




# Brice Beffara

Assistant Lecturer & Research Scholar - Psychology  
Besançon, France

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## Current position

### Academic

[Université de Franche-Comté, France](#)

Assistant lecturer (ATER)

September 2018 - present

### Independent

[The Walden III Slowpen Science Laboratory](#)

Research scholar (co-founder)

2017 - present

## Scientific Affiliations

[Association pour la Diffusion de la Recherche Internationale en Psychologie Sociale](#) 2018 - 2019

[Association for Psychological Science](#) 2016 - 2017

[International Society for Research on Emotions](#) 2015 - 2016

[Society for Affective Science](#) 2015 - 2016

## Past positions

[Université de Lyon, France](#)

Post-doctoral researcher

January 2018 - August 2018

## Education

[Université Catholique de Louvain](#) PhD Psychological and Educational Sciences 2013 - 2016  
[Université Grenoble Alpes](#) PhD Cognitive Science, Psychology, and Neurocognition  
Cotutelle

Advisors: Pr. Martial Mermillod & Pr. Nicolas Vermeulen

Jury: Pr. Bernard Rimé, Pr. Gilles Pourtois, Dr. Valérie Dufour, Pr. Pierre Maurage, Pr. Martial Mermillod & Pr. Nicolas Vermeulen

[INP Grenoble](#) MSc 2 Cognitive Science -high honors- 2012 - 2013

[Blaise Pascal University of Clermont-Ferrand](#) MSc 1 Social and Cognitive Psychology 2011 - 2012

[Blaise Pascal University of Clermont-Ferrand](#) BSc Psychology -honors- 2008 - 2011

## Qualifications

16<sup>th</sup> section of the French National Council of Universities Qualified for french lecturer positions in Psychology 2018

69<sup>th</sup> section of the French National Council of Universities Qualified for french lecturer positions in Neuroscience 2018

## Publications

### *In preparation*

**Beffara, B.**, Mermillod, M., & Vermeulen, N. (*first preprint* 2016). Can we test the influence of prosociality on high frequency heart rate variability? A double-blind sham-controlled approach. BioRxiv, 078006. <https://doi.org/10.1101/078006>

**Beffara, B.**, Vermeulen, N., & Mermillod, M. (*first preprint* 2016). Resting high frequency heart rate variability is not associated with the recognition of emotional facial expressions in healthy human adults. BioRxiv, 077784. <https://doi.org/10.1101/077784>

### *Under review*

**Beffara, B.**, Bret, A., & Nalborczyk, L. (*first preprint* 2018). Automation in Sequential Testing: A commentary on Schönbrodt, Wagenmakers, Zehetleitner, and Perugini (2017). PsyArXiv. <https://doi.org/10.17605/OSF.IO/V7XPG> (*Being revised for further consideration at Meta-Psychology*)

Bret, A., **Beffara, B.**, Mierop, A., Mermillod, M., & Corneille, O. (*first preprint* 2017). Right-Wing Authoritarianism Predicts weakened Attitude Change in an Evaluative Counter-conditioning Paradigm. PsyArXiv. <https://doi.org/10.17605/OSF.IO/3MFA8> (*Being revised for further consideration at Social Psychological and Personality Science*)

### *Peer-reviewed journal articles*

Spatola, N., Santiago, J., **Beffara, B.**, Mermillod, M., Ferrand, L., & Ouellet, M. (2018). When the Sad Past Is Left: The Mental Metaphors Between Time, Valence, and Space. *Frontiers in Psychology*, 9. <https://doi.org/10.3389/fpsyg.2018.01019>

Mermillod, M., Grynberg, D., Pio-Lopez, L., Rychlowska, M., **Beffara, B.**, Harquel, S., ... Droit-Volet, S. (2018). Evidence of Rapid Modulation by Social Information of Subjective, Physiological, and Neural Responses to Emotional Expressions. *Frontiers in Behavioral Neuroscience*, 11. <https://doi.org/10.3389/fnbeh.2017.00231>

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*, 1–15. <https://doi.org/10.1080/13506285.2017.1347590>

Bret, A., **Beffara, B.**, McFadyen, J., & Mermillod, M. (2017). Right wing authoritarianism is associated with race bias in face detection. *PloS One*, 12(7), e0179894. <https://doi.org/10.1371/journal.pone.0179894>

