TEI By Example

TEI by Example. Module 4

Edward Vanhoutte
Ron Van den Branden
Melissa Terras

Centre for Scholarly Editing and Document Studies (CTB), Royal Academy of Dutch Language and Literature, Belgium, Gent, 9 July 2010

Last modified on: 2017-09-01
Licensed under a Creative Commons Attribution ShareAlike 3.0 License
# TABLE OF CONTENTS

1. Introduction........................................................................................................................ 1
2. Patterned arrangement of language....................................................................................2
   2.1 Document type............................................................................................................. 2
   2.2 Structural divisions..................................................................................................... 4
   2.3 Grouping structures.................................................................................................... 11
      2.3.1 Composite poems.............................................................................................. 12
      2.3.2 Cycles of poems.............................................................................................. 13
      2.3.3 Anthologies....................................................................................................... 13

3. Rhyme...............................................................................................................................16
   3.1 Rhyming words.......................................................................................................... 16
   3.2 Rhyme patterns........................................................................................................... 18
   3.3 Rhyming words and patterns..................................................................................... 19

4. Metrical structure............................................................................................................. 21
   4.1 Conventional metrical structure................................................................................. 22
   4.2 Private metrical notation scheme............................................................................... 22
   4.3 Realisation of metrical structure................................................................................ 23
   4.4 Caesura and Enjambements....................................................................................... 23

5. Metaphorical Language.................................................................................................... 24

6. Advanced encoding.......................................................................................................... 29
   6.1 Components of the verse line.................................................................................... 29
   6.2 Dedications................................................................................................................. 30
   6.3 Acrostics..................................................................................................................... 32

7. What's next?..................................................................................................................... 33
Module 4: Poetry

1. Introduction

According to the Oxford English Dictionary, poetry is:

Composition in verse or some comparable patterned arrangement of language in which the expression of feelings and ideas is given intensity by the use of distinctive style and rhythm; the art of such a composition.

(OED-online, poetry, 2a) or

The product of this art as a form of literature; the writings of a poet or poets; poems collectively or generally.

(OED-online, poetry, 2b)

A poem then can have different manifestations:

- A piece of writing or an oral composition, often characterised by a metrical structure, in which the expression of feelings, ideas, etc., is typically given intensity or flavour by distinctive diction, rhythm, imagery
  (OED-online, poem, 1)
- A composition in prose having elements in common with a poem.
  (OED-online, poem, 2a)
- An artwork or piece of music having elements in common with a poem.
  (OED-online, poem, 2b)

The length of a poem can vary from a couple of words to a multi-volume book.

If length is not a decisive feature of the poetry genre, verse or some comparable patterned arrangement of language, metrical structure, and metaphorical language certainly are.

The use of metaphorical language is for some critics an argument in favour of the treatment of prose poetry as a form of poetry and the absence of a patterned arrangement of language and metrical structure is for other critics an argument in favour of the treatment of prose poetry as a form of prose. Likewise, Elizabethan and Jacobean drama, which was often written in verse by authors such as William Shakespeare, Christopher Marlowe, Thomas Middleton, and Ben Jonson, can be considered drama or poetry just as the chorus in a Greek play that was originally composed to be sung.

The TEI Guidelines don’t interfere with this poetry/prose debate by treating texts by their document types rather than by their genres. That’s why the TEI Guidelines present a chapter on verse, not on poetry. The document type is—contrary to what it may seem—not an innate property of the document, but a formalised analysis of a document by a subjective agent such as a scholar, editor, or encoder who identifies a text as prose, verse, or drama through their own subjective reasoning. For the detailed documentation of the possible encodings of the thus identified text, the encoder or scholar may then turn to the appropriate sections of the Guidelines.
In this module on poetry, we take a step back and consider poetry by example. We will analyse different instances of poetry structurally and encode them for their defining features such as

- patterned arrangement of language
- rhyme
- metrical structure
- metaphorical language

### 2. Patterned arrangement of language

#### 2.1 Document type

A shopping list is commonly not considered a form of literature, not even when it features in a literary work, or when it shows some incidental metrical structure or rhyme, unless someone identifies the text as such. The following text can thus be considered as non-literary prose:

```
Poppadom
Oatmeal
Bubble gum
Cut of veal
Mince for pie
Frozen peas
Video for Guy
Selection of teas
Paper towels/garbage bags
Pasta sauce and Parmesan
Pumpkin seed and olive oil
Cheesy crisps and favourite mags
Kidney beans (1 large can)
Cling film and kitchen foil
```

What we see here is a functional block of fourteen lines of prose, typographically separated from each other by line breaks. The fundamental organisational unit for prose is the paragraph which is encoded in TEI as `<p>`.

