# Department of Translation and Language Sciences Universitat Pompeu Fabra

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Dr. Carmen Saldana

BEATRIU DE PINÓS RESEARCH FELLOW, Universitat Pompeu Fabra

#### **EDUCATION**

# The University of Edinburgh, UK

PhD, Linguistics and English Language, Nov 2018

Dissertation: Simplifying linguistic complexity: Culture and cognition in language evolution

Supervisors: Prof. Dr. Kenny Smith, Prof. Dr. Simon Kirby, Dr. Rob Truswell

## The University of Edinburgh, UK

MSc, Evolution of Language and Cognition, Nov 2013

Dissertation: The evolution of phrase structure in Bayesian Iterated Artificial Language Learning

Supervisor: Prof. Dr. Kenny Smith

#### University of Barcelona, Spain

BA, Linguistics, July 2012

Dissertation: Human Accelerated Regions and the Faculty of Language

Supervisor: Prof. Dr. Cedric Boeckx

# ACADEMIC EMPLOYEMENT

## Beatriu de Pinós Postdoctoral Research Fellow, Universitat Pompeu Fabra, February 2024 - present

Department of Translation and Language Sciences

Postdoctoral Researcher, University of Zurich, September 2019-January 2024 Department of Comparative Language Science

#### Lecturer, University of Zurich, September 2019-August 2023

- Linguistic Theory from an Evolutionary Perspective (2022-2023)
- Conditions of Language Dynamics (2019-2022)
- Current Advances in Evolutionary Linguistics (2021)
- Morphology (2020-2021)

# Postdoctoral Researcher, The University of Edinburgh, July 2018-July 2019

ERC project The Evolution of Linguistic Complexity (PI: Prof. Dr. Kenny Smith)

#### Research Assistant, The University of Edinburgh, Feb-June 2018

ERC project Syntax shaped by cognition: transforming theories of syntactic systems through laboratory experiments (PI: Prof. Dr. Jennifer Culbertson)

#### Teaching Assistant, The University of Edinburgh, 2014–2018

- Origins and Evolution of Language (2015-2018)
- First Language Acquisition (2015-2017)
- Second Language Acquisition (2015-2017)
- Cross-Linguistic Variation (2014-2018)
- Linguistics and English Language (2014-2018)
- Phonetic Analysis & Empirical Methods (2014-2016)
- Child Bilingualism (2016)

#### Teaching Assistant, The University of Stirling, 2018

- Foundations of Language

#### Research Assistant, The University of Edinburgh, Apr-Sept 2016

ESRC project Cognitive and interactional causes of regularity in language (PI: Prof. Dr. Kenny Smith and Dr. Olga Fehér)

**PUBLICATIONS** 

Saldana, C. & Maldonado, M. (2024) Exploring horizontal homophony in pronominal paradigms: A case study where cross-linguistic regularities defy individual learning biases. *Proceedings of the 46th Annual Meeting of the Cognitive Science Society*.



Saldana, C.\*, Herce, B.\*, Mansfield, J. & Bickel, B. (2023) Naturalness is gradient in morphological paradigms: Evidence from positional splits. *Glossa*. doi: https://doi.org/10.16995/glossa.9280



Saldana, C., Culbertson, J. (2023) Speakers' cognitive representations of gender and number morphology shape cross-linguistic tendencies in morpheme order. *Proceedings of the 45th Annual Meeting of the Cognitive Science Society*.



Saldana, C.\*, Herce, B.\* & Bickel, B. (2022) More or less unnatural: Semantic similarity shapes the learnability and cross-linguistic distribution of syncretism in morphological paradigms. *Open Mind*, 6, 183–210. https://doi.org/10.1162/opmi\_a\_00062



Maldonado, M., & **Saldana, C.** (2022) Interpretations of plurality in personal pronouns differ across person categories: An experimental study. In Degano, M., Roberts T., Sbardolini, G., & Schouwstra, M. (eds.) *Proceedings of the 23rd Amsterdam Colloquium*, 388–396.



Saldana, C., Claidière, N., Fagot, J. & Smith, K. (2022) Probability matching is not the default decision making strategy in human and non-human primates. *Scientific Reports*, 129(1), 13092. https://doi.org/10.1038/s41598-022-16983-w



Schick, J., Saldana, C., Kathiresan, T., Zuberbuhler, K., & Stoll, S. (2022) Declarative and imperative pointing acts by infants can be distinguished by accompanying preverbal vocalisations. In *Proceedings of the 44th Annual Meeting of the Cognitive Science Society* 



Saldana, C., Herce, B., & Bickel, B. (2022). A Naturalness Gradient Shapes the Learnability and Cross-Linguistic Distribution of Morphological Paradigms. In *Proceedings of the 44th Annual Meeting of the Cognitive Science Society* 