**Beffara, B., Bret, A. G., Vermeulen, N., & Mermillod, M.** (2016). Resting high frequency heart rate variability selectively predicts cooperative behavior. *Physiology & Behavior*, 164, 417–428. <https://doi.org/10.1016/j.physbeh.2016.06.011>

**Beffara, B., Wicker, B., Vermeulen, N., Ouellet, M., Bret, A., Molina, M. J. F., & Mermillod, M.** (2015). Reduction of interference effect by low spatial frequency information priming in an emotional Stroop task. *Journal of Vision*, 15(6), 16. <https://doi.org/10.1167/15.6.16>

**Bret, A., & Beffara, B.** (2013). Anthropomorphising Ourselves : The Origin of the Free Will Illusion. *Student Journal of Psychology*, 2, 1, 28-30. [http://docs.wixstatic.com/ugd/fefdb\\_62582ff81c851d5cb7117522f7457fbd.pdf](http://docs.wixstatic.com/ugd/fefdb_62582ff81c851d5cb7117522f7457fbd.pdf)

**Beffara, B., Ouellet, M., Vermeulen, N., Basu, A., Morisseau, T., & Mermillod, M.** (2012). Enhanced embodied response following ambiguous emotional processing. *Cognitive Processing*, 13(S1), 103–106. <https://doi.org/10.1007/s10339-012-0468-6>

#### *PhD thesis*

**Beffara, B.** (2016). Variabilité cardiaque de haute fréquence et comportements prosociaux : Approche causale de la théorie polyvagale [*High frequency heart rate variability and prosocial behaviours: A causal approach to the Polyvagal theory*] (Thesis). Université Grenoble Alpes - Université Catholique de Louvain. <https://tel.archives-ouvertes.fr/tel-01691751>

#### **Oral communications**

**Beffara, B., Nalborczyk, L., Héjja-Brichard, Y., and Bret, A.** (2017, November) Open, slow and sustainable science. Talk presented at the PhD student day of the LPNC, Grenoble, France.

**Bret, A., Mierop, A., Beffara, B., Corneille, O., and Mermillod, M.** (2017, August) Political conservatism and evaluative counterconditioning: Motivational and cognitive differences. Talk presented at ESCON, Gdansk, Poland.

**Bret, A., Mierop, A., Beffara, B., Corneille, O., and Mermillod, M.** (2017, July) Right-Wing Authoritarianism is negatively associated with counter-conditioning. Talk presented at EASP, Granada, Spain.

**Bret, A., Mierop, A., Beffara, B., Corneille, O., and Mermillod, M.,** (2017, March) When sensitivity to evaluative counterconditioning is associated with sociopolitical ideologies: Is this due to style differences? Talk presented at TEAP, Dresden, Germany.

**Bret, A.G., Mierop, A., Beffara, B., Mermillod, M. & Corneille, O.** (2016, December) Quand une plus faible sensibilité au contreconditionnement évaluatif est associée aux idéologies socio-politiques : ces différences sont-elles dues au style cognitif [*When a weaker sensitivity to counter evaluative conditioning is associated with socio-political ideologies: are these differences due to cognitive style*] ? Talk presented at the Journées de la Cognition Sociale, Grenoble, France.

**Bret A, Mierop A, Beffara B, Corneille O and Mermillod M.** (2016, August) Socio-political ideologies Predict (Un) Learning Evaluatively Conditioned Attitudes. Talk presented at ESCON, Lisbon, Portugal.

Bret A, Mierop A, **Beffara B**, Corneille O and Mermillod M. (2016, July) Socio-political ideologies Predict (Un) Learning Evaluatively Conditioned Attitudes. Talk presented at the EASP Medium Size Meeting: The Psychology of Attitudes: Cologne, Germany.

**Brice Beffara**, Amélie Bret, Nicolas Vermeulen & Martial Mermillod. Social neurocardiology. The case of heart rate variability and cooperation in healthy human adults. The 8th European Conference on Behavioural Biology (ECBB 2016), 2016, July 12-15, Vienna, Austria

Bret A, Mierop A, **Beffara B**, Corneille O and Mermillod M. (2016, June) Les idéologies socio-politiques prédisent la formation de préjugés sans médiation par la flexibilité cognitive. Talk presented at the 11ème Congrès International de Psychologie Sociale en langue française: Genève, Switzerland.