The start of a new typographical line is encoded with the milestone tag `<lb>` which appears as `<lb/>` because of its empty status. Applied to the shopping list, this produces the following encoding:
Poppadom, Oatmeal, Bubble gum, Cut of veal, Mince for pie, Frozen peas, Video for Guy, Selection of teas, Paper towels/garbage bags, Pasta sauce and Parmesan, Pumpkin seed and olive oil, Cheesy crisps and favourite mags, Kidney beans (1 large can), Cling film and kitchen foil.

But our shopping list is a specific type of prose: it is a list, for which we could use `<list>` containing twelve items for which we use `<item>`. This could result in the following encoding:

```
<list>
  <item>Poppadom</item>
  <item>Oatmeal</item>
  <item>Bubble gum</item>
  <item>Cut of veal</item>
  <item>Mince for pie</item>
  <item>Frozen peas</item>
  <item>Video for Guy</item>
  <item>Selection of teas</item>
  <item>Paper towels/garbage bags</item>
  <item>Pasta sauce and Parmesan</item>
  <item>Pumpkin seed and olive oil</item>
  <item>Cheesy crisps and favourite mags</item>
  <item>Kidney beans (1 large can)</item>
  <item>Cling film and kitchen foil</item>
</list>
```

On the most basic structural level, this shopping list is thus a named grouping of lines of text. When we use the element `<lg>` for line group, and the element `<l>` for line, we arrive at the following encoding:
<lg>
  <I>Poppadom</I>
  <I>Oatmeal</I>
  <I>Bubble gum</I>
  <I>Cut of veal</I>
  <I>Mince for pie</I>
  <I>Frozen peas</I>
  <I>Video for Guy</I>
  <I>Selection of teas</I>
  <I>Paper towels/garbage bags</I>
  <I>Pasta sauce and Parmesan</I>
  <I>Pumpkin seed and olive oil</I>
  <I>Cheesy crisps and favourite mags</I>
  <I>Kidney beans (1 large can)</I>
  <I>Cling film and kitchen foil</I>
</lg>

Summary

Up to now we have looked at three different possible encodings for the same document which we identified as a shopping list. The first encoding considers the document as a block of prose in which different lines of text are separated by line breaks. The second one structures the shopping list with the appropriate labels (list and item). The third one makes abstraction of the meaning of these typical labels and considers the shopping list as a group of lines of text. The latter is less specific than the second, but more structurally descriptive than the first.

2.2 Structural divisions

But is this shopping list just a block of prose, organised as a group of lines? The metrical composition, form and structure of this shopping list, together with the use of rhyme may suggest that this is rather a piece of poetry which can be encoded as such. The rhyme present in the poem gives away a possible structure which consists not of one but of four line groups or stanzas. We use <lg> to encode them:
<lg>
  <lg>
    <l>Poppadom</l>
    <l>Oatmeal</l>
    <l>Bubble gum</l>
    <l>Cut of veal</l>
  </lg>
</lg>
<lg>
  <lg>
    <l>Mince for pie</l>
    <l>Frozen peas</l>
    <l>Video for Guy</l>
    <l>Selection of teas</l>
  </lg>
</lg>
<lg>
  <lg>
    <l>Paper towels/garbage bags</l>
    <l>Pasta sauce and Parmesan</l>
    <l>Pumpkin seed and olive oil</l>
  </lg>
</lg>
<lg>
  <lg>
    <l>Cheesy crisps and favourite mags</l>
    <l>Kidney beans (1 large can)</l>
    <l>Cling film and kitchen foil</l>
  </lg>
</lg>

There is nothing in this encoding, however, which documents whether these four line groups belong together or not. Therefore we can wrap another <lg> element around them inside which they nest comfortably.

1 In order to distinguish among the nesting line groups and the parental one, we can add some semantic information in a @type attribute which specifies a name conventionally used for this level of division and label the line groups respectively as stanza and poem as in the following example:

......

1 Like other text-division elements, <lg> elements can nest hierarchically.
<lg type="poem">
  <lg type="stanza">
    <l>Poppadom</l>
    <l>Oatmeal</l>
    <l>Bubble gum</l>
    <l>Cut of veal</l>
  </lg>
  <lg type="stanza">
    <l>Mince for pie</l>
    <l>Frozen peas</l>
    <l>Video for Guy</l>
    <l>Selection of teas</l>
  </lg>
  <lg type="stanza">
    <l>Paper towels/garbage bags</l>
    <l>Pasta sauce and Parmesan</l>
    <l>Pumpkin seed and olive oil</l>
  </lg>
  <lg type="stanza">
    <l>Cheesy crisps and favourite mags</l>
    <l>Kidney beans (1 large can)</l>
    <l>Cling film and kitchen foil</l>
  </lg>
</lg>

