

TEI Header and Metadata

TEI@Oxford

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The TEI Header

The TEI header was designed with two goals in mind

- needs of bibliographers and librarians trying to document 'electronic books'
- needs of text analysts trying to document 'coding practices' within digital resources

The result is that discussion of the header tends to be pulled in two directions...

The Librarian's Header

- Conforms to standard bibliographic model, using similar terminology
- Organized as a single source of information for bibliographic description of a digital resource, with established mappings to other such records (e.g. MARC)
- Emerging code of best practice in its use, endorsed by major digital collections
- Pressure for greater and more exact constraints to improve precision of description: preference for structured data over loose prose

Everyman's Header

- Gives a polite nod to common bibliographic practice, but has a far wider scope
- Supports a (potentially) huge range of very miscellaneous information, organized in fairly ad hoc ways
- Many different codes of practice in different user communities
- Unpredictable combinations of narrowly encoded documentation systems and loose prose descriptions

TEI Header Structure

The TEI header has four main components:

- `<fileDesc>` (file description) contains a full bibliographic description of an electronic file.
- `<encodingDesc>` (encoding description) documents the relationship between an electronic text and the source or sources from which it was derived.
- `<revisionDesc>` (revision description) summarizes the revision history for a file.
- `<profileDesc>` (text-profile description) provides a detailed description of non-bibliographic aspects of a text, specifically the languages and sublanguages used, the situation in which it was produced, the participants and their setting. (just about everything not covered in the other header elements)

Only `<fileDesc>` is required; the others are optional.

Example Header: Minimal required header

```
<teiHeader>
  <fileDesc>
    <titleStmt>
      <title>A title?</title>
    </titleStmt>
    <publicationStmt>
      <p>Who published?</p>
    </publicationStmt>
    <sourceDesc>
      <p>Where from?</p>
    </sourceDesc>
  </fileDesc>
</teiHeader>
```

The TEI supports two 'levels' or types of header

- *corpus level* metadata sets default properties for everything in a corpus
- *text level* metadata sets specific properties for one component text of a corpus

```
<teiCorpus>
<teiHeader type="corpus">
<!-- corpus-level metadata here -->
</teiHeader>
<TEI>
<teiHeader type="text">
<!-- metadata specific to this text here -->
</teiHeader>
<text>
<!-- ... -->
</text>
</TEI>
<TEI>
<teiHeader type="text">
<!-- metadata specific to this text here -->
</teiHeader>
<text>
<!-- ... -->
</text>
```

Types of content in the TEI header

- free prose
 - prose description: series of paragraphs
 - phrase: character data, interspersed with phrase-level elements, but not paragraphs
- grouping elements: specialised elements recording some structured information
- declarations: Elements whose names end with the suffix Decl (e.g. subjectDecl, refsDecl) enclose information about specific encoding practices applied in the electronic text.
- descriptions: Elements whose names end with the suffix Desc (e.g. <settingDesc>, <projectDesc>) contain a prose description, possibly, but not necessarily, organised under some specific headings by suggested sub-elements.

File Description

- has some mandatory parts:
 - `<titleStmt>`: provides a title for the resource and any associated statements of responsibility
 - `<sourceDesc>`: documents the sources from which the encoded text derives (if any)
 - `<publicationStmt>`: documents how the encoded text is published or distributed
- and some optional ones:
 - `<editionStmt>`: yes, electronic texts have editions too
 - `<seriesStmt>`: and they also fit into "series".
 - `<extent>`: how many floppy disks, gigabits, files?
 - `<notesStmt>`: notes of various types

NB A "file" may actually correspond with several operating system files.