**Beffara, B.**, Bret, A., Ferreri, L., Bard, P., Vermeulen, N., Bugaiska, A., & Mermillod, M. (2016). Healthy adults with lowest levels of cooperation are more cooperative after heart rate variability biofeedback. Annual Conference of the Society for Affective Science. Chicago (Illinois). USA. March 2016.

Bret, A., **Beffara, B.**, & Mermillod, M. (2016). Right-wing authoritarianism explains differences in the visual search of faces from different races. Annual Conference of the Society for Affective Science. Chicago (Illinois). USA. March 2016.

Amélie Bret, **Brice Beffara** & Martial Mermillod. Infrahumanization or threat perception ? Measuring racial discrimination by the visual search of faces. ESCOP 2015, September 17-20, Paphos, Cyprus

**Brice Beffara**, Amélie Bret, Nicolas Vermeulen & Martial Mermillod. Socio-emotional skills and homeostasis in mammals: the key role of heart-brain interactions. ESCOP 2015, September 17-20, Paphos, Cyprus

Nicolas Spatola, Julio Santiago, **Brice Beffara**, Martial Mermillod & Marc Ouellet. The non-conglomerate conceptual mappings between Time, Valence and Space and how a bad mood makes you look towards the past. ESCOP 2015, September 17-20, Paphos, Cyprus

Amélie Bret, **Brice Beffara** & Martial Mermillod. Cognitive roots of racial discrimination: infrahumanization or threat perception? A visual search approach. ISRE 2015, July 8-10, Geneva, Switzerland

**Brice Beffara**, Amélie Bret, Amélie Baldini, Nicolas Vermeulen & Martial Mermillod. High frequency heart rate variability is positively associated with cooperation in a chicken game. ISRE 2015, July 8-10, Geneva, Switzerland

Amélie Bret, **Brice Beffara** & Martial Mermillod. Bases cognitives de la discrimination raciale : du spécisme au racisme [*Cognitive roots of racial discrimination: from speciesism to racism*]. 6e Rencontres du Pôle Grenoble Cognition, 6 juin 2015 : Cognition, Santé, Education

**Brice Beffara**, Amélie Bret, Nicolas Vermeulen & Martial Mermillod. Comportements pro-sociaux et homéostasie chez les mammifères : le rôle central de l'interaction coeur-cerveau [*Pro-social behaviors and homeostasis in mammals: the key role of heart-brain interactions*]. 6e Rencontres du Pôle Grenoble Cognition, 6 juin 2015 : Cognition, Santé, Education

**Beffara, B.**, Bret, A., Chausse, P., Guinet, E., Vermeulen, N., & Mermillod, M. (2015). Increased Heart Rate Variability after Short Term Biofeedback : Visual Feedback without Paced Breathing is

Sufficient to Regulate. Annual Conference of the Society for Affective Science. Oakland (California). USA. April 2015.

Mermillod, M., **Beffara, B.**, Bret, A., Lepage, J., Morisseau, T., & Vermeulen, N. (2014). Is the Devil (or Angel) Located in Frontal Cortical Areas? The 12th International Conference on Cognitive Neuroscience. Brisbane. Australia. July 2014.

**Brice Beffara**, Nicolas Vermeulen, Amélie Bret, and Martial Mermillod : From Fast Visual Perception to Frontal Emotional Inhibition (Consortium of European Research on Emotion conference, March 27 - 28, 2014, Berlin, Germany)

**Brice Beffara**, Marc Ouellet, Nicolas Vermeulen, Amélie Bret, Tiffany Morisseau and Martial Mermillod : Toward new physiological evidence of Social Top-down Response Modulation (International Symposium Vision, action and concepts : Behavioural and neural basis of embodied perception and cognition, 28-30 October 2013, Lille, France)

**Brice Beffara**, Bruno Wicker, Nicolas Vermeulen, Marc Ouellet, Amélie Bret, Maria Jesus Funes Molina & Martial Mermillod : Is Low Spatial Frequency Information Really Have a Preferential Role in Emotional Frontal Inhibition ? A Behavioral Study. (ESCOP 2013, Eighteenth Meeting of the European Society for Cognitive Psychology, 29 August - 1 September 2013 - Budapest, Hungary)

**Brice Beffara**, Coriandre Vilain, Bruno Wicker, Nicolas Vermeulen, Marc Ouellet, Amélie Bret, Maria Jesus Funes Molina & Martial Mermillod. Le Rôle des Basses Fréquences Spatiales dans le Processus d'Inhibition Emotionnelle [*The Role of Low Spatial Frequency Information in Emotional Inhibition*]. 4e Rencontres du Pôle Grenoble Cognition, 4 juin 2013 : Cognition naturelle et cognition artificielle - des données aux modèles, aux systèmes et aux artefacts

**Brice Beffara** & Martial Mermillod. L'Anticipation dans la Perception Sociale des Emotions [*Anticipation in the Social Perception of Emotions*]. Small Group Workshop on Embodied Cognition, 18-19 Avril 2013, LPNC, Grenoble.