Mansfield, J., Saldana, C., Hurst, P., Nordlinger, R., Stoll, S., Bickel, B. & Perfors, A. (2022) Category clustering and morphological learning. *Cognitive Science*, 46(2), e13107. https://doi.org/10.1111/cogs.13107



Saldana, C., Oseki, Y. & Culbertson, J. (2021) Cross-linguistic patterns of morpheme order reflect a cognitive biases: A case study of number and case morphology. *Journal Of Memory and Language*, 118, 104204. https://doi.org/10.1016/j.jml.2020.104204



Saldana, C., Smith, K., Kirby, S. & Culbertson, J. (2021) Is regularisation uniform across

linguistic levels? Comparing learning and production of unconditioned probabilistic variation in morphology and word order. *Language Learning and Development*, 17(2), 158–188. doi: https://doi.org/10.1080/15475441.2021.1876697



Saldana, C., Claidière, N., Fagot, J. & Smith, K. (2020) Rational after all: Probability matching behaviour across time in humans and monkeys. In S. Denison., M. Mack, Y. Xu, & B.C. Armstrong (Eds.), *Proceedings of the 42nd Annual Meeting of the Cognitive Science Society* 



Maldonado, M., Saldana, C. and Culbertson, J. (2020) Learning biases in person-number linearization. In *Proceedings of the 50th Annual Meeting of the North East Linguistic Society (NELS 50)*.



Saldana, C., Fagot, J., Kirby, S., Smith, K. & Claidière, N. (2019) High-fidelity copying is not necessarily the key to cumulative cultural evolution: a study in monkeys and children. *Proceedings of the Royal Society B*, 286(1904). https://doi.org/10.1098/rspb.2019.0729



Saldana, C., Smith, K., Kirby, S., Fagot, J. & Claidière, N. (2019) Cumulative cultural evolution in a non-copying task in children and Guinea baboons. In A.K. Goel, C.M. Seifert, & C. Freksa (Eds.), *Proceedings of the 41st Annual Conference of the Cognitive Science Society* (pp. 994–1000).



Saldana, C., Oseki, Y. & Culbertson, J. (2019) Do cross-linguistic patterns of morpheme order reflect a cognitive bias?. In A.K. Goel, C.M. Seifert, & C. Freksa (Eds.), *Proceedings of the 41st Annual Conference of the Cognitive Science Society* (pp. 1001–1007).



Saldana, C., Kirby, S., Truswell, R. & Smith, K. (2019) Compositional hierarchical structure evolves through cultural transmission: an experimental study. *Journal of Language Evolution*, lzz002. https://doi.org/10.1093/jole/lzz002



Saldana, C., Kirby, S., Smith, K. & Culbertson, J. (2017) Is the strength of regularisation behaviour uniform across linguistic levels? In G. Gunzelmann, A. Howes, T. Tenbrink & E. Davelaar (eds) *Proceedings of the 39th Annual Meeting of the Cognitive Science Society* (pp. 1023–1028).



SELECTED
INVITED TALKS
(LAST FIVE)

Saldana, C. (2023, July) Combining experimental methods and quantitative typology to test morphological universals. *SIGMORPHON* workshop within the *Meeting of the Association for Computational Linguistics*. Toronto, Canada.

Saldana, C. (2023, June) What can Artificial Language Learning experiments tell us about morphological universals? Department of Linguistics, University of Konstanz, Germany.

Saldana, C. (2023, February) Cognitive biases in the evolution of morphological paradigm splits. Computational Linguistics and Linguistic Theory, Universitat Pompeu Fabra, Spain.

Saldana, C. (2021, Nov) Learning biases in paradigmatic and syntagmatic morphological relations. Séminaire de Recherche en Linguistique, Université Genève, Switzerland.

Saldana, C. (2021, January) *Morphology as shaped by cognition*. Language Learning and Processing Lab Meetings, Hebrew University of Jerusalem, Israel.

# SELECTED CONFERENCE PRESENTATIONS (LAST FIVE)

Saldana, C. (2023, July) Speakers' cognitive representations of gender and number morphology shape cross-linguistic tendencies in morpheme order. Oral presentation given at the 45th Annual Meeting of the Cognitive Science Society (CogSci 2023). Sydney, Australia.

Saldana, C. (2022, September) The syntagmatic properties of agreement morphs and the learning bias against more unnatural paradigmatic patterns. International Morphology Meeting 20. Budapest, Hungary.

Saldana, C. (2022, September). Semantic similarity shapes how agreement markers split over positions in verb morphology. Oral presentation to be given at the Joint Conference on Language Evolution. Kanazawa, Japan.