The File Description

- `<titleStmt>`: contains a mandatory `<title>` which identifies the electronic file (not its source!)
- optionally followed by additional titles, and by 'statements of responsibility', as appropriate, using `<author>`, `<editor>`, `<sponsor>`, `<funder>`, `<principal>` or the generic `<respStmt>`
- `<publicationStmt>`: may contain
 - plain text (e.g. to say the text is unpublished)
 - one or more `<publisher>`, `<distributor>`, `<authority>`, each followed by `<pubPlace>`, `<address>`, `<availability>`, `<idno>`

<fileDesc> components

```
<fileDesc>
  <titleStmt>
<!-- ... -->
  </titleStmt>
  <editionStmt>
<!-- ... -->
  </editionStmt>
  <extent>
<!-- ... -->
  </extent>
  <publicationStmt>
<!-- ... -->
  </publicationStmt>
  <seriesStmt>
<!-- ... -->
  </seriesStmt>
  <notesStmt>
<!-- ... -->
  </notesStmt>
  <sourceDesc>
<!-- ... -->
  </sourceDesc>
</fileDesc>
```

A minimal <fileDesc>

```
<fileDesc>
  <titleStmt>
    <title>Punch, or the London Charivari: an electronic edition</title>
    <respStmt>
      <resp>TEI version</resp>
      <name>TEI@Oxford team</name>
    </respStmt>
  </titleStmt>
  <publicationStmt>
    <p>Unpublished</p>
  </publicationStmt>
  <sourceDesc>
    <p>Recoded from the Project Gutenberg
      versions</p>
  </sourceDesc>
</fileDesc>
```

Title- and Responsibility- statements...

There may be many of them:

```
<title>Artamene</title>  
<title type="alt">Le Grand Cyrus</title>  
<title type="sub">Digital Edition</title>
```

Amongst the guilty parties:

```
<author>Scudery, Madeleine de</author>  
<principal>Geffin, Alexandre</principal>  
<funder>Fonds Nationale Suisse de la  
Recherche Scientifique</funder>  
<respStmt>  
  <resp>Encoding check</resp>  
  <name>Jean Untel</name>  
</respStmt>
```

<titleStmt> example (1)

```
<titleStmt>
  <title>Two stories by Edgar Allen Poe: electronic version</title>
  <author>Poe, Edgar Allen (1809-1849)</author>
  <respStmt>
    <resp>compiled by</resp>
    <name>James D. Benson</name>
  </respStmt>
</titleStmt>
```

<titleStmt> example (2)

```
<titleStmt>
  <title>Yogadarśanam (arthāt
    yogasūtrapūphah):
    a digital edition.</title>
  <title>The Yogasūtras of Patañjali:
    a digital edition.</title>
  <funder>Wellcome Institute for the History of Medicine</funder>
  <principal>Dominik Wujastyk</principal>
  <respStmt>
    <name>Wieslaw Mical</name>
    <resp>data entry and proof correction</resp>
  </respStmt>
  <respStmt>
    <name>Jan Hajic</name>
    <resp>conversion to TEI-conformant markup</resp>
  </respStmt>
</titleStmt>
```

<publicationStmt> example

```
<publicationStmt>  
  <publisher>TEI Consortium</publisher>  
  <distributor>Oxford Text Archive</distributor>  
  <idno type="ota">1256</idno>  
  <availability>  
    <p>Available under the terms of a Creative Commons  
      Attribution and Share Alike licence.</p>  
  </availability>  
</publicationStmt>
```


<publicationStmt> example

```
<publicationStmt>
  <publisher>Sigma Press</publisher>
  <address>
    <addrLine>21 High Street,</addrLine>
    <addrLine>Wilmslow,</addrLine>
    <addrLine>Cheshire M24 3DF</addrLine>
  </address>
  <date>1991</date>
  <distributor>Oxford Text Archive</distributor>
  <idno type="ota">1256</idno>
  <availability>
    <p>Available with prior consent of depositor for
      purposes of academic research and teaching only.</p>
  </availability>
</publicationStmt>
```

<notesStmt> example

<notesStmt> can contain notes on almost any aspect:

```
<notesStmt>  
  <note>Material prepared for the TEI@Oxford Summer School.</note>  
</notesStmt>
```

The Source Description

Few electronic texts are original 'born digital' works: their source/s therefore need to be described using traditional bibliographic practice

