

Breaking Disciplinary Silo's: Network Analysis and the Schism of Utrecht

The Schism of Utrecht (1723) resulted in the establishment of a second and rival Catholic Church, the Church of Utrecht, nowadays known as the Old Catholic Church, in the Dutch Republic. Henceforth this officially Protestant country was home to two competing Catholic Churches, a situation which continues until this very day. Hitherto this schism has been the subject of traditional church histories which viewed it from circumscribed theological and juridical perspectives and squarely focused on the clergy. Although such scholarship has unearthed important insights about the internal structure of the Church of Utrecht, the relationships between the two Churches and the secular authorities, and the intellectual programmes of key figures from both camps, the role and experiences of the Catholic laity has been seriously understudied. It is the aim of Geraerts' book project to remedy this lacuna. In order to do so, this project used mixed-method approach, including the application of network analysis. This has spurred to collaboration between a historian (Geraerts) and a physicist who specializes in network analysis (Vasques Filho).

This paper comprises three distinct but closely related parts. In the first part of the paper, we will discuss the construction of a graph-based data model in the context of the academic project analysing the schism in the Catholic Church in the eighteenth-century Dutch Republic. Based on a set of serial sources, namely registers of baptisms, marriages, and burials, this project levies a graph database in order to examine the choices Catholic laypeople made for one of the two competing Catholic Churches. These registers allow us to chart the choices individual laypeople made, for instance because they married or had their children baptised in different Churches. We will discuss the scholarly workflow, i.e. the process of collecting and standardizing the data, in relation to the design of the graph database, showing the necessary ongoing dialogue between the primary, archival sources on the one hand, and the structure of the graph-based data model on the other. Moreover, some advantages of working with a graph database will be highlighted.

Second, we will discuss the network analysis we performed in the context of affiliation networks. Most of network analysis measures and methods are solely useful for what we call one-mode networks, that is, a network composed by one set of nodes (actors) and a set of links (social ties). However, most social interactions, including those of historical actors, happen in an affiliation context represented by two-mode (bipartite) networks. The latter have two sets of nodes instead of one — actors that are connected (affiliated) to artifacts (e.g. family, church, profession, or even the tavern one often frequents). We are interested in the direct connections of individual to collectivities, and consequently in the indirect pairwise connections resulting from these affiliations. Thus, leveraging the graph database, we built temporal two-mode networks to explore the affiliation of the Catholic laypeople (to primary groups such as in a kinship network, and to secondary groups, as their confessional affiliation) and the social mechanisms that lead to changes in their confessional choices. The results show a prevalence of changes as couples or as part of a nuclear family, rather than individually or as part of larger groups (e.g. extended family or sub-communities)

The third and last part of this paper consists of a brief evaluation of our methodology – its advantages and limitations – as well as a reflection on the importance and nature of this interdisciplinary collaboration. We will discuss the main benefits and outcomes of this collaboration, partly by situating them against the backdrop of the existing scholarship on the schism. What are the prerequisites for a successful collaboration and how has it enhanced our knowledge of this schism? Equally important is the discussion of the challenges and possible pitfalls of such a collaboration. For example, ideally the concrete results of this collaboration should support the (different) career tracks of all the scholars involved, which is not always

easy given the still firmly disciplinary structure of academia. Nevertheless, it is the contention of this paper that for this particular project interdisciplinary collaboration was absolutely necessary in order to push the boundaries of our knowledge further.

N.B. The research underpinning this conference paper has been accepted for publication in the peer-reviewed *Journal of Historical Network Analysis* and will be published in 2024.