The @type attribute can have any value defined by the encoder, although it is intended solely for conventional names of different classes of text blocks. When <lg> is used to encode paragraphs in prose poetry, the @type attribute value could be para or anything else. If the <lg> represents an arbitrary organisation of lines, the @type attribute value could be free or anything else. If, for instance, this poem would have been organised differently, say in two quatrains and one sestet, we could have the following encoding:
<lg type="poem">
  <lg type="quatrain">
    <l>Poppadom</l>
    <l>Oatmeal</l>
    <l>Bubble gum</l>
    <l>Cut of veal</l>
  </lg>
  <lg type="quatrain">
    <l>Mince for pie</l>
    <l>Frozen peas</l>
    <l>Video for Guy</l>
    <l>Selection of teas</l>
  </lg>
  <lg type="sestet">
    <l>Paper towels/garbage bags</l>
    <l>Pasta sauce and Parmesan</l>
    <l>Pumpkin seed and olive oil</l>
    <l>Cheesy crisps and favourite mags</l>
    <l>Kidney beans (1 large can)</l>
    <l>Cling film and kitchen foil</l>
  </lg>
</lg>

Next, we can number the stanzas and lines in our poem inside an @n attribute and document that this poem has four stanzas and fourteen lines of verse:
<lg type="poem">
<lg type="stanza" n="1">
  <l n="1">Poppadom</l>
  <l n="2">Oatmeal</l>
  <l n="3">Bubble gum</l>
  <l n="4">Cut of veal</l>
</lg>
<lg type="stanza" n="2">
  <l n="5">Mince for pie</l>
  <l n="6">Frozen peas</l>
  <l n="7">Video for Guy</l>
  <l n="8">Selection of teas</l>
</lg>
<lg type="stanza" n="3">
  <l n="9">Paper towels/garbage bags</l>
  <l n="10">Pasta sauce and Parmesan</l>
  <l n="11">Pumpkin seed and olive oil</l>
</lg>
<lg type="stanza" n="4">
  <l n="12">Cheesy crisps and favourite mags</l>
  <l n="13">Kidney beans (1 large can)</l>
  <l n="14">Cling film and kitchen foil</l>
</lg>
</lg>

Poems often carry a title which can be encoded using <head>:

......

3 For large corpora of verse texts these numberings are commonly added automatically by some sort of programmed routine.
<lg type="poem">
  <head>Shopping</head>
  <lg type="stanza" n="1">
    <l n="1">Poppadom</l>
    <l n="2">Oatmeal</l>
    <l n="3">Bubble gum</l>
    <l n="4">Cut of veal</l>
  </lg>
  <lg type="stanza" n="2">
    <l n="5">Mince for pie</l>
    <l n="6">Frozen peas</l>
    <l n="7">Video for Guy</l>
    <l n="8">Selection of teas</l>
  </lg>
  <lg type="stanza" n="3">
    <l n="9">Paper towels/garbage bags</l>
    <l n="10">Pasta sauce and Parmesan</l>
    <l n="11">Pumpkin seed and olive oil</l>
  </lg>
  <lg type="stanza" n="4">
    <l n="12">Cheesy crisps and favourite mags</l>
    <l n="13">Kidney beans (1 large can)</l>
    <l n="14">Cling film and kitchen foil</l>
  </lg>
</lg>

Preceding quotations introducing the poem as a motto can be encoded using <epigraph>: 

2. Patterned arrangement of language
<lg type="poem">
  <head>Shopping</head>
  <ab type="attribution">To my mother</ab>
  <epigraph>
    <cit>
      <quote>Thou shalt not steal</quote>
      <bibl>Ex. 20:15</bibl>
    </cit>
  </epigraph>
  <lg type="stanza">
    <l>Poppadom</l>
    <l>Oatmeal</l>
    <l>Bubble gum</l>
    <l>Cut of veal</l>
  </lg>
  <lg type="stanza">
    <l>Mince for pie</l>
    <l>Frozen peas</l>
    <l>Video for Guy</l>
    <l>Selection of teas</l>
  </lg>
  <lg type="stanza">
    <l>Paper towels/garbage bags</l>
    <l>Pasta sauce and Parmesan</l>
    <l>Pumpkin seed and olive oil</l>
  </lg>
  <lg type="stanza">
    <l>Cheesy crisps and favourite mags</l>
    <l>Kidney beans (1 large can)</l>
    <l>Cling film and kitchen foil</l>
  </lg>
</lg>

Poems are often signed which can be encoded using <signed> outside the <lg type="poem"> element.
<lg type="poem">
  <head>Shopping</head>
  <lg type="stanza">
    <l>Poppadom</l>
    <l>Oatmeal</l>
    <l>Bubble gum</l>
    <l>Cut of veal</l>
  </lg>
  <lg type="stanza">
    <l>Mince for pie</l>
    <l>Frozen peas</l>
    <l>Video for Guy</l>
    <l>Selection of teas</l>
  </lg>
  <lg type="stanza">
    <l>Paper towels/garbage bags</l>
    <l>Pasta sauce and Parmesan</l>
    <l>Pumpkin seed and olive oil</l>
  </lg>
  <lg type="stanza">
    <l>Cheesy crisps and favourite mags</l>
    <l>Kidney beans (1 large can)</l>
    <l>Cling film and kitchen foil</l>
  </lg>
</lg>

<signed>M. Ystery-Shopper</signed>

Summary

Different document types such as prose, verse or drama can be considered poetry. Poetry of the
document type verse consists typically of minimally one group of one or more lines which may be
encoded using <hi>. Line groups can nest inside each other. To all instances of line groups and lines,
semantic and analytical information can be added in attributes. The title of a poem can be encoded
using <head>, motto's can be encoded using <epigraph>, the name of the poet can be encoded using
<signed>.