- prose description
- `<bibl>` : contains free text or any picture of bibliographic elements such as `<author>`, `<publisher>` etc.
- `<biblStruct>` contains effectively the same elements but constrained in various ways according to bibliographic standards
- `<biblFull>` special-cases texts which were born TEI by replicating an embedded `<fileDesc>`
- A `<listBibl>` may be used for lists of such descriptions
- Specialised elements are available for spoken texts (`<recordingStmt>` etc.) and for manuscripts or other text-bearing objects (`<msDesc>`)
- Authority lists for e.g people (`<listPerson>`) or places (`<listPlace>`) can be included.

<sourceDesc> examples (1)

```
<sourceDesc>
  <p>Born digital.</p>
</sourceDesc>
```

```
<sourceDesc>
  <bibl>
    <title level="a">Enigma</title>, <title level="j">Punch: or the London Charivari</title>,
    <date when="1914-07-01">July 1, 1914</date>, 147, p. 6</bibl>
  </sourceDesc>
```

<bibl> vs. <biblStruct> Example

```
<bibl>
  <title level="a">Enigma</title>, in <title level="j">Punch: or the London
    Charivari</title> (July 1, 1914), vol 147, pp. 1-20
</bibl>
```

```
<biblStruct>
  <analytic>
    <title level="a">Enigma</title>
  </analytic>
  <monogr>
    <title level="j">Punch: or the London Charivari</title>
    <imprint>
      <pubPlace>London</pubPlace>
      <date when="1914-07-01">July 1, 1914</date>
      <biblScope type="vol">147</biblScope>
      <biblScope type="pp">1-20</biblScope>
    </imprint>
  </monogr>
</biblStruct>
```

<sourceDesc> example (2)

```
<sourceDesc>
  <biblStruct xml:lang="fr">
    <monogr>
      <author>Eugène Sue</author>
      <title>Martin, l'enfant trouvé</title>
      <title type="sub">Mémoires d'un valet de chambre</title>
      <imprint>
        <pubPlace>Bruxelles et Leipzig</pubPlace>
        <publisher>C. Muquardt</publisher>
        <date when="1846">1846</date>
      </imprint>
    </monogr>
  </biblStruct>
</sourceDesc>
```

<sourceDesc>: <listBibl> and <msDesc>

- <sourceDesc> can also contain <listBibl> for a list of bibliographic references to sources
- The TEI also includes a highly developed manuscript description module for those wanting to catalogue their primary source manuscript objects with <msDesc>

Association between header and text

By default everything asserted by a header is true of the text to which it is prefixed. This can be over-ridden:

- as when a text header over-rides or amplifies a corpus-header setting
- when model.declarable elements are selected by means of the *@decls* attribute (available on all model.declaring elements)
- using special purpose selection/definition elements e.g. `<catDesc>` and `<taxonomy>` (see below)

Most components of the encoding description are declarable.

Encoding Description

`<encodingDesc>` groups notes about the procedures used when the text was encoded, either summarised in prose or within specific elements such as

- `<projectDesc>`: goals of the project
- `<samplingDecl>`: sampling principles
- `<editorialDecl>`: editorial principals, e.g. `<correction>`, `<normalization>`, `<quotation>`, `<hyphenation>`, `<segmentation>`, `<interpretation>`
- `<classDecl>`: classification system/s used
- `<tagsDecl>`: specifics about usage of particular elements

The `<encodingDesc>` can replace the user manual, or facilitate semi-automatic document management, given agreed codes of practice.

