

Tools people use to analyse network:

 Gephi

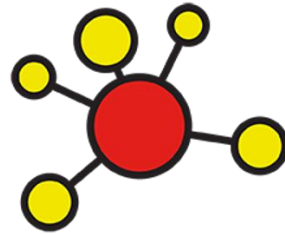


Cytoscape

Visone



NetworkX
Network Analysis in Python

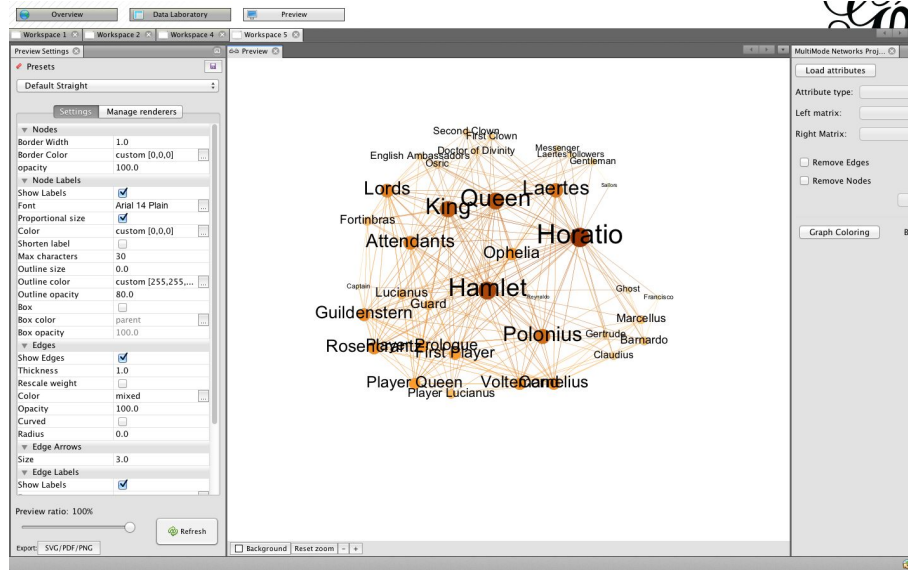


igraph

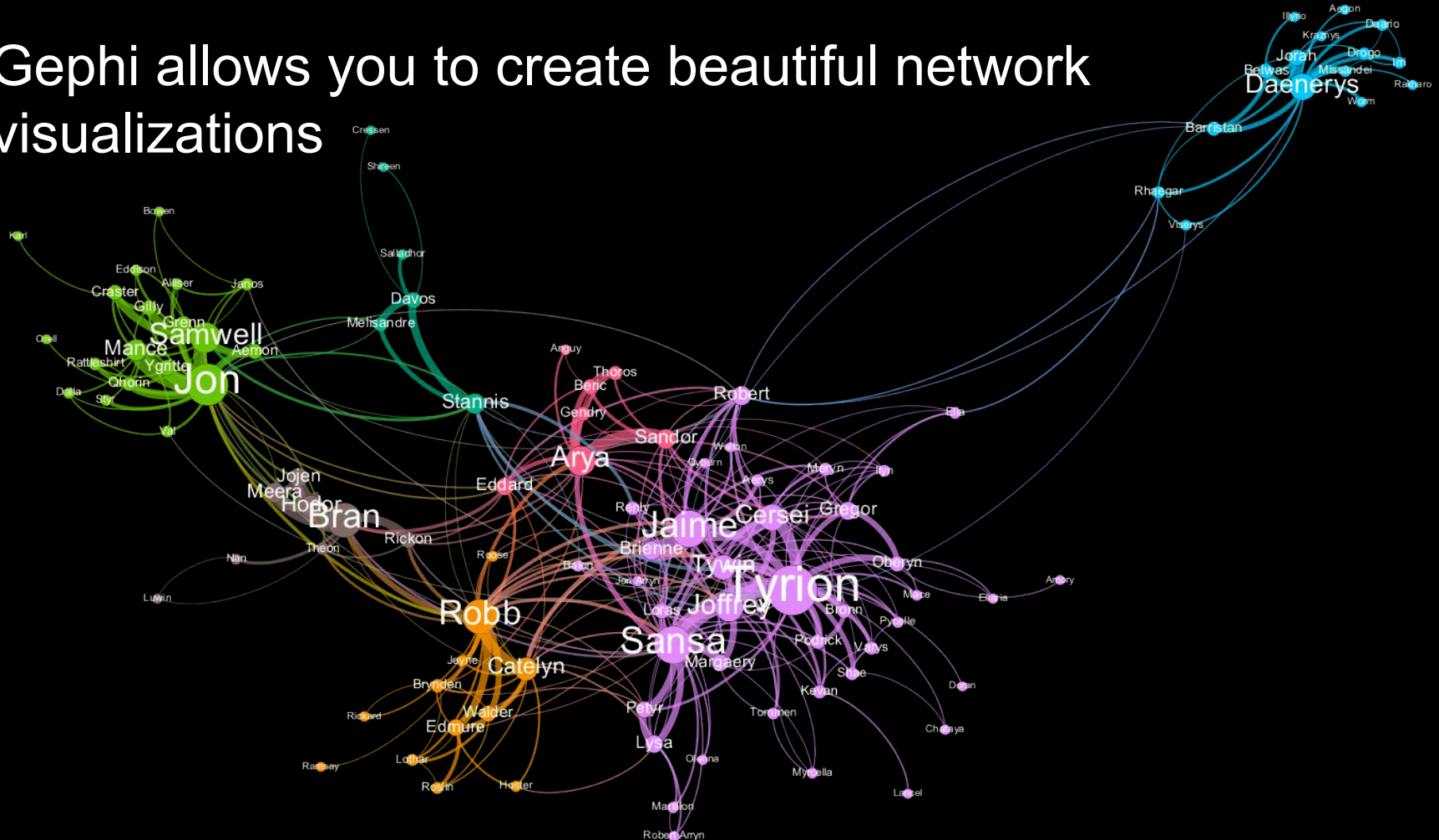
Gephi (gephi.org)