2.3 Grouping structures

Single poems may appear isolated as independent texts, as part of some other document types
such as prose and drama, or in combination with other poems as part of composite texts. Typical
examples of such composite texts are anthologies, cycles of poems, and composite poems, i.e.
poems consisting of other poems. The line between cycles of poems and composite poems, however, is thin and assigning either interpretation to the texts is the encoder's decision who can usually depend on how the author or publisher represented the texts in the original publication.

Many encoding strategies can be used to encode either of the composite texts mentioned. In the following paragraphs we suggest only a couple of them.

### 2.3.1 Composite poems

Since the `<lg>` element can nest, it is possible to encode nesting poems using `<lg>` with a value `poem` for the `@type` attribute. If we consider the stanza’s of the example poem as poems in their own right which were numbered by the author, this can generate the following encoding:

```xml
<lg type="poem">
  <head>Shopping</head>
  <lg type="poem" n="1">
    <head>I.</head>
    <l>Poppadom</l>
    <l>Oatmeal</l>
    <l>Bubble gum</l>
    <l>Cut of veal</l>
  </lg>
  <lg type="poem" n="2">
    <head>II.</head>
    <l>Mince for pie</l>
    <l>Frozen peas</l>
    <l>Video for Guy</l>
    <l>Selection of teas</l>
  </lg>
  <lg type="poem" n="3">
    <head>III.</head>
    <l>Paper towels/garbage bags</l>
    <l>Pasta sauce and Parmesan</l>
    <l>Pumpkin seed and olive oil</l>
  </lg>
  <lg type="poem" n="4">
    <head>IV.</head>
    <l>Cheesy crisps and favourite mags</l>
    <l>Kidney beans (1 large can)</l>
    <l>Cling film and kitchen foil</l>
  </lg>
</lg>
```
2.3.2 Cycles of poems

Cycles of poems are structurally akin to composite poems but the top level element is not a `<lg type="poem">` but a `<div>` with a suggested value cycle for the `@type` attribute. If we reconsider the example poem, this generates the next encoding:

```xml
<div type="cycle">
  <head>Shopping</head>
  <lg type="poem" n="1">
    <head>I.</head>
    <l>Poppadom</l>
    <l>Oatmeal</l>
    <l>Bubble gum</l>
    <l>Cut of veal</l>
  </lg>
  <lg type="poem" n="2">
    <head>II.</head>
    <l>Mince for pie</l>
    <l>Frozen peas</l>
    <l>Video for Guy</l>
    <l>Selection of teas</l>
  </lg>
  <lg type="poem" n="3">
    <head>III.</head>
    <l>Paper towels/garbage bags</l>
    <l>Pasta sauce and Parmesan</l>
    <l>Pumpkin seed and olive oil</l>
  </lg>
  <lg type="poem" n="4">
    <head>IV.</head>
    <l>Cheesy crisps and favourite mags</l>
    <l>Kidney beans (1 large can)</l>
    <l>Cling film and kitchen foil</l>
  </lg>
</div>
```

2.3.3 Anthologies

An anthology can as well be represented using a `<div type="anthology">` element but it is good practice to use the more powerful `<group>` element. The `<group>` element groups together a sequence of distinct texts (or groups of such texts) which are regarded as a unit for some
purpose. The `<group>` element consists of `<text>` elements which may have optional `<front>` and `<back>` elements and mandatory `<body>` elements. If we reconsider the example poem that way, the following encoding may apply:
<text>
<front>
<docTitle>
<titlePart>Shopping</titlePart>
</docTitle>
</front>
<group>
<text>
<body>
<lg type="poem" n="1">
<head>I.</head>
<l>Poppadom</l>
<l>Oatmeal</l>
<l>Bubble gum</l>
<l>Cut of veal</l>
</lg>
</body>
</text>
<text>
<body>
<lg type="poem" n="2">
<head>II.</head>
<l>Mince for pie</l>
<l>Frozen peas</l>
<l>Video for Guy</l>
<l>Selection of teas</l>
</lg>
</body>
</text>
<text>
<body>
<lg type="poem" n="3">
<head>III.</head>
<l>Paper towels/garbage bags</l>
<l>Pasta sauce and Parmesan</l>
<l>Pumpkin seed and olive oil</l>
</lg>
</body>
</text>
<text>
<body>
<lg type="poem" n="4">
</lg>
</body>
</text>
</text>
<text>2. Patterned arrangement of language
</text>
IV.