Sample encoding description 1

```
<encodingDesc>
  <projectDesc>
    <p>The Imaginary Punch Project aims to ....
  </p>
</projectDesc>
<samplingDecl>
  <p>All pages containing editorial text have been
    transcribed in full. Pages containing only advertisements or
    illustrations have been omitted.</p>
</samplingDecl>
<editorialDecl>
  <hyphenation>
    <p>Original spelling has been retained, except that
      words hyphenated across line breaks have been silently
      re-assembled. The hyphen has been retained only where there exist
      cases of the same word being hyphenated in mid-line position. </p>
  </hyphenation>
<!-- ... -->
</editorialDecl>
<!-- ... -->
</encodingDesc>
```

Sample encoding description 2

```
<encodingDesc>
<!-- ... -->
  <classDecl>
    <taxonomy xml:id="size">
      <category xml:id="large">
        <catDesc>story occupies more than half a page</catDesc>
      </category>
      <category xml:id="medium">
        <catDesc>story occupies between quarter and
          a half page</catDesc>
      </category>
      <category xml:id="small">
        <catDesc>story occupies less than a quarter
          page</catDesc>
      </category>
    </taxonomy>
  <!-- etc -->
  <taxonomy xml:id="topic">
    <category xml:id="politics-domestic">
      <catDesc>Refers to domestic
        political events</catDesc>
    </category>
    <category xml:id="politics-foreign">
      <catDesc>Refers to foreign political events</catDesc>
    </category>
    <category xml:id="social-women">
```

More about <taxonomy>

- You can point using *@ana* to any of the *@xml:id* attributes
- By pointing to a sub-categorization you are inheriting the semantics of its ancestors
- You can give multiple <cateDesc> elements for any <category>, e.g. in other languages
- You can use the *@ana* attribute to point back to these from structural elements or phrase-level elements

XIncluding a `<taxonomy>`

- You can XInclude the `<taxonomy>` from another file by putting something like:

```
<xi:include href="taxonomy.xml">
  <xi:fallback>
    <taxonomy>
      <category xml:id="TaxonomyError">
        <catDesc>An Error Importing the Taxonomy</catDesc>
      </category>
    </taxonomy>
  </xi:fallback>
</xi:include>
```

inside your `<classDecl>`

- oXygen can be set to virtual include this file and use those `@xml:id` attribute values

Another <taxonomy>

```
<taxonomy xml:id="concepts">
  <category xml:id="politics">
    <catDesc xml:lang="en">Politics</catDesc>
    <catDesc xml:lang="zh">Politics (in Chinese)</catDesc>
  <category xml:id="law">
    <catDesc>Law</catDesc>
    <category xml:id="lenience">
      <catDesc>Lenience</catDesc>
    </category>
    <category xml:id="miscarriageOfJustice">
      <catDesc>Miscarriage of Justice</catDesc>
    </category>
    <category xml:id="jurisprudence">
      <catDesc>Jurisprudence</catDesc>
    </category>
    <category xml:id="polTexts">
      <catDesc>Political Texts</catDesc>
    </category>
  </category>
</taxonomy>
```

Sample encoding description 3

```
<encodingDesc>
<!-- ... -->
  <tagsDecl>
    <namespace name="http://www.tei-c.org/ns/1.0">
      <tagUsage gi="cit" occurs="410"/>
      <tagUsage gi="div" occurs="115"/>
      <tagUsage gi="gap" occurs="3"/>
      <tagUsage gi="head" occurs="156"/>
      <tagUsage gi="hi" occurs="147"/>
      <tagUsage gi="l" occurs="2"/>
      <tagUsage gi="lg" occurs="1"/>
      <tagUsage gi="p" occurs="680"/>
      <tagUsage gi="quote" occurs="3"/>
      <tagUsage gi="s" occurs="2415"/>
      <tagUsage gi="w" occurs="41799"/>
    </namespace>
    <namespace name="http://www.ipp.org/ns/1.0">
      <tagUsage gi="citCom" occurs="417"/>
    </namespace>
  </tagsDecl>
</encodingDesc>
```

<rendition> element

- **<rendition>**: structured information about appearance in the source document

```
<tagsDecl>
  <rendition xml:id="r-center" scheme="css">text-align: center;</rendition>
  <rendition xml:id="r-small" scheme="css">font-size: small;</rendition>
  <rendition xml:id="r-large" scheme="css">font-size: large;</rendition>
</tagsDecl>
```


