Racial and Disciplinary Language in Classical Studies: A Quantitative Study of Three Text Collections

Drawing on recent work in the digital humanities (Block 2020), natural language processing (Manzini *et al*. 2019, Antoniak and Mimno 2021), and the computational social sciences (Garg *et al*. 2018, Abid *et al*. 2021), this paper explores the operation of racial and disciplinary discourse in three online collections of texts: 1) the racist appropriations of classical material archived by the Pharos project (Dozier 2021); 2) discussion threads on *Famae Volent*, an informal forum devoted to the Classics job market; and 3) book reviews published by the *Bryn Mawr Classical Review* (*BMCR*). For the Pharos corpus, we quantify the attention given to various historical figures in white supremacist writings; for *Famae Volent* and *BMCR*, we examine at scale how the field of Classics has engaged with questions of race, racism, and interdisciplinary scholarship (Rankine 2019, Umachandran 2022), as reflected in two extremely different contexts.

Using Pharos' archive, we assemble a corpus of 99 white supremacist documents. Out of a large selection of classical names mentioned in total, only five are referred to in more than 10% of documents. Not only do extremist writers keep returning to a small stable of ancient figures, their selection is also far from a cross-section of classical material. Of the top-five figures, Plato is first (referred to in 23% of documents), Aristotle second (20%), and Socrates fifth (11%). In providing a clearer picture of the pattern of exploitation of classical material, the data suggest how classicists might better understand the risks that attend the teaching of the corpus: while almost all texts are potentially open to exploitation, there are demonstrable differences in which texts tend to be appropriated.

When trained on large corpora, word embedding models based on distributional semantics often learn biases present in the original texts, which makes them powerful tools for studying racial and gender stereotyping (Garg *et al*. 2018, Manzini *et al*. 2019, Abid *et al*. 2021, Antoniak and Mimno 2021). Drawing on this body of prior research, including studies of pervasive gender bias on the Economics Job Market Rumors forum (Wu 2018), we train a word2vec model on a collection of nearly 20,000 anonymous posts made to the *Famae Volent* message board between 2005 and 2018. Word similarity results for key terms corroborate Christensen's observation that posts adopting widely differing sociopolitical positions nevertheless share a common tendency, reflected in diverse internet fora, towards the use of pejorative language (Christensen 2018). Moreover, we observe a marked increase in explicit discussions of racism, often inflected by political references, in the wake of the 2016 election.

From a frequency analysis of terms across the *BMCR* corpus (more than 14,500 documents), we provide quantitative evidence of Classics' lack of engagement with interdisciplinary approaches that could undergird more sustained anti-racist scholarship. Fewer than 0.5% of reviews mention the terms "racism" or "racist" or refer to one or more of 12 area studies terms, such as "African American Studies." More telling - and disconcerting - than the absolute frequencies of these terms are the temporal trends: whereas mentions of "reception studies" increase 30-fold over the history of the corpus, explicit discussion of both racism and area studies is more frequent in the pre-2000 documents.

Bibliography

Abid, A., M. Farooqi, and J. Zou. 2021. "Large language models associate Muslims with violence." *Nature Machine Intelligence* 3: 461-463.

Antoniak, M., and D. Mimno. 2021. "Bad Seeds: Evaluating Lexical Methods for Bias Measurement." *Proceedings of ACL 2021*: 1889-1904.

Block, S. 2020. "Erasure, Misrepresentation and Confusion: Investigating JSTOR Topics on Women's and Race Histories." *Digital Humanities Quarterly* 14.http://www.digitalhumanities.org/dhq/vol/14/1/000448/000448.html.

Christensen, J. 2018. "*Famae Volent*: A Personal History." *Sententiae Antiquae* (blog). Published March 4, 2018. Accessed May 2, 2022. https://sententiaeantiquae.com/2018/03/04/famae-volent-a-personal-history/.

Dozier, C. 2021. *Pharos: Doing Justice to the Classics*. Accessed May 2, 2022. https://pharos.vassarspaces.net/.

Garg, N., L. Schiebinger, D. Jurafsky, and J. Zou. 2018. "Word embeddings quantify 100 years of gender and ethnic stereotypes." *PNAS* 115: E3635-E3644.

Manzini, T., L. Chong, A. Black, and Y. Tsvetkov. 2019. "Black is to Criminal as Caucasian is to Police: Detecting and Removing Multiclass Bias in Word Embeddings." *Proceedings of NAACL-HLT 2019*: 615-621.

Rankine, P. 2019. "The Classics, Race, and Community-Engaged or Public Scholarship." *AJP* 140: 345-359.

Umachandran, M. 2022. "Disciplinecraft: Towards an Anti-racist Classics." *TAPA* 152: 25-31.

Wu, A. 2018. "Gendered Language on the Economics Jobs Market Rumors Forum." *AEA Papers and Proceedings* 108: 175-179.