Cheesy crisps and favourite mags

Kidney beans (1 large can)

Cling film and kitchen foil

Summary

Composite poems, cycles of poems, and anthologies are composite texts which can be encoded using different encoding strategies. Composite poems may be encoded using nesting elements. Cycles of poems may be encoded using sibling elements. Anthologies may be used using the element which may have multiple elements.

3. Rhyme

3.1 Rhyming words

The rhyming words of a line of verse can be encoded using the appropriate element:

......

Each element can have its own and elements so that it becomes possible, for instance, to encode complete works of poets maintaining the original front and back materials of the separately published poetry volumes. See Text in TBE Module 1: Common Structure and Elements.
<rhyme> can appear anywhere in the line. This way, not only end-of-line rhymes can be tagged but also internal rhyme, even inside prose(-like) paragraphs like in the following fragment:
<p>This course is terse and provides a fine sign for the study of poetry like yours and mine.</p>

### 3.2 Rhyme patterns

Rhyme patterns can be documented with a `<rhyme>` attribute which has a default notation in which distinct letters stand for rhyming lines. This attribute can be added to `<lg>` and/or to `<l>`, and also to any `<div>` element that is used for the encoding of poetry.

The rhyme scheme in the shopping list poem is "ababcdcdefg". This can be documented inside the `<rhyme>` attribute of `<lg type="poem">`. The rhyme scheme of the separate stanzas can be encoded inside the `<rhyme>` attribute of `<lg type="stanza">`, and even the rhyme scheme of the separate lines can technically be encoded inside the `<rhyme>` attribute of the `<l>` element. The complexity of the use of all these options depends on the encoder. A maximally complex encoding could be the following:
<lg type="poem" rhyme="ababcdcdefgefg">
  <lg type="stanza">
    <l rhyme="a">Poppadom</l>
    <l rhyme="b">Oatmeal</l>
    <l rhyme="a">Bubble gum</l>
    <l rhyme="b">Cut of veal</l>
  </lg>
  <lg type="stanza">
    <l rhyme="c">Mince for pie</l>
    <l rhyme="d">Frozen peas</l>
    <l rhyme="c">Video for Guy</l>
    <l rhyme="d">Selection of teas</l>
  </lg>
  <lg type="stanza">
    <l rhyme="e">Paper towels/garbage bags</l>
    <l rhyme="f">Pasta sauce and Parmesan</l>
    <l rhyme="g">Pumpkin seed and olive oil</l>
  </lg>
  <lg type="stanza">
    <l rhyme="e">Cheesy crisps and favourite mags</l>
    <l rhyme="f">Kidney beans (1 large can)</l>
    <l rhyme="g">Cling film and kitchen foil</l>
  </lg>
</lg>

### 3.3 Rhyming words and patterns

The correspondence between the rhyming pattern documented in the `@rhyme` attribute and the rhyming words encoded with the `<rhyme>` element can be specified in a `@label` attribute to the `<rhyme>` element. The value of this attribute is usually one of the letters of the rhyme pattern. Applied to the shopping list poem, this results in the following encoding:
All `<rhyme>` elements with the same value for their `@label` attribute are assumed to rhyme with each other within a given scope. That scope is defined by the nearest ancestor element for which the `@rhyme` attribute has been supplied.

In the following encoding of the same poem, the scope is defined by the `<lg type="stanza">` element. This means that the rhyming words labelled a, b, or c are only assumed to rhyme inside the stanza and not across stanzas:
<lg type="poem">
  <lg type="stanza" rhyme="abab">
    <l>
      <rhyme label="a">Poppadom</rhyme>
    </l>
    <l>
      <rhyme label="b">Oatmeal</rhyme>
    </l>
    <l>Bubble <rhyme label="a">gum</rhyme> Cut of <rhyme label="b">veal</rhyme></l>
  </lg>
  <lg type="stanza" rhyme="abab">
    <l>Mince for <rhyme label="a">pie</rhyme> Frozen <rhyme label="b">peas</rhyme></l>
    <l>Video for <rhyme label="a">Guy</rhyme> Selection of <rhyme label="b">teas</rhyme></l>
  </lg>
  <lg type="stanza" rhyme="abc">
    <l>Paper towels/garbage <rhyme label="a">bags</rhyme> Pasta sauce and <rhyme label="b">Parmesan</rhyme></l>
    <l>Pumpkin seed and olive <rhyme label="c">oil</rhyme></l>
  </lg>
  <lg type="stanza" rhyme="abc">
    <l>Cheesy crisps and favourite <rhyme label="a">mags</rhyme> Kidney beans (1 large <rhyme label="b">can</rhyme>)</l>
    <l>Cling film and kitchen <rhyme label="c">foil</rhyme></l>
  </lg>
</lg>

Summary

The occurrence of rhyming words and rhyming patterns and their correspondence can be encoded by a combination of tags and attribute values. Depending on the encoder’s preferences, they can be applied to different structural levels of the text.

