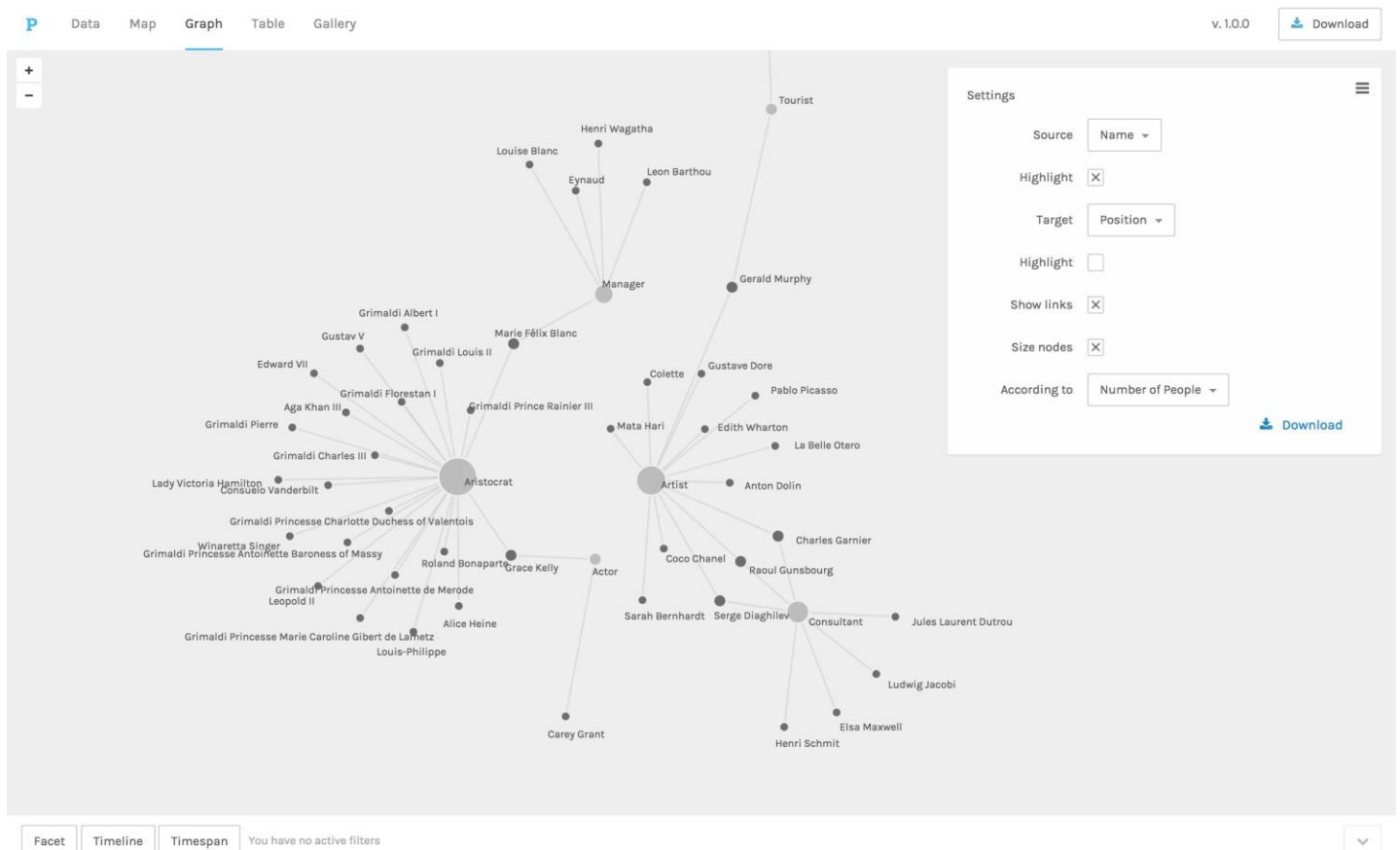# Network Visualisation

Network visualisations are useful for exploring relationships in your data. Networks can be used to explore interactions between characters, common features of different texts, key (central) features in your data, and much more![1]

This workshop will use the web-based visualisation tool ***Palladio***, developed at Stanford University.[2]

Palladio**: http://hdlab.stanford.edu/palladio/**

The network is a visual representation of a graph, where data points (**nodes**) are connected by lines (**links**) that represent their relationship.