<applInfo> element

- **<applInfo>**: structured information about an application which has edited this TEI file

```
<applInfo>
  <application version="1.7" ident="ImageMarkupTool" notAfter="2008-06-01">
    <label>Image Markup Tool</label>
    <ptr target="#P1"/>
    <ptr target="#P2"/>
  </application>
</applInfo>
```

Profile Description

An extensible rag-bag of descriptions, categorised only as 'non-bibliographic'. Default members of the model.profileDescPart) class include:

- `<creation>`: information about the origination of the intellectual content of the text, e.g. time and place
- `<langUsage>`: information about languages, registers, writing systems etc used in the text
- `<textDesc>` and `<textClass>`: classifications applied to the text by means of a list of specified criteria or by means of a collection of pointers, respectively
- `<particDesc>` and `<settingDesc>`: information about the 'participants', either real or depicted, in the text
- `<handNotes>`: information about the hands identified in a manuscript

<creation> example

```
<creation>  
  <date when="1992-08">August 1992</date>  
  <rs type="city">Taos, New Mexico</rs>  
</creation>
```

Language and character set usage

The `<langUsage>` element is provided to document usage of languages in the text. Languages are identified by their ISO codes:

```
<langUsage>
  <language ident="en">English</language>
  <language ident="fr">French</language>
  <language ident="bg-cy">Bulgarian in Cyrillic characters </language>
  <language ident="bg">Romanized Bulgarian</language>
</langUsage>
```

Classification Methods

`<textClass>` provides a classification (by domain, medium, topic...) for the whole of a text expressed in one or more of the following ways:

using `<catRef>` direct reference to a locally defined (e.g. in the corpus header) category

using `<classCode>` reference to some commonly agreed and externally defined category (e.g. UDC)

using `<keywords>` assign arbitrary descriptive terms taken from a bibliographic controlled vocabulary or a tag cloud

BNC Example

```
<profileDesc>
  <creation>
    <date when="1962"/>
  </creation>
  <textClass>
    <catRef
      target="#WRI #ALLTIM1 #ALLAVA2 #ALLTYP3 #WRIDOM5 #WRILEV2 #WRIMED1 #WRIPP5
#WRISAM3 #WRISTA2 #WRITAS0"/>
    <classCode scheme="DLEE">W nonAc: humanities arts</classCode>
    <keywords scheme="COPAC">
      <term>History, Modern - 19th century</term>
      <term>Capitalism - History - 19th century</term>
      <term>World, 1848-1875</term>
    </keywords>
  </textClass>
</profileDesc>
```

This categorization applies to the whole text. For more fine grained classification, use *@decls* on e.g. a `<div>` element.

Detailed characterization of a text

`<textDesc>` provides a description of a text in terms of its 'Situational parameters'

```
<textDesc n="novel">  
  <channel mode="w">print; part issues</channel>  
  <constitution type="single"/>  
  <derivation type="original"/>  
  <domain type="art"/>  
  <factuality type="fiction"/>  
  <interaction type="none"/>  
  <preparedness type="prepared"/>  
  <purpose type="entertain" degree="high"/>  
  <purpose type="inform" degree="medium"/>  
</textDesc>
```

`<!-- These subelements constitute the class model.textDescPart: redefine that to roll your own. -->`

<particDesc> example (1)

```
<particDesc xml:id="p2">
```

```
  <p>Female informant, well-educated, born in Shropshire UK, 12 Jan  
    1950, of unknown occupation. Speaks French fluently.
```

```
    Socio-Economic status B2 in the PEP classification scheme.</p>
```

```
</particDesc>
```


