

Single Authorship, National Co-Authorship, and International Co-Authorship in the Social Sciences and Humanities: A Multi-Dimensional Analysis of the Flemish Case

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Abstract

Single-authored publications are common in the Social Sciences and Humanities, while internationally collaborative papers are less common than in other fields. Recently, we collected all author affiliations for the complete Flemish SSH research output (2012-2022). This data allow us to present a unique comprehensive analysis of national and international co-authorship in the SSH. We investigate the degree of collaboration by dividing the dataset into three distinctive subsets: single-authored publications, publications with only national collaboration and publications with international collaboration. The analysis is carried out on multiple levels: by total number of publications, by publication type, by discipline and by country of collaboration. We find that international collaboration is steadily rising, and is most common in edited volumes.

Introduction

The Humanities and Social Sciences are known to be more locally anchored than other fields of science. In the Humanities in particular, single authorship is more common than in other fields of science. In the Social Sciences, co-authorship is gradually increasing, as is co-authorship involving international co-authors (Henriksen, 2016).

In this paper, we present a unique comprehensive approach to the study of the evolution of single authorship, co-authorship at the national level, and co-authorship involving international colleagues in the Social Sciences and Humanities. For the period 2012 to 2022 we collected the affiliation data of all co-authored peer-reviewed publications included in the Flemish Academic Bibliographic Database for the Social Sciences and Humanities (henceforth VABB, see Verleysen et al 2015). Since the VABB compiles all articles, book publications and proceedings contributions by researchers affiliated to a Flemish SSH university department, it offers comprehensive coverage of the publications in the SSH beyond that covered by international databases such as the Web of Science, Scopus, Dimensions or OpenAlex. In the case of the VABB, about half of the publications are indexed in the Web of Science (WoS), while the other half of the peer-reviewed publications (the GP publications) is included upon approval by a panel of academics appointed by the Flemish Government.

As a result of a data collection started in 2019, we have enriched all the records in the database with author affiliation data (Aspeslagh, 2024). While the affiliation data for the publications indexed in the WoS is available in WoS, author affiliations for GP publications needed to be retrieved alternatively via a multifaceted data

collection operation (matching with other sources where possible and manual look-up of all other records; registering affiliated organizations via (ROR-)identifier). This addition enables to distinguish single-authored publications from co-authored publications, which can be further subdivided into co-authored publications that involve only national collaboration (=all affiliations are Belgian) and co-authored publications that involve cross-country collaboration (=at least one of the affiliations is non-Belgian).

Based on the complete set of VABB publications for the period 2012 to 2022 we analyze:

1. The evolution of the share of single-authored publications, co-authored publications involving national collaboration, and co-authored publications involving international collaborations. We analyze this separately for each of the publication types distinguished in VABB, for the Humanities and for the Social Sciences, and for the disciplines that resort under Social Sciences and Humanities in the OECD Fields of Research and Development classification (OECD, 2025);
2. The countries that are most commonly involved in the set of internationally collaborative papers. Similarly, we analyze this separately for the Humanities and for the Social Sciences, and for the disciplines that resort under Social Sciences and Humanities in the OECD Fields of R&D classification.

The main purpose of the analysis presented in this research in progress paper is to shed light on the single authorship, national co-authorship, and international co-authorship of the Social Sciences and Humanities in Flanders, Belgium.

Method

Discipline classification

The VABB data comprehensively cover peer reviewed publications of the following types: journal articles, monographs, edited volumes, book chapters, and proceedings papers. The VABB covers the full output of all researchers affiliated to a SSH faculty at one or more of the five Flemish universities. The data are classified both according to an organizational and a cognitive classification (Guns et al 2018). In the organizational classification a discipline is assigned on the basis of the entity the author is affiliated to, independent of the content of the publication. In the *cognitive classification* the publications are assigned to OECD FoRD disciplines based on the channel in which they are published (e.g. all articles published in Scientometrics are assigned to *Computer and information sciences* and *Media and communications*).

Dataset

The initial dataset used in this analysis contains all peer-reviewed VABB publications from 2012 to 2022 (n=103,157). The dataset is available on Zenodo (<https://doi.org/10.5281/zenodo.14810662>). For a limited number of those publications (n=2,312, 2.2%), no affiliation data could be retrieved, resulting in a

final dataset of 100,845 publications. The number of publications per year varies between 6,975 (2012) and 10,558 (2021). In terms of affiliations and co-authorship we divide this set of publications in three:

- Single-authored publications with one or more affiliations (SAu) (n=29,830; 29.6%);
- Co-authored publications with only national (intra-Belgian) affiliations (NAf) (n=30,166; 29.9%);
- Co-authored publications with one or more international (extra-Belgian) affiliations (IAf) (n=40,849; 40.5%).

