Justine Mertz, Ph.D.

Academic CV

Current position

Feb. 2023 Post-doctoral researcher in sign language phonetics/phonology under the direction of Doris *Now* Mücke, Institut f
ür Linguistik - University of Cologne.

Education

2018 - 2022 **Ph.D. student in Sign Language Linguistics**, *U. Paris Cité*, *IJN - ENS*, under the supervision of Giuseppina Turco (LLF) and Carlo Geraci (IJN).

Title of Ph.D. dissertation, "Phonological contrast and feature inventories in sign language: A study on French Sign Language (LSF)".

2014 - 2017 Masters degree in Cognitive Science - Cogmaster, ENS - EHESS - Paris V.

Title of master thesis, "Processing and cortical implementation of reading and writing in the three main variants of Primary Progressive Aphasia".

2011 - 2014 Bachelor in Linguistics, with Highest Honours, Université de Nantes.

Research activities

- October 2022 Post-doctoral researcher in sign language linguistics under the direction of Charlotte - Feb. 2023 Hauser (U. Paris 8), IJN - ENS, Assistant to build Lang'Action, a start-up in DeepTech.
 - Research valorization on sign language linguistics and language acquisition
 - Fundraising to build Lang'Action (Bourse French Tech, BPI France)
 - Creation of a website, building content for workshops on linguistic dissemination
- June Sept., Post-doctoral researcher in sign language phonology under the direction of Carlo Geraci, 2022 IJN ENS.
 - Research activities
 - Writing and publishing of scientific articles
 - Supervision of the thesis of an MA student
- Jan. June, Research assistant in the Sign Language team and preparation of PhD application, under 2018 the supervision of Carlo Geraci, IJN - ENS, Research assistant in several studies in Sign Language Linguistics.
 - Participation to the project Sign Language History and creation of the project website
 - Involvement in the other experiments from the SL team
 - Attendance to French Sign Language (LSF) intensive courses and lab seminars LINGUAE
 - Improvement of LSF
- March Sept., Field work volunteering at the *Inkawu Vervet Project* (South Africa) headed by Érica van 2017 de Waal, Behavioral studies on wild vervet monkeys in their natural environment.
 - Field work in Research with collect of behavioral data, team work and life in an international community
 - Participation to experiments on social learning, social transmission, gestural and vocal communication
 - $\circ~$ Manager of the project equipment and the processing of organic samples for a study in genetics
 - $\circ~$ Improvement of spoken English

Oct. - Feb., Research internship in a Masters break year under the supervision of Antoni Valéro-Cabre, 2017 FrontLab ICM, Research assistant.

- Behavioral experiments with EEG recordings on patients with primary progressive aphasia (PPA)
- Participation to a review on the effects of non-invasive brain stimulation on neurodegenerative diseases
- Participation to TMS experiments

Summer 2015, Experiment on bias in implicit causality in French verbs under the supervision of Pascal

- Oct. Feb., Amsili & Barbara Hemforth, LLF U. Paris 7, Research internship in psycholinguistics.
 - 2017 Achievement of an on-line experiment in linguistics with subjects recruitment and formatting data
 Improvement in Python et R
 - Improvement of written English
- 2015 2016 Internship in 2nd year of MsC in Cogmaster under the supervision of Marc Teichmann, FrontLab ICM, Study of reading and writing disorders in patients with PPA.
 - Behavioral data analysis from patients with PPA
 - Improvement of statistical skills and their implementation in Python
 - Improvement of written English and scientific writing
- 2014 2015 Internship in 1st year of MsC in Cogmaster under the supervision of Marc Teichmann, FrontLab ICM, Literature review on the cortical implementation of the lexicon in PPA.
 - Writing a literature review
 - First experience in a Research Lab
 - Participation to lab meetings