<particDesc> example (2)

```
<particDesc>
  <listPerson>
    <person xml:id="HanBISM">
      <persName>
        <forename>Hannah</forename>
        <forename>Leopoldine</forename>
        <forename>Alice</forename>
        <surname>von Bismarck-Schönhausen</surname>
      </persName>
      <birth when="1893-05-11">1893</birth>
      <death>1971</death>
    </person>
    <person xml:id="JLOW">
      <persName>James William Lowther</persName>
      <persName type="title" from="1921-07-08">Viscount Ullswater</persName>
      <occupation from="1905-06-08" to="1921-04-28">Speaker of the House of Commons</occupation>
      <birth when="1855-04-01">1855</birth>
      <death when="1949-03-27">1947</death>
      <note>
        <ref
          target="http://www.oxforddnb.com/view/article/34615?docPos=2">DNB entry</ref>
      </note>
      <note>
        <ref
          target="http://hansard.millbanksystems.com/people/mr-james-lowther">Hansard entry</ref>
      </note>
    </person>
  </listPerson>
</particDesc>
```

<settingDesc> example (1)

```
<settingDesc>
```

```
  <p>The time is early spring, 1989. P1 and P2 are playing on the rug  
    of a suburban home in Bedford. P3 is doing the washing up at the  
    sink. P4 (a radio announcer) is in a broadcasting studio in  
    London.</p>
```

```
</settingDesc>
```

<settingDesc> example (2)

```
<settingDesc>
  <setting who="#p1 #p2">
    <name type="city">Bedford</name>
    <name type="region">UK: South East</name>
    <date>early spring, 1989</date>
    <locale>rug of a suburban home</locale>
    <activity>playing</activity>
  </setting>
  <setting who="#p3">
    <name type="city">Bedford</name>
    <name type="region">UK: South East</name>
    <date>early spring, 1989</date>
    <locale>at the sink</locale>
    <activity>washing-up</activity>
  </setting>
<!-- ... -->
</settingDesc>
```

<handNotes> example

```
<handNotes>  
  <handNote xml:id="H1" script="copperplate" medium="brown-ink"> Carefully written with regular  
descenders</handNote>  
  <handNote xml:id="H2" script="print" medium="pencil"> Unschooled scrawl</handNote>  
</handNotes>
```

Revision Description

- A list of `<change>` elements, each with a `@date` and `@who` attributes, indicating significant stages in the evolution of a document.
- Most recent first.
- Can be maintained manually, but better done by means of a CMS (change management system)

```
<revisionDesc>
  <change>
    <date>$LastChangedDate: 2010-02-06 19:38:40 +0000 (Sat, 06 Feb 2010) $.</date>
    <name>$LastChangedBy: rahtz $</name>
    <note>$LastChangedRevision: 9288 $</note>
  </change>
</revisionDesc>
```

Bibliographic Citations (Refresher)

- `<bibl>` (loosely structured bibliographic citation)
- `<biblStruct>` (structured bibliographic citation)
- `<listBibl>` (a list of bibliographic citations such as a bibliography)
- The 'header' module also includes `<biblFull>` (fully-structured bibliographic citation based on the TEI fileDesc element)

Simple <bibl> Example

```
<p>In Punch there is an brief note which could be misconstrued as a slur upon Canadians.<note>  
  <bibl>  
    <title level="a">Men for the Antarctic</title>  
    <title level="j">Punch: or the London Charivari</title>,  
    <biblScope>p. 6</biblScope>  
  </bibl>  
</note> It should not be understood as such.</p>
```

Another <bibl> Example

Keble is, of course, named after the hymn-writer and divine; and Balliol, where C. S. C. played the wag so divertingly, after Balliol. <hi rend="it">À propos</hi> of Oxford, it is a question whether that extremely amusing book, <bibl>
<title>Verdant Green</title>
</bibl>, is still much read by freshers.

