Observing semantic change in the representation of ethnic minorities through distant reading of museum catalogues

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Introduction

Computational analysis that demonstrates biased representations related to ethnicities has been widely covered in literature (see, for example, Garg et al. 2018, Tripodi et al. 2019, Lucy et al. 2020). Previous research in computational approaches has revealed diachronic change of concepts in general (Tahmasebi et al. 2018) and for the representation of antisemitism, in particular (Tripodi et al. 2019). However, literature that shows how local representations of ethnic minorities change through contexts revealed in museum catalogues and metadata, how they are tagged, contextualised and processed through museum databases, and consequently what kind of knowledge is produced and/or retrieved, is relatively scarce. In this paper we demonstrate how conceptual representations related to Jews and Armenians fluctuate, depending on where contexts related to these ethnic minorities are produced.

The aim of this paper is to show how the analysis of museum catalogues and online museum collections can reveal the difference over geographic areas in dominating attitudes and multiple perspectives in the perception of minority cultures. We compare search results related to Jews and Armenians for the British Museum in London and the State Historical Museum in Moscow. The museums were chosen as they both represent an 'imperial archive' (Barringer and Flynn 1998, p. 11, Khazanov 2000), they

have collections that include multiple historical objects and they are both located in capital cities for the two countries. Their online digital collections produce sufficient results to analyse the representation of minorities and the perspectives of these two major memory institutions on what is deemed an ethnic minority.

Methodology

Our analysis includes results for Jews and Armenians, ethnicities that represent the concept of 'otherness' within each country. The State Historical Museum in Moscow shows objects from the period of the Russian Empire and the Soviet Union when, between 1828 and 1991, Armenia was a part of the Russian Empire/Soviet Union, and it was integrated in a variety of political and social structures (see, for example, Matossian 1962, Slezkine 1994). Jews are an ethnic minority that exist within each country and, at the same time, were a part of the area under the British mandate in Palestine, and thus were under the British Empire's rule, between 1917 and 1948. We use data on records related to Jewish and Armenian cultural representations from the websites of the British Museum in London and the State Historical Museum in Moscow. We use such search terms as 'Jew', 'Jewish', 'Israel', 'Yiddish', and 'Armenia' or 'Armenian' to obtain results for the analysis. The data were collected from museum websites in June-July 2022 and tabulated using Open Refine and Python. The data fields we used for the analysis were related to 'time period', 'geographical location', 'format', and 'subject matter'. While we used all the data obtained to get results for the dominant time periods and geographies, we used a sample of data, with 20% of the records in each dataset randomly generated for each search term to manually tag 'subject matter'.

Results

We find large differences in the representations of ethnicities for the two museums. Figures 1 and 2 show the geographical distribution for the place of production related to Jews and Armenians in the collections of the British Museum and the State Historical Museum in Russia.
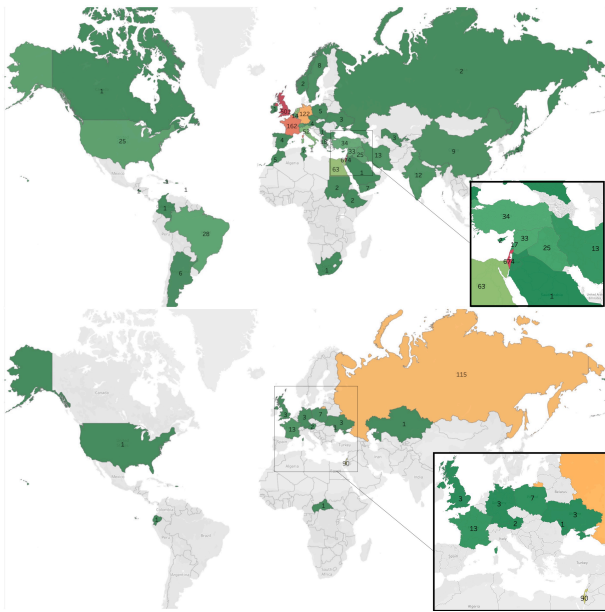
Figure 1. Geographical distribution of Jewish items in the British museum (top) and the State Historical Museum of Russia
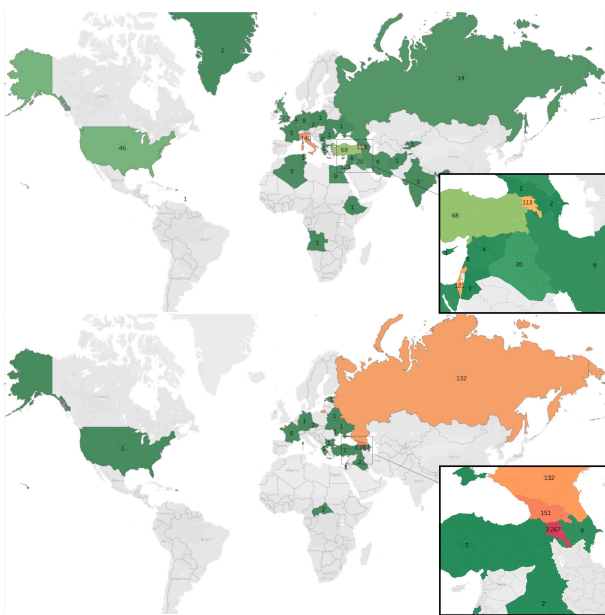

Figure 2. Geographical distribution of Armenian items in the British museum (top) and the State Historical Museum of Russia

