

Title: Exploration of a large database of French notarial acts with social network methods

Authors: Fabrice Rossi (1), Nathalie Villa-Vialaneix (1) and Florent Hautefeuille (2)

(1) SAMM, EA 4543, Université Paris 1, 75634 Paris - France

(2) TRACES, Université Toulouse 2 (Le Mirail) - France

Abstract:

The use of electronic databases has eased exploration and analysis of large collections of charters, enabling complex prosopographical research. Despite such progress, the systematic exploration of such databases remains complex and time-consuming, especially when the number of documents under study reach one hundred or more. This poster shows how methods used to analyse large interaction networks, such as online social networks, can be applied to help historians to understand large charter or biography databases visually.

The proposed approach is applied to a very large corpus of thousands notarial acts established in the same small geographical area from South West of France, mainly between the XIIIth and the XVth centuries. These documents all are land charters and provide various information such as the transaction dates and types and also the persons directly involved in the transaction. Data mining tools were developed to help the historians decipher the main features of the corpus: a network model was derived from the database and tools developed in the field of social network analysis were used to analyse it. In this network model, entities, that are either persons or transactions, are connected if a person is involved in a given transaction.

Tools developed in the field of social network analysis were used to gain knowledge about the corpus and to identify some possible transcriptional errors. Visualisation methods were also applied to provide an intuitive representation of the corpus, that can be used by historians to explore the network: additional information can be added on the representation, such as dates or main persons' names, giving an insight about the macro-structure of the network derived from the database.