A tool for network visualization and analysis

"like Photoshop but for graph data" (gephi.org)



Gephi allows you to create beautiful network visualizations

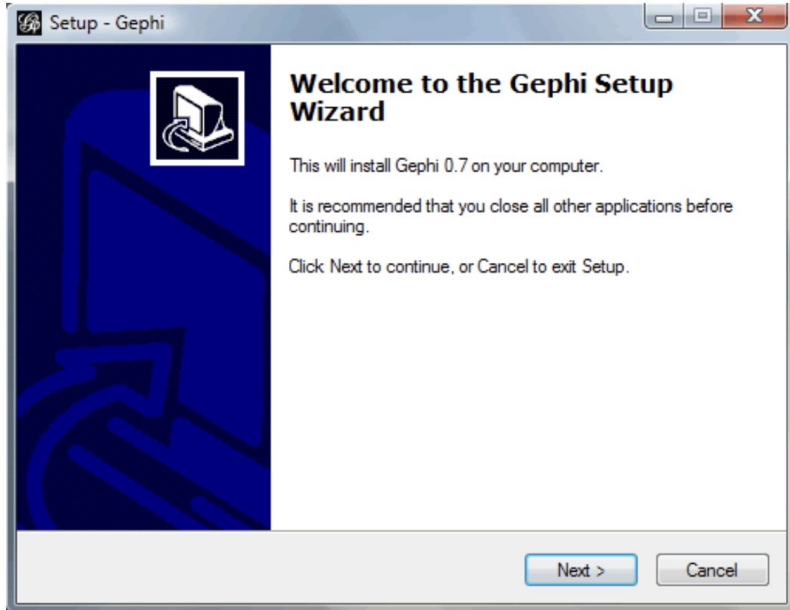


Installing Gephi

gephi.org/users/install

Windows

1. After the download completes, run the installer and follow the steps.



Mac OS X

1. After the download completes, click on the downloaded .dmg file.
2. Drag the gephi application in your Application folder.



