Nodes and Edges in Literary History.
Modelling 19th Century Literary Landscapes

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Georg Brandes: *Main Currents in 19th century literature* (1872-1890)

FACTS
▶ Georg Brandes' (1842-1927) six-volume work, on modern European literature as well as the development of modern thought. Translated into more than 10 languages.
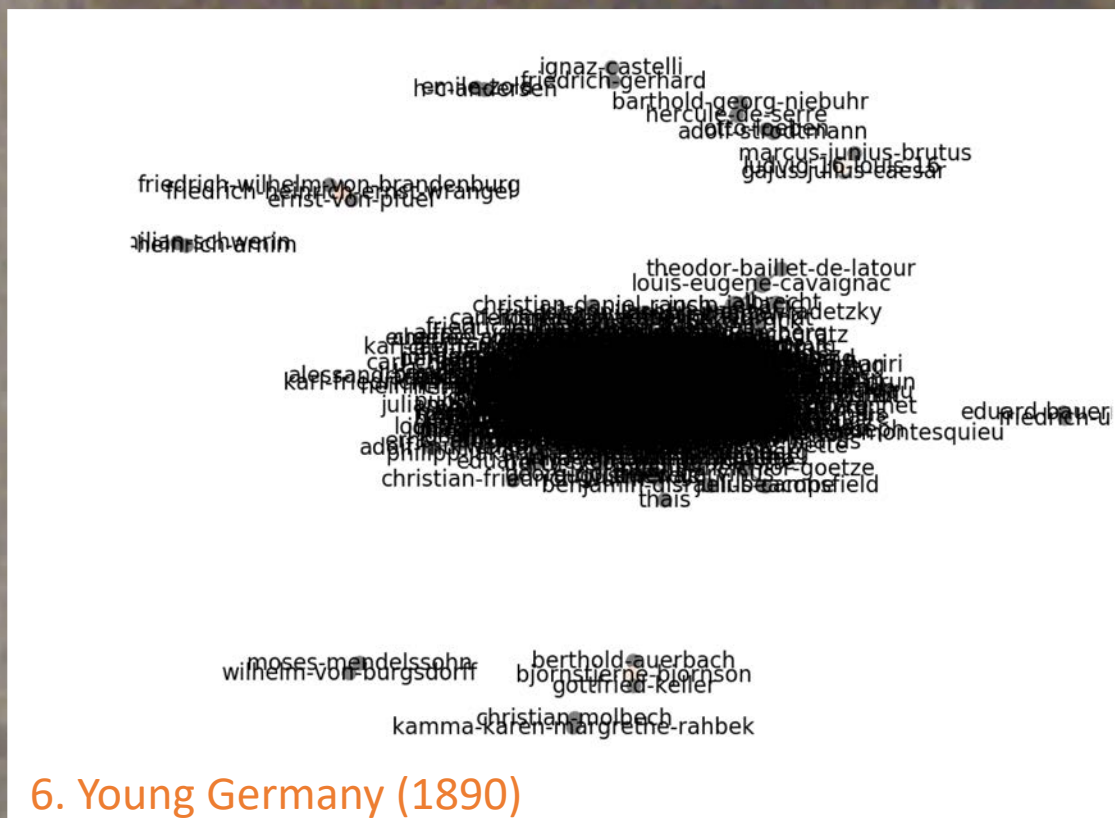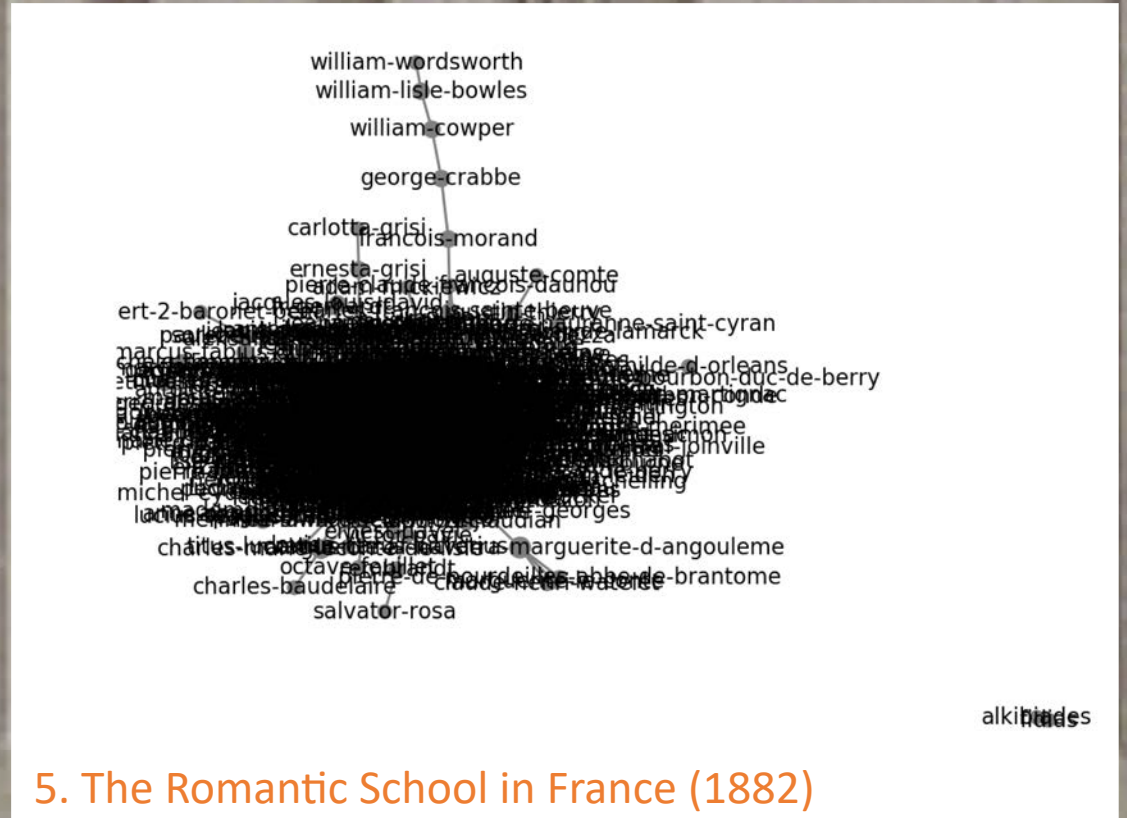