

Beyond centrality: network analysis in the Humanities

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Reprinting and replication was an increasingly common practice in the (long) 19th century from furniture to print. The reuse, reprinting, and reconfiguring of text, known as “scissors-and-paste journalism,” has long been a subject of inquiry among periodical scholars interested in the circulation of texts, which has only recently been explored as an object of study- as in tracing the individual patterns of reuse across periodicals. This is due to the need for a) a relatively sound corpus of digitized periodicals, for example a representative sample of German periodicals in the 19th century; and the need for b) an understanding and developing a digital pipeline – from digitized periodicals, to data preparation and cleaning, to computational analysis to trace patterns of reuse. In periodical studies, the quantitative methods to map reuse have largely employed complete network analysis– a approach to analyze relational phenomena where information is projected as complete or bounded relations between entities (e.g. articles reprinted in newspapers), for which we can consider the characteristics, and structure of the networks, as well as the positions of texts or newspapers (e.g. centrality) (Bode 2017, Cordell 2015, So & Long 2013). Yet, modeling reuse as a network affords a multitude of relational analysis options, for example comparing the individuals (ego) networks that may be represented in the complete network, and the patterns of individual reprinting itself.

In this talk we, as a network and a periodical scholar, will explain the use of network analysis in the Humanities, what it affords, and propose why the focus has largely been on complete networks, and how and why a more enhanced use of network measures can contribute to both empirical knowledge about reuse as well as more generally in archival/cultural heritage data. This will be presented through the lens of one case a study of illustration reuse in three 19th-century fashion periodicals: the German *Der Bazar*, the French *La Mode illustrée*, and the Spanish *La Moda elegante* in a single year, 1863 using a network approach. In mapping the noted reuse of individual illustrations (edges in the network), across the periodicals (nodes in the network), we are able to identify not only popularly reused illustrations and the largest share of reused illustrations in this period (see Figure 1. Measures of centrality of a complete network), but in addition looking at ego networks- the most common paths of reuse of an individual illustration (see Figure 2. Path analysis of ego networks). This allows us to identify the most popular fashion magazines in nineteenth-century Europe reused “Parisian” fashion illustrations that in reality originated from Germany, debunking, as Van Remoortel (2017) has previously suggested, the myth that all fashion came from Paris. In addition, in moving beyond centrality, we show how using network measures that accurately relate to the relational research question at hand provide complementary insight into various aspects of the relational phenomena. This case provides an example of how to accurately move beyond centrality in the Humanities.

Figure 1. Measures of centrality of a complete network

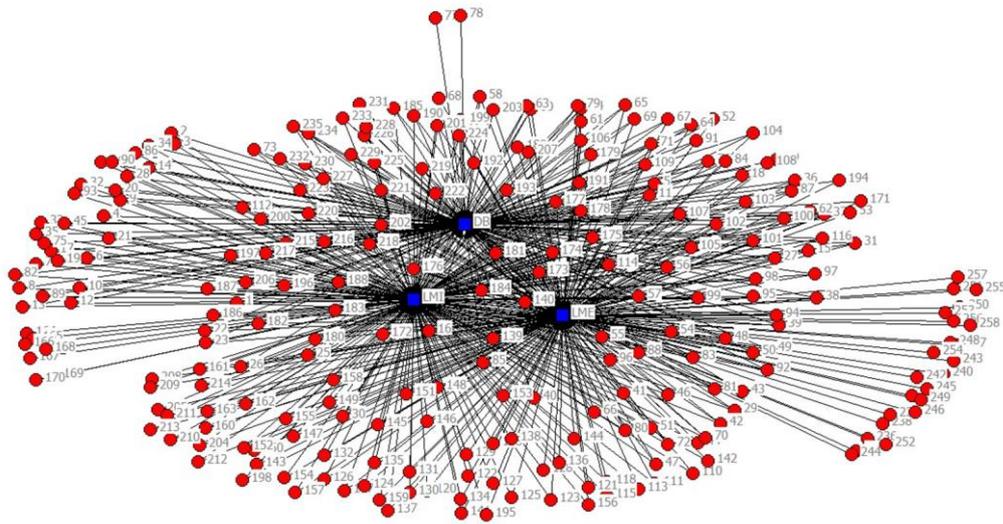
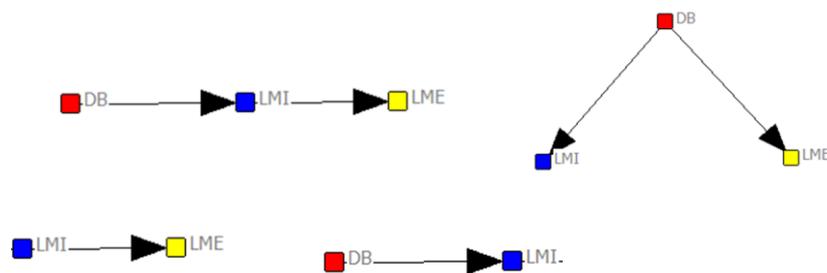


Figure 2. Path analysis of ego networks



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