Summer schools and other training

- Since 2013 LSF classes, Weekly classes on French Sign Language, B2-C1 level: fluent.
 - Oct. 5-8, Workshop on "Quantifying and interpreting variability in speech", Paris-Cologne Collaborative 2021 Meeting (PCCM 7), Paris.
- 2019 2020 University of Chicago, Classes in Phonology, American sign language (ASL), and Topics in Language and Gestures.
- 2018 2022 Seminars, LINGUAE seminars (IJN ENS), LingLunch (LLF U. Paris Cité), Center of Gesture and Sign Language (CGSL, U. Chicago), Linguistic seminars (U. Chicago), Modalities (U. Chicago).
- 2018 2022 **Doctoral training**, Answer a call for tenders in NGOs, Zotero, Working in consulting after a Ph.D., Assets for doctors in companies, digital identities and social media in research, CFDIP, U. Paris Cité.
- June 11-15, Summer School in Sign Language Linguistics, SIGN-HUB CNRS, Como, Italy. 2018

Teaching experience

- Lecture Language acquisition (BA), 24h, Introduction to language acquisition, Université Paris Cité.
- Lecture Experimental Phonology (MA), 14h, Module on sign language phonology: Categorical perception and EEG studies, Université Paris Cité.
- Lecture & TA Phonetic and phonological principles (BA), 64h, Introduction to French phonetics and phonology, Université Paris Cité.
 - TA Phonology (BA), 108h, General course, Université Paris Cité.
- Lecture & TA Phonetics (BA), 8h, Module on sign language phonetics, Université Paris Cité.
 - Lecture Introduction to sign language linguistics, 2h, General introduction as an invited lecturer, Paris Sciences et Lettres (PSL).

Reviewing and supervising activities

International Journal reviewer

- August, 2022 Frontiers in Psychology.
 - July, 2022 Journal of Deaf Studies and Deaf Education.

Supervising activities

- Ongoing MA student, Supervision of an MA thesis in sign language linguistics, U. Turin.
- July, 2021 Intern in formal linguistics (BA), Supervision of a one-month internship: work on a confusion matrix for inter-rater reliability, LLF U. Paris Cité.

- June, 2021 Intern in speech therapy, Supervision of a one-month internship: immersion in a research environment, participation to lab meetings, scientific readings, building and developing a confusion matrix, IJN-ENS.
- April-June, Intern in formal linguistics (MA), Supervision of a three-month internship: participation in a study 2020 on articulatory complexity in sign language, scientific readings, data cleaning, building a research question and developing a confusion matrix, LLF U. Paris Cité.

Independent Fundings

Oct., 2019 - **Fulbright Foreign Student Program**, *Fulbright bursary*, Fundings to cover a 4.5-month stay at the Feb., 2020 University of Chicago as a Visiting Student Researcher.

Mobility grant, *Labex EFL*, Fundings to cover a 4.5-month stay at the University of Chicago as a Visiting Student Researcher.

- Sept., Ph.D. fundings at the École Doctorale "Sciences du Langage", ED132 LLF UMR 7110, Paris, 2018 Fundings which cover a three-year Ph.D.
- June 11-15, Bursary for the SIGN-HUB CNRS Summer School in Sign Language Linguistics, Como, 2018 Italy, Bursary which covers housing during the Summer School.

Dissemination

Publications

Submitted Mertz, J., (sub.). Categorical Perception in French Sign Language (LSF).

