

# Esti Blanco-Elorrieta

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Updated: September, 2018

## EDUCATION

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**Ph.D.:** Psychology: Cognition and Perception (2015 – Present).  
Institution: New York University.  
Supervisor: Liina Pylkkänen.

Fellow: Department of Psychology (Fall 2018)  
Institution: Harvard University  
Supervisor: Alfonso Caramazza

**M.Sc.:** Cognitive Neuroscience of language (2013).  
Institution: Basque Center on Cognition, Brain and Language (BCBL).  
Dissertation: An alternative explanation for asymmetric switch-costs in unbalanced bilinguals.  
Supervisors: Jon Andoni Duñabeitia and Clara Martin.

**B.A.:** Basque philology and Linguistics (honors) (2012).  
Institution: University of Deusto.

### Other Courses:

Summer Course: Genetics & Neurobiology of Language Course. Cold Spring Harbor Laboratories (2016).

Summer University: German language and literature. Westfälische Wilhelms-Universität. Münster, Germany (2011).

Summer University: German language and literature. Heinrich-Heine Universität. Düsseldorf, Germany (2010).

## FELLOWSHIPS AND AWARDS

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- 2018: Dingwall Foundation: Dissertation Fellowship in the Cognitive, Clinical, and Neural Foundations of Language (\$30,000).
- 2018: New York University: Dean's Student Travel Grant.
- 2017: Predoctoral fellow merit award: Society of the Neurobiology of Language (SNL).
- 2017: Woodcock Institute Grant Research Award (\$9,951).
- 2016: Helmsley Fellowship for cross-disciplinary research (\$2,350).
- 2016: New York University: Dean's Student Travel Grant.
- 2015: Neurobiology of Language Conference: Travel Award.
- 2015: New York University: MacCracken Fellowship for Doctoral studies.
- 2014: La Caixa Foundation: fellowship for Graduate Studies in North America ( ~\$75,000 per year, dependent on tuition fees).
- 2012: Basque Center on Cognition, Brain and Language: academic scholarship waiver of M.Sc. tuition fees.
- 2011: Basque Government: grant for undergraduate research projects (€3,300).
- 2010: University of Deusto: grant for undergraduate research projects (€3,000).
- 2008: Basque Government: Distinguished Academic scholarship (waiver of first year University matriculation fees).

## MANUSCRIPTS AND PUBLICATIONS

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**Blanco-Elorrieta, E\*.,** Gwilliams, L\*., Marantz, A., & Pylkkänen, L. (in prep.). Neural bases of perceptual adaptation to foreign accents.

Valenti, A., **Blanco-Elorrieta, E.,** & Scheutz, M. (in prep.). An adaptive computational model of bilingual language switching.

**Blanco-Elorrieta, E.,** Ding, N., Pylkkänen, L., & Poeppel, D. (submitted). Understanding requires tracking: Noise and knowledge interact in bilingual language comprehension.

**Blanco-Elorrieta, E.,** Emmorey, K., & Pylkkänen, L. (2018). Decomposing language switching: MEG evidence from bimodal bilinguals. *Proceedings of the National Academy of Sciences*

**Blanco-Elorrieta, E.,** Kastner, I., Emmorey, K., & Pylkkänen, L. (2018). A shared neurobiology for building phrases in signed and spoken language. *Scientific Reports*, 8, 5492.

**Blanco-Elorrieta, E.** Emmorey, K., & Pylkkänen, L. (2017). Decoding Language Switching in the Bilingual Brain: evidence from simultaneous speech and sign production. *Cognitive Computational Neuroscience (CCN)*.

**Blanco-Elorrieta, E.,** Ferreira, V.S., Del Prato, P., & Pylkkänen, L. (2017). The priming of basic combinatorial responses in MEG. *Cognition*, 70, 49-63.

**Blanco-Elorrieta, E. &** Pylkkänen, L. (2017). Bilingual language switching in the lab vs. in the wild: The spatio-temporal dynamics of adaptive language control. *The Journal of Neuroscience*, 37: 9022-9036.

**Blanco-Elorrieta, E. &** Pylkkänen, L. (2016). Bilingual language control in perception vs. action: MEG reveals comprehension control mechanisms in anterior cingulate cortex and domain-general production control in dorsolateral prefrontal cortex. *The Journal of Neuroscience*, 36(2): 290 – 301.

**Blanco-Elorrieta, E. &** Pylkkänen, L. (2016). Composition of complex numbers: Delineating the computational role of the left anterior temporal lobe. *NeuroImage*, 124, 194 - 203.