Saldana, C. (2022, July). A Naturalness Gradient Shapes the Learnability and Cross-Linguistic Distribution of Morphological Paradigms. Oral presentation to be given at the 44th Annual Meeting of the Cognitive Science Society (CogSci 44). Toronto, Canada. [recording]

Saldana, C. (2020, July) (2020) Rational after all: Probability matching behaviour across time in humans and monkeys. Oral presentation given at the 42nd Annual Meeting of the Cognitive Science Society. Online. [recording]

# SELECTED SCIENTIFIC OUTREACH

From the primate brain to the linguistic community, Scientifica 2021, Zurich, CH. Interactive workshop for young adults to be carried out at Zurich's Scientifica science festival.

Language beats, SciFilmIt Hackathon Zurich 2021, CH. Short movie created during the SciFilmIt Hackathon Zurich 2021.

Language evolves!, Midlothian Science Festival School Programme 2018-2019, Edinburgh, UK. Interactive workshop for children 7-12 yo in primary schools within the Midlothian council in Scotland, UK.

Interactive exhibit at the Budongo Trail, 2018, Edinburgh Zoo, UK.

Interactive exhibit for children on memory games used to study non-human primates' behaviour.

Workshops in Science Communication to PhD students, 2014-2018, Edinburgh, UK. Organisation and design of training workshops in Science Communication by and for doctoral students within the University of Edinburgh.

Innovative learning week, The University of Edinburgh, 2015-2016

Coordination and design of interactive workshops for the general public showcasing the experimental paradigms used in evolutionary linguistics.

#### SUPERVISION

#### PhD mentoring:

- Anna Graff, Department of Comparative Language Science, University of Zurich, 2020-present
- Nicole Tamer, Department of Comparative Language Science, University of Zurich, 2020-present.
- Sara Morales Izquierdo, Department of Psychology, University of Warwick, 2020-2023.

#### Master theses:

- Sarah Einhaus, MA Speech and Language Processing, The University of Konstanz, 2023
- Joahanna Schick, MA Comparative Linguistics, University of Zurich, 2020
- Erik Gröningson, MSc Language Evolution and Cognition, The University of Edinburgh, 2019 Bachelor theses:
- Markus Bietenhader, BA Comparative Linguistics, University of Zurich, 2020 Research Interns:
- Julia Pater, Department of Comparative Language Science, University of Zurich, 2021
- Jingyi Zahng, Department of Transaltion and Language Sciences, Universitat Pompeu Fabra,
   2024

# FURTHER ACADEMIC SERVICE

Conference organiser of the annual international conferences Cross-linguistics Perspectives on Processing and Learning (X-PPL) and Culture Conference.

Workshops on Open Science principles and practices. Given at the University of Zurich (2019-present) and the University of Edinburgh (2018-2019).

Co-founder of LingProof, a community of linguists who offer proof-reading services free of charge to FAIR Open Access journals. LingProof's aim is to help combat the linguistic discrimination that arises from the anglocentric scientific publishing model in the language sciences. More info @LProofreading

Ad hoc reviewer: European Research Council, Glossa, Cognitive Science, Open Mind, Cognition, Journal of Memory and Language, Language Learning and Development, Memory & Cognition, Journal of Historical Linguistics, Humanities and Social Sciences Communications - Nature, the Journal of Language Evolution, Artificial Life and Robotics, the Evolution of Language International Conference, the Cultural Evolution Society Conference, the International Cognitive Linguistics Conference, and the Annual Meeting of the Cognitive Science Society.

#### AWARDS

Beatriu de Pinós Research Fellowship, 2024-2027, Generalitat of Catalunya and the European Union's Horizon 2020 research and innovation programme (€152,348.46)

Individual Call to Scientific Employment Stimulus - 6th Edition, 2024-2030, Portuguese Foundation for Science and Technology (declined)

Finalist for the Early Career Award 2024 by the Swiss Academy for Humanities and Social Sciences

Travel grant, Swiss Academy for Humanities and Social Sciences and the UZH Graduate Campus (Fr. 3,200)

Conference funding for Culture Conference 2022, UZH Graduate Campus and NCCR Evolving Language (Fr. 9,500)

Conference funding for Cross-linguistics Perspectives on Processing and Learning (X-PPL) 2022, Swiss Academy for Humanities and Social Sciences and UZH Graduate Campus (Fr. 15,000)

Peter Jusczyk Best Paper Award 2021 by the Society for Language Development (\$250) Conference funding for Cross-linguistics Perspectives on Processing and Learning (X-PPL) 2021, Swiss Academy for Humanities and Social Sciences and UZH Graduate Campus (Fr. 15,100)

Four-time nominee for the Teaching Awards, 2014-2018, Linguistics and English Language, PPLS, The University of Edinburgh

LaCaixa Scholarship for postgraduate studies in Europe, 2012-2013, Obra Social "La-Caixa" (ID 100010434), fellowship code LCF/BQ/EU12/10130016 (£37,000)

Outstanding Bachelor Award, 2012, Linguistics, University of Barcelona

Research Collaboration Award, 2011, Spanish Ministry of Education (€2,700)