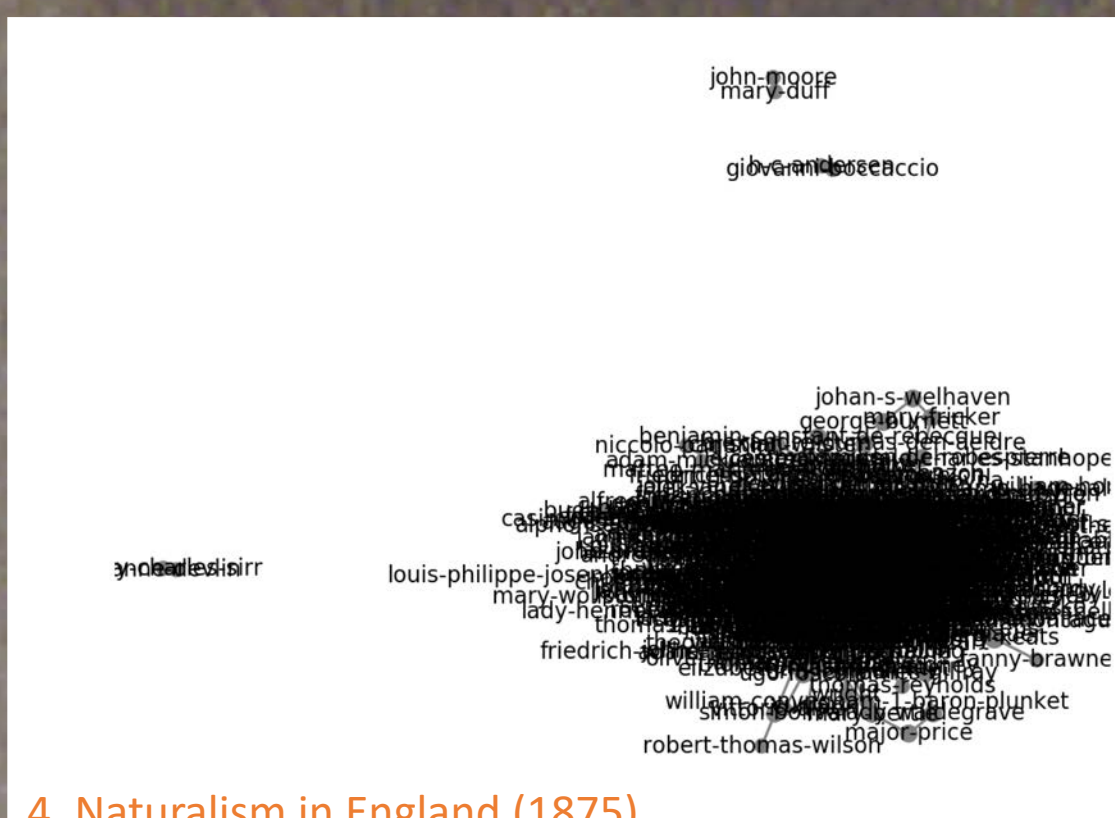
ASSUMPTIONS
▶ *Main Currents* is a literary history, and thereby, also, literature in its own right (Hayden White, Metahistory, 1973), reliant on strategies of narration and