We can see that both minorities are much better contextualized as ancient civilizations in the case of the British Museum, compared to the State Historical Museum. Geographical contexts for the British Museum demonstrate twice as many mentions of countries providing contexts for both minorities compared to the State Historical Museum (over 30 countries vs 12 countries). Temporal distribution (Fig. 3, 4) also shows a pre-17th century materials connected to Jews and pre-12th century materials connected to Armenians in the State Historical Museum with its 1,7 million archaeological objects (State Historical Museum 2022). Conversely, the British Museum representations go as far back as prehistorical time, with pronounced peaks between 200 BCE and 200

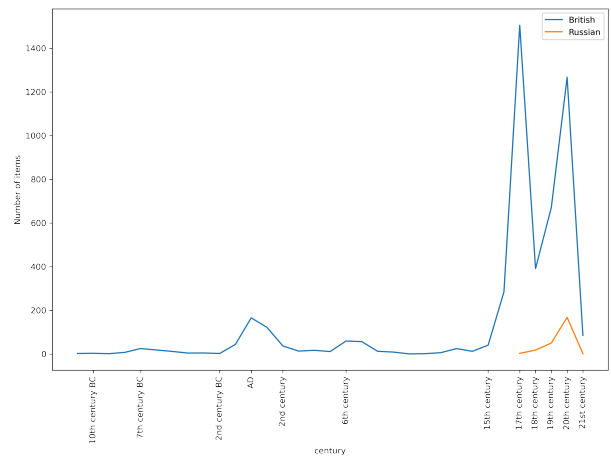AD for the Jewish data and around 200 AD for the Armenian data (Fig. 3, 4).

Figure 3. Temporal distribution of Jewish items in the British museum (top) and the State Historical Museum of Russia(bottom) by century (each bar is one century
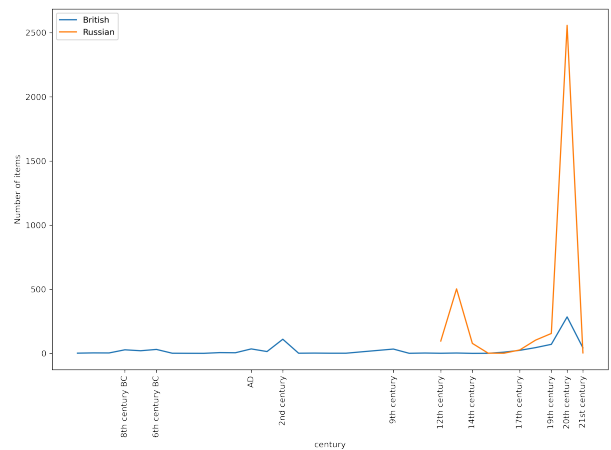

Figure 4. Temporal distribution of Armenian items in the British museum (top) and the State Historical Museum of Russia(bottom) by century

Thus, the focus of the State Historical Museum on how minorities function within the mechanism of the Russian Empire/Soviet Union affects not only the breadth of geographical coverage but also the depth of temporal representation, showing minorities within a narrow lens of the relations with Russia/Soviet Union. The majority of Armenian records for the State Historical Museum are governmental or municipal documents that demonstrate how Armenians were incorporated within the formal structures of the Soviet Union (Fig. 5, 6).
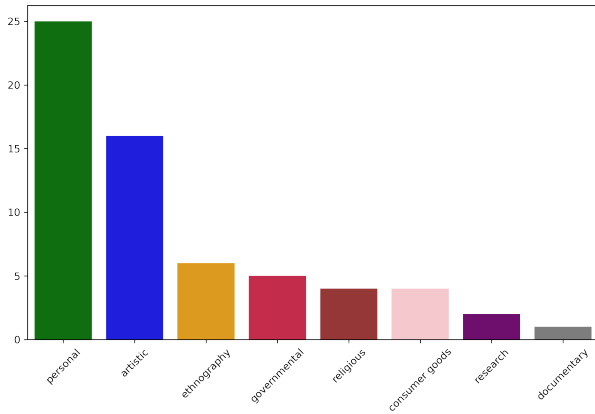
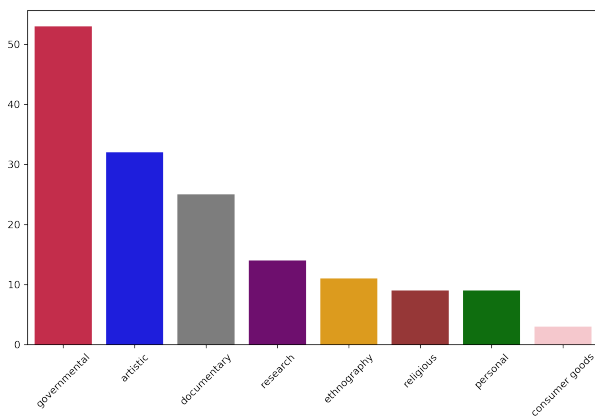Figure 5. Types of Jewish objects in the State Historical Museum of Russia

Figure 6. Types of Armenian objects in the State Historical Museum of Russia

Conclusion

In future work we would like to look deeper into semantic change across space, using a corpus of text snippets from metadata. Different academic traditions, ideologies, collectors and museum collection policies affect representations, creating semantic fields around different representations of the same concepts. How these fields are linked and how the time of collecting and cataloguing affects changes in these links is another question for further research. Generally, our results demonstrate that distant reading of museum catalogues in combination with close reading of separate entries reveals very different concepts associated with minorities, with a possibility of studying the change in concepts and perception across time and space, and in different cultures, using tools developed in Digital Humanities.

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