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## A bibliometric analysis of the coverage of historical journals in Web of Science and Scopus

### Abstract

Historical research involves the construction of competing narratives around complex historical events. Getting the whole story requires having access to these narratives, which can be a challenge when the coverage of historical research in widely used databases is incomplete or biased. This paper investigates to what extent journals indexed in two historical research databases, namely Historical Abstracts and America: History and Life, are covered by the Web of Science (WoS) and Scopus, as well as the national and linguistic biases in that coverage. We find that about half of the historical journals are indexed in WoS or Scopus, and that a much higher coverage of historical research is found in Scopus compared to WoS. Both databases disproportionately cover English language journals and journals published in the United Kingdom. Our findings raise questions about how these imbalances in journal coverage may lead to biases in the narratives to which readers are exposed when they limit their sources to those included in large, multidisciplinary databases.

### Introduction

Historical perception and narratives can vary from one historian to another, with interpretations of historical events differing based on personal thought and understanding (McCullagh, 2000; McPartland, 2010). Due to the interpretative nature of the field, historians' account of the past can be tainted by personal biases and biases in available research, leading to competing historiographies of the same event (Lustick, 1996; McCullagh, 2000; Møller & Skaaning, 2021). Because there are multiple historiographies and interpretations of historical

events, researchers need to have access to a variety of information to understand the different facets of historical events. In order to better attain relevant information, diverse and useful materials need to be available in databases to ensure that all historical narratives and interpretations are accessible.

Numerous studies comparing the coverage of the Web of Science and Scopus across research fields converged, showing that Arts and Humanities journals are underrepresented in Web of Science and Scopus (Glänzel & Schoepflin, 1999; Lopez-Ilescas et al., 2009; Hicks & Wang, 2011; Mongeon & Paul-Hus, 2016). However, no studies investigated the coverage of historical research specifically. Historical research is not found in any databases – books are a widely used mode of knowledge dissemination in History (Larivière, 2006).

This work in progress aims to investigate the national and linguistic bias in the representation of historical research in two multidisciplinary databases (Scopus and Web of Science) by comparing the coverage of journals indexed in two history databases: Historical Abstracts (HA) and America: History and Life (AHL). These sources appear to be complementary as HA covers world history (excluding the United States and Canada) from the 15th century to the present, whereas the stated purpose of AHL is to cover the history and culture of the United States and Canada from prehistory to the present. This paper addresses the following research questions:

1. What proportion of historical journals from Historical Abstracts and America: History and Life is indexed in the Web of Science and Scopus?
2. Which publishing countries and languages are over or underrepresented in the subset of historical journals indexed in the Web of Science and Scopus?

## **Data and Methods**

### ***Data collection***

We downloaded the HA master journal list from the HA website on October 20th, 2021. The AHL master journal list was downloaded from the website on October 27th, 2021. Both lists include journals indexed in the databases up until October 2021. We combined the journal information from both the HA and AHL lists into a single dataset of unique journals and then searched Ulrich's Periodicals Directory to retrieve information about the publishing languages and countries of journals, as well as the peer-reviewed status of journals (which was missing for only a few journals). After removing duplicates, monographs (records with ISBNs rather than ISSNs), and non-peer-reviewed publications, our final dataset included a total of 2,789 historical journals, out of which 1,520 and 2,352 were included in AHL and HA, respectively. We used the Scopus and WoS journal list (downloaded on September 29th, 2021) to analyze their combined and individual coverage of history journals.

### ***Analysis***

Our analysis compares the distribution of journals across publishing countries and languages for the entire list of historical journals (AHL+HA) with the distribution of the subset of those journals indexed in Scopus and WoS. We calculated the country or language over- or under-representation in WoS and Scopus by dividing their relative frequency WoS and Scopus by their relative frequency in the historical databases. Therefore, a value above 1 indicates an over-representation in WoS or Scopus and a value under 1 indicates an under-representation. For

example, journals publishing in German account for 9.5% of the historical dataset, but only 7.4% of the combined WoS and Scopus subset, so by dividing 7.4% by 9.5%, we obtain a value of 0.779 indicating an under-representation of German journals.