4. Metrical structure

There is a difference between the conventional metrical structure of a poem and the actual realisation of that conventional metrical structure. Both can be documented with the use of attributes.
4.1 Conventional metrical structure

The conventional metrical structure in which a poet is working is documented as the value of the @met attribute. The @met value specifies the metrical form of a single verse line. This attribute can be added to any text-division element in use in the encoding of poetry: <div>, <lg>, and <l>. The metre documented inside the @met attribute is inherited by any metrical unit contained within the element for which the @met attribute has been supplied. This means that the @met value of a <div> or an <lg>, for instance, is inherited by nesting <div>s or <lg>s. The metrical structure of that <lg> is understood to contain as many repetitions of the pattern as there are lines in the line group. The same attribute value, when inherited in turn by the <l> element, must be understood not to repeat. Consider the third stanza of our shopping list poem, which exists of three lines of alternating long and short syllables:

```
<lg type="stanza" met="-u|-u|-u|-/">
  <l> Paper towels/garbage bags </l>
  <l> Pasta sauce and Parmesan </l>
  <l> Pumpkin seed and olive oil </l>
</lg>
```

4.2 Private metrical notation scheme

The encoder is free to design their own metrical notation scheme. In the example above use has been made of the classical scansion system which marks quantitative metre originally by a macron (here a dash ‘-’) for long syllables and a breve (here a ‘u’) for short syllables. A bar ‘|’ is used to mark the foot boundary and a slash ‘/’ marks the line boundary. Other systems like the ictus (/) and x (x) system could be used to denote metrically stressed and unstressed syllables. The use of this latter system results in the following @met attribute value for the stanza above: /+//+//.

The metrical notation scheme used may be documented in the <metDecl> element within the <encodingDecl> element inside the TEI header. For the above example this could be as follows:

```
<metDecl>
  <metSym value="-">long syllable</metSym>
  <metSym value="u">short syllable</metSym>
  <metSym value="|">foot boundary</metSym>
  <metSym value="/">metrical line boundary</metSym>
</metDecl>
```

This may also be expressed less formally, for instance:
<metDecl>
<p>use has been made of the classical scansion system which marks quantitative metre originally by a macron (here a dash '-') for long syllables and a breve (here a 'u') for short syllables. A bar '|' is used to mark the foot boundary and a slash '/' marks the line boundary.</p>
</metDecl>

Crosslink
See P5 6.5 Metrical Notation Declaration for more examples and complex cases.

4.3 Realisation of metrical structure

When we consider the third and the fourth stanza of the shopping list poem, we see that some lines of the fourth stanza divert from the metrical scheme documented in the @met attribute. This deviation, or otherwise put, the Realisation, may be documented inside a @real attribute:

<lg type="stanza" met="-u|-u|-u|-/">
  <l>Paper towels/garbage bags</l>
  <l>Pasta sauce and Parmesan</l>
  <l>Pumpkin seed and olive oil</l>
</lg>

<lg type="stanza" met="-u|-u|-u|-/">
  <l>Cheesy crisps and favourite mags</l>
  <l real="-u-|--u-">Kidney beans (1 large can)</l>
  <l real="- -|u-|u-">Cling film and kitchen foil</l>
</lg>

4.4 Caesura and Enjambments

Whereas a caesura expresses a metrical pause inside one line of verse, an enjambement marks the breaking of a syntactic unit between two lines of verse.

The third line of the last stanza of the shopping list poem consists of two equal metrical parts (-u-) with a rest in between. This rest is called a caesura, and is here represented with an apostrophe. We can encode this also in the line with the <caesura> element which marks the point at which a metrical line may be divided:

<l>Kidney beans <caesura> (1 large can)</l>
The presence, absence, or degrees of discrepancy between lines of verse and syntactic units running over them can be documented as values of an optional `@enjamb` attribute to the `<l>` element. When used, this attribute can, for instance, have the value `yes` or `no` to signal its occurrence, or `weak` or `strong` to express some sort of evaluation. In the following stanza of Edgar Allen Poe’s *The Raven* the presence or absence of enjambment is encoded:

```xml
<l>
  <l enjamb="yes">But the Raven, sitting lonely on the placid bust, spoke only</l>
  <l enjamb="no">That one word, as if his soul in that one word he did outpour.</l>
  <l enjamb="no">Nothing further then he uttered, not a feather then he fluttered.</l>
  <l enjamb="no">Till I scarcely more than muttered,—"Other friends have flown before;"</l>
  <l enjamb="no">On the morrow he will leave me, as my Hopes have flown before."</l>
  <l enjamb="no">Then the bird said, "Nevermore."</l>
</l>
```

**Summary**

The expressions of conventional metrical structures in `@met` attributes are inherited by the children of the attributed elements, except where deviations are expressed in a `@real` attribute. Each encoder is free to design their own encoding scheme and document it inside `<metDecl>`. It is also possible to encode the occurrence and location of a caesura or an enjambement.

