

Disciplinary Territories and the Landscape of Wikipedia Research: A Bibliometric Analysis of Scientific Production

Quoc-Tan Tran

▶ To cite this version:

Quoc-Tan Tran. Disciplinary Territories and the Landscape of Wikipedia Research: A Bibliometric Analysis of Scientific Production. 11e Colloque international d'ISKO-France, Jul 2017, Paris, France. hal-01676673

HAL Id: hal-01676673

https://hal.science/hal-01676673

Submitted on 5 Jan 2018

HAL is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.

Disciplinary Territories and the Landscape of Wikipedia Research:

A Bibliometric Analysis of Scientific Production

Quoc-Tan Tran, GERiiCO Laboratory, University of Lille (France), <quoc-tan.tran@etu.univ-lille3.fr>

Summary

Being a fruit of digital culture, Wikipedia is a kind of model of organization that can offer new capabilities for dispensing and producing knowledge, and promote the emergence of new platforms for knowledge dissemination. In this work, we aim to analyze the worldwide scientific production on Wikipedia research in order to contribute to knowledge and visualization of its main actors. More specifically, this study proposes to:

- Analyze the presence of the theme Wikipedia in the international scientific literature;
- Explicate the core journals disseminating the theme;
- Identify the main sub-themes pertaining to the theme and their co-occurrences in the analyzed literature, through the words present in titles and abstracts of articles.

Introduction

The overall objective of this research is to provide a bibliometric analysis and to pave ways to define epistemic communities of Wikipedia research, which can be divided into four categories according to Nielsen (2012): (1) Research that examines Wikipedia; (2) Research that uses information from Wikipedia; (3) Research that explores technical extensions to Wikipedia; and (4) Research that is using Wikipedia as a resource for communication.

We reach the objectives by achieving the two tasks. The first task is to analyze scientific production and key authors that contributed to the development of the field by means of corpus analysis and bibliometric analysis. The second task is to develop a domain analysis of the field. More specifically, we will identify theoretical referents and epistemic communities of the researchers that constitute the landscape of 'Wikipedia studies', and indicate a social-scientific epistemology that continues to dominate the domain.

Methods

Using Scopus database as source, the retrieval of articles on the subject was carried out, using the following terms in Advanced search:

TITLE-ABS-KEY (wikipedia) AND (LIMIT-TO (DOCTYPE, "cp") OR LIMIT-TO (DOCTYPE, "ar")) AND (LIMIT-TO (SUBJAREA, "COMP") OR LIMIT-TO (SUBJAREA, "SOCI") OR LIMIT-TO (SUBJAREA, "ARTS")) AND (LIMIT-TO (SRCTYPE, "p") OR LIMIT-TO (SRCTYPE, "j")).

We then analyze the corpus of 4924 research articles related to Wikipedia research that is indexed in SCOPUS. For this task, the selected papers will be recorded in special files in order to verify:

- in what part of the text those terms appear
- in which context they appear
- how they appear and interact
- who are their authors (names, collaboration, affiliations, countries)
- what are the cited sources for that approach
- what kind of theoretical relationship those authors establish each other

Based on the corpus of bibliographic records, we extracted word co-occurrence counts over the titleabstract-keywords and map all co-occurrences into a twodimensional cartography using VOSViewer tool.