## Results

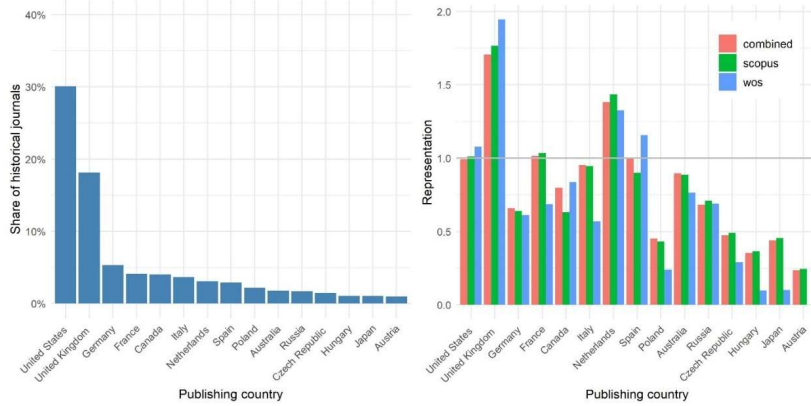
Table 1 displays the number of journals indexed in AHL and HA and their coverage in WoS, Scopus, and WoS and Scopus Combined. We find that Scopus has a larger coverage of history journals, which was expected given the larger number of journals indexed in Scopus overall. Combined, WoS and Scopus cover more than half of the journals covered in each of the history databases individually, but slightly less than half of all history journals combined. This indicates that journals that are indexed in both AHL and HA have greater coverage in WoS and Scopus than journals appearing in only one of the databases.

**Table 1.** Coverage of historical journals in Web of Science and Scopus.

Database	N	Web of Science		Scopus		Combined	
		N	%	N	%	N	%
AHL	1,520	658	43.3	817	53.8	850	55.9
HA	2,352	898	38.2	1,190	50.6	1,233	52.4
Combined	2,789	992	35.6	1,316	47.2	1,370	49.1

### *Coverage of publishing countries*

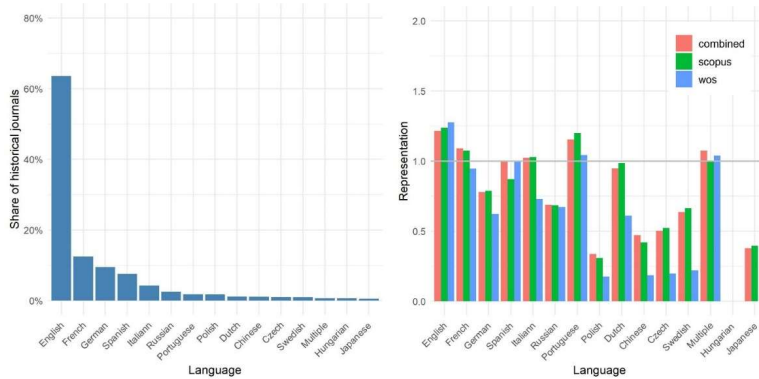
Figure 1 shows the top 15 publishing countries for journals indexed in the historical databases. It shows a very skewed distribution with two dominant publishing countries. The United States (30.7%) and the United Kingdom (18.6%) account for a total of 49.3% of journals, far above the closest competitor, Germany, with 5.1% of journals. The right panel of Figure 1 shows a strong WoS and Scopus coverage bias in favour of journals published in the UK and in the Netherlands, at the expense of most other publishing countries, except the United States, France, and Spain which are close to the expected value of 1. The results also show slight differences in the representation of countries in WoS and Scopus. WoS has a stronger bias towards the US, the UK, Canada and Spain, whereas Scopus favors France, Italy, the Netherlands, Poland, Australia, and Hungary and Japan.



**Figure 1.** Distribution of historical journals across publishing countries in AHL and HA (left panel) and representation of historical journal's publishing countries in WoS and Scopus (right panel).

### Coverage of languages

Figure 2 illustrates the top 15 most frequent publication languages for history journals between the databases. Journals published in the English language are slightly overrepresented in both WoS and Scopus. This aligns with the overrepresentation of UK journals and the dominance of English as the language of science (Sugimoto & Larivière, 2018). French and Portuguese are some notable exceptions of languages being overrepresented in Scopus. We also note that none of the databases appear to index journals publishing in Hungarian, and WoS doesn't index journals that publish in Japanese.



**Figure 2.** Distribution of languages in history databases (left panel), and representation of publishing languages in Scopus and WoS (right panel).

### Discussion and Conclusion

More than half of the journals included in the historical databases covered in this study are published in English, so the dominance of English in bibliometric databases is expected, and well documented (Archambault et al., 2006; van Leeuwen et al., 2001). Dominance and overrepresentation are, however, two different concepts. And one of the contributions of our study is that by using a more comprehensive set of journals as a ground truth, we are able to state that the databases studied index more or fewer journals from certain countries or in certain languages as would be expected based on that ground truth.

This study has provided insight into how historical publications in different languages and published in different countries are represented in the two major databases, Scopus and Web of Science. Our analysis suggests that major databases are limited in their ability to provide sufficient history research materials due to their multi-disciplinarity. Although major databases do provide history research, their coverage is not nearly as vast or varied as the subject specific databases. Subject specific databases like Historical Abstracts and America: History and Life not only provide a much more significant coverage of history research, but they have a more diverse range of materials available.

Further research will investigate historical publications at the article level to determine if there are subject biases present in the historical research found in major databases. Uncovering and discussing the biases found in selected published history research can uncover bias present in accessible information, and how limited available historiographies affect the narratives presented in historical research.

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