**Blanco-Elorrieta, E. &** Pylkkänen, L. (2015). Brain bases of language selection: MEG evidence from Arabic-English bilingual language production. *Frontiers in Human Neuroscience*, 9.

Pylkkänen, L., Bemis, D.K. & **Blanco-Elorrieta, E.** (2014). Building phrases in language production: An MEG study of simple composition. *Cognition*, 133, 371-384.

## ORAL PRESENTATIONS

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**Blanco-Elorrieta, E.** Emmorey, K., & Pylkkänen, L. (2018). Task switching decomposed: MEG evidence from bimodal language switching. Talk presented at the Cognitive Neuroscience Society (CNS) Annual Conference, Boston, USA.

**Blanco-Elorrieta, E.** (2017). The neurocognition of bilingualism. Talk presented at the Young Leaders of the Americas Initiative (YLAI) in New York, NY, USA.

**Blanco-Elorrieta, E.** Emmorey, K., & Pylkkänen, L. (2017). Turning a language “off” is cognitively effortful, but turning a language “on” is not: MEG evidence from bimodal language switching. Talk presented at the Society for the Neurobiology of Language (SNL) Annual Conference, Baltimore, USA.

**Blanco-Elorrieta, E.** (2017). Bilingual language switching in the lab vs. in the wild: The spatio-temporal dynamics of adaptive language control. Talk presented at the Summer school on Bilingualism and Multilingualism, Barcelona, Spain.

**Blanco-Elorrieta, E.** & Pylkkänen, L. (2016). While language-switching in the lab localizes in anterior cingulate cortex, comprehending code-switches in the wild engages the auditory cortex: MEG evidence from Arabic-English bilinguals. Talk presented at the 22<sup>nd</sup> AMLaP Conference in Bilbao, Basque Country.

**Blanco-Elorrieta, E.** (2016). Brain bases of bilingual language selection and switching: Evidence from production and comprehension. Invited talk at the Graduate Center of the City University of New York (CUNY), New York, USA.

**Blanco-Elorrieta, E.,** Ferreira, V.S., Del Prato, P., & Pylkkänen, L. (2016). The priming of basic combinatorial responses in MEG. Talk presented at the 29<sup>th</sup> Annual CUNY Conference on Human Sentence Processing, Florida, USA.

**Blanco-Elorrieta, E.** & Pylkkänen, L. (2015). Switch mechanisms revealed by MEG: What is special about language switching? Talk presented at the Neuroscience of Language Workshop, Abu Dhabi, UAE.

**Blanco-Elorrieta, E. & Pylkkänen, L. (2015).** Bilingual language control: domain general in production but not comprehension? Evidence from MEG. Talk presented at the 5th Linguistics in the Gulf Conference, Doha, Qatar.

**Blanco-Elorrieta, E. & Pylkkänen, L. (2015).** Brain bases of language selection: MEG evidence from Arabic-English bilingual language production. Talk presented at the NYUAD Annual Research Conference, Abu Dhabi, U.A.E.

## POSTER PRESENTATIONS

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**Blanco-Elorrieta, E., Ding, N., Pylkkänen, L., & Poeppel, D. (2018).** The impoverished comprehension of non-native speech in noise. Society for the Neurobiology of Language (SNL) Annual Conference, Quebec City, Canada.

**Blanco-Elorrieta, E. Emmorey, K., & Pylkkänen, L. (2018).** Task switching decomposed: MEG evidence from bimodal language switching. Cognitive Neuroscience Society (CNS) Annual Conference, Boston, USA.

**Blanco-Elorrieta, E. Emmorey, K., & Pylkkänen, L. (2017).** Decoding Language Switching in the Bilingual Brain: evidence from simultaneous speech and sign production. Cognitive Computational Neuroscience (CCN), New York, USA.

Fyshe, A., **Blanco-Elorrieta, E. & Pylkkänen, L. (2017).** The neural representation of concepts during composition. Cognitive Computational Neuroscience (CCN), New York, USA.

**Blanco-Elorrieta, E., Ferreira, V.S., Del Prato, P., & Pylkkänen, L. (2016).** The priming of basic combinatory responses in MEG. Society for the Neurobiology of Language (SNL) Annual Conference, London, UK.

