



GÖTEBORGS
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Språk-
BANKEN

TEI graphing

Overview

The EXPath app

Final Comments

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- ▶ TEI graphing
- ▶ EXPath app package



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Acknowledgements

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Text Encoding Initiative (TEI)

- ▶ Defacto standard for text encoding in the Humanities
- ▶ Modules
- ▶ Using XML Schema

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Goals of Dramawebben

- ▶ The project includes a baselined corpus of TEI drama annotated plays
- ▶ Development of exploration and visualization tools
- ▶ Engaging a vibrant community
- ▶ Educate students in TEI encoding and let them be ambassadors spreading the word
- ▶ Target disciplines within the humanities, such as linguistics, literary and theater history, studies in children's culture, practical and theoretical research in children's theater, and arts tertiary institutions.

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The context

- ▶ The baseline encoding covers the basic structure of the drama text.
- ▶ On top of that, it is possible to add semantic annotation, which goes beyond the text itself, referring to the action below, behind or beyond the actual words.

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The context (continued)

- ▶ All plays on Dramawebben printed 1880-1900 were selected. It included 89 plays in all genres, children's plays, drama and comedy, plays by female as well as by male dramatists.
- ▶ To tempt scholars in humanities with semantic encoding, we have started with one theme–textile handicraft, which was a recurrent feature of the plays by female playwrights of the 1880's.

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Where does the graphing fit?

► Relations

We combine parts of namesdates module, like `<listPerson>` and `<listOrg>` with relations in `<listRelation>` elements to create graphs of relations between persons (cast and non-cast) or interaction on stage (cast only) sociograms.

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Personal relations

- ▶ Personal relations are coded by hand.
- ▶ Every <person> shall have at least one <relation> referencing it.
- ▶ Organisations can also be part of these relations.
- ▶ To differentiate between persons and organisations in the graphs we make the <person> nodes elliptic and the <org> ones rectangular.
- ▶ Cast persons have a solid node outline while non-cast persons have a dashed outline.

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Personal relations (continued)

- ▶ We have followed the default of three <relation> @type values "personal", "social", and "other".
- ▶ These are represented by dashed, solid, and dotted edges respectively.

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Sociograms

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- ▶ Sociograms are created dynamically and can be created based on any criteria of what constitutes interaction.
- ▶ These can also be weighted by giving a numeric value to the @sortKey attribute of the <relation> element.
- ▶ Of course you can also create other types of graphs based on dynamic data.

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Show personal relations



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Sociograms (continued)

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- ▶ By looking at the previous graph you get a clear impression that Adolf is the central person based on the number of relations.



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Show sociogram



Sociograms (continued)

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- ▶ In the sociogram Adolf seems to be more peripheral, with Laura his wife being in the center of interaction.



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Backend

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- ▶ uses jung2 and batik
- ▶ svg and graphml output
- ▶ show example in README.md



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- ▶ Keep it simple
- ▶ Iterate and baseline
- ▶ Modularise
- ▶