

- [Articles](#)
 - [Current Volume](#)
 - [Older Volumes](#)
 - [Editor's Choice](#)
 - [Replicable Articles](#)
 - [by Author](#)
 - [by Subject](#)
 - [Search](#)
- [Special Collections](#)
 - [About Special Collections](#)
 - [All Special Collections](#)
- [for Authors](#)
 - [General Information](#)
 - [Submission Guidelines](#)
 - [Peer Review and Publication](#)
 - [Copyright Information](#)
 - [Review Process](#)
 - [Submit a Paper](#)
 - [Submit a Letter](#)
 - [My Author Account](#)
- [for Readers](#)
 - [Get Email Alerts](#)
 - [How to cite DR](#)
- [About the Journal](#)
 - [Purpose](#)
 - [From the Publisher and Editor](#)
 - [Who's Who](#)
 - [Our Reviewers](#)
 - [Contact Us](#)
 - [Copyright & Legal](#)
 - [Privacy Policy](#)

Search DR journal and we

[Volume 30](#) - Article 32 | Pages 911–924

Quantifying paradigm change in demography

By [Jakub Bijak](#), [Daniel Courgeau](#), [Eric Silverman](#), [Robert Franck](#)

[Download PDF](#) [Submit a Response Letter](#)



Date received: 11 Oct 2013

Date published: 25 Mar 2014

Word count: 2436

Keywords: [demographic paradigms](#), [empiricism](#), [Google books](#), [history of demography](#), [N-grams](#)

DOI: [10.4054/DemRes.2014.30.32](#)

Additional files: [readme.30-32](#) (text file, 916 Byte)

[demographic-research.30-32](#) (zip file, 12 kB)

Abstract

Background: Demography is a uniquely empirical research area amongst the social sciences. We posit that the same principle of empiricism should be applied to studies of the population sciences as a discipline, contributing to greater self-awareness amongst its practitioners.

Objective: The paper aims to include measurable data in the study of changes in selected demographic paradigms and perspectives.

Methods: The presented analysis is descriptive and is based on a series of simple measures obtained from the free online tool Google Books Ngram Viewer, which includes frequencies of word groupings (n-grams) in different collections of books digitised by Google.

Results: The tentative findings corroborate the shifts in the demographic paradigms identified in the literature -- from cross-sectional, through longitudinal, to event-history and multilevel approaches.

Conclusions: These findings identify a promising area of enquiry into the development of demography as a social science discipline. We postulate that more detailed enquiries in this area in the future could lead to establishing History of Population Thought as a new sub-discipline within population sciences.

Author's Affiliation

[Jakub Bijak](#) - University of Southampton, United Kingdom [[Email](#)]

[Daniel Courgeau](#) - Institut National d'Études Démographiques (INED), France [[Email](#)]

[Eric Silverman](#) - University of Southampton, United Kingdom [[Email](#)]

[Robert Franck](#) - Université catholique de Louvain, Belgium [[Email](#)]

Other articles by the same author/authors in Demographic Research

» [Integrating uncertainty in time series population forecasts: An illustration using a simple projection model](#)

Volume 29 - Article 43

» [Reforging the Wedding Ring: Exploring a Semi-Artificial Model of Population for the United Kingdom with Gaussian process emulators](#)

Volume 29 - Article 27

Articles

» [Current Volume](#)

» [Older Volumes](#)

» [Volume 30](#)

» [Editor's Choice](#)

» [Replicable Articles](#)

» [by Author](#)

» [by Subject](#)

» [Search](#)

Citations

Cited References: 20

» [View the references of this article](#)

Download to Citation Manager

» [RIS format](#)

» [BibTeX format](#)

Similar Articles

PubMed

» [Articles by Jakub Bijak](#)

[»Articles by Daniel Courgeau](#)

[»Articles by Eric Silverman](#)

[»Articles by Robert Franck](#)

Google Scholar

[»Articles by Jakub Bijak](#)

[»Articles by Daniel Courgeau](#)

[»Articles by Eric Silverman](#)

[»Articles by Robert Franck](#)

Jump to Article

Volume

Page

Volume

Article ID

© 1999–2018 [Max Planck Society](#)

- [Articles](#)
- [Current Volume](#)
- [Older Volumes](#)
- [Editor's Choice](#)
- [Replicable Articles](#)
- [by Author](#)
- [by Subject](#)
- [Search](#)

- [Special Collections](#)
- [About Special Collections](#)
- [All Special Collections](#)

- [for Authors](#)
- [General Information](#)
- [Submission Guidelines](#)
- [Peer Review and Publication](#)
- [Copyright Information](#)
- [Review Process](#)
- [Submit a Paper](#)
- [Submit a Letter](#)
- [My Author Account](#)

- [for Readers](#)
- [Get Email Alerts](#)
- [How to cite DR](#)

- [About the Journal](#)
- [Purpose](#)
- [From the Publisher and Editor](#)
- [Who's Who](#)
- [Our Reviewers](#)
- [Contact Us](#)
- [Copyright & Legal](#)
- [Privacy Policy](#)