ALEXIA ROUX-SIBILON

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y @a_rouxsibilon

WORK EXPERIENCE

Postdoctoral Researcher — September 2020 - Septembre 2023

 \P Université Catholique de Louvain, Psychological Research Institute / Institute of Neuroscience Louvain-la-Neuve, Belgium

Research and Teaching Fellow (A.T.E.R.) — September 2019 - August 2020

♀ University Grenoble-Alpes, LPNC CNRS 5105, *Grenoble, France*

Contractual PhD Candidate — October 2016 - August 2019

♀ University Grenoble-Alpes, LPNC CNRS 5105, *Grenoble, France*

Teaching Assistant — October 2016 - June 2019

♥ University Grenoble-Alpes, LPNC CNRS 5105, Grenoble, France

Research Assistant — July 2016 - August 2016

♀ University Grenoble-Alpes, LPNC CNRS 5105, Grenoble, France

EDUCATION

PhD in Psychology and Cognitive Neuroscience — 2020

♀ University Grenoble-Alpes, LPNC CNRS 5105, *Grenoble, France*

Dissertation: Visual recognition: Study of the influence of peripheral vision within the coarse-

to-fine theoretical framework Supervisor: Dr. Carole Peyrin Funding: AGIR POLE CBS (UGA)

$\textbf{MSc in Cognitive Science - Natural and artificial cognition} \\ -2016$

♥ Grenoble Institute of Technology, *Grenoble, France* Supervisors: Dr. Carole Peyrin and Dr. Solène Kalénine

Master's degree in Experimental Psychology — 2015

• Pierre Mendès-France University, *Grenoble, France* Supervisor: Dr. Carole Peyrin

BA in Psychology — 2013 ♥ Pierre Mendès-France University, *Grenoble, France*

GRANTS AND AWARDS

Funded grant proposals ✓

F.S.R. Post-Doc grant from UCLouvain Research Council 2 years fellowship to carry out research at UCLouvain (*Louvain-La-Neuve*, *Belgium*) in Prof. Valerie Goffaux's laboratory Project: *Mapping new territories*: *Impact of orientation biases on the interaction between foveal and peripheral vision*

Idex Graduate School grant from ComUE Grenoble-Alpes — 2018 3 months travel grant in UCLouvain (*Louvain-La-Neuve*, *Belgium*)

Awards

2021 Thesis Price from University Grenoble-Alps

PUBLICATIONS

Journal papers

Peyrin, C., **Roux-Sibilon, A.**, Trouilloud, A., Khazaz, S., Joly, M., Pichat, C., Boucart, M., Krainik, A., Kauffmann, L. Semantic and physical properties of peripheral vision are used for scene categorization in central vision. *Journal of Cognitive Neuroscience* (accepted)

Trouilloud, A., Kauffmann, L., **Roux-Sibilon, A.**, Rossel, P., Boucart, M., Mermillod, M., Peyrin, C. (2020). Rapid scene categorization: From coarse peripheral vision to fine central vision. *Vision Research*, 170, 60-72.

Roux-Sibilon, A., Trouilloud, A., Kauffmann, L., Guyader, N., Mermillod, M., Peyrin, C. (2019). Influence of peripheral vision on object categorization in central vision. *Journal of Vision*, 19(14), 7-7.

Roux-Sibilon, A., Rutge, F., Aptel, F., Attye, A., Guyader, N., Boucart, M., Chiquet, C., Peyrin, C. (2018). Scene and human face recognition in the central vision of patients with glaucoma. *PloS One*, 13(2).

Roux-Sibilon, A., Kalénine, S., Pichat, C., Peyrin, C. (2018). Dorsal and ventral stream contribution to the paired-object affordance effect. *Neuropsychologia*, 112, 125-134.

Hoyau, E., **Roux-Sibilon, A.**, Boudiaf, N., Pichat, C., Cousin, E., Krainik, A., Jaillard, A., Peyrin, C., Baciu, M. (2018). Aging modulates fronto-temporal cortical interactions during lexical production. A dynamic causal modeling study. *Brain and Language*, 184, 11-19.

Kauffmann, L., **Roux-Sibilon, A.**, Beffara, B., Mermillod, M., Guyader, N., Peyrin, C. (2017). How does information from low and high spatial frequencies interact during scene categorization ?. *Visual Cognition*, 25(9-10), 853-867.

