Elena Benini

PostDoc Researcher at RWTH Aachen University: <u>Homepage</u> E-mail: elena.benini@psych.rwth-aachen.de

Education

Postdoc Researcher, Psychology

RWTH Aachen

Field: Cognitive and Experimental Psychology

June, 2024 - Present

PhD Candidate, Psychology

RWTH Aachen

October 2019

 $Field:\ Cognitive\ and\ Experimental\ Psychology$

November 2019 - May 2024

Supervisors: Andrea M. Philipp, Ph.D., Iring Koch, Ph.D.

Dissertation title: The role of feature binding and episodic retrieval processes in

task switching with a special focus on binding and retrieval of task-irrelevant contextual features.

Defense date: May 14th, 2024

M.Sc. in Applied Experimental Psychological Sciences

Milan-Bicocca University, Milan

Final grade: 110/110 with distinction

Master's thesis supervisor: Carlo Reverberi

Time abroad: "Erasmus" traineeship with Giosuè Baggio

at NTNU, Trondheim, Norway

Bachelor degree in "Psychology and Mental Health" "La Sapienza" Unive

Final Grade: 110/110 with distinction

Bachelor thesis supervisors: Fabio Ferlazzo, Stefano Sdoia Time abroad: "Erasmus" project at Universidad de Zaragoza,

Teruel, Spain

"La Sapienza" University, Rome July 2017

Academic experience

Invited Talks Wilfried Kunde's lab at Würzburg University (9th December 2024) • Martin

Fischer's lab at Postdam University (online), March 2024 \bullet Jan de Houwer and Senne Braem's labs at Ghent University (in person), January 2024 \bullet Christian Frings' Lab at Trier University (in person), February 2024 \bullet Tamar Gollan's lab

at University California San Diego (online), January 2024.

Teaching Taught hands-on course (experiment design, data analyses with R, results in-

terpretation) in Psychology Bachelor for 5 semesters. April 2021 - July 2023.

Supervised two Bachelor's theses.

Lab Visit February 2025, 8-weeks lab visit at the University of Zurich with Klaus Oberauer.

• September 2022, four-weeks lab visit at the University of Passau, Germany,

with Susanne Mayr and Malte Möller.

Professional Service

Peer Reviewer

Reviewed more than 10 empirical articles for the following outlets: • Journal of Experimental Psychology: Learning Memory and Cognition • Journal of Experimental Psychology: Human Perception and Performance • Journal of Cognition • Attention, Perception & Psychophysics • Memory & Cognition • Psychological Research • Frontiers • Cognitive, Behavioural, & Affective Neuroscience

Professional Service (Continued)

Conferences Organized and chaired a double symposium about feature binding and episodic

retrieval at the TeaP conference in Trier in 2023 and in Regensburg in 2024 (with Tom Verguts and Mengqiao Chai from Ghent University among the invited speak-

ers).

Others Organizing a symposium with Dr. Luca Moretti about conflict adaptation in

single- and multi-tasking paradigm that will take place in Aachen in July, 2025 and includes 8 invited speakers from the US, Belgium, Italy, France and Germany. • Organized an online meeting of the Women+ in Control group, with prof. Miriam Gade, prof. Eva Van den Bussche and dr. Kerstin Froeber and

served as chairperson.

Grants

RWTH Start-Up Grant 2024 Received funding for a project proposal including 4 ex-

periments and a lab visit in the US (ca. €16k)

DFG International Events Grant I applied as a co-organizer for a Deutsche Forschungsgemeinschaft (German Research Foundation) grant to fund

an international symposium in Aachen that was awarded

to Luca Moretti (MO 4887/3-1 ca. €3,600).

Gorilla Grants 2020 Won platform credit to run ca. 100 participants on

the Gorilla Experiment Builder Platform (ca. €100)

https://app.gorilla.sc/grants/winners2020

Publications

Strivens, A., Lavric, A., Benini, E., Philipp, A. M., and Koch, I. (2025). The effect of preparation on binding between spatial and non-spatial features of voices in a multitalker setting. *Psychological Research*, 89(2):88.

Benini, E., Koch, I., Mayr, S., Frings, C., and Philipp, A. M. (2022). Contextual features of the cue enter episodic bindings in task switching. *Journal of Cognition*, 5(8):1–17.

Benini, E., Koch, I., Mayr, S., Frings, C., and Philipp, A. M. (2023a). Binding of task-irrelevant contextual features in task switching. *Quarterly Journal of Experimental Psychology*, 76(8):1872–1888.

Benini, E., Koch, I., and Philipp, A. M. (2024). Repetition costs in task switching are not equal to cue switching costs: evidence from a cue-independent context. *Psychological Research*, 88(3):910–920.

Benini, E., Möller, M., Koch, I., Philipp, A. M., Qiu, R., and Mayr, S. (2023b). Evidence of task-triggered retrieval of the previous response: a binding perspective on response-repetition benefits in task switching. *Psychonomic Bulletin & Review*, Advance Online Publication.