Simple <biblStruct> Example

'Enigma', Punch: or the London Charivari , July 1, 1914, 147, pp. 1-20

```
<biblStruct>
  <analytic>
    <title level="a">Enigma</title>
  </analytic>
  <monogr>
    <title level="j">Punch: or the London Charivari</title>
    <imprint>
      <pubPlace>London</pubPlace>
      <date when="1914-07-01">July 1, 1914</date>
      <biblScope type="vol">147</biblScope>
      <biblScope type="pp">1-20</biblScope>
    </imprint>
  </monogr>
</biblStruct>
```

Another <biblStruct> Example

```
<biblStruct>
  <monogr>
    <title>Magnalia Christi Americana: or, The
      ecclesiastical history of New-England, ...</title>
    <author>Mather, Cotton (1663-1728)</author>
    <imprint>
      <publisher>Printed for Thomas Parkhurst, at the
        Bible and Three Crowns in Cheapside.</publisher>
      <pubPlace>London</pubPlace>
      <date when="1702">MDCCII</date>
    </imprint>
  </monogr>
</biblStruct>
```

<biblFull> example (1)

```
<biblFull>
  <titleStmt>
    <title>The Feminist Companion to Literature in English: women writers from the middle ages to the
present</title>
    <author>Blain, Virginia</author>
    <author>Clements, Patricia</author>
    <author>Grundy, Isobel</author>
  </titleStmt>
  <editionStmt>
    <edition>UK edition</edition>
  </editionStmt>
  <extent>1231 pp</extent>
  <publicationStmt>
    <publisher>Yale University Press</publisher>
    <pubPlace>New Haven and London</pubPlace>
    <date>1990</date>
  </publicationStmt>
  <sourceDesc>
    <p>No source: this is an original work</p>
  </sourceDesc>
</biblFull>
```

<biblFull> example (2)

```
<biblFull>
  <titleStmt>
    <title>Envisioning Information</title>
    <author>Tufte, Edward R[olf]</author>
  </titleStmt>
  <extent>126 pp.</extent>
  <publicationStmt>
    <publisher>Graphics Press</publisher>
    <pubPlace>Cheshire, Conn. USA</pubPlace>
    <date>1990</date>
  </publicationStmt>
</biblFull>
```

And what about <cit>?

<cit> gives a collection of a quotation with a bibliographic citation

```
<cit>
  <q>For those less familiar with the TEI Guidelines, this temptation for unbridled customization can be
overwhelming, yet should be avoided if possible. </q>
  <bibl>
    <author>James Cummings</author>
    <title level="a">The Text Encoding Initiative and the Study of Literature</title> in
<title level="m">A Companion to Digital Literary Studies</title>
    <ptr target="http://snipurl.com/dlstei"/>
  </bibl>
</cit>
```

<cit> example

```
<p>蔡元長既南遷，中路有旨取所寵姬慕容、邢、武者三人，以金人指名來索也。  
<bibl>  
  <persName key="1649" type="author">元長</persName>作  
  <title type="quoted" ana="#poetry">詩</title>  
</bibl>以別云：  
<cit>  
  <q type="written">  
    「為愛桃花三樹紅，年年歲歲惹東風。如今去逐它人手，誰復尊前念老翁。」 </q>  
  <bibl type="intextat">  
    <persName key="1649" type="author">元長</persName>  
    <title type="quoted" ana="#poetry">詩</title>  
  </bibl>  
</cit>...  
</p>
```

Some more Acronym soup

Some significant metadata related acronyms:

DCMI: Dublin Core Metadata Initiative Very simple standard for describing web resources: 15 'lowest common denominator' fields

RDF: Resource Description Framework W3C Standard for representing any kind of resource description using object oriented concepts: basis of the 'semantic web'

OAIS: Open Archival Information System well developed abstract model for any archival system: ISO standard

EAD: Encoded Archival Description International Standard for describing archival collections

METS: Metadata Encoding and Transcription Standard
generalised method of integrated different metadata systems

TEI provides a richer vocabulary than EAD or DCMI, and is less abstract than RDF or METS



The future

- The TEI header was originally conceived as something for non-specialist usage
- It lacks "application profiles" for particular uses
- Standard codes of practice or ways of using have been developed by particular user communities (e.g. digital librarians, corpus linguists)
- As a 'primary source of information' it remains an essential framework for documenting:
 - what your text is
 - where it came from
 - how you encoded it
 - how it may be used (technically)
 - how it may be used (legally)