### Linking in the TEI

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Digital Editing



### What is the concept of 'linking' in the TEI?

- Linking is a way of representing non-linear and/or non-hierarchical structures in the TEI (see TEI Guidelines 17).
- XML is an extremely flexible language, except for the fact that its elements must nest neatly inside of each other; when rendering texts in XML, this nesting structure translates as a hierarchical one, but not all texts behave that way.
- Linking is a way to circumvent the constraints that XML imposes on the digital representation of texts.

### Linking is good for ...

- Useful for dealing with non-hierarchical structures.
  - Can indicate when separate structures should be understood as being one structure – a.k.a. aggregation.
- Useful for discourse analysis that focuses anaphoric structures.
- Useful for texts that correspond to one another in some way.
  - Translations.
  - Footnotes.
  - Hypertext.

### Linking and Translation

## What does it look like? Separate documents

#### **Translation**

```
<div type="narrative">
   <ab type="translation unit" n="1">
       <1 xml:id="I.1.1">The batalis and the man I wil discrive </l>
       <1 xml:id="I.1.2">Fra Troyis boundis first that fugitive </l>
       <1 xml:id="I.1.3">By fait to Ytail come and cost Lavyne , </l>
       <1 xml:id="I,1.4">Our land and sey katchit with mekil pyne </1>
   </ab>
   <ab type="translation unit" n="2">
       <1 xml:id="I.1.5">By forss of goddis abufe , from every steid , </1>
       <1 xml:id="I.1.6">Of cruell Juno throu ald remembrit fede . </l>
   </ab>
   <ab type="translation unit" n="3">
       <1 xml:id="I.1.7">Gret pane in batail sufferit he alsso </l>
       <1 xml:id="I.1.8">Or he his goddis brocht in Latio </1>
       <1 xml:id="I.1.9">And belt the cite fra quham , of nobill fame , </1>
       <1 xml:id="I.1.10">The Latyne pepill takyn heth thar name , </1>
   </ab>
   <ab type="translation unit" n="4">
       <1 xml:id="I.1.11">And eik the faderis , princis of Alba , </1>
       <1 xml:id="I.1.12">Cam , and the wallaris of gret Rome alswa . </l>
   </ab>
</div>
```

#### Source

```
<div type="narrative">
    <ab type-"translation unit" n="1">
       <1 xml:id="I.1">Arma virumque cano troiae qui primus ab oris </1>
       <l xml:id="I.2">Italiam fato profugus lauiniaque venit </l>
       <1 xml:!d="I.3">Litora : multum ille et terris iactatus et alto </l>
    </ab>
    <ab type="translation unit" n="2">
        <1 xml:id="I.4">Vi superum saeuae memorem iunonis ob iram : </l>
    </ab>
    <ab type="translation unit" n="3">
       <1 xml:id="I.5">Multa quoque et bello passus : dum conderet vrbem : </l>
       <1 xml:id-"I.6">inferretque deos latio : genus unde latinum : </1>
    </ab>
    <ab type="translation unit" n="4">
        <1 xml:id="I.7">Albanique patres atque altae moenia romae . </l>
    </ab>
</div>
```

# What does it look like? Corresp method

```
<div type="book" n="1" xml:id="A.I">
   <ab type="translation unit" xml:id="A.I.1" corresp="#E.I.1">
        <1 xml:id="I.1">Arma virumque cano troiae qui primus ab oris </l>
       <1 xml:id="I.2">Italiam fato profugus lauiniaque venit </l>
        <1 xml:id="I.3">Litora : multum ille et terris iactatus et alto </l>
    </ab>
    <ab type="translation unit" xml:id="A.I.2" corresp="#E.I.2">
        <1 xml:id="I.4">Vi superum saeuae memorem iunonis ob iram : </l>
    </ab>
    <ab type="translation unit" xml:id="A.I.3" corresp="#E.I.3">
       <1 xml:id="I.5">Multa quoque et bello passus : dum conderet vrbem : </l>
       <1 xml:id="I.6">inferretque deos latio : genus unde latinum : </l>
    </ab>
    <ab type="translation unit" xml:id="A.I.4" corresp="#E.I.4">
       <1 xml:id="I.7">Albanique patres atque altae moenia romae . </l>
    </ab>
</div>
<div type="book" n="1" xml:id="E.I">
    <ab type="translation unit" xml:id="E.I.1" corresp="#A.I.1">
        <1 xml:id="I.1.1">The batalis and the man I wil discrive </l>
       <1 xml:id="I.1.2">Fra Troyis boundis first that fugitive </1>
        <1 xml:id="I.1.3">By fait to Ytail come and cost Lavyne , </l>
       <1 xml:id="I.1.4">Our land and sey katchit with mekil pyne </l>
    </ab>
    <ab type="translation_unit" xml:id="E.I.2" corresp="#A.I.2">
       <1 xml:id="I.1.5">By forss of goddis abufe , from euery steid , </l>
        <1 xml:id="I.1.6">Of cruell Iuno throu ald remembrit fede . </l>
    </ab>
   <ab type="translation unit" xml:id="E.I.3" corresp="#A.I.3">
       <l xml:id="I.1.7">Gret pane in batail sufferit he alsso </l>
       <l xml:id="I.1.8">Or he his goddis brocht in Latio </l>
       <1 xml:id="I.1.9">And belt the cite fra quham , of nobill fame , </l>
       <1 xml:id="I.1.10">The Latyne pepill takyn heth thar name , </1>
    </ab>
    <ab type="translation unit" xml:id="E.I.4" corresp="#A.I.4">
       <1 xml:id="I.1.11">And eik the faderis , princis of Alba , </l>
       <1 xml:id="I.1.12">Cam , and the wallaris of gret Rome alswa . </1>
    </ab>
</div>
```

