

## Sofia Gil-Clavel

Computer, Actuarial, and Population Scientist

Interests: Computational Social Science, Demography, Computer Science



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### WORK EXPERIENCE

**Researcher.** [2022-] Multi-Actor Systems Department, TU Delft, Netherlands.

**PhD Student.** [2018-2022] Max Planck Institute for Demographic Research, Germany.

**Head of the Demographic Analysis Department.** [2017-2018] National Population Council of Mexico (CONAPO).

**Research support.** [2014-2015] Center of Demographic, Urban, and Environmental Studies (CEDUA) of El Colegio de Mexico (COLMEX).

### EDUCATION

**Ph.D. Student** [2020-2023] affiliated with the Faculty of Spatial Sciences of the University of Groningen, Netherlands.

**Ph.D. Student** [2018-2022] at the Max Planck Institute for Demographic Research, Germany.

**Master of Science** [2015-2017] with Specialization on **Computational and Industrial Mathematics**. Center of Mathematics Research (CIMAT), Mexico.

**Bachelor of Science in Actuarial Science** [2009-2014]. National Autonomous University of Mexico (UNAM).

### SKILLS

**Statistical Analysis:** R, Python.

**Programming:** Python, R, C++, VBA.

**Text processing:** LATEX, R-Markdown, Jupyter Notebook.

**Data visualization and exploration:** R (shiny, ggplot), Python (matplotlib), Gephi.

**Use of Application Programming Interfaces (APIs):** Facebook, Twitter, etc.

**Languages:** Spanish (native), English (advanced), German (basic), Dutch (basic).

### SELECTED ARTICLES

(Complete list [here](#))

**Gil-Clavel, S., & Filatova, T.** (2023). *Using Natural Language Processing and Networks to Automate Structured Literature Reviews: An Application to Farmers Climate Change Adaptation*

<https://arxiv.org/pdf/2306.09737.pdf>

**Gil-Clavel, S., & Mulder, C. H.** (2023). *Does Twitter data mirror the European North-South family ties divide? A comparative analysis of tweets about family*

<https://doi.org/10.31219/osf.io/c379h>

**Gil-Clavel, S., Grow, A., & Bijlsma, M. J.** (2022). *Analyzing EU-15 Immigrants' Language Acquisition using Twitter Data*

<https://doi.org/10.31235/osf.io/bs4hk>

**Gil-Clavel, S., Zagheni, E., and Bordone, V.** (2021). *Close social networks among older adults: the online and offline perspectives*. Population Research and Policy Review, 1-25.

<https://link.springer.com/article/10.1007/s11113-021-09682-3>

**Gil-Clavel, S., & Zagheni, E.** (2019). Demographic Differentials in Facebook Usage around the World. *Proceedings of the International AAAI Conference on Web and Social Media*, 13, 647–650. Retrieved from <https://ojs.aaai.org/index.php/ICWSM/article/view/3263>

### CONFERENCES

(Complete list in Appendix A)

- **ICWSM:** International Conference on Web and Social Media.
- **IMISCOE:** International Migration, Integration and Social Cohesion in Europe.
- **PAA:** Population Association of America.

## Appendix A: Complete list of Presentations at Conferences

**Sofia Gil-Clavel**, Tatiana Filatova, “Farmers’ Adaptation to Climate Change: a Natural Language Processing Systematic Review”. Presentation at Latin American Researchers Day 2023. Event organized by LATITUD in collaboration with the Mexican and Colombian embassies. June 2023.

**Sofia Gil-Clavel**, Clara Mulder, “Do Tweets Mirror the European North-South Family Ties Division?”. Presentation for Dutch Demography Day. Session: Poster Pitch. November 2022.

**Sofia Gil-Clavel**, Tatiana Filatova, “Transformational Adaptation to Floods at Micro and Macro Level - an AI Systematic Review”. Poster Presentation at The Art of Scientific Computing. TU Delft. September 2022.

**Sofia Gil-Clavel**, André Grow, Maarten J. Bijlsma, “Analyzing EU-15 Immigrants’ Language Acquisition using Twitter Data”. Poster Presentation at The Art of Scientific Computing. TU Delft. September 2022.

