

TEI-SIG Graph Technologies

Andreas Kuczera, Academy of Sciences and Literature | Mainz
andreas.kuczera@adwmainz.de

I would like to introduce a TEI-SIG for Graph Technologies.

As TEI is not a format, though many people think it is. It's a de facto standard that specifies Guidelines for document interchange. Actually the Guidelines are based on the XML but this is only one possible technical way of expressing the phenomenon.

The aim of the Graph-SIG is to find a way of expressing the language phenomenon of the TEI in Graphs.

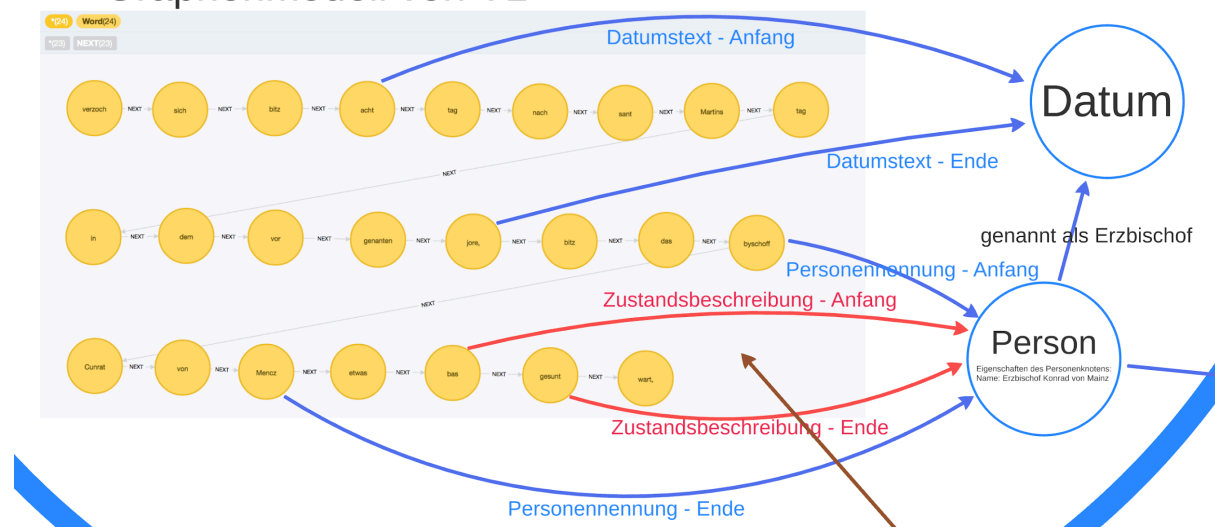
Here you have an example of an TEI-encoded document from a project proposal (prezi-link: <https://prezi.com/uijihw5d5-rd/graphbasierte-digitale-editionen/>):

XML-Transkription von V1

```
tilgen.<lb />vnd das verzoch sich bitz <date when="1429-11-18"><date dur="P8D"
  >acht<lb />tag</date>
<offset>nach</offset>
<date when="1429-11-04" type="holyDayOfObligation">sant Martins tag<lb />in
  dem vor genanten jore</date></date>,<lb />bitz das <persName
  ref="http://d-nb.info/gnd/137346204"><roleName type="nobility"
  subtype="archbishopElector" xml:id="roleNameErsterTeil"
  next="roleNameZweiterTeil">byschoff</roleName>
<forename>Cunrat</forename><lb /><roleName type="nobility"
  subtype="archbishopElector" xml:id="roleNameZweiterTeil"
  prev="roleNameErsterTeil"><nameLink type="roleNameLink">von</nameLink>
<placeName ref="http://www.geonames.org/2874225/"
  >Mencz</placeName></roleName></persName> etwas bas gesunt<lb />wart,
```

The same part modelled in a graph cloud look like this:

Graphenmodell von V1



The main goals of the graph model are:

1. In the graph you can use multi-hierarchical annotations layers. To get the same flexibility in XML you must use technical tricks as XML is “hierarchical by design”.
2. Graph models are very easy to read and understand. So DH-People and “normal” scientists have a level of discussion in common.
3. A Graph can be expressed as RDF so the step from a Graph to linked open data is easy to make.

The main goal of the TEI-Graph-SIG is to model the textual phenomenons of the TEI in a Graph and to develop routines to import TEI-encoded XML-files into graph databases.