Results & Findings

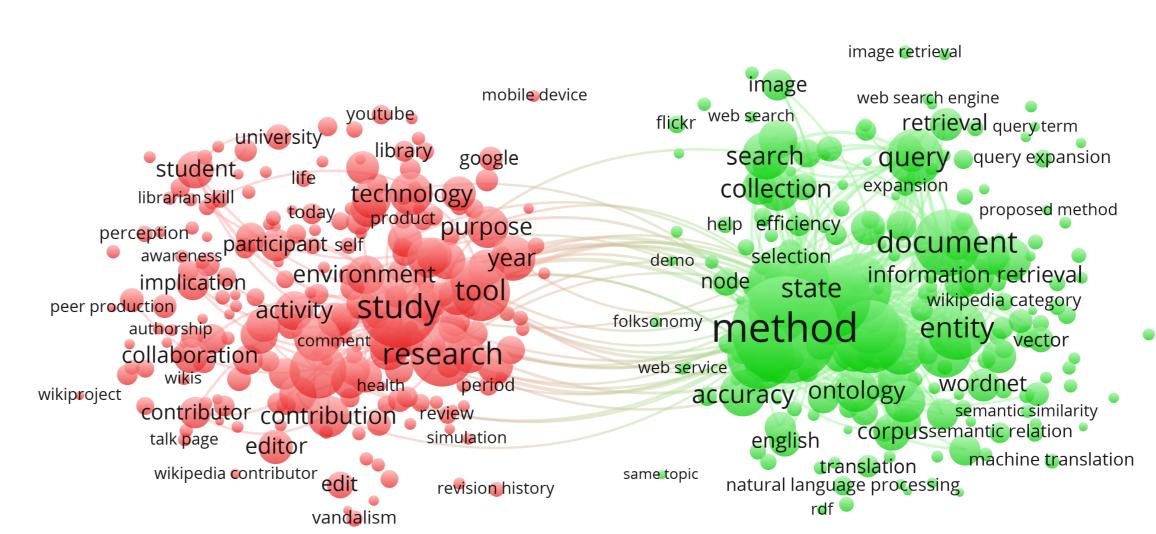


Figure 1. Network of the word co-occurrence in titles and abstracts

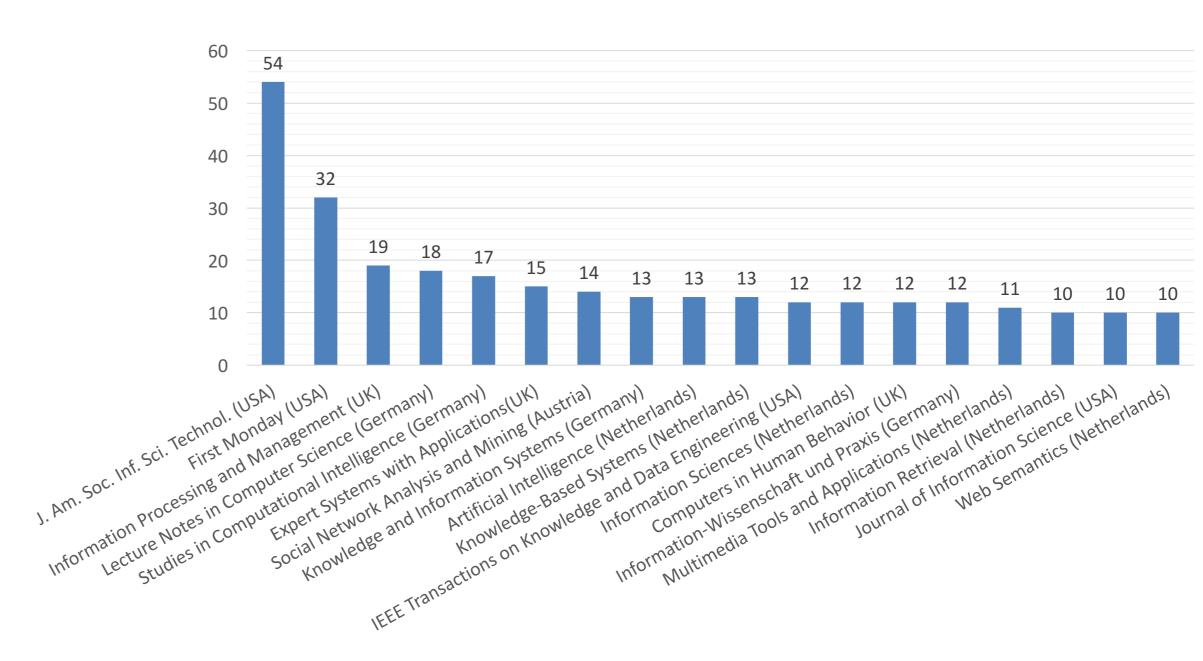


Figure 2. Core journals on the dissemination of Wikipedia scientific production

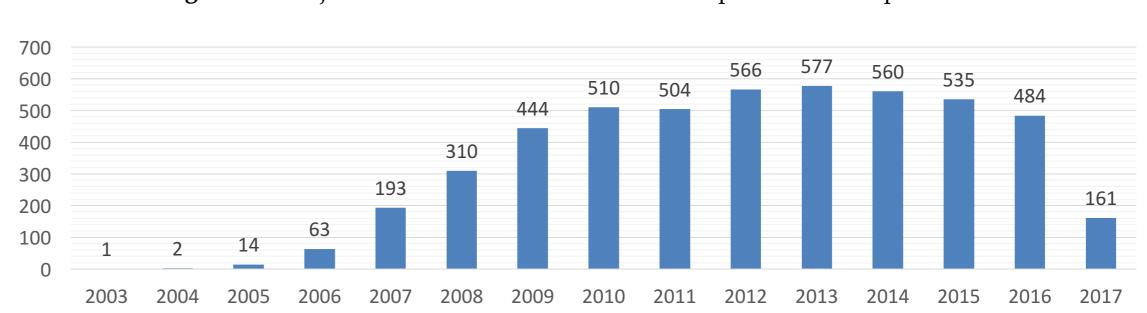


Figure 3. Evolution of the theme "Wikipedia" in Scopus

Discussion & Further Works

By using bibliometric approach, we aim to analyze the researchers and authors who contribute to the development of the field. More specifically, we aim to identify the "epistemic communities" within the domain of the researchers that constitute a specific digital landscape. If we accept that the production and dissemination of knowledge in the humanities and social sciences in modern times is inseparable from the print culture, what is the situation today in the digital context? What are the new practices associated with the changes in writing and reading the digital tools and methods, and what are their cognitive effects? With the multiplication of discourses and the environment in which 'scientific knowledge' is confronted with a multitude of 'folk knowledge', what are the norms that define today the authority imposed on knowledge and the status of the author(s)? What is the meaning of these transformations for the institutions that come from the print culture, such as academic publishing? Those are essential questions that we try to answer by examining Wikipedia - our case of digital microcosm.

References

- 1. Fallis, D. (2008). Toward an epistemology of Wikipedia. Journal of the American Society for Information Science and Technology, 59(10), 1662–1674.
- 2. Fyfe, P. (2012). Electronic Errata: Digital Publishing, Open Review, and the Futures of Correction. In Debates in the Digital Humanities (p. xvi, 516 pp).
- 3. Gold, M. K. (2012). Debates in the digital humanities. Univ of Minnesota Press.
- 4. Hjørland, B. (2002). Domain analysis in information science: Eleven approaches traditional as well as innovative. Journal of Documentation, 58(4), 422–462.
- 5. Magnus, P. D. (2009). On Trusting WIKIPEDIA. *Episteme*, 6(1), 74–90.
- 6. Nielsen, A. (2012). Wikipedia research and tools: Review and comments. Work, 66.

8. Wray, K. B. (2009). The epistemic cultures of science and Wikipedia: A comparison. *Episteme*, 6(1), 38–51.

7. Sanger, L. M. (2009). The fate of expertise after Wikipedia. *Episteme*, 6(1), 52–73.



Université