating multiple measures from inside and outside the lab" chaired and organised by Laia Fibla
- 11. **Fibla, L.**, Forbes, S. H., Samuelson, L. K., Magnotta, V. A., Deoni, S., & Spencer, J. P. (2020). Language exposure and brain structure in early childhood. *The Flux 2020 Virtual Congress* [**Preregistered Poster**]
- 12. **Fibla, L.**, Samuelson, L. K., Singh, V., Kumar, A., & Spencer, J. P. (2020). Early language processing and language exposure across-cultures: Uk and india. *The virtual International Congress of Infant Studies (vICIS)* [Symposium talk] Part of the Symposium entitled "Early language across-cultures: input, language processes and outcome measures" chaired and organised by Laia Fibla
- 13. **Fibla, L.**, Singh, J., Singh, V., Kumar, A., Samuelson, L. K., & Spencer, J. P. (2020). The lena system applied to the awadhi dialect: Measuring language exposure in rural india. *The virtual International Congress of Infant Studies (vICIS)* [Poster]
- 14. **Fibla, L.**, Samuelson, L. K., & Spencer, J. P. (2019). Measuring linguistic input in low resource settings: A lena approach to the awadhi dialect. *The 4th Lancaster Conference on Infant and Early Child Development (LCICD), Lancaster (UK)* [Talk]
- 15. **Fibla, L.**, Spencer, J. P., & Samuelson, L. K. (2019). Early language processing and brain development: A comparative study between the uk and india. *The Biennial meeting of the Society for Research in Child Development (SRCD), Baltimore (USA)* [Symposium Talk] Part of the symposium entitled "Objective measures of early development in low- and middle-income countries: EEG, Eye-tracking, fNIRS" chaired and organised by Sarah Lloyd-Fox
- 16. **Fibla, L.**, Spencer, J. P., & Samuelson, L. K. (2018a). Early language processing: A comparative study between the uk and india. *University of Bologna and University of Pittsburgh Joint international workshop on Understanding and Promoting change from early to complex skills in typical and atypical development: A cross-population Approach, Bologna (Italy) [Poster]*
- 17. **Fibla, L.**, Spencer, J. P., & Samuelson, L. K. (2018b). Validation of the early language processing assessment across uk and india. *The 2nd BPS East of England Conference, University of East Anglia, Norwich (UK)* [**Poster**]
- 18. **Fibla, L.**, & Cristia, A. (2018). Modelling word segmentation from variable input: Comparing monolingual and bilingual experiences. *International Congress of Infant Studies (ICIS)*, *Philadelphia (USA)* [Flash talk]

- 19. **Fibla, L.**, Maniel, C., & Cristia, A. (2017). Vocabulary differences between monolingual and bilingual toddlers: A touch-screen study. *IASCL 2017: 14th International Congress for the Study of Child Language, Lyon (France)* [Poster]
- 20. **Fibla, L.**, Maniel, C., & Cristia, A. (2016b). Word comprehension and multilingualism among toddlers: A study using touch screens in daycares. *Joint workshop on NLP for Computer Assisted Language Learning and NLP for Language Acquisition at SLTC, Umeå (Sweden)* [**Poster**]
- 21. Rosemberg, C., Menti, A., Stein, A., Alam, F., Migdalek, M., Ojea, G., Fibla, L., & Cristia, A. (2015). Socio-economic differences in argentinean toddlers' language environments. Workshop on Extensive and Intensive Recordings of Children's Language Environment (WEIRCLE), Paris (France) [Poster] Related talk at the Students and post-docs GDR (Groupe de recherche "Neurosciences Cognitives du Développement"), November, Paris (France)
- 22. Dautriche, I., **Fibla, L.**, & Christophe, A. (2015). Learning homophones: Syntactic and semantic contexts matter. Boston University Conference on Language Acquisition, Boston (USA) [Talk by Anne Christophe]
- 23. Schaeffner, S., **Fibla, L.**, & Philipp, A. M. (2015). Is there a bimodal advantage in language switching? Tagung experimentell arbeitender Psychologen (TeaP), Hildesheim (Germany) [Talk by Simone Schaeffner]

Invited Talks and Guest Lectures

- Fibla, L. (2021, April). *Measuring early language across cultures* [Invited Talk over Zoom at the University of Haifa, Israel].
- Fibla, L. (2022, June). Are you as smart as a baby? Explore how babies learn language [Guest Lecture for Developmental Psychology, The University of East Anglia Psychology Discovery Day].
- Fibla, L. (2019, October). Language development as a bilingual baby [Guest Lecture for Cognitive Developmental Module, Undergraduate Psychology course at the University of East Anglia].

Community Talks, Workshops and Blog Posts

- Fibla, L., & Quirk, E. (2023, April). Community outreach in language development research [CRBLM 5À7: INSPIRATION FROM OUTREACH]. Program.
- Fibla, L. and Kosie, Jessica E and Kircher, Ruth and Lew-Williams, Casey and Byers-Heinlein, Krista. (2022, May). Supporting bilingual families around the world [ICIS Babyblog Post]. Post.
- Fibla, L., & Byers-Heinlein, K. (2022, April). Growing up bilingual: How can we help babies learning two languages? [Talk over Zoom at UnidosUS]. Webinar.
- Fibla, L. (2019, August). Methods in child research [Workshop at CEL India].
- Fibla, L. (2018, June). Child language development research [Workshop at CEL India].

Volunteer Work

- Member of Kotoboo Outreach Project (2023 current). Website.
- PhD Academic Representative (Rep) for the School of Psychology at UEA (2019 2020).
- Reviewer at the Journal of Child Language 2022 current.
- Co-supervising students and volunteers (2016 current).

Technical Software

- Programming and data managing: R Studio, R Markdown and Overleaf, Bash, GitHub
- Transcription and audio treatment: LENA software Praat, CLAN, ELAN
- Experiment Programs: Experiment Builder and Data Viewer EyeLink software, Pupil Labs eye-tracking technology and software

Experimental Methods

- Eye-tracking with infants and children using EyeLink
- Dyadic interactions between children and parents using Pupil Labs
- Field work in rural India
- In home daylong recordings with multiple populations and countries (UK, India, Canada)
- Touch screens with toddlers at daycares
- Corpus data processing and analysis
- Observational studies

Languages

Catalan: Bilingual native speaker Spanish: Bilingual native speaker

English: Fluent

French: Intermediate - Advanced

German: Basic