Ouellet, Spatola, Sémary, **Beffara**, Mermillod & Santiago de Torres : When the sad past is left (6 Septembre 2012, 5th International Conference on Spatial Cognition, Sapienza, Rome)

**Beffara**, Ouellet, Vermeulen, Basu, Morisseau, & Mermillod : Enhanced embodied response following ambiguous emotional processing (7 Septembre 2012, 5th International Conference on Spatial Cognition, Sapienza, Rome)

## Reviewer

[Frontiers in psychology](#) (N = 1)

[Psychophysiology](#) (N = 2)

## Teaching

Year	University	Level	Course	Type	Hours
2018-19	Franche-Comté	1 <sup>st</sup> year BSc	Methods in psychology	TD	72
2018-19	Franche-Comté	2 <sup>nd</sup> year BSc	Statistics	TD	24
2018-19	Franche-Comté	3 <sup>rd</sup> year BSc	Data analysis (JASP)	TD	24
2018-19	Franche-Comté	3 <sup>rd</sup> year BSc	Experimental methods	CM	8
2018-19	Franche-Comté	3 <sup>rd</sup> year BSc	Experimental methods	TD	8
2018-19	Franche-Comté	3 <sup>rd</sup> year BSc	Psychometry	CM	12
2018-19	Franche-Comté	3 <sup>rd</sup> year BSc	Psychometry	TD	12
2014-15	Grenoble Alpes	1 <sup>st</sup> year BSc	Introduction to psychology	TD	20
2014-15	Grenoble Alpes	2 <sup>nd</sup> year BSc	Cognitive Psychology	TD	12
2014-15	Grenoble Alpes	3 <sup>rd</sup> year BSc	Data Analysis (SPSS)	TD	16
2014-15	Grenoble Alpes	1 <sup>st</sup> year MSc	Eprime Programming	TD	18
2014-15	Grenoble Alpes	PhD students	Stress and learning	Other	6
<i>Total<sub>CM</sub></i>				CM	20
<i>Total<sub>TD</sub></i>				TD	206
<b>Total</b>				<b>All</b>	<b>232</b>

## Scientific tools

Signatory of the [Commitment to Research Transparency and Open Science](#)

Signatory of the [Peer Reviewers' Openness Initiative](#)

**Open Transparent Reproducible Science** Open Science Framework, bioRxiv, PsyArxiv, GitHub

**Programming experiments** PsychoPy, OpenSesame, Eprime

**Data Analysis** R, jamovi, JASP, SPSS, Statistica

**Behavioral-Cognitive Measurements** Evaluative conditioning, Response times, Social dilemmas, Signal detection, Attentional blink

**Physiological Measurements** Electrocardiography, Electromyography, Electrodermal Activity (basics), Functional Near Infrared Spectroscopy (basics)

**Physiological Softwares** Acqknowledge, Labchart, Zephyr Bioharness, Oxysoft (basics)

**Physiological Signal Analysis** Kubios HRV, gHRV, R, Python (basics), Matlab (basics)

**Image Processing** Matlab (basics)

**Redaction** LaTeX (Overleaf), RMarkdown, Authorea, LibreOffice

**Surveys** Qualtrics, Testable, Prolific Academic

**Bibliography** Zotero, Mendeley, EndNote

## Advisor

Amélie Bret (MSc Cognitive and Social Psychology, Grenoble Alpes University) 2014-2015. Is the out-group not enough interesting or too much threatening? Dual route dehumanization leads to racial discrimination. Co-advised with Pr. Martial Mermillod

Dorine Chatel (Research Internship 1<sup>st</sup> year MSc Cognitive and Social Psychology, Grenoble Alpes University) 2014-2015. Investigation of induction techniques in order to reduce implicit dehumanization. Co-advised with Pr. Martial Mermillod and Amélie Bret, MSc

