TEI By Example

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Last modified on: 2017-09-01
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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:

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

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>
  <l>Poppadom</l>
  <l>Oatmeal</l>
  <l>Bubble gum</l>
  <l>Cut of veal</l>
  <l>Mince for pie</l>
  <l>Frozen peas</l>
  <l>Video for Guy</l>
  <l>Selection of teas</l>
  <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>
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>
    <l>Mince for pie</l>
    <l>Frozen peas</l>
    <l>Video for Guy</l>
    <l>Selection of teas</l>
  </lg>
  <lg>
    <l>Paper towels/garbage bags</l>
    <l>Pasta sauce and Parmesan</l>
    <l>Pumpkin seed and olive oil</l>
  </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.

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:

```xml
<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>
```

Like other text-division elements, `<lg>` elements can nest hierarchically.

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...
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="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>
```

......

would have been organised differently, say in two quatrains and one sestet, we could have the following encoding:
<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>

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

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For large corpora of verse texts these numberings are commonly added automatically by some sort of programmed routine.

2. Patterned arrangement of language
<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>:</epigraph>
<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>
<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:

```
<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">I.
Poppadom
Oatmeal
Bubble gum
Cut of veal
</lg>
      </body>
    </text>
    <text>
      <body>
        <lg type="poem" n="2">II.
Mince for pie
Frozen peas
Video for Guy
Selection of teas
</lg>
      </body>
    </text>
    <text>
      <body>
        <lg type="poem" n="3">III.
Paper towels/garbage bags
Pasta sauce and Parmesan
Pumpkin seed and olive oil
</lg>
      </body>
    </text>
    <text>
      <body>
        <lg type="poem" n="4">IV.

</lg>
      </body>
    </text>
  </group>
</text>
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 `lg` elements. Cycles of poems may be encoded using sibling `lg` elements. Anthologies may be used using the `group` element which may have multiple `text` elements.