emplotment (Brandes himself conceptualized the work as a "drama in six acts", Introduction, 1872)
▶ Modelling through network analysis – previously, with success, used to analyse prose fiction and drama – may provide new insights on the work and its composition
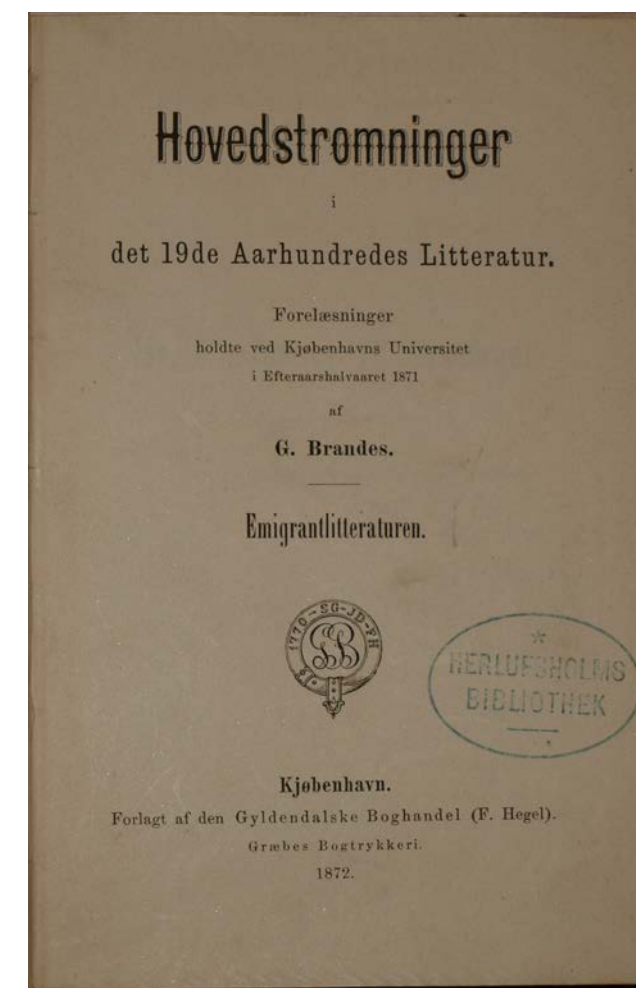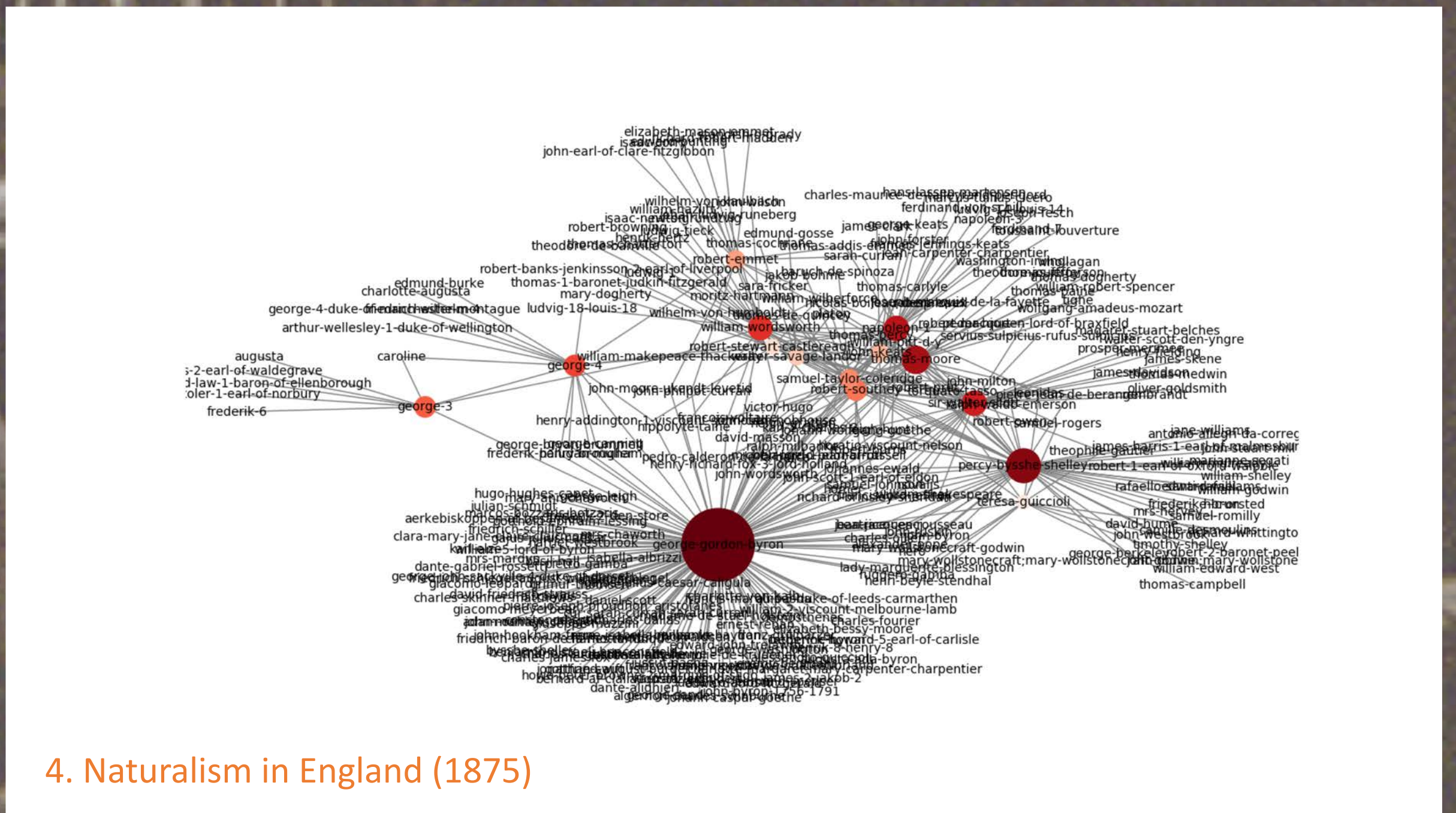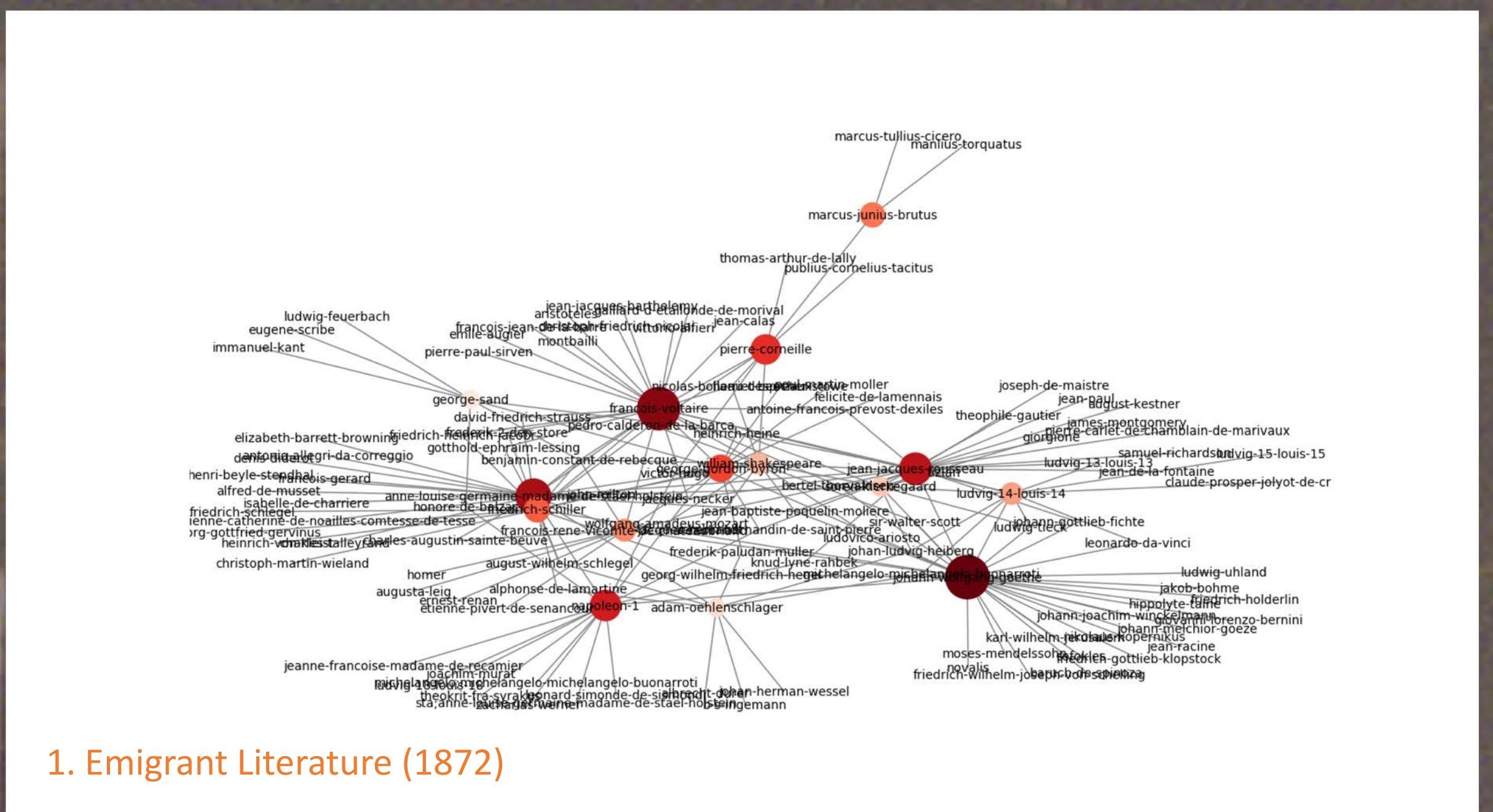
… the bible of the young intellectuals of Europe …
– Thomas Mann