In the cognitive classification a subset of 68,558 publications are assigned to a SSH discipline. 48,376 publications are categorized as social sciences, 23,704 as humanities, with a slight overlap (multiple disciplines can be assigned). This subset, based on the cognitive classification, will be used when studying publications by discipline and comparing social sciences with humanities.

Evolution of SSH publications by collaboration type

Overall, more than 70% of the VABB publications are co-authored publications. However, the distribution over the three subsets is evolving over time. While the share of IAf is gradually increasing, the proportion of both the NAf and the SAu subsets is clearly decreasing (Figure 1). The percentage of SAu evolved from almost 33.6% in 2014 to 24.7% in 2022; NAf from 33.3% to 28.6%. Meanwhile the share a publications in international collaboration rose from one third (33.2%) of the publications in 2014, to almost half in 2022 (46.7%).

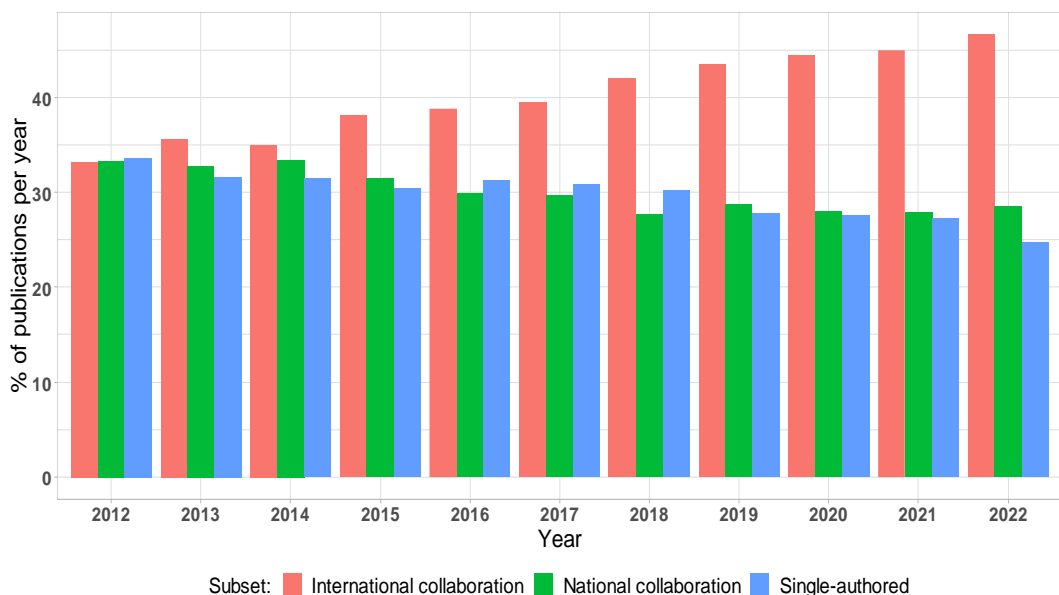


Figure 1. Collaboration in VABB per year and subset.

Publication type

VABB contains five different publication types: journal articles (74.2%), books/monographs (1.6%), edited volumes (2.2%), book chapters (17.5%) and conference proceedings (4.5%). In relative terms, Iaf is the highest for edited volumes: more than half of them (58.8%) are published with a co-editor affiliated to a non-Belgian institution, a number remaining constant over time. However, the share of Iaf is clearly increasing for journal articles (from 36.2% to 50.6%). Books and book chapters, in contrary, largely remain single-authored. Conference proceedings are mostly published in collaboration, evolving to a higher share of international collaboration until 2017.

