Keeping up with the times

Measuring the relevance of Social Sciences and Humanities research in Dutch societal debates (2000-2018)

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By 1998, leading American scholars had noted a "growing lack of public understanding and support for the humanities" in the US (Choper et al., 2008). Its prospects in relation to social relevance have been described as "gloomy, hopeless and bleak" (Ikpe, 2015), to a point that some speak of a "crisis of the humanities [...] of public justification" (Choper et al., 2008). Today, recent debates have pointed to a general decline of trust in the humanities and its position also in Dutch society.[1] Popular and para-academic critiques have accentuated an already deep-rooted mistrust for the humanities as an essentially relativistic science, that, by virtue of "postmodern" hermeneutics, has destabilised the status of objectivity and lead the way to an era of "post-truth" (Kakutani, 2018). These critiques have also reached the realm of politics, as the humanities are frequently portrayed as a vehicle for "partisan indoctrination", particularly through the inconspicuous influence of "cultural marxism" (see Cliteur, 2018, and Klei, 2018). Whether in relation to such critiques or not, the humanities' purported lack of immediate practicality and direct "purpose" in society (Lievers 2018) have been one of a few justifications for over twenty years of budget cuts from Dutch education policies (ibid).

In response, scholars have defended the utility of the humanities and social sciences (henceforth SSH) as sciences that strive to provide citizens the means to describe, interpret and explain societal trends, issues and developments. Such skills are based upon hermeneutics, critical thinking and the moral and practical interrogations of history and the arts - amidst other methods (Lyotard 1979, 18; Heidegger 1961, 127). SSH research have indeed provided citizens and policy makers with material to interpret and deliberate key problems Dutch society faces, though in ways difficult to measure. Among these problems are the nature of financial crises and contemporary economies, migration, social identity and

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[1] A recent plea of eight Dutch university deans of faculties for humanities illustrates this (Algra, Keimpe et al, 2018).

political representation, and the relation between contemporary human lifestyles and the environment.[2]

Given the difficulty of measuring the impact of the SSHs, the presence of humanities research in Dutch societal debate has to this day not been studied. Previous studies have sought to measure the (academic) "impact" of SSH, particularly of specific articles through bibliometrics (Martin et al., 2010; Archambault et al., 2006; Hammarfelt, 2014). But while exact sciences often produce concrete results and techniques to quantify societal trends, measuring the impact of SSH cannot always be expressed in quantities, since these studies concern the popular embodiment of new knowledge and the evolution of social values and ideas.

In response, we propose a quali-quantitative study that focuses on the pertinence and influence of SSH research within Dutch societal debates. More specifically, we explore the presence of topics tackled in SSH research in Dutch societal debates (located in specific outputs, such as newspapers) and vice-versa (Bornmann 2015). Our method is thus twofold: with (1) techniques from Natural Language Processing (topic modelling and using word embeddings (word2vec), as implemented in Řehůřek, R., and Sojka, P. 2010), we identify which themes are most prevalent in a corpus of Dutch newspapers and magazines from 2000-2018; this corpus only includes newspapers and magazines of which we have the full text.[3] This implies training a topic model of 1000 topics, interpreting the topics through manual labelling and grouping topics into similar themes (e.g., Dutch parliamentary debates and Dutch populism are labelled as "Dutch politics").

Then, (2) we compare these topics to significant themes that we identify in publications done by SSH researchers in The Netherlands and media publications. We do so through a bibliometric analysis overtime, particularly to locate moments when each of these two fields engaged in one of the 1000 topics of our dataset. For publications, we rely on textual data provided by NARCIS, such as abstracts and keywords.[4] We do a curated linking of keywords and abstracts to the media topics identified in the previous step. After this, we visualize the relative attention of the topics in the media and in academia for a theme over time.[5] This allows us to locate prominent topics in printed or online societal debates to then identify the degree to which SSH research responds to issues discussed in society and whether the discussed themes in academics are in fact "ahead" of societal debate.

Then, we qualitatively compare a few case studies we chose based on the above-mentioned results. Each of these will imply close reading frequent words Dutch media and academia has used to describe themes; this would allow us to assess a possible cross-influence of media or academic language. We are then able to discern whether

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[2] Studied, for instance, in disciplines such as financial history, gender studies, ecocriticism and the digital humanities themselves.

[3] Our media corpus consists of 1.4M publications from De Volkskrant, Het Parool, NRC, De Telegraaf, De Groene Amsterdammer, Elsevier, HP De Tijd, and De Nieuwe Revu.

[4] NARCIS (https://www.narcis.nl/) is a service that aggregates metadata on universities' and academic institutes' publications and is hosted by DANS (https://dans.knaw.nl/). It provides over 180k publications by scholars working in the Humanities or Social Sciences.

[5] By "relative attention", we imply attention measured through the proportion of the topic in the media corpus in a specific period, and the relative number of publications on this theme in this same timespan.

conceptual language from SSH has been used by media discourses. For example: gender studies in the humanities might have provided the media with the vocabulary to speak about gender issues. This should be visible in our corpus in the form of an increased amount of, e.g., humanities-originated vocabulary ("gender and ethnicity") in the media corpus overtime.

Finally, this method also enables us to estimate the political slant of SSH research, particularly by comparing the relation and thematic focus of SSH academia with those of social debates. Research into the interaction between news and opinion on the one hand, and publications from the SSH on the other, shows (1) what and which role SSH research plays in Dutch public debate and (2) the added value of SSH research and related disciplines for relevant societal themes.

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