**5. Metaphorical Language**

Just like any other aspect of the transcription and encoding process, analysing metaphorical language involves interpretation. Unlike the expression of this interpretation in structural markup, the analysis of metaphorical language addresses logical structures that probably will cross structural boundaries. Due to the primary focus of the TEI encoding scheme on representing structural characteristics of texts, and the syntactic requirement that all XML structures should nest properly, this kind of logical analysis will need a kind of workaround. One such workaround defines different analytic categories separately and links them to the relevant passages in the poems. A first requirement is that the smallest addressable structures be identified with an `@xml:id` attribute:
These @xml:id values can later be used to identify spans of interpretive categories. Such interpretive spans are encoded as <span>, identifying the structural scope of this interpretation with the @to attribute marking its beginning and the @from attribute marking its end. Their values are values for an @xml:id attribute elsewhere in the document. Preferably, the @resp attribute is used to identify who is responsible for the interpretation. Related <span> elements can be grouped in a <spanGrp> element. A @type attribute can characterise the kind of analysis. In our poem, one way of identifying all images concerned with food and non-food could be:

......

@xml:id provides a unique identifier for the element bearing the attribute. Its value must start with a letter, or '_' and may be followed by one or more Named Characters (letter, digit, ' ', ',', '-', '_', Unicode Combining Character, or Extender). See the XML Specification for more guidance on the use of @xml:id.
<lg xml:id="p001" type="poem">
  <lg xml:id="s001" type="stanza">
    <l xml:id="l001">Poppadom</l>
    <l xml:id="l002">Oatmeal</l>
    <l xml:id="l003">Bubble gum</l>
    <l xml:id="l004">Cut of veal</l>
  </lg>
  <lg xml:id="s002" type="stanza">
    <l xml:id="l005">Mince for pie</l>
    <l xml:id="l006">Frozen peas</l>
    <l xml:id="l007">Video for Guy</l>
    <l xml:id="l008">Selection of teas</l>
  </lg>
  <lg xml:id="s003" type="stanza">
    <l xml:id="l009">Paper towels/garbage bags</l>
    <l xml:id="l010">Pasta sauce and Parmesan</l>
    <l xml:id="l011">Pumpkin seed and olive oil</l>
  </lg>
  <lg xml:id="s004" type="stanza">
    <l xml:id="l012">Cheesy crisps and favourite mags</l>
    <l xml:id="l013">Kidney beans (1 large can)</l>
    <l xml:id="l014">Cling film and kitchen foil</l>
  </lg>
</lg>

<spanGrp resp="RvdB" type="imagery">
  <span from="#l001" to="#l006">food</span>
  <span from="#l007">non-food</span>
  <span from="#l008">food</span>
  <span from="#l009">non-food</span>
  <span from="#l010" to="#l013">food</span>
  <span from="#l014">non-food</span>
</spanGrp>

Note that the @from attribute is mandatory. The @to attribute is optional; when it is missing, the entire structure identified by the @from attribute will be taken as the context for the interpretation.

6 The value of the @resp must be a pointer to an element in the document header that is associated with a person asserted as responsible for some aspect of the text’s creation, transcription, editing, or encoding. See P5 14 Certainty and Responsibility.
As will be clear from this example, this system of linking analyses to textual structures is not very economic when discontinuous structures share the same analysis. Another approach for logical analysis works from the opposite angle by hooking text structures to specific interpretations. In order to do so, interpretive categories should be formally defined somewhere else, be it in the same document or externally. This is done inside the `<interp>` element, bearing a unique `@xml:id` attribute. Related interpretive categories can be grouped inside an `<interpGrp>` element. Following example could identify the same semantic categories from the previous example:

```xml
<interpGrp resp="RvdB" type="imagery">
  <interp xml:id="food">food</interp>
  <interp xml:id="non-food">non-food</interp>
</interpGrp>
```

Inside the transcription of the poem, reference can be made to these interpretations with the `@ana` attribute. Its value should always point to an identifier, either locally or externally. Suppose these interpretive categories are stored in a separate document named "analysis.xml". Then the poem could be analysed as follows:
Summary

For the study of metaphorical language in poetry, logical structures should be identified and grouped into interpretive categories which can be related to other such categories. These interpretive categories with their logical relationships can be stored inside or outside the XML document. Reference from within the poem can be made to these internally or externally documented analysis.

......