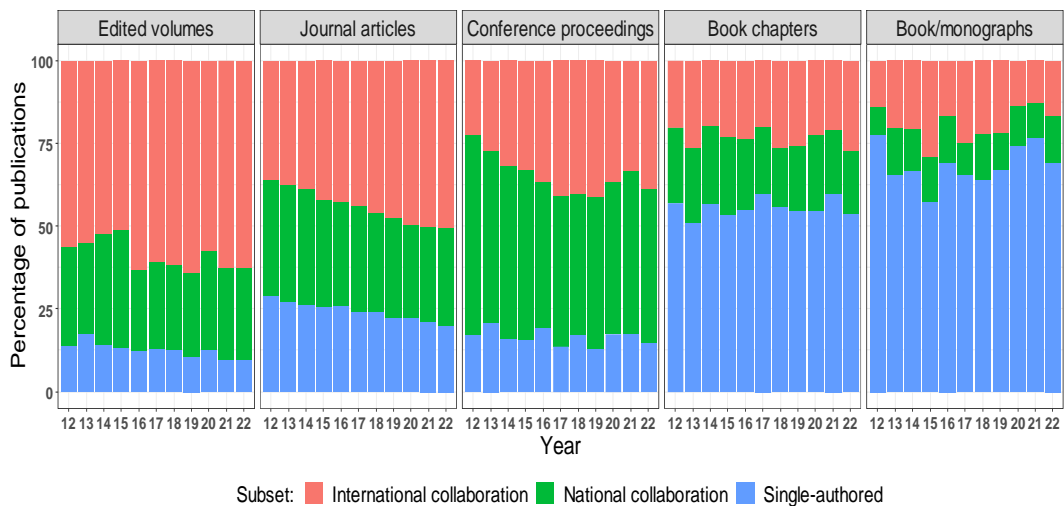


Figure 2. Collaboration by publication type.

Discipline

When reducing the full dataset to the publications that are strictly SSH according to the cognitive classification, almost two third of the humanities publications are SAu (61.0%), with both Naf and Iaf near 20%. SAu, Naf and Iaf are almost evenly distributed in social sciences. The absolute number of publications that are labeled as social sciences is more than double than the humanities ones (48,376 versus 23,704).

Table 1. Distribution of type of collaboration by SSH group.

	<i>Social sciences</i>	<i>%</i>	<i>Humanities</i>	<i>%</i>
Single-authored	15,767	32.6	14,462	61.0
National collaboration	14,851	30.7	4,668	19.8
International collaboration	17,758	36.7	4,554	19.2
Total	48,376	100	23,704	100

Zooming in on the level of individual disciplines, almost all social sciences disciplines precede their humanities counterparts concerning the degree of

international collaboration, mirroring SAu publications. Only law and, to a lesser degree, political science have a lower IAF than at least one humanities discipline.

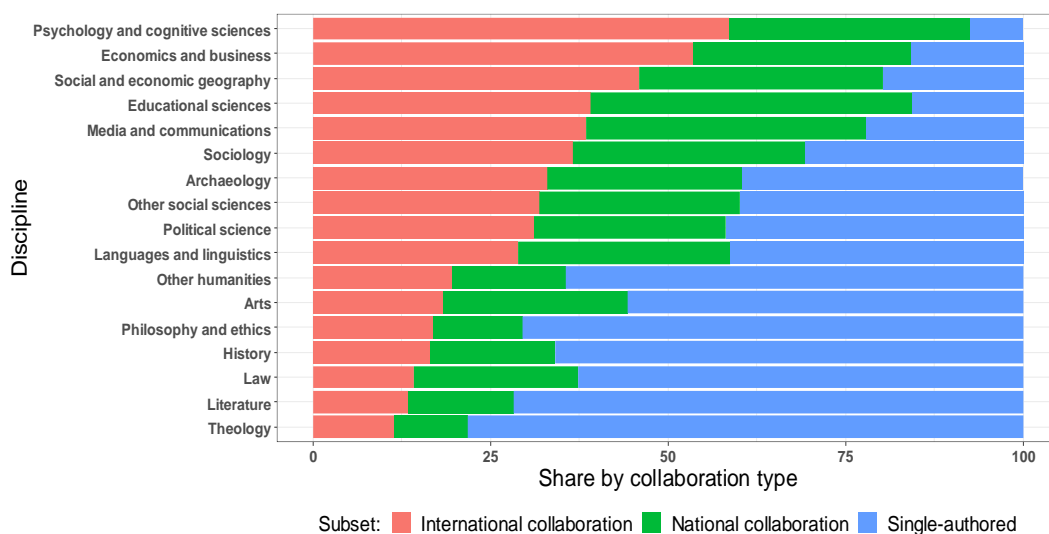


Figure 3. SSH disciplines, ordered by share of international collaboration.

Collaboration by country

During the period 2012-2022 SSH authors affiliated to a Flemish university co-authored with colleagues and scholars from 186 different countries. Collaboration most often takes place with Dutch institutions (n=12,744), followed by the United Kingdom (n=8,800), the United States (n=7,467) and Germany (n=5,913).

By disciplinary group

When switching to the strict SSH subset, the same countries are usually rounding the top 5 (NL, UK, US, DE, FR), with France sometimes being surpassed by Italy. In social sciences, the top 4 are always the Netherlands, the UK, the US and Germany, with only two years in which the internal order was different. Humanities show more variety in the order.

Except for social sciences 2021-2022, five countries always represent more than half of the publications with international collaboration. NL, GB, US and DE are always represented; a fifth country varies between FR, IT and CN.