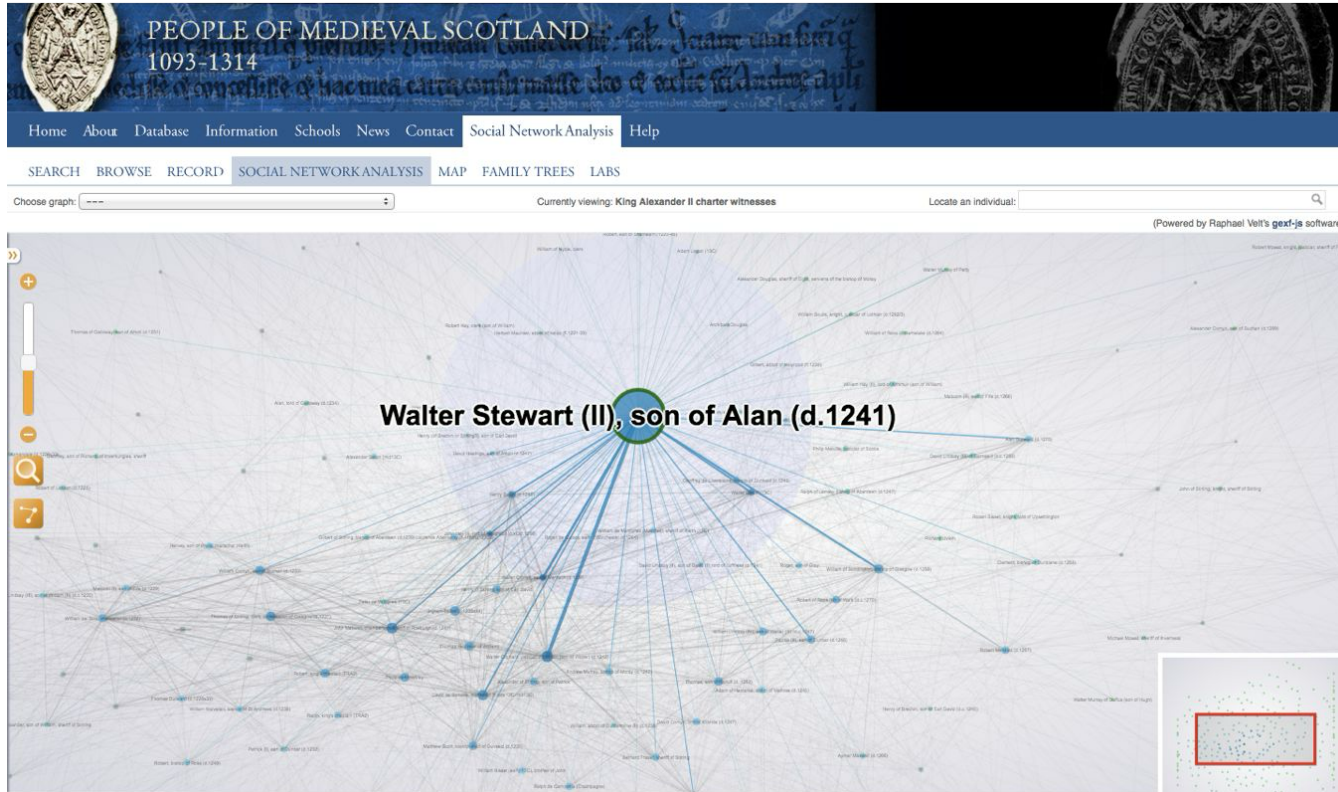
Linux

1. After the download completes, unzip and untar the file in a directory.
2. Run it by executing `./bin/gephi` script file.

Hands-on with Gephi: visualizing a network
following the [instruction](#)

