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Modern XML Publishing Process

- TeX is poured into the XML mould and DTD is used as the sieve
- The Cup and the Lip – publishing is like smelting iron from its raw form
- The XML keeps the link alive between the present print-led world and future worlds such as HTML5
Modern Publishing Process

- Copyeditors and XML form the bridge between these two worlds.
- LaTeX’s own secret little macros and TeX4HT have also made it easier to form this bridge between the two worlds.
- These set of macros are not designed to replace copyeditors but to make it easier for them to take care of mundane aspects of copyediting in a systematic way.
- Copyediting involves quite a broad spectrum of activity
- At one end of the spectrum it improves semantic communication between the author and the reader
- At the other end of the spectrum it reinforces certain stylistic and typographic conventions of the publisher
- Semantic aspects are beyond the capability of ordinary TeX macros
Copyediting Process – Modular Components

- Localization — British-American-Australian-Canadian
- Close-up, Hyphenation, and Spaced words
- Latin abbreviations
- Acronyms and Abbreviations
- Itemization, nonlocal lists and labels
- Parenthetical and serial commas
- Non-local tokenization in language through Abbreviations and pronouns.
- Subject specific macros such as Genus-species identification
- Juxtaposing
- Synonyms
Localization – A Quick View

- **DG (Am) versus DGE (Au, Br, Ca)** - In American spelling, words like Acknowledgement and Judgement lose the e and become Acknowledgment and Judgment.

- **Z (Am, Ca) versus S (Br, Au)** - American and Canadian spelling prefers ize, while Australian and British use ise e.g. apologize/apologise or authorize/authorise

- **S (Am, Ca) versus C (Br, Au)** - In words like defense/defence, oense/oence, the American and Canadian prefer s instead of c

- **G (Am) versus GUE (Br, Au, Ca)** - In words like dialog/dialogue, catalog/catalogue Americans prefer to drop the ue
OR (Am) versus OUR (Br, Au, Ca) - In words like color/colour, favor/favour, Americans do away with u while the rest keep the British spelling.

ER (Am) versus RE (Br, Au, Ca) - In words like center/centre, caliber/calibre, Americans prefer the er spelling while the rest follow the British spelling.

L (Am) versus LL (Br, Au, Ca) - In words like canceled/cancelled, modeled/modelled, American prefer the single l spelling while rest prefer double l.

Others - The patterns and differences that don’t fall into the above patterns are handled by a word list with their corresponding language mapping table.
Localization Macros

- Both \texttt{\textvaria{color}} and \texttt{\textvaria{colour}} would produce the same output: \texttt{colour}, so the author’s original text need not be changed.

Switch to particular language using \texttt{\textusepackage{copyediting}} \texttt{[lang=uk]}

- Force a particular use in a particular instance using \texttt{\textvaria{analog}} (starred macro will leave the input unchanged as analog)
Close-up, Hyphenation, and Spaced Words

- To hyphenate a compound word use `\hyp{anti}{body}`
- For close-up word use: `\closeup{anti}{body}`
- For compound words that occur as two separate words: `\sword{Civil}{War}`
- Although American spellings use less hyphenation, the modern preference for closed prefixes has a few exceptions
  - if the root word is a proper noun or a number (post-Depression, pre-2001)
  - for double prefix (non-self-governing)
  - if the prefix precedes a proper open compound then ndash is used (pre–Civil War)
  - if two instances of the letter i or the letter a are adjacent (anti-intellectual, extra-action), or another combination of letters that could hamper reading (pro-labor)
  - for a double prefix (anti-antibody)
  - for a repeated prefix with implicit use (over- and understimulation)
Latin Abbreviations

- The straightforward Latin abbreviations listed below can be handled using:
  \textit{et al.}
  - cf. compare
  - et. al. and others
  - etc. and so forth
  - e.g. for example
  - i.e. that is
  - NB note
  - viz. namely

- The stylistic aspect can be taken care using global switches such as:
  \texttt{\usepackage[lat=0,abbr=italic]{copyedit}}

- The default \texttt{\textcolor{red}{lat=0}} leaves the text as it is, the option \texttt{\textcolor{red}{lat=1}} removes all the dots and \texttt{\textcolor{red}{lat=2}} sets the value to its English equivalent
Acronyms and Abbreviations

- If the initial letter abbreviations are spoken together as a word, as in AIDS (Acquired Immune Deficiency Syndrome), the term acronym is used.
- Here there is no distinction and treat them as one and the same.
- A simple macro: `\ac{AIDS}`
- The mapping between the acronym and its expansion can be declared the first time as: `\newacro{AIDS}{Acquired Immune Deficiency Syndrome}`
- Many standard acronyms would be available by default from the package.
- Only new acronyms need to be added this way and this can be checked during compilation.
Itemizations and Nonlocal Lists and Labels

- For itemization use the macro as given in the below example:

Firstly, this is an endangered species;
Secondly, humans find them delicious;
Thirdly, they are only found on this island.

This can be changed into a standard Arabic numeral list: 1)... 2)... 3)... etc.

\begin{eitem}
\item this is a endangered species;
\item humans find them delicious;
\item they are only found on this island.
\end{eitem}
Itemizations (Cont.)

