## ALEXIA ROUX-SIBILON

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## Work Experience

**Postdoctoral Researcher** — September 2020 - Septembre 2023

♥ 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

**Q** 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

**Q** 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)

### 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.

## **Talks**

**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 year	Project	Co-supervisor(s)
P. Rossel	Msc Research in Psy-	2019-2020	Rapid scene categorization from	L. Kauffmann, C. Peyrin,
	chology (University		coarse peripheral vision to fine cen-	A. Trouilloud
	Grenoble-Alpes)		tral vision	
P. Rossel	Msc Research in Psy-	2018-2019	Role of peripheral vision in the	L. Kauffmann, C. Peyrin,
	chology (University		coarse-to-fine analysis of visual	A. Trouilloud
	Grenoble-Alpes)		scenes	
L. Simoncelli,	BA in Psychology (Uni-	2018-2019	Impact of the radial-tangential	
S. Sudre, M.	versity Grenoble-Alpes)		anisotropy in peripheral vision on	
Sibillini			representational momentum	
A. Trouilloud	Msc Neuropsychology	2017-2018	Spatial frequency processing in	C. Peyrin
	and Clinical Neuro-		people with glaucoma	
	science (University			
	Grenoble-Alpes)			
M. Favre, C.	BA in Psychology (Uni-	2017-2018	Influence of contextual informa-	C. Peyrin
Curto, B. Tam	versity Grenoble-Alpes)		tion in peripheral vision on object	
			categorization	
V. Louraço, P.	BA in Psychology (Uni-	2017-2018	Affordance and categorization of	L. Molto
Rossel	versity Grenoble-Alpes)		'uncomfortable' manipulable arti-	
			facts	
S. Khazaz, M.	Msc Research in Psy-	2016-2017	Integration of information ex-	C. Peyrin
Joly, A. Trouil-	chology (University		tracted in central and peripheral	
loud	Grenoble-Alpes)		vision	

### Acdemic 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 — 2021

# Organisation of Scientific and Society Events

Participation in workshops for children for the **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 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): Valérie 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 (basics), Psychtoolbox in Matlab (basics)

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

Reproductible writing: LaTeX, RMarkdown