Elie Bes (1<sup>st</sup> year MSc Cognitive and Social Psychology, Grenoble Alpes University) 2014-2015. Social networks, multi-tasking and attentional skills. Co-advised with Pr. Martial Mermillod

Mickaël Perrier (1<sup>st</sup> year MSc Cognitive and Social Psychology, Grenoble Alpes University) 2014-2015. Can We Get a Boosted Bounce? Spatial Frequencies Play a Role in the Attentional Blink. Co-advised with Pr. Martial Mermillod

Leo Riera and Rafaël Lopes (1<sup>st</sup> year MSc Web Informatics and Knowledge, Grenoble Alpes University) 2014-2015. Development of a portable biofeedback application on Android. Co-advised with Pr. Martial Mermillod and Eric Guinet, Engineer

Amélie Bret (1<sup>st</sup> year MSc Cognitive and Social Psychology, Grenoble Alpes University) 2013-2014. Modulation Of Cognitive Processes By Racial Discrimination. Co-advised with Pr. Martial Mermillod

Oriane Gordzki (1<sup>st</sup> year MSc Cognitive and Social Psychology, Grenoble Alpes University) 2013-2014. Modulation of emotional facial expressions identification by perceptive and social variables. Co-advised with Pr. Martial Mermillod

## Grants and Awards

Mermillod, M., Beffara, B., Champeaux, G., & Bret, A. (2016) Psychophysiological vectors of extremist behaviors following the terrorist attack of the 13<sup>th</sup> November 2015 : evaluation and remediation 15 K€ CNRS

Beffara, B., Bègue, L., Bugaiska, A., Vermeulen, N., & Mermillod, M. (2015) Remediation of socio-affective functioning by biofeedback 2.2 K€ *Grenoble Cognition Center*

Beffara, B. (2013) Doctoral allocation *Université Grenoble Alpes and French Ministry for Higher Education and Research*

Beffara, B., Vilain, C., & Mermillod, M. (2013) Top-down perception of emotions: behavioral and electromyographical approach 4 K€ *Grenoble Cognition Center*

Beffara, B. (2011 - 2013) MSc grant for best BSc students 3.6 K€ *Ministry of Higher Education and Research*

## Projects accepted by ethical committees

Beffara, B., Marquis-Favre, C., Dumortier, D., Avillac, M., Perrin, F., & Cottet, M. (2018). The role of greenery in urban environment on audio-visual perception and stress. *CNRS Ethical committee (Institutional review board) and "Comité de Protection des Personnes" (South-Ouest and Overseas III Regional Review Board) registered under the number: ID-RCB: 2018-A01621-54*

**Beffara, B.,** Mermillod, M., & Vermeulen, N. (2015). Can we test the influence of prosociality on high frequency heart rate variability? A double-blind sham-controlled approach. *Université Catholique de Louvain ethical committee*

**Beffara, B.,** Vermeulen, N., & Mermillod, M. (2014). Impact of heart rate variability biofeedback on social responses: a double-blind sham-controlled exploration. *Université Grenoble Alpes ethical committee*

## Tutorials

**Beffara, B.** (2017). How to embed http websites in your R presentation ? <https://medium.com/@slowpescience/how-to-embed-http-websites-in-your-r-presentation-f2b2bcb7a277>

## Scientific mediation

**Beffara, B. & Bret, A.** (2018). What is Experimental Psychology? Montdory High school, Thiers, France

**Beffara, B.** (2018). “Homéopathie : peut-on soigner les gens avec du sucre ?” <https://medium.com/@slowpescience/retour-sur-la-vid%C3%A9o-le-monde-hom%C3%A9opathie-peut-on-soigner-les-gens-avec-du-sucre-f2e2b30ddd8c>

**Beffara, B.** (2017). Good Researcher, Bad Researcher. Student radio of Lyon University [French] <http://www.troisieme-lieu.fr/2017/12/04/logos-4-bon-chercheur-mauvais-chercheur/>

Bret, A., **Beffara, B.,** & Mermillod, M. Psychology, Neuroscience and Political Orientation (2015). Pint of Science, Grenoble, France

Bret, A. **Beffara, B.** (2014). What is Experimental Psychology? Montdory High school, Thiers, France

**Beffara, B. & Bret, A.** (2013). What is Experimental Psychology? Montdory High school, Thiers, France

*Last update of this CV was made on 2018-12-13.*

The template of this CV has been developed by Steven V. Miller and can be found at <https://github.com/svmiller/svm-r-markdown-templates>