**Blanco-Elorrieta, E. & Pylkkänen, L. (2016).** While language-switching in the lab localizes in anterior cingulate cortex, comprehending code-switches in the wild begins in auditory cortex: MEG evidence from Arabic-English bilinguals. Society for the Neurobiology of Language (SNL) Annual Conference, London, UK.

**Blanco-Elorrieta, E.,** Ferreira, V.S., Del Prato, P., & Pykkänen, L. (2016). The priming of basic combinatory responses in MEG. Cognitive Neuroscience Society (CNS) Annual Conference, New York, USA.

**Blanco-Elorrieta, E. & Pykkänen, L.** (2016). Bilingual language control in perception vs. action: MEG reveals comprehension control mechanisms in anterior cingulate cortex and domain-general production control in dorsolateral prefrontal cortex. 29<sup>th</sup> Annual CUNY Conference on Human Sentence Processing, Gainesville, USA.

**Blanco-Elorrieta, E. & Pykkänen, L.** (2015). Switching in perception vs. action revealed by MEG: Reactive control in the ACC and proactive control in the dorsolateral PFC. Society for the Neurobiology of Language (SNL) Annual Conference, Chicago, USA.

**Blanco-Elorrieta, E. & Pykkänen, L.** (2015). Composition of Complex Numbers: Delineating the computational role of the left anterior temporal lobe. Society for the Neurobiology of Language (SNL) Annual Conference, Chicago, USA.

Oseki Y., Gwilliams, L., Gaston, P., **Blanco-Elorrieta, E.,** Pykkänen, L. & Marantz, A. (2015). Neural dynamics of morphological and phrasal composition. Society for the Neurobiology of Language (SNL) Annual Conference, Chicago, USA.

**Blanco-Elorrieta, E. & Pykkänen, L.** (2014). Brain bases of language selection: MEG evidence from Arabic-English bilingual language production. Society for the Neurobiology of Language (SNL) Annual Conference, Amsterdam, The Netherlands.

Martin, C.D., **Blanco-Elorrieta, E.,** & Duñabeitia, J.A. (2013). An alternative explanation to asymmetrical switch-costs in unbalanced bilinguals. Annual Psychonomics Conference, Toronto, Canada.

## TEACHING

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### **Teaching assistant:**

- 2018: Psychology: *Introduction to Psychology*. Grader position (Undergraduate).  
2018: Psychology: *Cognition*. Teaching assistant for Prof. Trenton Jerde (Undergraduate).  
2017: Psychology: *Cognition*. Teaching assistant for Prof. Robert Rehder (Undergraduate).  
2016: Psychology and Linguistics: *Neural Bases of Language*. Teaching assistant for Prof. Liina Pykkänen (Graduate and Undergraduate).

### **Guest lectures:**

- 2017: *Neurolinguistics*. Lecture on bilingual language control, bilingualism and aging (Young Leaders of the Americas Initiative (YLAI at NYC)).  
2017: *Cognition*. Lecture on language and cognition (NYU).  
2016: *Neural Bases of Language*. Lecture on the neurobiology of bilingualism (NYU).  
2016: *Neural Bases of Language*. Lecture on the neural bases of perceptual attunement (NYU).

## RESEARCH POSITIONS

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- 2013- 2015: Research assistant.  
Institution: New York University Abu Dhabi (Neuroscience of Language Lab).  
Supervisors: Alec Marantz and Liina Pykkänen.
- 2012 – 2013: Research assistant.  
Institution: Basque Center on Cognition, Brain and Language (BCBL).
- 2011 - 2012: Research assistant.  
Institution: University of Deusto (Tesitek Linguistics Research Group).  
Supervisor: Rosa Miren Pagola.

## ACADEMIC SERVICE

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a) Ad hoc reviewer for:

*Journals:* Proceedings of the National Academy of Sciences, Plos Biology; Journal of Neuroscience; NeuroImage; Brain and Language; Language, Cognition and Neuroscience; Journal of Cognitive Psychology; Journal of Neurolinguistics.

*Grants:* Polish Ministry of Science and Higher Education, Polish National Centre for Research and Development.

b) Student Representative. Undergraduate linguistics student body (2008 –2012).

## LANGUAGES

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Basque:	Native speaker. Certificate of Proficiency in Basque (EGA).
Spanish:	Native speaker.
English:	Cambridge Certificate of Proficiency in English (CPE), 113 internet Based Test TOEFL.
German:	Upper Intermediate (B2 European Framework of Reference).
Galician:	Elementary (A2 European Framework of Reference).
French:	Elementary (A1 European Framework of Reference).