- Under review Mertz, J. and Geraci, C. (*under review*). Modeling contrast and feature inventory: The nature of [web] in French Sign Language.
 - 2022 Mertz, J., Annucci, C., Aristodemo, V., Giustolisi, B., Gras, D., Turco, G., Geraci, C., & Donati, C. (2022). Measuring sign complexity: Comparing a model-driven and an error-driven approach, *Laboratory Phonology*, 24(1)., https://doi.org/10.16995/labphon.6439.
 - 2021 Sanches, C., Stengel, C., Godard, J., Mertz, J., Teichmann, M., Migliaccio, R., & Valero-Cabré, A. (2021). Past, present, and future of non-invasive brain stimulation approaches to treat cognitive impairment in neurodegenerative diseases: Time for a comprehensive critical review. *Frontiers in Aging Neuroscience*, 12, 578339., https://doi.org/10.3389/fnagi.2020.578339.
 - 2020 Mertz, J. (2020). Représentation phonologique des signes à deux mains en LSF: faut-il reconsidérer l'orientation absolue dans les modèles phonologiques des langues des signes?. In 6e conférence conjointe Journées d'Études sur la Parole (JEP, 33e édition), Traitement Automatique des Langues Naturelles (TALN, 27e édition), Rencontre des Étudiants Chercheurs en Informatique pour le Traitement Automatique des Langues (RÉCITAL, 22e édition). Volume 1: Journées d'Études sur la Parole (pp. 424-432). ATALA; AFCP., PDF.
 - 2020 Abner, N., Geraci, C., Yu, S., Lettieri, J., Mertz, J., & Salgat, A. (2020). Getting the upper hand on sign language families: Historical analysis and annotation methods. FEAST. Formal and Experimental Advances in Sign language Theory, 3, 17-29., https://doi.org/10.31009/FEAST.i3.02.
 - 2019 Mertz, J., Surreault, A., van de Waal, E., & Botting, J. (2019). Primates are living links to our past: The contribution of comparative studies with wild vervet monkeys to the field of social cognition. *Cortex*, 118, 65-81., *PDF*.
 - 2018 Routier, A., Habert, M. O., Bertrand, A., Kas, A., Sundqvist, M., Mertz, J., David, P.-M., Bertin, H., Godefroy, O., Etcharry-Bouyx, F., Moreaud, O., Pasquier, F., Couratier, P., Bennys, K., Boutoleau Bretoniere, C., Martinaud, O., Laurent, B., Pariente, J., Puel, M., Belliard, S., Migliaccio, R., Dubois, B., Colliot, O., & Teichmann, M. (2018). Structural, microstructural, and metabolic alterations in primary progressive aphasia variants. *Frontiers in neurology*, 9, 766., https://doi.org/10.3389/fneur.2018.00766.

Conference presentations

April 27-29, "Categorical perception in French Sign Language (LSF)" (Mertz J, Turco G, Geraci C), 2022 Generative Linguistics in the Old World (GLOW 45), London, England.

- April 22-24, "Categorical perception in French Sign Language (LSF)" (Mertz J, Turco G, Geraci C), 2022 The Chicago Linguistic Society (CLS 58), Chicago, USA.
- Feb. 24-26, "Categorical perception in French Sign Language (LSF)" (Mertz J, Turco G, Geraci C), 2022 Incontro di Grammatica Generativa (IGG 47), Catania, Italy.
 - June 1-4, "Universal vs. Language specific feature inventory: on the contrast of [web] in LSF" (Mertz 2021 J), Formal and Experimental Advances in Sign Language Theory (FEAST), Online, Hong Kong.
- June 23-25, "Structural Phylogenetics and the Reconstruction of Sign Language History" (Abner N, 2020 Geraci C, Yu S, Lettieri J, Mertz J, Salgat A), Formal and Experimental Advances in Sign Language Theory (FEAST), Paris - Online, France.
- June 8-19, "Représentation phonologique des signes à deux mains en LSF : faut-il reconsidérer 2020 l'orientation absolue dans les modèles phonologiques des langues des signes ?" (Mertz J), Journées d'Études sur la Parole (JEP-TALN-RECITAL), Nancy - Online, France.
- Sept. 26-28, SIGNopsis "Articulatory evidence for sign language typology and history" (Abner N, 2019 Geraci C, Mertz J, Yu S), Theoretical Issues in Sign Language Research (TISLR 13), Hamburg, Germany.
- June 17-19, "On how to measure phonological complexity of sign languages" (Aristodemo V, Annucci 2019 C, Geraci C, Giustolisi B, Gras D, Mertz J, Donati C), Phonetics and Phonology in Europe (PaPE), Lecce, Italy.
 "Typological and Historical relations across sign languages The view from articulatory features" (Geraci C, Mertz J, Lettieri J, Yu S, Abner N), Phonetics and Phonology in Europe
 - June 11, "Theory-Description-Theory: A round trip in French sign language phonology." (Mertz J, 2019 Geraci C), Theoretical and Formal Linguistics (TFL), Nantes, France.
 - June 3-5, "Investigation of sign language phonology: On how LSF makes us reconsider absolute 2019 orientation and timing units" (Mertz J), Paris-Cologne Collaborative Meeting (PCCM 6), Cologne, Germany.
 - May 7-11, "On how to measure phonological complexity of sign languages" (Aristodemo V, Annucci 2019 C, Geraci C, Giustolisi B, Gras D, Mertz J, Donati C), Generative Linguistics in the Old World (GLOW 42), Oslo, Norway.
- Feb. 21-23, "Typological and Historical relations across sign languages The view from articulatory 2019 features." (Geraci C, Mertz J, Yu S, Lettieri J, Abner N), Incontro di Grammatica Generativa (IGG 45), Padova, Italy.
- Nov. 9-11, "La famiglie linguistiche nelle lingue dei segni" (Geraci C, Abner N, Lettieri J, Yu S, Mertz 2018 J), 4° Convegno Nazionale LIS, Rome, Italy.