# What does it look like? Link groups

```
<div type="book" n="1" xml:id="A.I">
    <ab type="translation unit" xml:id="A.I.1">
        <1 xml:id="I.1">Arma virumque cano troiae qui primus ab oris </l>
        <1 xml:id="I.2">Italiam fato profugus lauiniague venit </l>
        <1 xml:id="I.3">Litora : multum ille et terris iactatus et alto </l>
    </ab>
    <ab type="translation unit" xml:id="A.I.2">
        <1 xml:id="I.4">Vi superum saeuae memorem iunonis ob iram : </l>
    </ab>
</div>
<div type="book" n="1" xml:id="E.I">
   <ab type="translation unit" xml:id="E.I.1">
        <1 xml:id="I.1.1">The batalis and the man I wil discrive </l>
        <1 xml:id="I.1.2">Fra Troyis boundis first that fugitive </l>
        <1 xml:id="I.1.3">By fait to Ytail come and cost Lavyne , </l>
        <1 xml:id="I.1.4">Our land and sey katchit with mekil pyne </1>
    </ab>
   <ab type="translation unit" xml:id="E.I.2">
        <1 xml:id="I.1.5">By forss of goddis abufe , from euery steid , </l>
        <1 xml:id="I.1.6">Of cruell Iuno throu ald remembrit fede . </l>
</div>
<linkGrp type="alignment" domains="#A.I #E.I">
   <link target="#A.I.1 #E.I.1"/>
   <link target="#A.I.2 #E.I.2"/>
```

### Linking and Aggregation

## What does it look like? Shared ID numbers

```
<div type="narrative">
    <ab type="translation unit" n="21">
        <l xml:id="I.1.68">Ontill hir self thus spak in propir teyn : </l>
    </ab>
    <said direct="true" speaker="Juno" gender="female" mortality="god" nation="none">
        <ab type="translation unit" n="21">
            <l xml:id="I.1.69">' Is this ganand that I my purposs faill </l>
            <l xml:id="I.1.70">As clene ourcum , and may nocht from Itaill </l>
            <l xml:id="I.1.71">Withhald this kyng of Troy and hys navy ? </l>
        </ab>
    </said>
</div>
```

### What does it look like? Next and Prev

```
<div type="narrative">
    <ab type="translation unit" xml:id="E.I.21" next="#E.I.22">
        <1 xml:id="I.1.68">Ontill hir self thus spak in propir teyn : </l>
    </ab>
    <said direct="true" speaker="Juno" gender="female" mortality="god" nation="none">
        <ab type="translation unit" xml:id="E.I.22" prev="#E.I.21">
            <l xml:id="I.1.69">' Is this ganand that I my purposs faill </l>
            <l xml:id="I.1.70">As clene ourcum , and may nocht from Itaill </l>
            <l xml:id="I.1.71">Withhald this kyng of Troy and hys navy ? </l>
        </ab>
    </said>
</div>
```

### What does it look like? Join method

```
<div type="narrative">
    <ab type="translation unit" xml:id="E.I.21">
        <l xml:id="I.1.68">Ontill hir self thus spak in propir teyn : </l>
    </ab>
    <said direct="true" speaker="Juno" gender="female" mortality="god" nation="none">
        <ab type="translation unit" xml:id="E.I.22">
            <l xml:id="I.1.69">' Is this ganand that I my purposs faill </l>
            <l xml:id="I.1.70">As clene ourcum , and may nocht from Itaill </l>
            <l xml:id="I.1.71">Withhald this kyng of Troy and hys navy ? </l>
        </ab>
    </said>
</div>
<join target="#E.I.21 #E.1.22" result="ab"/>
```