- Option to change the last item in the list to lastly but that’s a global switch: \usepackage[eitem=0, last]{copyedit}
  - where the eitem=0 is the default option that causes firstly, secondly… and last indicates that the last item should be lastly
  - If eitem=1 is set then ly drops out and for eitem=2, 3,.., it switches to standard enumerated and bulleted list
Itemizations (Cont.)

<table>
<thead>
<tr>
<th>eitem</th>
<th>Output</th>
</tr>
</thead>
<tbody>
<tr>
<td>eitem=0, last=true</td>
<td>Firstly, this is an endangered species; Secondly, humans find them delicious; Lastly, they are only found on this island.</td>
</tr>
<tr>
<td>eitem=1, last=true</td>
<td>First, this is an endangered species; Second, humans find them delicious; Last, they are only found on this island.</td>
</tr>
<tr>
<td>eitem=2</td>
<td>1. this is an endangered species; 2. humans find them delicious; 3. they are only found on this island.</td>
</tr>
<tr>
<td>eitem=3</td>
<td>• this is an endangered species; • humans find them delicious; • they are only found on this island.</td>
</tr>
<tr>
<td>eitem=4, last=true</td>
<td>Firstly, this is an endangered species; secondly, humans find them delicious and lastly, they are only found on this island.</td>
</tr>
<tr>
<td>eitem=5, last=true</td>
<td>First, this is an endangered species; second, humans find them delicious and last, they are only found on this island.</td>
</tr>
</tbody>
</table>
Parenthetical and Serial Commas

- For parenthetical comma use the macro as given in the below example:

  *The enthusiastic young ducks flying in front of the group\( \text{led by the sagacious older ones at the back, make a lot of noise and turbulence} \) which are used by older ones at the back to warm their heart and the wings.*

  **Output:**

  *The enthusiastic young ducks flying in front of the group, led by the sagacious older ones at the back, make a lot of noise and turbulence, which are used by older ones at the back to warm their heart and the wings.*

- The global switch \( pc=0,1,2,3\) or 4 we have the option of choosing parenthetical comma, parenthesis, emdash, a footnote or a sidenote.
Elist

- For list of items use the macro as given in the below example

  Suddenly $\text{elist\{warblers,tits,wrens,hummingbirds\}}$ started singing in chorus from the bushes. . .

  **This will be transformed into:**

  Suddenly warblers, tits, wrens and hummingbirds started singing in chorus from the bushes. . .

- This macro will help bring consistency across the document:
  - regarding the placement of comma before and after and in the last item
  - ensuring proper white-space after the comma.
Non-local tokenization in language through Abbreviations and pronouns

For minimization operation use the macro as given in the below example:

\[
\text{His Holyness, the Prince of Mangoistan addressed a gathering of ordinary mangoes in the capital New Mango. The Prince of Mangoistan pointed out the serious threat of foreign insects in the country. He further pointed out the precautionary methods taken such as the use of organic insect repellants like the neem leaves and cow-dung to keep the country free of foreign pests.} \ldots
\]

- This copyediting operation can be denoted using: `\texttt{\textbackslash{definetoken\{mango\}\{His Holyness, the Prince of Mangoistan\}\{The Prince of Mangoistan\}\{He\} at first instance and just \texttt{\textbackslash{Token\{mango\}} at the later instances.}

- This macro would be quite useful to even just indicate what the important pronouns link to in a paragraph
Subject specific macros such as **Genus-species identification** - use \texttt{\textbackslash gensp\{E. coli\}} and for embedding of new undefined genus species entities use \texttt{\textbackslash gensp\{E. coli\}\{Escherichia coli\}}

**Juxtaposing** - use as in the below example:

"It is another politician that we can't trust in the White House."

It is another politician \texttt{\textbackslash pull that we can't trust \textbackslash push\{in the White House\}}.

**Output:** "It is another politician in the White House that we can’t trust."

**To Restore:** It is another politician \texttt{\textbackslash push\{in the White House\} that we can't trust \textbackslash pop}.

Use the macros \texttt{\textbackslash pull, \textbackslash push and \textbackslash pop} to achieve juxtaposing
Synonyms - use as in the below example:

“The temperature of the water was raised above 80°C to see if some bacteria could still survive at this high temperature.”

The temperature of the water was \texttt{\textbackslash syn\{raised\}\{increased\}} above 80\textdegree{}C to see if some bacteria could still survive at this high temperature.

- The \texttt{\textbackslash syn} macro can be used for fixing inappropriate usages with their appropriate equivalents.
Interactive proofing

- The above set of macros bring certain level of transparency and consistency to the copyediting process.

- Using additional macros, this also has the potential to convey further the key aspects of copyediting to the author using menus and dashboards.

- Bringing certain interactive aspect to the proofing process.
Conclusion

- Involves some amount of drastic simplification and abstraction that may or may not work in all cases

- The starred macros could be used in those exceptional cases where one needs to escape the global switch

- The non-local linkages work just as in the case of bibliography links by multiple compilation of LaTeX that passes information through aux files

- Only a small step towards the Himalayan task of climbing the semantic hill through LaTeX macros as envisaged by SenseTeX
Thank You