Contreras-Saavedra, C. E., Willmes, K., Koch, I., Schuch, S., **Benini**, E., and Philipp, A. M. (2020). Multilingual two-digit number naming: The influence of composition rules on language switching. *Quarterly Journal of Experimental Psychology*, 73(9):1481–1494.

Frings*, C., Beste*, C., Benini*, E., Möller*, M., Dignath, D., Giesen, C. G., Hommel, B., Kiesel, A., Koch, I., Kunde, W., Mayr, S., Mocke, V., Moeller, B., Münchau, A., Parmar, J., Pastötter, B., Pfister, R., Philipp, A. M., Qiu, R., Render, A., Rothermund, K., Schiltenwolf, M., and Schmalbrock, P. (2024). Consensus definitions of perception-action-integration in action control. *Communications Psychology*, 2(1):7.

- Mocke, V., **Benini**, E., Parmar, J., Schiltenwolf, M., and Kunde, W. (2023). What is behind partial repetition costs? Event-files do not fully occupy bound feature codes. *Psychonomic Bulletin Review*, 30(4):1463–1474.
- Papageorgiou, K. A., **Benini**, E., Bilello, D., Gianniou, F., Clough, P. J., and Costantini, G. (2019). Bridging the gap: A network approach to Dark Triad, Mental Toughness, the Big Five, and perceived stress. *Journal of Personality*, 87(6):1250–1263.
- *shared first authorship

Manuscripts in preparation or submitted

- Benini, E., Moeller, M., Mayr, S., Koch, I., Qiu, R., Grange, J., Philipp, A. M., and Moretti, L. Repeating the response retrieves the task: An MPT model approach to the influence of response selection on task selection.
- Benini, E., Mocke, V. (Submitted) Spatial Numerical Associations in the Absence of Lateralized Codes: Magnitude Processing Creates Horizontal Biases in Vertical Mouse Movements
- Benini, E., Hazeltine, E., Weissman, D., Koch, I. (Submitted) Evidence for the contribution of a signalling heuristic during cued task switching: Increasing the number of response alternatives can reduce response-repetition costs
- Benini, E., Koch, I., Mayr, S., and Philipp, A. M. Context binding in language switching.

Conferences Attended as a Presenter

- Psychonomics annual meeting, New York, 2024. Poster: "Episodic retrieval in task switching: Repeating the response induces retrieval of the task"
- Teap, Regensburg 2024. Symposium talk: "Evidence of episodic retrieval in task switching: Repeating the response retrieves the task and vice versa"
- NeuroMi, annual meeting of Milan center for neuroscience, Milan, 2023. Poster: "Compositionality of neural representations of logical rules: an fMRI study"
- Psychonomics annual meeting, San Francisco, 2023. Poster: "Evidence of Task-triggered retrieval of the previous response: A binding perspective on response-repetition benefits in task switching"
- Meeting of the DFG-funded Research Unit "Binding and Retrieval in Action Control" with international guests, Trier 2023. Talk and poster on the topic "Binding of task-irrelevant contextual features in task switching: Results and perspectives"
- Teap, Trier 2023. Symposium talk: "A Repeating task retrieves the previous response in task switching.". Attended pre-conference workshop about an introduction to bayesian statistics with JASP
- Psychonomics annual meeting, Boston, 2022. Poster: "Binding of task-irrelevant contextual dimensions in language switching."
- NeuroMi, annual meeting of Milan center for neuroscience, Milan, November 2022. Poster: "Putting pieces together: how logical connectives combine propositions. An fMRI study."
- ESCoP, Lille, 2022. Symposium talk: Benini, E., Koch, I., Mayr, S., Frings, C., Philipp, A.M. Binding of task-irrelevant contextual features in task-switching.
- Teap, Cologne (online), 2022. Talk: "Binding of task-irrelevant cue features in cued language-switching."
- Psychonomics annual meeting, New Orleans (online) 2021. Poster: "Binding of task-irrelevant contextual features in task switching."
- ADok conference for PhD students, Würzburg, June 2021. Talk: "Is language bound in task switching when it is task-irrelevant?"

Teap, Ulm (online), 2021. Talk: "Binding of task-irrelevant contextual features in task-switching.". Attended pre-conference workshop about Multinomial Processing Tree Models.

Summer/Winter Schools and Workshops

Amsterdam, July 2024. "Model-Based Neuroscience and Cognition Summer School".

Mannheim, June 2023. "An introduction to cognitive modelling" workshop organized by the Statistical Modeling in Psychology (SMiP) program.

TeaP 2022 (online), pre-conference workshop: "Multinomial Processing Tree Modeling: Basic Methods and Recent Advances"

Milan (online), December 2022. "Intensive course on the analysis of power"

Hamburg (online) September 2021. "Cognitive Modeling Academy Hamburg" (CMAH) An introduction to cognitive models and hands-on exercises about reinforcement learning models and drift diffusion models.

Chalmers (online) September 2020. Workshop organized by the IDEA League about "Analysis and Modelling of Road User Behavior".

Technical skills

Programming Languages/Tools RStudio, Python, git, Matlab, MS office package, multiTree

Language proficiencies

ItalianNativeEnglishVery fluentSpanish, GermanIntermediate