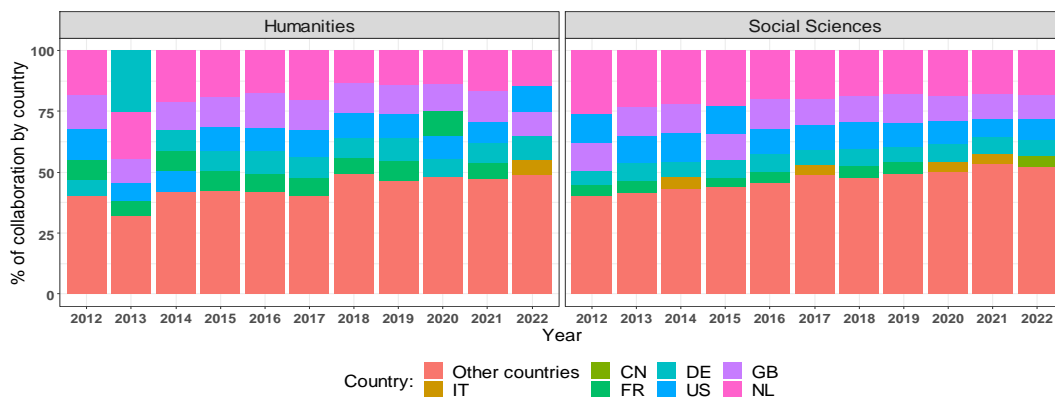


Figure 4. Percentage of affiliations per country over time (Humanities versus Social Sciences).

By discipline

The same picture appears when a distribution is made by separate discipline. In each discipline bar archaeology, the Netherlands is the country Flemish SSH authors most often collaborate with. The largest concentrations of affiliations with the top 5-countries are found in theology, history and law.

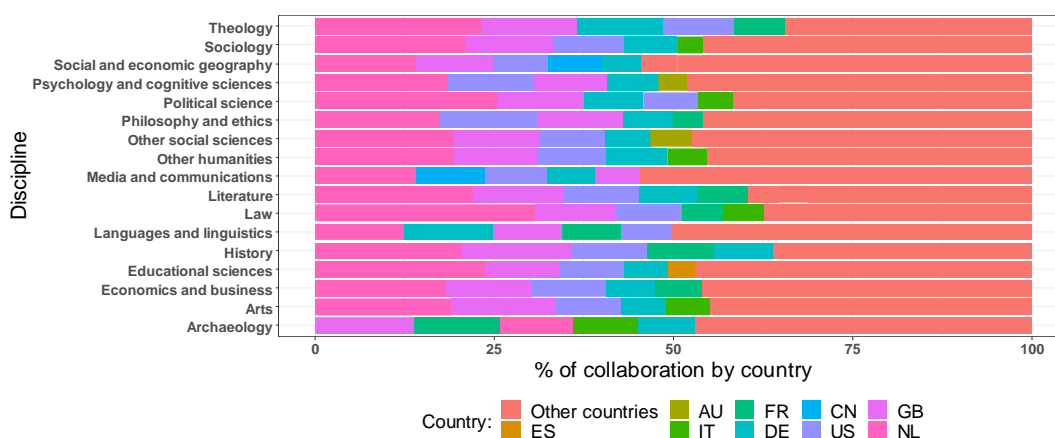


Figure 5. Percentage of affiliations per country by discipline.

Future research

During the author affiliation data collection for GP publications, organization identifiers (ROR) were assigned to each affiliation. In the near future, coding on this level will be extended to the WoS publications. This will enable us to conduct a more fine-grained analysis of organizations authors of SSH publications are affiliated with.

While registering the affiliation data, it was discovered that only two thirds of affiliated organizations were covered by ROR identifiers (Aspeslagh e.a., 2022). Therefore we are in the process of developing an extended organization database, the Flemish Organization Registry, which will include all organizations relevant for

the Flemish STIE system. It adds complementary organizations to a local ROR copy, specifically focusing on educational, research and government-related organizations. The extended organization database will be valorized in a broader context and serve other institutions and purposes.

Conclusion

The addition of author affiliation data to VABB offers a comprehensive view on collaboration in Flemish SSH research. We distinguish three subsets: single-authored publications, co-authored publications with national collaboration only and co-authored publications which include international collaboration.

In general, the share of the publications in international collaboration is rising over the time window 2012 to 2022. The share of single-authored and nationally co-authored publications is decreasing. However, when analyzing the publications by discipline, a more nuanced picture appears: in the humanities single-authored publications remain dominant, while in the social sciences single authorship, national collaboration, and international collaboration are about as common. The majority of books and book chapters remain single-authored, while journal articles, edited volumes and conference proceedings show a trend towards more collaborative publishing.

International coauthors of Flemish SSH scholars are mainly affiliated to institutions in the Netherlands, the UK, the USA, Germany and France. When studied by discipline, in most cases half of the affiliations can be assigned to a set of five countries.

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