1. Georg Brandes' Hairballs: Composition

1. Emigrant Literature (1872)

2. The Romantic School in Germany (1873)

3. The Reaction in France (1874)

4. Naturalism in England (1875)

5. The Romantic School in France (1882)

6. Young Germany (1890)

OBSERVATIONS (examples)
These are only hairballs, but…
▶ There is a clear difference between the make-up of the earlier and the later volumes reg. person mentions – and networks.
▶ v1 is a coherent *story* dealing with one single network
▶ v6 is an atomistic *history* with detached chapters and networks

2. Modelling Protagonists

1. Emigrant Literature (1872)

4. Naturalism in England (1875)

OBSERVATIONS (examples)
Zooming-in provides further analytical insights
▶ v1 is supposed to deal with the French *literature emigré* ca 1800, BUT the two protagonists are Goethe (German) and Voltaire (dead)
▶ v4: English "Naturalism" is essentially a one-man-show, featuring the now disregarded Lord Byron. Again, Goethe plays a key role.

3. What Betweenness Centrality tells us

Betweenness centrality quantifies the number of times a node acts as a bridge along the shortest path between two other nodes, not how many relations (edges) a node has.
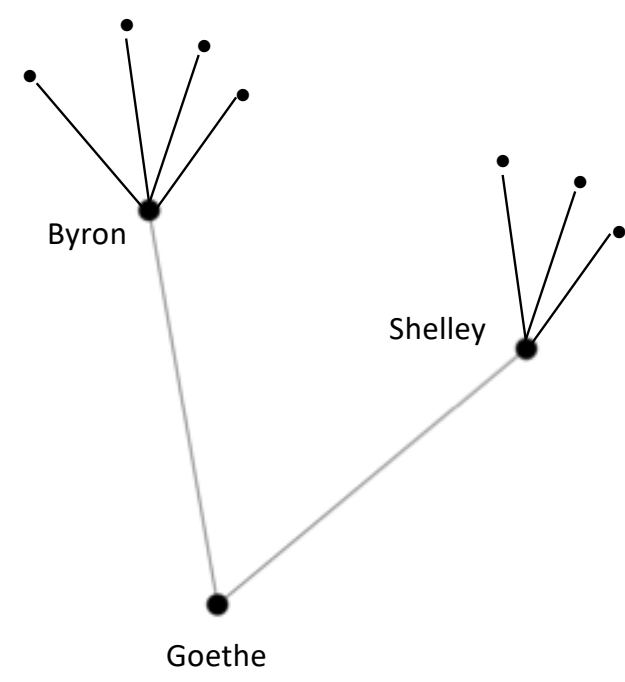
OBSERVATION (example)
▶ Was Napoleon 1 an English author? He is 4th most central character in Vol. 4 on English romanticism (25 mentions), trailing only Byron (533), Shelley (179) and Moore (125). But Napoleon, and other rulers of the time, are integral to Brandes' contextualisation of literature.

Vol. 4. Naturalism in England
1. george-gordon-byron (0.69)
2. percy-bysshe-shelley (0.15)
3. thomas-moore (0.10)
4. *napoleon-1 (0.08)*
5. sir-walter-scott (0.08)
6. william-wordsworth (0.07)