Of course, analyses can be much more complex. The TEI provides a generic mechanism for expressing complex hierarchies of interpretive relationships, called "Feature Structures". See P5 12 "Feature Structures" for a detailed treatment.
6. Advanced encoding

6.1 Components of the verse line

It is often convenient for various kinds of analysis to encode further subdivisions of verse lines. This can be done using the `<seg>` element which contains any arbitrary phrase-level unit of text (including other seg elements).

The third and the fourth stanza of our poem, for instance, contain lines which include two items each, except for line 13. The appropriate encoding could be the following:
<lg type="stanza" n="3">
  <l>
    <seg type="item">Paper towels</seg>
    /
    <seg type="item">garbage bags</seg>
  </l>
  <l>
    <seg type="item">Pasta sauce</seg>
    and
    <seg type="item">Parmesan</seg>
  </l>
  <l>
    <seg type="item">Pumpkin seed</seg>
    and
    <seg type="item">olive oil</seg>
  </l>
</lg>

<lg type="stanza" n="4">
  <l>
    <seg type="item">Cheesy crisps</seg>
    and
    <seg type="item">favourite mags</seg>
  </l>
  <l>
    <seg type="item">Kidney beans (1 large can)</seg>
  </l>
  <l>
    <seg type="item">Cling film</seg>
    and
    <seg type="item">kitchen foil</seg>
  </l>
</lg>

### 6.2 Dedications

If the poem is encoded as an `<lg>`, the TEI doesn't have an "out of the box" solution to deal with dedications which appear under the title of the poem. In the case a dedication needs to be encoded, there are two viable options. The first one is to consider the dedication as a `<head>` and specify its function as dedication for a `@type` attribute:
<lg type="poem">
  <head>Shopping</head>
  <head type="dedication">To my mother</head>
  <lg type="stanza" n="1">
    <l n="1">Poppadom</l>
    <l n="2">Oatmeal</l>
    <l n="3">Bubble gum</l>
    <l n="4">Cut of veal</l>
  </lg>
  <lg type="stanza" n="2">
    <l n="5">Mince for pie</l>
    <l n="6">Frozen peas</l>
    <l n="7">Video for Guy</l>
    <l n="8">Selection of teas</l>
  </lg>
  <lg type="stanza" n="3">
    <l n="9">Paper towels/garbage bags</l>
    <l n="10">Pasta sauce and Parmesan</l>
    <l n="11">Pumpkin seed and olive oil</l>
  </lg>
  <lg type="stanza" n="4">
    <l n="12">Cheesy crisps and favourite mags</l>
    <l n="13">Kidney beans (1 large can)</l>
    <l n="14">Cling film and kitchen foil</l>
  </lg>
</lg>

The second option is to encode the poem as a `<div type="poem">` instead of an `<lg type="poem">`, and consider the title as an anonymous block `<ab>` with a value of dedication for its `@type` attribute.
<div type="poem">
  <head>Shopping</head>
  <ab type="dedication">To my mother</ab>
  <lg type="stanza" n="1">
    <l n="1">Poppadom</l>
    <l n="2">Oatmeal</l>
    <l n="3">Bubble gum</l>
    <l n="4">Cut of veal</l>
  </lg>
  <lg type="stanza" n="2">
    <l n="5">Mince for pie</l>
    <l n="6">Frozen peas</l>
    <l n="7">Video for Guy</l>
    <l n="8">Selection of teas</l>
  </lg>
  <lg type="stanza" n="3">
    <l n="9">Paper towels/garbage bags</l>
    <l n="10">Pasta sauce and Parmesan</l>
    <l n="11">Pumpkin seed and olive oil</l>
  </lg>
  <lg type="stanza" n="4">
    <l n="12">Cheesy crisps and favourite mags</l>
    <l n="13">Kidney beans (1 large can)</l>
    <l n="14">Cling film and kitchen foil</l>
  </lg>
</div>

6.3 Acrostics

One example of the use of the <seg> element for further advanced analysis is the following proposal to signal the presence of an acrostic in a poem. In this poem by an Edgar Allan Poe, entitled 'An Acrostic', the first letters of each line of verse together form the first word of the first line: 'Elizabeth'.

ELIZABETH, it is in vain you say "LOVE not" - thou sayest it in so sweet a way:

ELIZABETH, n vain those words from thee or L.E.L.

ELIZABETH, n that language from thy heart arise, read it less gently forth - and veil thine eyes.

NELLYMION, recollect, when Luna tried to cure his love - was cured of all beside - for he died.

7. What's next?

You have reached the end of this tutorial module covering poetry markup with TEI. You can now either

- proceed with other TEI by Example modules
- have a look at the examples section for the poetry module.
- take an interactive test. This comes in the form of a set of multiple choice questions, each providing a number of possible answers. Throughout the quiz, your score is recorded and feedback is offered about right and wrong choices. Can you score 100%? Test it here!