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[1] For some interesting examples, check out https://flowingdata.com/category/visualization/network-visualization/
[2] Adapted from: Marten Düring, "From Hermeneutics to Data to Networks: Data Extraction and Network Visualization of Historical Sources," *The Programming Historian* 4 (2017), https://programminghistorian.org/lessons/creating-network-diagrams-from-historical-sources.

Data as a network

When you want to represent your data as a network, you have to identify the attributes you will include as **nodes** and the relationships you want to observe as **links** between your **nodes**.

For example, if you were looking to compare keywords in different texts, the **nodes** in your graph would likely be the **texts** and the **keywords**. If *word_A* is key in *text_A*, there will be a line connecting them. This is your **link.**

Your data table could look like this:

Text	Keyword
Text_A	Cat
Text_A	Bubble
Text_B	Cat
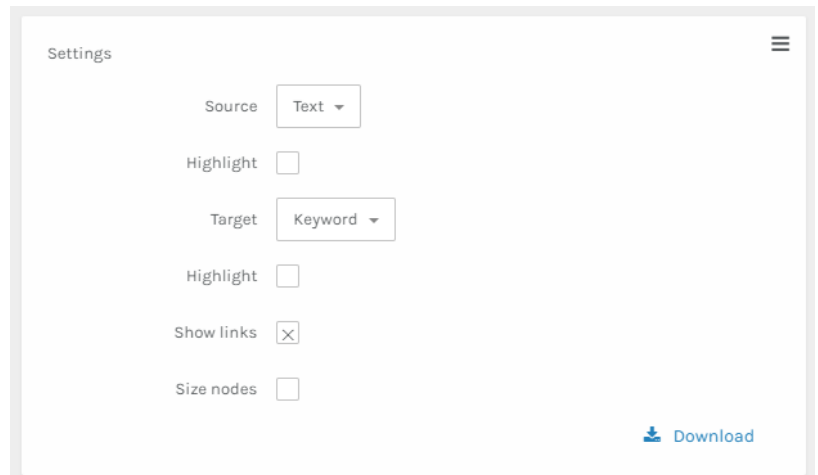
You can paste this table into Palladio, and the program will identify the fields from the table headings.

You will have the option of choosing your **source node** and your target **node** (graph tab).

With these options, your network would look like this:
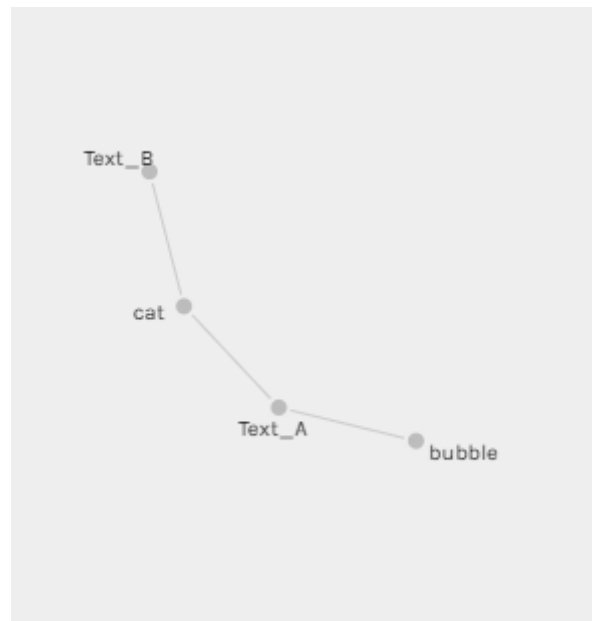
Sample data

To try out a slightly more exciting network, head to the Palladio website and press 'Start'. You will be given the option to import your own data, load a project, or use sample data. Choose 'Try with sample data'.

Spend a bit of time exploring the dataset, and when you are ready, head over to the 'Graph' tab and choose any **source** and **target** from the options available. Experiment with different options.

In addition to the source and target, you can also 'size' the nodes based on a specific parameter. Try this out to see how the networks change.

The next step is visualising your own data as a network!