Bonus: visualising a directed network Gephi

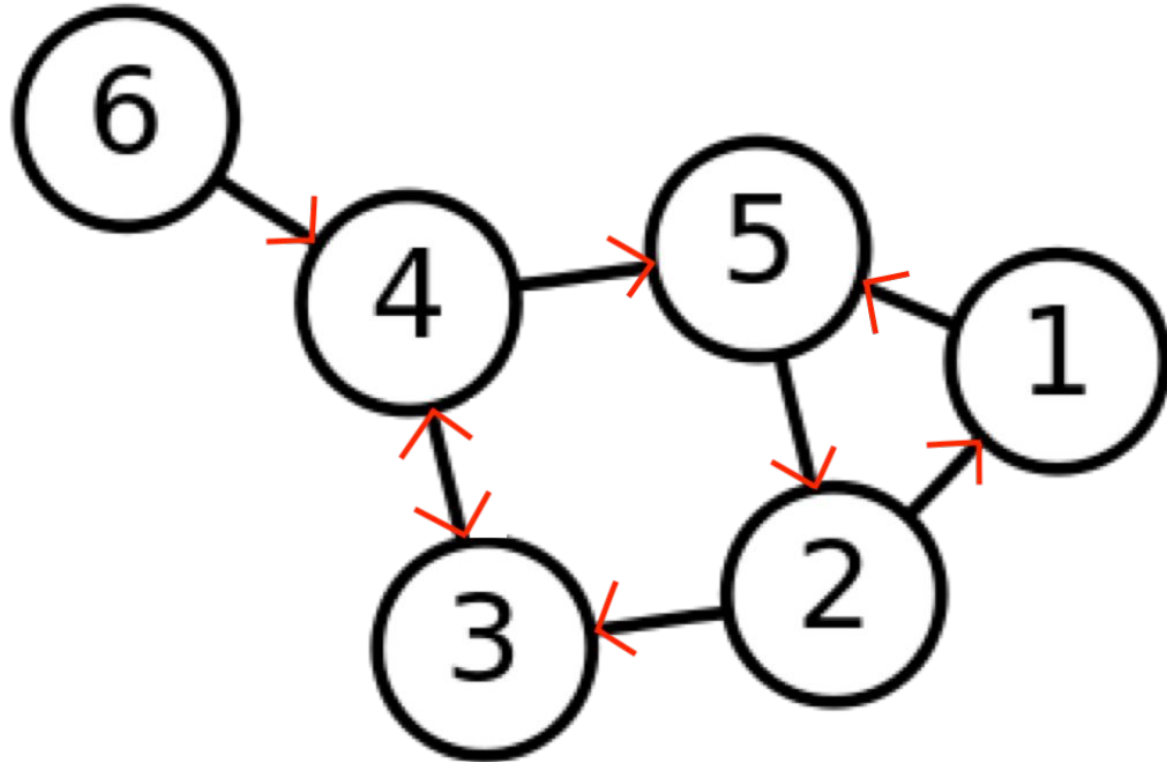
People of Medieval Scotland Project



Directed network data from the POMS project:

- Network ([gexf-file 2 MB](#)) of the so-called grantors and beneficiaries in medieval scotland
- Based on the information about «transactions» (donations, values transfer) of 2225 people or organisational entities (e.g. churches, abbeys) from 4063 Scottish medieval docs:
 - «...explicitly made statements in the medieval sources about connections between individuals».
 - «...case study is based around the factoid type 'transaction'. The study incorporated only
 - transactions from the following document types: charter, charter/brieve, notification, agreement and settlement, because these for the most part contain evidence about dispositive transactions»
 - «There are 5351 transactions drawn from 4063 documents involving 2225 persons and institutions allowing for an average of 2.4 transactions per person»
- Transactions are asymmetrical (i give to you IS NOT EQUAL you give to me), so the network is directed

Directed graph (network)



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Directed network data from the POMS project:

- Transactions have some monetary value 💰💰💰 so the network is weighted
- More [detailed description of these data](#) (chapter in a book about the ‘People of Medieval Scotland’ project):

3 NETWORKS OF GRANTORS & BENEFICIARIES

The three categories of relationship networks examined in chapter two reflected explicitly made statements in the medieval sources about connections between individuals. The following chapters examine social networks produced from other sorts of connections between medieval persons. Chapter three examines the links between grantors and beneficiaries of charters. Most of the documents in the database record gifts, confirmations, sales, and so forth, of land or other property from one person or institution to another. The enactment of these transactions set in train long-standing relationships. The anthropological and sociological literature on gift-giving and the social relationships engendered in gift-giving is vast. It is not the job of social network analysis to speculate on the exact nature of these relationships, rather to allow us access to these networks in ways which were hitherto impossible. While chapter two's analyses were based on the factoid type 'relationship' in the PoMS database, chapter three's case study is based around the factoid type 'transaction'. The study incorporated only transactions from the following document types: charter, charter/brieve, notification, agreement and settlement, because these for the most part contain evidence about dispositive transactions, like gift-giving. The parameters of the study are as follows:

Table 3.1. Grantor and beneficiary study parameters

Number of documents	4063
Number of transactions	5351
Number of people/ institutions	2225
Average transactions per person	2.4