Peyrin, C., Ramanoël, S., **Roux-Sibilon, A.**, Chokron, S., Hera, R. (2017). Scene perception in age-related macular degeneration: Effect of spatial frequencies and contrast in residual vision. *Vision Research*, 130, 36-47.

Conference papers

Roux-Sibilon, A., Peyrin, C., Greenwood, J. A., Goffaux, V. (2021). Radial biases influence face identification in the periphery. *Journal of Vision*, 21(9), 2594-2594.

ORAL COMMUNICATIONS

Roux-Sibilon, A., Peyrin, C., Greenwood, J. A., Goffaux, V. (2021). *Radial biases influence face identification in the periphery*. Belgian Association for Psychological Science online conference.

Peyrin, C. & **Roux-Sibilon, A.** (2018). *Troubles de la reconnaissance visuelle de scènes induits par une atteinte rétinienne et désorganisation corticale associée.* Journée scientifique du LPNC "Neuroplasticité et rééducation cognitive", Grenoble, France.

Roux-Sibilon, A. (2017). Scene and face categorization in the central vision of patients with glaucoma. 'PSM Fest' Vision workshop, Laboratoire de Psychologie de la Perception, Université Paris Descartes, France.

POSTER COMMUNICATIONS

Roux-Sibilon, A., Peyrin, C., Greenwood, J. A., Goffaux, V. (2021). Radial biases influence face identification in the periphery. *NeuroCog conference*., Louvain-la-Neuve, Belgium.

Roux-Sibilon, A., Peyrin, C., Greenwood, J. A., Goffaux, V. (2021). Radial biases influence face identification in the periphery. *Virtual Vision Sciences Society Conference*., USA.

Trouilloud, A., Kauffmann, L., **Roux-Sibilon, A.**, Rossel, P., Boucart, M., Mermillod, M., & Peyrin, C. (2018). Rapid scene categorization: From coarse peripheral vision to fine central vision. *European Conference on Visual Perception*. Leuven, Belgium

Trouilloud, A., **Roux-Sibilon, A.**, Rutgé, F., Kauffmann, L., Attyé, A., Chiquet, C., Aptel, F., & Peyrin, C. (2018). Peripheral vision loss affects the processing of spatial frequencies in the central vision of people with glaucoma. *European Conference on Visual Perception*, Trieste, Italy.

Roux-Sibilon, A., Trouilloud, A., Kauffmann, L., Mermillod, M., & Peyrin, C. (2018). Role of peripheral vision on proactive processing leading to object recognition. *1st international Workshop on Predictive Processing*, San Sebastian, Spain.

Roux-Sibilon, A., Rutgé, F., Aptel, F., Attye, A., Guyader, N., Boucart, M., Chiquet, C., & Peyrin, C. (2017). Is scene and face perception preserved in the central visual field of people with glaucoma?. *European Conference on Visual Perception*, Berlin, Germany

Roux-Sibilon, A., Kalenine, S., Pichat, C., & Peyrin, C. (2016). The neural basis of the paired-object affordance effect. *European Conference on Visual Perception*, Barcelona, Spain

Kauffmann, L., **Roux-Sibilon, A.**, Miler, D., Beffara, B., Mermillod, M., & Peyrin, C. (2016). How does information from low and high spatial frequencies interact during scene categorization?. *European Conference on Visual Perception*, Barcelona, Spain

TEACHING

Methods and statistics

Advanced Methods in Cognitive Psychology (tutorials 6h | Psychology 4rd Year) Experimental design and programming, Introduction to programming psychological experiments in E-Prime

Introduction to Inferential Statistics (tutorials 32h | Psychology 2nd Year) Introduction to t-test and inferential statistics

Data Analysis (tutorials 32h | Psychology 1st Year)

Descriptive statistics (scales, graphs, mean, median, standard deviation, bivariate analyses)

Methods in Social Science (tutorials 12h | Psychology 1st Year)

Research methods, study designs, types of measurement

Academic Work Methods (tutorials 68h | Psychology 1st Year)

Literature search, bibliography, reading reports, reasoning and writing

Psychology

Psychometrics (tutorials 28h | Psychology 2nd Year)

Psychometric properties, Intelligence tests (WISC-IV)

Cognitive Psychology - Visual recognition (lecture 4h | Psychology 2nd Year)

Characteristics and models of visual recognition

Cognitive Psychology - Perception, action, categorisation (tutorials 24h | Psychology 3rd Year)