WHAT WE DID
▶ All proper names in Brandes' texts were tagged by philologists (below, left), primarily in order to prepare the apparatus for the digital edition (below right)
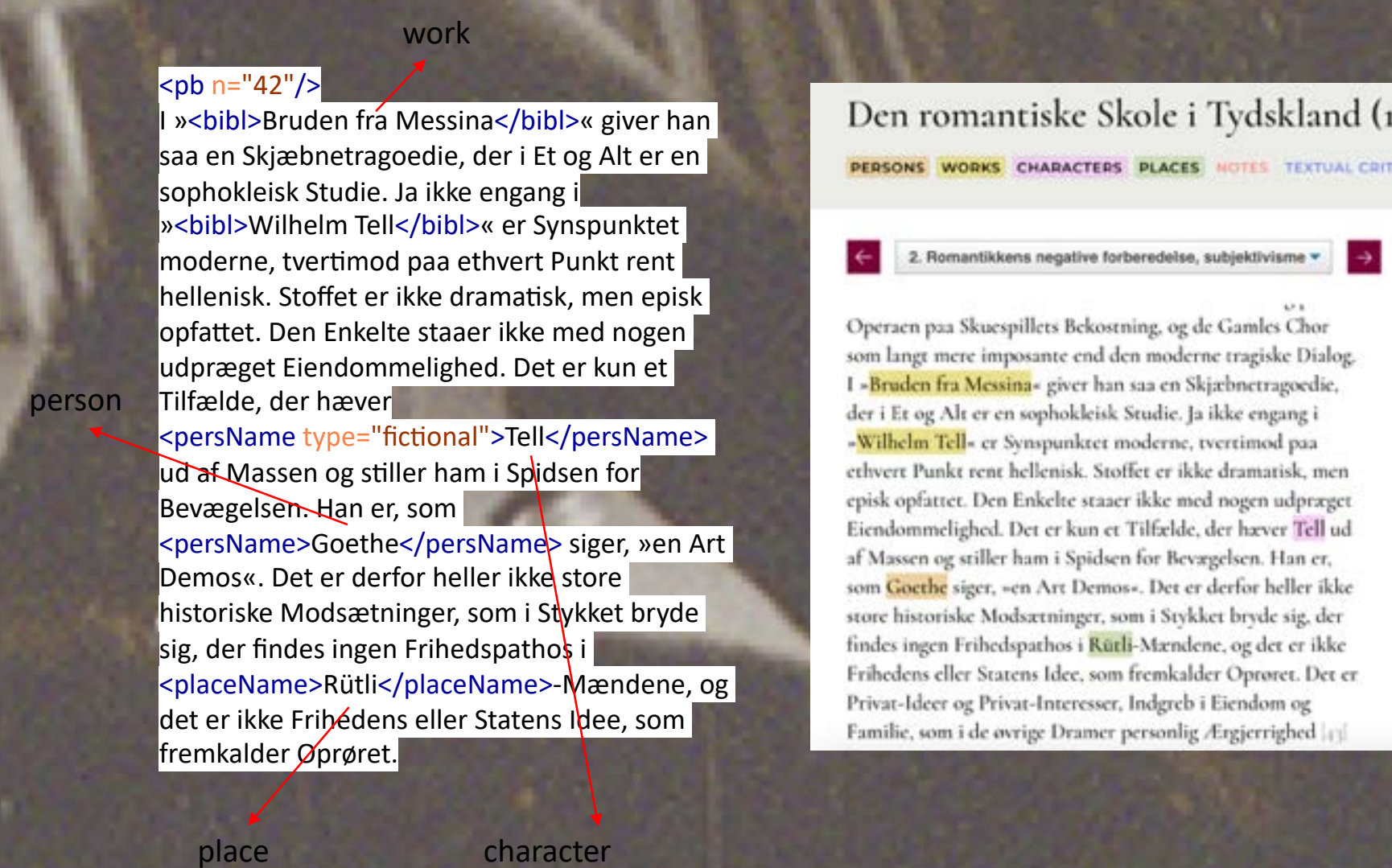
▶ For this experiment we define nodes as characters, and edges as characters mentioned together: Each time two characters are mentioned in the same paragraph we establish an edge between them. If character A, B and C are mentioned together, we establish edges between A-B, A-C and B-C. The more time two characters are mentioned together, the stronger the edge (weight).
▶ We wrote a Python script to collect the nodes and edges, using the manually annotated characters in order to ensure that mentions of e.g. "Byron", "Lord Byron" and "Geordie" all are interpreted as the same character, and "Lady Byron" as a different one.
▶ The data, including the manually annotations, are open source and available from our github repository: github.com/dsldk/brandes_xml

ABOUT THE PROJECT
▶ The data was curated and marked up in the process of establishing a new critical edition of *Main Currents*
▶ Explore Texts, Tools and Research at: www.georgbrandes.dk