Invited presentations

(PaPE), Lecce, Italy.

- June, 2022 "Categorical Perception in French Sign Language (LSF)", Laboratoire de Sciences Cognitives et Psycholinguistique (LSCP), Ecole Normale Supérieure, Paris, France.
- Dec., 2021 "Perception catégorielle en Langue des Signes Française (LSF)", Laboratoire MODYCO, Université Paris Nanterre, Paris, France.
- April, 2020 "Classe phonémique Orientation : Quel statut en linguistique des langues des signes ?", Atelier de Phonologie - Université Paris 8, Saint-Denis, France.
- Feb., 2020 "Relative vs. absolute orientation in sign language: The case of LSF", Séminaires de Recherches en Phonétique et Phonologie (SRPP) Laboratoire de Phonétique et Phonologie, Université Sorbonne Nouvelle, Paris, France.

Poster presentations and short talks

Sept. 2-4, "Categorical Perception in French Sign Language (LSF)" (Mertz J, Turco G, Geraci C), 2021 Architectures and Mechanisms for Language Processing (AMLaP 2021), Paris - Online, France.

- Sept. 26-28, "Measuring phonological complexity in Sign Languages" (Mertz J, Aristodemo V, Annucci 2019 C, Geraci C, Giustolisi B, Gras D, Donati C), Theoretical Issues in Sign Language Research (TISLR 13), Hamburg, Germany.
 "Theory-Description-Theory: A round trip in French sign language phonology" (Mertz J, Geraci C), Theoretical Issues in Sign Language Research (TISLR 13), Hamburg, Germany.
- June 17-19, "Theoretical and Empirical issues of phonemic inventories in French Sign Language" 2019 (Mertz J, Geraci C, Turco G), Phonetics and Phonology in Europe (PaPE), Lecce, Italy.
 - May 7-11, "Typological and Historical relations across sign languages The view from articulatory
 2019 features" (Geraci C, Mertz J, Lettieri J, Yu S, Abner N), Generative Linguistics in the Old
 World (GLOW 42), Oslo, Norway.
 - April 11, "Questions théoriques et empiriques sur les inventaires phonémiques des langues signées :
 2019 le cas de la LSF" (Mertz J), Journée d'Ouverture à la Recherche en LSF (JORLSF dissemination day), Paris, France.

Services to the scientific community

- Sept., 2021 AMLaP 21, Part of the organizational committee.
- April, 2021 GLOW 44, Part of the organizational committee.
- June, 2020 FEAST 2020, Part of the organizational committee.

Other experiences

Associative Life

- Since 2018 Association WAZO for birds protection, Treasurer of the association WAZO La cité internationale des oiseaux, Île de France, Website.
 - Act for birds/wildlife conservation
 - Construction of nesting boxes and drinking trough
 - Installation of camera for monitoring
 - Installation of microphones to map birds nests at the International University Campus in Paris
- 2014 2015 Association of students and young researchers in Cognitive Science in Île-de-France, President of the association Cognivence, Île de France.
 - Organisation of the Forum des Sciences Cognitives 2015
 - Management experience
 - Search for fundings
 - Decision-making and responsibilities
- 2009 2010 European Leukodystrophies Association, President of the association ELA in highschool, Lycée Erckmann-Chatrian, Grand Est region.
 - Fund-raising
 - Promotion of the association and the importance of volunteerism
 - Participation to the national day of the association in Paris

Skills and qualifications Computer skills Edition IAT_EX, Office pack Systems Linux, MacOS, Windows

Spoken Languages

French	Mother tongue	$\mathbf{English}$	P
German	Beginner Level		
	Sign Languages		

LSF Advanced level (C1)

Programm. R (advanced level), Python (intermediate level), Shell

Software Poser (3D animation), Labvanced (experimental platform)

English Professional practice

ASL Beginner Level