Developmental and embodied approach of categorization processes, Infants and children testing methods

Introduction to Cognitive Psychology (tutorials 26h | Psychology 1st Year)

Experimental approach in behavioral research (hypotheses and predictions, dependant and independant variables, main effects and interactions)

Neurophysiology

Neurophysiology of Sensory Systems (tutorials 32h | Psychology 3rd Year)

Neurophysiology of audition, olfaction and gustation

Neurophysiology of Sensory Systems (practical works 92h | Psychology 3rd Year)

Practical works on vision, audition, gustation and electroencephalography

STUDENT SUPERVISION

| Student(s) | Degree | Academic | Project | Co-supervisor(s) |
|--|---|-----------|---|--|
| | | year | | |
| P. Rossel | Msc Research in Psychology | 2019-2020 | Rapid scene categorization from coarse peripheral vision to fine central vision | L. Kauffmann, C. Peyrin, A. Trouil- loud |
| P. Rossel | Msc Research in Psychology | 2018-2019 | Role of peripheral vision in the coarse-to-fine analysis of visual scenes | L. Kauffmann, C. Peyrin, A. Trouil- loud |
| L. Simon- celli, S. Sudre, M. Sibillini | BA in Psychology | 2018-2019 | Impact of the radial- tangential anisotropy in peripheral vision on representational mo- mentum | |
| A. Trouilloud | Msc Neuropsychology and Clinical Neuroscience | 2017-2018 | Spatial frequency processing in people with glaucoma | C. Peyrin |
| M. Favre, C. Curto, B. Tam | BA in Psychology | 2017-2018 | Influence of contextual information in peripheral vision on object categorization | C. Peyrin |
| V. Louraço, P. Rossel | BA in Psychology | 2017-2018 | Affordance and categorization of 'uncomfortable' manipulable artifacts | L. Molto |

| S. Khazaz, Msc Research | in | 2016-2017 | Integration of informa- | C. Peyrin |
|-------------------------|----|-----------|---------------------------|-----------|
| M. Joly, A. Psychology | | | tion extracted in central | |
| Trouilloud | | | and peripheral vision | |

ACADEMIC SERVICES

Elected representative of PhD students — 2017-2020

♀ University Grenoble-Alpes, ED-ISCE doctoral school

Ad hoc reviewer: Journal of Vision, Quaterly Journal of Experimental Psychology, i-Perception

MEMBERSHIP

Vision Science Society — 2017-2020

ORGANIZATION OF SCIENTIFIC AND SOCIETY EVENTS

Participation in workshops for children for the ${\bf Brain\ Awareness\ Week}$ in Grenoble elementary schools — 2019

Small experiments and initiation to classical behavioral and perceptual effects (visual illusions, Stroop...)

Organizing committee 'Les Rencontres Jeunes Chercheur·e·s du LPNC' — 2020 (event cancelled due to the Covid-19 pandemic)

Conference for, and organized by, french-speaking early carreer researchers in Cognitive Science

Organizing committee 'Les Rencontres Jeunes Chercheur-e-s du LPNC' — 2019 Conference for, and organized by, french-speaking early carreer researchers in Cognitive

Conference for, and organized by, french-speaking early carreer researchers in Cognitive Science

Organizing committee 'Journées de Printemps de la Société de Neuropsychologie de Langue Française' — 2017

Conference for french-speaking neuropsychologists and researchers

COLLABORATIONS

University Grenoble-Alpes, LPNC (*Grenoble*): Carole Peyrin, Louise Kauffmann, Audrey Trouilloud

Université Catholique de Louvain, IPSY (Louvain-La-Neuve): Valerie Goffaux

University Grenoble-Alpes, GIPSA-Lab (Grenoble): Nathalie Guyader

University College London, PALS (London): John Greenwood

Lille University, SCALab (Lille): Solène Kalenine

Grenoble University Hospital, Department of Ophtalmology (Grenoble): Florent Aptel

TECHNICAL SKILLS

Programming: R, Matlab

Data vizualization and analysis: R, JASP stats, Statistica

Experimental design and data collection: Psychopy in Python, E-Prime, OpenSesame (ba-

sics), Psychtoolbox in Matlab (basics)

Neuroimaging (fMRI): Experimental design, Data processing and analysis (SPM12), Dynamic

Causal Modeling (basics)

Reproductible writing: LaTeX, RMarkdown