

Mapping the humanities: Informetric analyses of literary studies through A&HCI data

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Introduction

Mapping research fields and visualizing intellectual structures, especially methods of analyzing citation data from e.g. Web of Science and – more recently – Scopus, is one of the main research areas in informetric research (e.g. Chen, 2003; White & Griffith, 1981). However, with a few exceptions, co-citation analyses of research fields in the humanities have not been done (Kreuzman 2001; Leydesdorff & Salah, 2010). One reason mentioned is reservations against the limited coverage in the *Arts and Humanities Citation Index (A&HCI)* database; another is the assumption that publishing patterns and citation practices in the humanities differ from other fields to such an extent that the results of e.g. co-citation analyses means little or nothing (Nederhof, 2006).

The aim of this analysis is to test if co-citation analyses can be used to produce any meaningful graphic representations of the intellectual structure of ‘literary studies’. The study is based on 38 literary studies journals indexed in the *A&HCI*, analysed using two different approaches: author co-citation and journal co-citation.

Methods and Materials

In the *A&HCI* (Thomson ISI, 2007), literary studies journals were identified and journals oriented towards language studies or with a broader arts and cultural studies focus were excluded, so that 38 journals remained, from which articles published

over the period 1997-2006 were downloaded from *Web of Science* (Thomson ISI, 2007).

The dataset was analyzed using *Bibexcel* (Persson, Danell & Schneider, 2009) and the results were visualized in *Pajek* (de Nooy, Mrvar & Batagelj, 2005). Just using raw co-citation data gave little results in terms of legible structures. Therefore, a stricter set of criteria for clustering the cited authors was used. Based on the co-citation frequencies for each author pair, the ‘select strongest links’ option in *Bibexcel* was chosen. Thus, the authors were clustered based on their strongest link, whereas weaker links were discarded. In addition to the strongest link clustering, we chose the clustering routine suggested by Persson (1994). The results of the strongest link clustering were used to produce a *Pajek* net-file. Hereafter the Persson clustering routine was applied as a basis for partitioning and the results were visualized using the Kamada-Kawai (1989) algorithm in *Pajek*, selecting the ‘separate components’ option.

Results

In order to test the applicability of co-citation analysis on literary studies, the 127 most cited authors (100 citations or more) were selected (Figure 1).

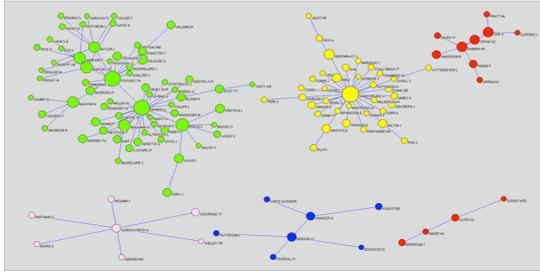


Figure 1. Co-citation analysis of 127 authors receiving a 100 citations or more, 1997-2006

Six clusters emerge, several of which can be interpreted as theoretically or thematically based groups. Most pronounced are two post-colonial clusters (bottom and top right on the map), and a cluster gathering authors mainly associated with English romanticism (bottom left). The main cluster – in the upper left – forms an intriguing structure where several theoretical branches can be detected. One example is the ‘Freudian’ branch where scholars and authors with a psychoanalytical focus are found, another is the ‘gender/feminist’ branch in the upper part of the cluster.

To test the journal co-citation alternative, 166 journals with 50 citations or more were selected for an analysis utilizing the same methods as for the ACA (Figure 2).

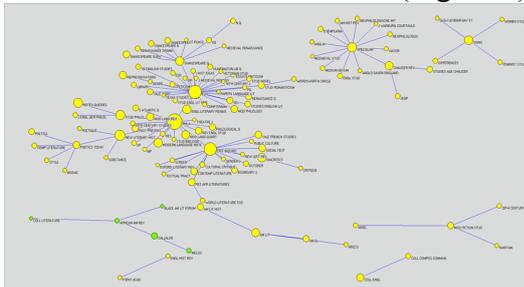


Figure 2. Co-citation analysis of 166 journals with 50 citations or more, 1997-2006.

The structure of the journal map is quite similar to the author map (Figure 1). The map shows several separated structures; and the major cluster is divided into several branches. However, clear groups based on theoretical orientation could not be found, with the exception of a cluster of journals with a post-colonial focus. One reason for this can be the general nature of

many humanities journals, with low levels of specialization.

Discussion

The journal map somewhat corresponds with the author map, but the interpretability of the author map is better due to the visibility of different theoretical research orientations. This shows that the cited authors approach presents a better option than an approach focusing on journals for mapping literary studies. The result is not entirely surprising, since journals are less cited than other publication types in literary studies. The most cited journal in the document set is *Publications of the Modern Language Association of America* with a total of 779 citations, a lower citation frequency than the three most cited authors (e.g. William Shakespeare, Jacques Derrida and Michel Foucault). Furthermore, the links between the cited journals, i.e. the co-citation frequencies, are weaker than between the cited authors. This, in turn, follows the low level of journal article publications in literary studies, where monographs and anthologies are the primary choice for communicating research. The journals forming separate clusters in the map have a distinct focus such as pre-modern literature or a post-colonial approach. Thus, although some conclusions could be drawn from the journal co-citation map it appears as if the analysis of authors gives a more detailed view of the content and research focus in the field of literary studies.

Intellectual structures in literary studies can be detected using informetric approaches. However, in a field where distinct research specialties are less common and monographs are the primary communication channel, the methods must be adjusted to deal with lower citation frequencies and weaker links. This study indicates that the strongest links option complementary to co-citation analysis can be a feasible approach for mapping research fields within the humanities. Consequently, citation analysis of literary

studies and other scholarly fields within the humanities could be a fruitful line of research as long as appropriate consideration is given to the intellectual organization of the field, the publication channels used and the citation practices of scholars within these fields.

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