**Sofia Gil-Clavel**, Tatiana Filatova, “Transformational Adaptation to Floods at Micro and Macro Level - an AI Systematic Review”. Poster Presentation at Tipping Points Conference: From Climate Crisis to Positive Transformation. September 2022.

**Sofia Gil-Clavel**, André Grow, Maarten J. Bijlsma, “EU-15 Immigrants Language Integration on Twitter”. Poster presented at European Population Conference (EPC). Poster Café. June 2022.

**Sofia Gil-Clavel**, André Grow, Maarten J. Bijlsma, “EU-15 Immigrants Language Integration on Twitter”. Presentation for Population Association of America (PAA). Session Flash: New Data and Methods in Migration Research. April 2022.

**Sofia Gil-Clavel**, Clara Mulder, “What do Europeans tweet about family before and after moving?”. Presentation at MigrantLife Symposium 2022. Session: Work, Family Life, and Employment. March 2022.

**Sofia Gil-Clavel**, André Grow, Maarten J. Bijlsma, “EU-15 Immigrants Language Integration on Twitter”. Presentation for International Population Conference (IPC). Session 193: Us vs Them: Cultural Assimilation and Anxieties in the Modern World. December 2021.

**Sofia Gil-Clavel**, André Grow, Maarten J. Bijlsma, “EU-15 Immigrants Language Integration on Twitter”. Presentation for Dutch Demography Day. Session: Poster Pitch. November 2021.

**Sofia Gil-Clavel**, “Immigrants’ Cultural Integration Patterns in Spain, Germany, and the UK: Tweets as Expressions of Context”<sup>1</sup>. Presentation for IMISCOE General Conference. Session: Migrant Transnationalism 13. July 2021.

**Sofia Gil-Clavel**, “EU-15 Immigrants Language Integration on Twitter”. Poster presentation for the IMPRS-PHDS Graduate Workshop. June 2021.

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<sup>1</sup> The final name of the work was “EU-15 Immigrants Language Integration on Twitter”.

**Sofia Gil-Clavel**, Emilio Zagheni, and Valeria Bordone, “Close Social Networks among Older Adults: The Online and Offline Perspectives”. Accepted presentation for PAA. Flash session: Social Networks, Social Support, and Health. May 2021.

**Sofia Gil-Clavel**, “Immigrants’ Cultural Integration Patterns in Spain, Germany, and the UK: Tweets as Expressions of Context”<sup>2</sup>. Presentation for IMISCOE Spring Conference. Session: Messaging Migration on and Through Social Media. March 2021.

**Sofia Gil-Clavel**, Emilio Zagheni and Valeria Bordone, “Close Social Networks among Older Adults: The Online and Offline Perspectives”. Presentation for the Dutch Demography Week. Session: Families in later life. November 2020.

**Sofia Gil-Clavel**, Valeria Bordone and Emilio Zagheni, “Determinants of Online and Offline Close Social Networks Among Older Adults”. Accepted presentation for EPC. Session: Health and Wellbeing in a Digital World. June 2020. Cancelled due to COVID-19.

**Sofia Gil-Clavel**, Valeria Bordone and Emilio Zagheni, “Determinants of Online and Offline Close Social Networks Among Older Adults”. Accepted presentation for PAA. Flash session: Use of Big Data to Model Health Outcomes and Mortality. April 2020. Cancelled due to COVID-19.

**Sofia Gil-Clavel** and Emilio Zagheni, “Demographic Differentials in Facebook Usage Around the World”, poster presented at The International AAAI Conference on Web and Social Media (ICWSM-2019). June 2019.

**Sofia Gil-Clavel** and Emilio Zagheni, “Demographic Differentials in Facebook Usage Around the World”, presented at IUSSP Digital Demography in the Era of Big Data. June 2019.

**Sofia Gil-Clavel** and Emilio Zagheni, “Demographic Differentials in Facebook Usage Around the World”, poster presented at Population Fest 2019 (PopFest2019). May 2019.

**Sofia Gil-Clavel**, “Estimation of the infant mortality rate in Mexico in 2015 at municipal level using numerical techniques”, presented at the XIV National Meeting of the Mexican Society of Demography (SOMEDE). June 2018.

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<sup>2</sup> The final name of the presentation was: EU-15 Immigrants Cultural Integration –In Twitter.